CITY OF LOS ALAMITOS
Council Chamber
3191 Katella Ave., Los Alamitos CA 90720

PLANNING COMMISSION/SUBDIVISION COMMITTEE AGENDA
REGULAR MEETING

Wednesday, September 25, 2024 – 7:00 PM

NOTICE TO THE PUBLIC – This Agenda contains a brief general description of each item to be considered. Except as provided by law, action or discussion shall not be taken on any item not appearing on the agenda. Supporting documents, including staff reports, are available for review at City Hall in the Development Services Department or on the City's website at www.cityoflosalamitos.org once the agenda has been publicly posted.

Each matter on the agenda, no matter how described, shall be deemed to include any appropriate motion, whether to adopt a minute motion, resolution, payment of any bill, approval of any matter or action, or any other action. Items listed as "for information" or "for discussion" may also be the subject of an "action" taken by the Planning Commission at the same meeting.

Agenda-related documents provided to a majority of the Planning Commission after distribution of the Planning Commission agenda packet (GC §54957.5) will be made available for public inspection at the meeting. Such documents will also be available at the Development Services office, 3191 Katella Ave., Los Alamitos, CA 90720.

In compliance with the Americans with Disabilities Act, Assistive Listening headphones are available and can be checked out by the Department Secretary. If you need special assistance to participate in this meeting, please contact the Department Secretary at (562) 431-3538, ext. 110. Notification at least 42 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. [28 CFR 35.102.35.104 ADA Title II]. Language translation services are available for this meeting by calling the Development Services Office at least 42 hours in advance.

If you are unable to attend this meeting in person, you may submit comments on any agenda item or on any item not on the agenda by email to gmartinez@cityoflosalamitos.org with the subject line "PLANNING COMMISSION PUBLIC COMMENT". Comments received by 3:00 p.m. the day of the meeting will be compiled, provided to the Planning Commission, and made available to the public before the start of the meeting. Staff will not read email comments at the meeting.

If, as an attendee, or a participant at this meeting, you will need special assistance beyond what is normally provided, please contact the Development Services Department at (562) 431-3538, extension 500, 48 hours prior to the meeting so that reasonable arrangements may be made.

1. CALL TO ORDER

2. ROLL CALL
Chair Cuilty
Vice Chair Zellmer
Commissioner DeBolt
Commissioner Grose
Commissioner Hastie
Commissioner Legere
Commissioner Loe

3. PLEDGE OF ALLEGIANCE

4. ORAL COMMUNICATIONS

At this time, any individual in the audience may address the Planning Commission and speak on any item within the subject matter jurisdiction of the Commission. Please state if you wish to speak on an item on the Agenda. **Remarks are to be limited to not more than five minutes.**

5. CONSENT CALENDAR

All Consent Calendar items may be acted upon by one motion unless a Planning Commissioner requests separate action on a specific item.

A. Approve of Minutes

Recommendation:

Recieve and File.

6. PUBLIC HEARING

A. Site Development Permit 22-02 Lampson Project

The Planning Commission will consider resolutions for recommendations to the City Council Regarding certification of an Environmental Impact Report pursuant to the California Environmental Quality Act, Adoption of a Statement of Overriding Considerations, Adoption of a Mitigation Monitoring and Reporting Plan, Approval of a Tentative Parcel Map 2022-133 (For Finance and Conveyance Purposes), Approval of a Vesting Tentative Tract Map No. 19263 (For Condominium Purposes), Approval of an Affordable Housing Unit Application, and Approval of a Site Development Permit – Major for the 4665 Lampson Project Located at 4665 Lampson Avenue (APN 130-012-35) to Allow Redevelopment of the Project Site with 246 Residential Units consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multifamily apartment homes comprised of 76 units restricted to lower income and one unrestricted manager's unit (the "Project").

Recommendation:

1. Open the Public Hearing;

2. Take testimony; and,

3. If appropriate,

4. Adopt Resolution No. 2024-06, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL CERTIFY THE FINAL ENVIRONMENTAL IMPACT REPORT, ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPT A MITIGATION MONITORING AND REPORTING PLAN FOR THE

4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)"

5. Adopt Resolution No. 2024-07, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE TENTATIVE PARCEL MAP 2022-133 (FOR FINANCE AND CONVEYANCE PURPOSES) AND VESTING TENTATIVE TRACT MAP NO. 19263 (FOR CONDOMINIUM PURPOSES) FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)"

6. Adopt Resolution No. 2024-08, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE AN AFFORDABLE HOUSING UNIT APPLICATION FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS, INCLUDING 77 AFFORDABLE MULTI-FAMILY APARTMENT HOMES (APPLICANT: LAMPSON PARK PLACE, LLC)"

7. Adopt Resolution No. 2024-09, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE A SITE DEVELOPMENT PERMIT – MAJOR FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)"

7. ITEMS FROM THE DEVELOPMENT SERVICES DEPARTMENT

At this time, City Staff may also report on items not specifically described on the Agenda that are of interest to the community, provided no action or discussion is taken except.

8. COMMISSIONER REPORTS

At this time, Commissioners may also report on items not specifically described on the Agenda that are of interest to the community, provided no action or discussion is taken except to provide Staff direction to report back or to place the item on a future Agenda.

9. ADJOURNMENT

APPEAL PROCEDURES

Any final determination by the Planning Commission may be appealed to the City Council, and must be done so in writing at the Development Services Department, within ten (10) business days after the Planning Commission decision. The appeal must include a statement specifically identifying the portion(s) of the decision with which the appellant disagrees and the basis in each case for the disagreement, accompanied by an appeal fee of $1,101.00 (resident)/ $2,349.00 (non-resident) in accordance with Los Alamitos Municipal Code Section 17.60 and Fee Resolution No. 2022-11.

I hereby certify under penalty of perjury under the laws of the State of California, that the foregoing Agenda was posted at the Los Alamitos City Hall, 3191 Katella Ave. and online at www.cityoflosalamitos.org not less than 72 hours prior to the meeting.



_____
Gabriela Martinez
Department Secretary

MINUTES OF PLANNING COMMISSION/SUBDIVISION COMMITTEE MEETING OF THE CITY OF LOS ALAMITOS

REGULAR MEETING – August 28, 2024

1. CALL TO ORDER

The Planning Commission/Subdivision Committee met in Regular Session at 7:00 p.m., Wednesday, August 28, 2024, in the Council Chamber located at 3191 Katella Avenue, Los Alamitos, CA 90720, Chair Cuilty presiding.

2. ROLL CALL

Present: Commissioners: Chair Cuilty
Zellmer (late 7:05 p.m.), DeBolt, Grose, Loe, Hastie, Legere

Staff: Gabriela Martinez, Department Secretary
Irving Montenegro Jr., Development Services Manager
Michael Daudt, City Attorney
Tom Oliver, Associate Planner

3. PLEDGE OF ALLEGIANCE

Vice Chair Cuilty led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS

Chair Cuilty opened oral communication.

Chair Cuilty closed oral communication.

5. CONSENT CALENDAR

All Consent Calendar items may be acted upon by one motion unless a Planning Commissioner requests separate action on a specific item.

A. Approve the Minutes of the Special Meetings of May 7, 2024

Motion/Second:
Carried 6/0 (Grose/Legere) Zellmer absent: The Planning Commission approved the Special Meeting minutes of May 7, 2024.

6. PUBLIC HEARING

A. Conditional Use Permit (CUP) 24-02 Commercial Recreation – Indoors at 10842 Noel St., #103, in the Planned Light Industrial (P-L-I) Zoning District

Development Services Manager Montenegro Jr. introduced the Public Hearing item.

Associate Planner Oliver summarized the staff report.

Commissioner Zelmer arrived late to the meeting at 7:05pm.

Commissioner Loe inquired if there was other Conditional Use Permits in place for the same building.

Associate Planner Oliver shared insight on other similar businesses in the same building that were smaller than 2,500 square feet requirement, therefore they do not have one in place.

Chair Cuilty opened the public hearing.

Applicant Lee took to the podium and shared the following:

- 41 years in the golfing business.
- Does not currently have a hitting bay in his current location and elected to expand into a larger location to accommodate 3 hitting bays.
- Explained his family connection to the City of Los Alamitos.
- Not intended to run as a 9-5 business. Private 1 on 1 lessons.

Commissioner Zellmer inquired about the custom fittings for clubs to individuals and asked if a special CUP is needed.

Applicant Lee responded with insight on how fittings work then shared the actual purchase of products will be through his other location. The Los Alamitos location will not be a retail business.

Associate Planner Oliver clarified that it is ancillary to the proposed business, and it does not require a special CUP

Commissioner Grose inquired on the number of club companies listed in the report.

Applicant Lee shared he only listed companies that provided fitting equipment at this moment. The list could change if other companies reach out wanting to provide the Applicant fitting equipment.

Commissioner Grose inquired if clients bring personal golf clubs or if they can rent.

Applicant Lee shared insight on lessons and the individuals bringing in their own gold clubs. However, they would offer clubs for rent for novice players.

Commissioner Legere asked what the hitting bays will predominantly be used for and the size of lessons.

Applicant Lee stated that the use will be for custom fittings and private 1 on 1 lessons.

Commissioner DeBolt shares his experience with a similar facility and then asked if there would be open hours to the public to make an appointment to come in and practice their swing aside from the private 1 on 1 lessons.

Applicant Lee shared that only he and his wife on occasion will be conducting the private lessons. Currently there is no plan to offer appointment only open practice.

Chair Cuilty closed the public hearing.

Motion/Second:
Carried 7/0 (Grose/Zellmer): The Planning Commission approved the Conditional Use Permit (CUP) 24-02 Commercial Recreation – Indoors at 10842 Noel St., #103, in the Planned Light Industrial (P-L-I) Zoning District.

9. ITEMS FROM THE DEVELOPMENT SERVICES DIRECTOR

Development Services Manager Montenegro Jr. briefly discussed the following:

- Lampson Park Place Project is aiming tentatively to come to the Planning Commissions September 25th meeting.
- Touched on street projects and park projects within the City.
- Nites on Pine event.
- Grand Re-Opening of the Community Center to showcase all the renovations and upgrades taking place on October 4th.

10. COMMISSIONER REPORTS

Commissioner Grose shared her joy for business expansion in the city.

Commissioner Hastie shared his appreciation on the individual meetings to discuss details for big Planning commission topics.

Commissioner Zellmer asked if a limit could be placed before hand for the next Planning Commission meeting to limit the amount of public hearing speakers.

City Attorney Daudt shared that encouragement is best for speakers to fill out the Public Hearing speaking forms to keep organization, but a limit cannot be placed on the quantity of speakers. It is the communities right to come up and speak if they choose to do so.

Chair Cuilty inquired about the time limit per person to speak.

City Attorney Daudt shared that is at the pleasure of the commission, but that the Planning Commission does have the ability to limit time per speaker.

Commissioner Hastie shared his insight on the Planning Commission setting a speaking time limit due to having a large turn out of speakers.

City Attorney Daudt shared his opinion to handle the speaking time limits at the beginning of the meeting and this topic is not agendized to continue speaking on.

Commissioner DeBolt shared his desire to agendize an item for a future meeting to discuss the joint and shared parking for commercial condos.

Chair Cuilty inquired if the Planning Commission has a say over that kind of item.

Development Services Manager Montenegro Jr. asked for clarification on what Commissioner DeBolt is asking for.

City Attorney Daudt stated due to this topic not being agendized, it is best to just allow staff to receive your comments at the moment.

Development Services Manager Montenegro Jr. touched on the binder and how each commissioner will have their own containing the zoning laws making it easier to reference for future meetings.

11. ADJOURNMENT

The Planning Commission adjourned the meeting at 7:26 p.m. to September 25, 2024.

ATTEST: _____ Maty Anne Cuilty, Chair

_____
Gabriela Martinez, Department Secretary

City of Los Alamitos

PLANNING COMMISSION/SUBDIVISION COMMITTEE AGENDA REPORT

MEETING DATE: September 25, 2024 **ITEM NUMBER: 6A**

To: **Chair Cuilty & Members of the Planning Commission**

Presented By: **Ron Noda, Development Services Director**

Subject: **Site Development Permit 22-02 Lampson Project**

SUMMARY

The Planning Commission will consider resolutions for recommendations to the City Council Regarding certification of an Environmental Impact Report pursuant to the California Environmental Quality Act, Adoption of a Statement of Overriding Considerations, Adoption of a Mitigation Monitoring and Reporting Plan, Approval of a Tentative Parcel Map 2022-133 (For Finance and Conveyance Purposes), Approval of a Vesting Tentative Tract Map No. 19263 (For Condominium Purposes), Approval of an Affordable Housing Unit Application, and Approval of a Site Development Permit – Major for the 4665 Lampson Project Located at 4665 Lampson Avenue (APN 130-012-35) to Allow Redevelopment of the Project Site with 246 Residential Units consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multifamily apartment homes comprised of 76 units restricted to lower income and one unrestricted manager's unit (the "Project").

RECOMMENDATION

1. Open the Public Hearing;

2. Take testimony; and,

3. If appropriate,

4. Adopt Resolution No. 2024-06, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL CERTIFY THE FINAL ENVIRONMENTAL IMPACT REPORT, ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPT A MITIGATION MONITORING AND REPORTING PLAN FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)"

5. Adopt Resolution No. 2024-07, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE TENTATIVE PARCEL MAP 2022-133 (FOR FINANCE AND CONVEYANCE PURPOSES) AND VESTING TENTATIVE TRACT MAP NO. 19263 (FOR CONDOMINIUM PURPOSES) FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665

LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)"

6. Adopt Resolution No. 2024-08, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE AN AFFORDABLE HOUSING UNIT APPLICATION FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS, INCLUDING 77 AFFORDABLE MULTI-FAMILY APARTMENT HOMES (APPLICANT: LAMPSON PARK PLACE, LLC)"

7. Adopt Resolution No. 2024-09, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE A SITE DEVELOPMENT PERMIT – MAJOR FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)"

BACKGROUND

Applicant:	Lampson Park Place, LLC
Project Location:	4665 Lampson Avenue, APN 130-012-35
Notice:	On September 11, 2024, a Notice of Public Hearing was posted at City Hall. It was also published in the Event News Enterprise and public notices were mailed out to all property owners and tenants within 500 feet of the property on this same date.
Environmental:	The City has complied with the California Environmental Quality Act (CEQA). Pursuant to the provisions of the CEQA, an Environmental Impact Report ("EIR") was prepared, which led to the conclusion that a Statement of Overriding Considerations be prepared for the Project due to potentially significant and unavoidable impacts related to transportation.

As stated by the CEQA Guidelines §15002, the basic purpose of CEQA is to:

- Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities involving discretionary government actions

(including the approval of development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects by alternatives or mitigation measures when the governmental agency finds the changes to be feasible and;
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An EIR is an informational document prepared in compliance with CEQA that informs government decision-makers and the public in general about potentially significant environmental impacts that could result from a project. The final EIR represents the independent judgment of the City of Los Alamitos (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from the construction and operation of the proposed 4665 Lampson Avenue Project.

The purpose of an environmental impact report is to identify potential effects on the environment of the Project and to indicate the manner in which those potentially significant effects can be avoided or mitigated. A primary function of the environmental impact report is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice of availability regarding the draft EIR was published on April 24, 2024, and the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

Together, the draft Environmental Impact Report (“DEIR”), the revisions to the DEIR, the comments of persons and organizations commenting on the DEIR and a list of all such persons and organizations, the responses to the comments, and other information added by the City constitute the final Environmental Impact Report (“FEIR”) on the Project.

The EIR prepared for the Project demonstrates that the proposed Project will not cause any significant onsite environmental damage as this is a Project on property that has already been designated as an area for residential units and there is no sensitive fish or wildlife habitat on site. The site was previously graded for the construction of the existing commercial building.

Regarding potential off-site traffic or transportation impacts, project components and mitigation measures available to reduce vehicle miles traveled (VMT) include developing pedestrian network improvements and implementing travel demand model (TDM) measures such as those listed in Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant, which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis. All feasible mitigation measures were incorporated to reduce VMT impacts per measures identified in the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook; however, even with the incorporation of all feasible mitigation measures, impacts would remain significant and unavoidable.

As described above, even with the incorporation of mitigation measures from the EIR into the

conditions of project approval, this potential VMT impact remains significant and unavoidable and would not be mitigated to a less than-significant level. Per Public Resources Code section 21081(a)(3) and CEQA Guidelines Section 15093, specific economic, legal, social, technological, or other considerations make infeasible additional mitigation. Pursuant to the CEQA, with respect to the identified significant unavoidable environmental effects of the Project, the Planning Commission would weigh the economic, legal, social, technological, and other benefits, including region-wide and statewide environmental benefits, of the Project against its unavoidable significant environmental impacts in determining whether to recommend approval of the Project. The Planning Commission would need to find that the benefits of the Project outweigh its unavoidable adverse environmental effects such that the adverse environmental effects may be considered “acceptable.”

Despite the potentially significant impacts, it is the City's considered judgment that the benefits offered by the proposed 4665 Lampson Avenue Project outweigh the potentially adverse effects. Each of the overriding considerations and Project benefits identified below separately and individually outweighs the unavoidable adverse environmental effect (VMT) identified in the EIR, and the City, therefore, finds the impact to be acceptable. Substantial evidence in the record demonstrates that approval and implementation of the Project will provide the benefits as described in detail in the Statement of Overriding Considerations, which is incorporated by reference herein. Each of the separate benefits listed below provides a separate and independent ground for the City’s decision that the Project’s benefits outweigh the significant and unavoidable environmental impact identified in the EIR:

- The Project furthers the City's housing goals and contributes to the City's RHNA requirements in accordance with State Housing Law. The Project site is identified within the City's 2021-2029 Housing Element, and the Project would provide 246 units (including 76 affordable), approximately 32% of the City's total RHNA allocation of 769 units and 24.6% of the City's affordable housing allocation. This would also be the first affordable housing Project that the City has approved in approximately 30 years.
- The Project would reduce commute travel and in turn reduce VMT and GHG Emissions consistent with SCAG Connect SoCal and the City’s General Plan Goals and Policies.
- The Project implements green and sustainable building practices, including the installation of solar photovoltaic rooftops (generating up to 1,229,520 kWh/annually).
- The Project will provide community and social benefits. In addition to the high-quality architectural design, site programming, and on-site amenities for residents, the Project includes the dedication or granting of an easement area of approximately 10,000 sf of the Project site to provide parking for Arbor Park and Arbor Dog Park.
- The Project will provide economic benefits, including a positive net fiscal impact on the City's annual General Fund operating budget and an increase in local and regional tax revenues, including sales and property taxes.

If approved, a Notice of Determination will be prepared for the proposed Project in accordance with the CEQA.

Prior CEQA Review:
The Project site is located within the geographical limits of the City of Los Alamitos and is covered by the City’s 2035 General Plan Update (GPU), which provides the fundamental basis

for the City's land use and development policies. The City's GPU was the subject of a review under CEQA (State Clearinghouse Number 2013121055). The City of Los Alamitos approved the GPU and certified its Final Program EIR on March 23, 2015. The Program EIR contains information relevant to the Project site. Thus, the Program EIR for the City's GPU is herein incorporated by reference pursuant to CEQA Guidelines Section 15150 and is available for public review at the City of Los Alamitos, Planning Division, 3191 Katella Avenue, Los Alamitos, CA 90720.

On February 21, 2023, the Los Alamitos City Council adopted the comprehensive update of the City's Housing Element for the reporting period of 2021-2029 (Resolution No. 2023-02). Upon adoption of the City's 2021-2029 Housing Element Update, the City Council adopted Resolution No. 2023-01 approving General Plan Amendment (GPA) 22-02 to ensure that the zoning code updates in Ordinance 2023-1 will maintain internal consistency with the actions, goals, objectives, and policies of the General Plan and will not create any inconsistencies therein. A Negative Declaration was prepared for the 2021-2029 Housing Element Update pursuant to the provisions of CEQA, and the record of the approval is available to the general public at the address stated above.

On March 20, 2023, the City Council adopted Ordinance 2023-01 which approved a Multi-Family Residential - 36 Zone (R-4) Zoning District in the City, amended the Town Center Mixed Use Zone, and rezoned certain properties to the R-3 and new R-4 Districts. Following adoption of the resolution and ordinance in connection with the 2021–2029 Housing Element update, the Project site land use designation was changed from General Office to Multi-Family Residential-25 and was rezoned from C-F (Community Facilities) to Multi-Family Residential-25 Zone (R-3).

Project and Applications Summary:
Lampson Park Place, LLC, has submitted applications for a Tentative Parcel Map (TPM 2022-133), a Vesting Tentative Tract Map (VTTM No. 19263), Affordable Housing Units, and a Site Development Permit – Major for the 4665 Lampson Project located at 4665 Lampson Avenue (APN 130- 12- 35) to allow redevelopment of the Project site with 246 residential units (see attached site plan).

The Project Applicant, Lampson Park Place, LLC, proposes to demolish the existing office building and surface parking lot on the 12.3-acre property and redevelop the Project site with a residential development consisting of a variety of housing product types, including single-family homes, townhomes, and apartments. The unit mix proposes 55 single family detached homes, 114 townhomes in 18 buildings, and 77 for rent multi-family apartment homes in three buildings comprised of 76 units restricted to lower income and one unrestricted manager's unit. The Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. The Project would provide 577 parking spaces (475 spaces for the single-family detached and townhomes and 102 for the apartments) in exceedance of the 441 parking spaces that would be required pursuant to the State's Density Bonus Law.

DISCUSSION

Project Location

The Project site is located at 4665 Lampson Avenue, in the City of Los Alamitos, County of Orange (Assessor Parcel Number 130-012-35). Specifically, the 12.3-acre Project site is north of and adjacent to Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street.

Aerial View of Site (DEIR Figure 3-3)



Figure 3-3

Existing Site Conditions

In 1971, the Project site was developed with the existing commercial structure on the central portion, a parking lot on the west portion, and landscaped areas on the remainder. The site has remained in this configuration through the present. Under existing conditions, the Project site is currently developed with a vacant two-story, 88,000-square-foot commercial office building located centrally within the Project site and a surface parking lot located within the western portion of the Project site. A boat storage area that is fenced off and a shipping container is located in the northwest corner of the property. AYSO uses the abutting Arbor Park (north of the Project) on weeknights and weekends for soccer practice and games, utilizing the existing paved parking lot on the Project site for overflow parking.

Site Land Use Designation and Zoning Classification

The Project site's land use designation is "Multi-Family Residential-25," which is defined as single-family detached and attached residences, including all development permitted in other residential categories, stacked flats, and other building types with 4 or more units. Other uses,

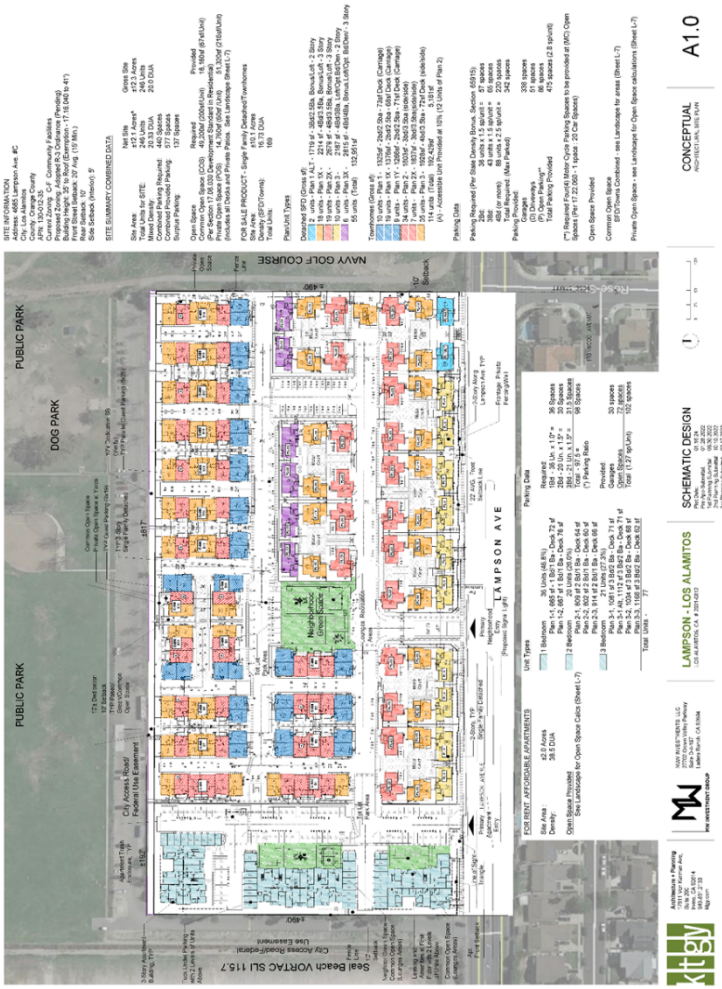
such as convalescent hospitals, churches, and mobile home parks, are also permitted, subject to special procedures.

The Project site's zoning classification is "Multi-Family Residential (R-3)". The R-3 zone applies to lots intended to provide multifamily housing. Housing types permitted include those permitted in the R-1 and R-2 zones, as well as structures containing four or more dwelling units. The maximum permitted density is 20 to 25 dwelling units per net acre. The R-3 zone implements the General Plan Multi-Family Residential land use designation.

Surrounding Designations and Uses

Direction from Project Site	Existing Land Use & Jurisdiction	General Plan Land Use Designation	Zoning
North	Arbor Park & Los Alamitos Joint (JFTB)	Community & Institutional/JFTB	C-F (Community Facilities)
South	Residential College Park East City of Seal Beach	Residential Low Density (RLD)	RLD-9
West	JFTB	Community & Institutional/JFTB	C-F (Community Facilities)
East	Navy Golf Course, JFTB	Community & Institutional/ JFTB	C-F (Community Facilities)

Below is the Site Plan for this proposed project (plans are attached/linked to this report).



Parks, Open Space, Landscaping, and Amenities

There is a total of 316.83 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 351.8 acres to meet the recreational needs of the City's residents. As proposed, the Project would provide a total of 58,027 square feet (sf) or 1.33 acres of open space in the Project site, including 16,508 sf of usable common open space, 41,519 sf of private open space (homeowner maintained). The usable common open space areas would include amenities such as a tot-lot with rubberized play surface, shade surface with BBQ Island and dining furniture, lawn area with cornhole, ping pong table, and lounge seating with fire-pit. There are also 4,620 sf of multifamily private decks and 5,181 sf of townhomes private decks that would be provided onsite. The Project has been designed with these enhanced recreational amenities to meet the needs of its future residents.

Although the designed neighborhood open space areas are anticipated to meet many of the park and recreation needs of Project residents, Project residents are also anticipated to utilize existing off-site park and recreation facilities in the City of Los Alamitos and nearby Rossmoor and City of Seal Beach Park system. Future residents of the Project site would also have access to (within walking distance) the following public park and recreational facilities, which comprise just over 14 acres of usable parkland and open space:

- Arbor Park, located directly north of the Project site, includes baseball fields leased by

LAYB within its approximately 9.60-acre site.

- Arbor Dog Park, located directly north of the Project site, includes a dog park that is currently leased by the City of Seal Beach from the JFTB for its residents within its approximately 1.40-acre site.
- Orville Lewis Park, located approximately 1 mile northwest of the Project site, includes a grass area, baseball backstop, basketball court, play area, barbecue, picnic shelter and tables, and drinking fountain within its approximately 1.65-acre site.
- Heather Park, located approximately 350 feet southwest of the Project site, includes two lit tennis courts, one tot lot/play structure, one swing set, and four picnic tables within its approximately 1.6-acre site.

The Project also includes a dedication or easement for the northerly 10-foot strip of land abutting Arbor Park and Arbor Dog Park for purposes of public access and parking, which comprises an area of approximately 10,000 sf of the Project site (Condition No. 14).

Based on the Project's Parks Impact Analysis, it is anticipated that a negligible amount of Project residents will regularly visit parks near the Project site. Specifically, a total of 178 Project residents would visit the designed neighborhood open spaces within the Project site and 131 Project residents would visit Arbor Park, Arbor Dog Park, and Heather Park as the parks they visit most often.

Open Space Plan



Landscape Plan



The carrying capacity of Arbor Park and Heather Park would be 337 visitors, and there is no calculation for carrying capacity for Arbor Dog Park. Because the projected number of Project visitors to these parks are well within the carrying capacity, there is sufficient capacity at existing nearby neighborhood parks to accommodate the Project residents. With full occupancy of the Project, the designed neighborhood open spaces within the Project site, the capacity and existing maintenance and usage of existing parks, and the estimated visitation of the Project residents to the existing parks; the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated.

Additionally, the Project Applicant will be required to pay in-lieu fees in accordance with the City's park dedication requirements under Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees) of the City of Los Alamitos Municipal Code (Condition No. 29).

Also, a variety of trees, shrubs, accent plants, and ground cover are proposed along the perimeter of the Project site, in common areas, recreational amenities, open space areas, and parking areas. Landscaping will feature drought-tolerant plant materials.

LAMC Section 17.08.030, Table 2-03 requires a minimum of 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, yet the Project will not be able to comply with the common area requirement. Pursuant to the Density Bonus Law, the Applicant is requesting a reduction from 200 to 150 square feet per unit. (Government Code Section 65915).

Parking

The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the 441 parking spaces that would be required pursuant to the State's Density Bonus Law.

As part of the Project, Walker Consultants prepared a parking analysis (*Technical Appendix P* of the Draft EIR) to determine the appropriate amount of parking needed for the Project. Based on the City's off-street parking requirements in the Municipal Code, the Project would be required to provide 679 parking spaces. However, because the Project includes an affordable housing component, it is entitled to the reduced parking ratios set forth in the State Density Bonus Law (Government Code Section 65915), which would reduce the Project's minimum off-street parking requirement to 441 parking spaces. The Project is proposing to provide 557 parking spaces, 26% above what is required under the State Density Bonus Law. Moreover, the City of Seal Beach has lower parking requirements for multi-family dwelling units than the City of Los Alamitos. Under the City of Seal Beach's Municipal Code Section 11.4.20.015, a total of 472.29 parking spaces would be required, inclusive of guest parking.

As discussed above, the Project would provide 577 parking spaces and would therefore exceed the City of Seal Beach's parking standards (by 84 spaces). Therefore, the Project would provide more than adequate parking based on nationally recognized Urban Land Institute/National Parking Association Standards for market-rate residential development and would meet the minimum parking requirements of the City of Seal Beach, the adjacent jurisdiction. Based on the analysis conducted in the parking analysis, the Project's proposed parking supply is appropriate to serve the potential parking needs of the Project. As a result, Project residents would have adequate parking on-site and would not park on streets in the adjacent neighborhood.

Table 3, 4665 Parking Requirements Based on State Density Bonus Law
Appendix P, Draft EIR (Walker Consultants; January 30, 2023)

Land Use	Vehicle Parking Requirement	Proposed # of Units	Number of Spaces Required	Number of Spaces Provided
Single-Family Dweling	2.50 spaces per unit	55	137.50 spaces	*183.00 spaces*
Multi-Family Dwelling				
2 bedroom	1.50 spaces per unit	38	57.00 spaces	
3 bedroom	1.50 spaces per unit	41	61.50 spaces	
4 bedrooms	2.50 spaces per unit	35	87.50 spaces	
Guest parking	Included in Above			
	Subtotal Multi-Family Dwelling		*206.00 spaces*	*276.00 spaces*
Affordable Housing				
1 bedroom	1.00 spaces per unit	36	36.00 spaces	
2 bedroom	1.50 spaces per unit	20	30.00 spaces	
3 bedroom	1.50 spaces per unit	21	31.50 spaces	
Guest parking	Included in Above			
	Subtotal Affordable Housing		*97.50 spaces*	*98.00 spaces*
		Grand Total	**441.00 spaces**	**557.00 spaces**

Architectural Features and Materials

The proposed residential buildings would range from two to three stories, and the maximum building height for the Project is 41 feet. Los Alamitos Municipal Code (LAMC) Sections 17.08.030 and 17.16.040 govern maximum building height, height measurement, and exceptions. According to LAMC Section 17.16.040.B certain building elements may exceed the allowed height of the zone in which they are located, up to an additional 6 feet above the maximum height limit (maximum height limit of 41 ft). These building elements include

plumbing vents and chimneys, fire and parapet walls, roof structures for the housing of air conditioners, elevators, stairways, tanks, ventilating fans, and similar equipment, and skylights. As proposed, the typical single-family dwelling ranges from 25.9 feet to 36 feet in height, the typical townhomes are approximately 35.5 to 37 feet in height, and the typical multifamily building is approximately 37 to 39 feet in height.

Architectural materials of the typical single-family dwelling units include composite shingle roof (no rake tile), metal roof (standing seam), faux wood, French door, vinyl windows, decorative fiberglass entry door, and cantilever built-up deck/balcony.

Typical Single-Family Dwelling Elevations



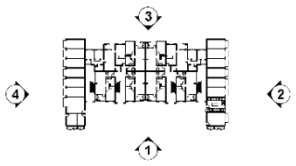


Architectural materials of the typical townhome unit include composite shingle roof, stucco light sand finish, faux wood trim, decorative faux vent, barge board, decorative gable end outlooker, vinyl windows, wood railing, decorative fiberglass entry door, and metal utility door.

Typical Townhome Elevations

Architectural materials of the typical multifamily units include stucco, vertical siding, composite shingle roof, decorative gable end outlooker, vinyl windows, metal sectional garage door, and stone veneer.

Typical Multi-Family Elevations



Building Key Plan N.T.S.

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER



1. FRONT ELEVATION



3. REAR ELEVATION

ktgy Architecture + Planning 7911 Van Karman Ave Suite 202 Irvine, CA 92614 949.851.2133 ktgy.com

LAMPSON - LOS ALAMITOS
LOS ALAMITOS
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
JANUARY 11TH, 2023

BUILDING ELEVATIONS

AA2.0

Public views of the townhomes and clustered homes from Lampson Avenue would consist of two-story to three-story buildings, parked cars, landscaping, and residents.

Lampson Street Scene



Walls and Fencing

Wall and fencing would be provided throughout the Project site to provide visual and physical privacy, sight lines for views, buffering between different uses, and to allow for privacy and security in residential areas. As shown in EIR Figure 3-20, *Wall and Fence Plan (see below)*, a 7-foot-high concrete wall would be constructed around the Project's perimeter and between the apartments and single-family detached homes/townhomes. Vinyl fencing (5'-6" high) would be constructed around the single-family detached homes and a 3'-6" high stucco concrete patio wall would be constructed around the patio areas of the townhomes. Additionally, a 4-foot-high combo metal guard-rail fencing would be constructed on the northern portion of the eastern boundary of the Project site.

Wall and Fence Plan



Water

Golden State Water Company (GSWC) would provide potable water service to the Project site. Water demand associated with the Project would consist of interior plumbing devices (i.e., showers, sinks, toilets, faucets), outdoor landscape irrigation, washers, and other uses similar to that of a residential development. Based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. The Project would not require the construction of new or expanded water facilities, nor would the Project require the relocation of water facilities. The Project would include the installation of new water lines within the Project site, connecting to existing facilities within Lampson Avenue, including a 1,200-foot watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson.

Wastewater (Sewer Infrastructure)

The results from the Sanitary Sewer Analysis (refer to *Technical Appendix O* of the Draft EIR) demonstrate that the proposed flows, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems. Based on sewer monitoring data collected in preparation of the Sanitary Sewer Analysis, the sewer systems in all three locations indicated good flow, along with hydraulics and relatively low depths. Wastewater volumes produced by the proposed development would not significantly impact or exceed the existing sewer capacity in the public system, and that the existing sewer system has adequate capacity for the proposed development.

Stormwater Drainage

The Hydrology Study (*Technical Appendix I3* of the Draft EIR) prepared for the Project demonstrated that the Project's peak hour flows would not exceed the existing condition flows. As proposed, the Project site's stormwater runoff would be conveyed by roof downspouts or street surface flow to the proposed gutters and collected by thru-curb inlet bio-filtration devices

or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the Project site. From the detention system, a stormwater sump pump located in the southwest corner of the Project site would outlet flow into the existing 18" outlet storm drainpipe at the southwest corner of the site, which conveys stormwater runoff to Los Alamitos Joint Forces Training Base (JFTB) property directly west of the site. The detention system and pump would be sized so that the outlet flows from the developed site will be equal to, or less than, existing conditions for all storm events. In the event the stormwater pump fails, or the outlet pipe becomes clogged, the emergency overflow for the site will be conveyed through a parkway drain discharging flow onto Lampson Avenue, matching historical drainage patterns.

WQMP

Pursuant to the LAMC Chapter 8.44, the Project Applicant would be required to implement a Water Quality Management Plan (WQMP) to demonstrate compliance with the City's National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit, and to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters. The WQMP is a site-specific post-construction water quality management program designed to address the pollutants of concern of a development project via BMPs, implementation of which ensures the on-going protection of the watershed basin. The Project's preliminary WQMP is included as *Technical Appendix I2* appended to the EIR.

As identified in the Project's preliminary WQMP, the proposed Project is designed to include evapotranspiration, rainwater harvesting BMPs, biotreatment BMPs, non-structural source control BMPs, and structural source control BMPs. The Project site would be divided into seven (7) Drainage Management Areas (DMA). Each drainage area would have an area drain system to convey runoff from landscape and roof drainage along curb inlet Modular Wetlands Systems to intercept surface runoff from surrounding walkways and drive aisles. The area drain system design would be determined during final engineering and would connect directly to the proposed water quality treatment devices. Non-structural source control BMPs include education for property owners, tenants and occupants, activity restrictions, common area landscape management, BMP maintenance, title 22 CCR compliance, uniform fire code implementation, common area litter control, employee training, common area catch basin inspection, and street sweeping private streets and parking lots. Structural source control BMPs include storm drain system stenciling and signage, trash and waste storage areas, efficient irrigation systems & landscape design, water conservation, smart controllers, and source control.

Solar & KW hours

The City of Los Alamitos receives electrical service from the Southern California Edison Company (SCE), and the Project operational energy demands would be supplied by SCE. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration. No new or expanded off-site dry utilities are required to serve the Project.

As summarized in EIR Table 4.5-2, *Project Annual Operational Energy Demand Summary*, operations for the Project would result in approximately 1,131,132 kWh of electricity annually and would offset the demand through the use of on-site photovoltaic solar power which is

expected to generate 1,229,520 kWh of electricity annually (PDF-GHG-1), resulting in a net electricity demand of 98,388 kWh/year of electricity. This is consistent with General Plan Policy 4.9, Renewable Energy, to promote the use of renewable energy sources to serve public and private sector development.

Noise

To address the proximity of the Los Alamitos JFTB, the Project will implement sound attenuation methods to ensure the interior CNEL does not exceed 45 dB. For example, the Project will provide mechanical ventilation (e.g. air conditioning) in all units. In addition, with implementation of PDF-N-2, which includes the use of windows with a STC rating of 29 on all second-floor facades adjacent to Lampson Avenue and JFTB Los Alamitos, the Project would be designed to achieve a 25 dBA reduction and meet the 45 dBA CNEL interior noise standard. As designed, the Project would not expose people residing or working in the Project area to excessive noise levels from airport or aircraft operations. Furthermore, as conditioned, the Applicant will be required to notify purchasers and renters that the Project site is within an airport influence area and may experience annoyances or inconveniences associated with proximity to airport operations (Condition No. 15).

Condominiums

The Project includes Tentative Parcel Map No. 2022-133 and Vesting Tentative Tract Map No. 19263. Tentative Parcel Map No. 2022-133 (for finance and conveyance purposes) would subdivide the property into two parcels: 1) Parcel 1 (2.204 acres) for the affordable housing component and 2) Parcel 2 (10.163 acres) for the single family detached and townhome component. The 77-unit apartment home component, including 76 units reserved for lower income households, will be established on Parcel 1, and the Vesting Tentative Tract Map would be proposed on the Parcel 2 and would be used for condominium purposes. Therefore, the Project would not conflict with General Plan Policy 4.10 related to subdivisions of land. Under this policy, the City encourages further land divisions resulting in parcel sizes that facilitate multifamily development affordable to lower income households. The City offers incentives for land division encouraging the development of affordable housing including but not limited to: priority to processing subdivision maps that include affordable housing units, expedited review for subdivision of larger sites, and financial assistance. The objective of this policy is to facilitate land subdivisions for affordable housing development.

Pursuant to LAMC section 17.28.110, *Condominiums – Residential and Residential Conversions*, the proposed Project furthers the goals of the General Plan, provides a balanced mix of housing, and ensures the form of ownership and occupancy complies with applicable laws for the general health, safety, and welfare of the public. This section allows new residential condominium projects in all residential zones at densities applicable to the zone in which the project is located, subject to the approval of tentative and final tract or parcel maps as may be required by law and any development permits required for multi-family housing in the zone in which the new project is located.

As proposed, the Project complies with the requirements of this section, with the requirements of LAMC Title 16 (Subdivisions), and with the basic purpose of the State Subdivision Map Act. The Project would also comply with applicable building and fire codes in effect at the time of construction. Furthermore, the Project incorporates Project Design Feature (PDF) N-2 that would reduce potential noise impacts for future residents.

Pursuant to the Density Bonus Law, the Applicant has requested concessions and waivers regarding the Condominium and/or zoning district requirements for the setback distance between structures, building step-back requirements, minimum storage space, common area requirements, and reduced parking ratio. See Affordable Housing Units and State Density Bonus Law below for additional details.

Affordable Housing Units

As proposed and conditioned (Condition Nos. 16 - 23), the Project would include 77 multi-family units which would be comprised of seventy-six (76) units restricted to lower income and with one unrestricted manager's unit. The affordable units would be rented to lower income households as defined in Section 50079.5 of the California Health and Safety Code for a period of no less than 55 years at rents that do not exceed the maximum rent for 80% income level units for that size unit in Orange County.

State Density Bonus Law

The State Density Bonus Law (Government Code Section 65915 et seq.) (collectively, "Density Bonus Law" or "DBL") and Los Alamitos Municipal Code (LAMC) Section 17.28.050 (Affordable Housing) entitles applicants to a density bonus, incentives or concessions, waivers or reductions of development standards, and reduced parking ratios to encourage the construction of affordable housing units. The Project qualifies for three incentives/concessions and unlimited waivers or reductions of development standards by providing 76 units for lower-income households.

1. Density Bonus

A maximum base density of 25 units per acre is allowed in the Multi-Family Residential R-3 zone pursuant to Section 17.08.030 of the LAMC, which yields 308 multi-family units for the 0.23-acre lot. With the inclusion of 76 units for lower-income households, the Project is providing 24% of its base density for affordable housing. Thus, pursuant to the Density Bonus Law, the Applicant is entitled to a Density Bonus of up to 50%, or up to 154 additional units, for a total development potential of 462 units. While entitled to the aforementioned Density Bonus, the Applicant is proposing a total of 246 residential units, less than the maximum 308-unit base density.

2. Concessions and Waivers

A "concession or incentive" includes a reduction in site development standards or a modification of zoning code requirements or architectural design requirements, approval of mixed-use zoning in conjunction with a housing project, and other regulatory incentives or concessions that result in a reduction in affordable housing costs. The DBL provides that a city must grant a proposed concession or incentive unless it makes a written finding, based upon substantial evidence, that the concession or incentive: (1) does not result in identifiable and actual cost reductions to provide for affordable housing costs for the targeted units; (2) would have a specific, adverse impact upon public health and safety or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households; or (3) would be contrary to state or federal law. The DBL provides that an applicant is entitled to three "incentives or concessions" if it offers to restrict at least 24% of the housing units for lower

households. The Project would provide 76 units for lower-income households, or 24% of the base density, making the Project eligible for three incentives/concessions. The Applicant, however, is proposing only two concessions, as follows:

a. Exception for building step-back requirements. LAMC Section 17.08.045.A.1 requires that for buildings higher than two stories, the third story must have a minimum 5-foot step back from the story below to minimize building bulk and create façade articulation. This requirement appears to govern regardless of building location within a project site or surrounding land uses. While the City interprets this requirement as applying only to perimeter buildings (i.e., buildings that are located along the perimeter of a Project site), given the requirement's ambiguity, the Applicant is requesting an exception from the required minimum 5-foot step back requirement for those structures identified on the site plan.
b. Reduction in minimum storage space. LAMC Section 17.08.030, Table 2-03, requires a minimum storage space in a garage or carport of 200 cubic feet per unit. For certain units within the Project, this storage space requirement will be difficult to satisfy because of limitations in garage and carport space. As such, the Applicant is requesting that the minimum storage space requirement be reduced to 175 cubic feet per unit for market rate units and 50 cubic feet per unit for affordable units identified on the site plan.

3. Waivers or Reductions in Development Standards

The DBL provides that, in addition to a density bonus and concessions or incentives, an applicant may propose waivers or reductions of development standards that will have the effect of physically precluding the construction of the proposed development, with the required density bonus and concessions or incentives permitted by the DBL. Similar to a concession or incentive, a city must waive or reduce a development standard that would physically preclude construction of the proposed development unless the waiver or reduction: (1) would have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact; (2) would have an adverse impact on any real property that is listed in the California Register of Historical Resources; or (3) would be contrary to state or federal law. The proposed project incorporates the following two (2) waivers or reductions of development standards, which the applicant contends would physically preclude construction of the project as proposed:

a. Reduced common area requirement. LAMC Section 17.08.030, Table 2-03 requires a minimum 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, but the Project will not be able to comply with the common area requirement. This is due to the proposed dedication or grant of an easement related to the northerly 10 feet strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of property. When this area is dedicated to the City, then the Project will be unable to comply with the common area requirement because compliance with this requirement would physically preclude construction of the Project at the densities allowed and with the concessions described above. Therefore, the Applicant is requesting a reduction in the common area requirement from 200 to 150 square foot per unit.
b. Reduction in setback distance between structures. LAMC Section 17.08.030, Table 2-

03 requires a 10-foot minimum distance between structures. Though most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances, the setback distance is reduced to 6 feet at certain locations within the Project site plan. Meeting the required 10-foot minimum setback distance would require a significant change to the site plan and likely result in a reduction of residential units.

4. Parking Reduction Request

The Project would provide 577 parking spaces (475 spaces for the single-family detached and townhomes and 102 for the apartments), the DBL specifies that for housing developments that qualify for a density bonus the local government shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project, which is significantly more than the 441 parking spaces that would be required pursuant to the State's Density Bonus Law.

The Project Applicant would be required to provide proof of recording, prior to final map approval, that the 76 affordable units are required to be maintained as affordable units for a period not less than 55 years. This is in accordance with the State Density Bonus Law and described further in the Conditions.

The Applicant would be required to enter into a Regulatory Agreement with the City to memorialize the provision of lower income housing and the granting of the requested Density Bonus Law concessions and waivers. Among other things, the Regulatory Agreement will require that households that include veterans of the United States military and/or households that include person(s) who are currently employed in or reside in the City of Los Alamitos be given preference in leasing the affordable units.

Findings

To recommend approval of a Tentative Parcel Map and Vesting Tentative Tract Map, the Planning Commission must consider the following findings (LAMC § 16.10.100 and § 16.10.110). Staff responds to each of these findings below.

1. The proposed maps are consistent with the City's General Plan:

Staff Response: The proposed maps allow for the site redevelopment with 246 residential units at a density of 20 dwelling units an acre which is within the General Plan multi-family residential land use designation of 20 – 25 units per acre. The proposed design of the Project subdivision is consistent with the applicable General Plan goals, policies, and implementation measures.

2. The design and improvement of the proposed subdivisions is consistent with the City's General Plan:

Staff Response: The design and improvement of the 246-unit project is suitable for

residential development in the R- 3 Multi-Family Residential Zone and the subdivisions can be developed in compliance with the General Plan.

3. The site is physically suitable for the proposed type of development:

Staff Response: The site is physically suitable for a residential subdivision because the site is generally flat and will require minimal grading.

4. The site is physically suitable for the proposed density of development:

Staff Response: The 12.3-acre site is capable of supporting the development of the proposed 246 residential units. The proposed Project is at 20 dwelling units per acre, within the maximum that the City' s R- 3 zoning district allows at 25 dwelling units per acre under multi-family development.

5. The requirements of the California Environmental Quality Act (CEQA) have been satisfied:

Staff Response: Pursuant to the provisions of the CEQA, an Environmental Impact Report ("EIR") was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this Project. The purpose of an EIR is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the EIR is to disclose and evaluate Project impacts and inform decision makers for the Project. In order to meet the 45-day circulation requirement, a notice regarding the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

6. The design of the subdivisions and proposed improvements are not likely to cause substantial environmental damage or substantial and avoidable injury to fish or wildlife in their habitat:

Staff Response: The proposed subdivisions will not cause environmental damage as this is an infill project on property that already has been designated as an area for residential units and there are no fish or wildlife habitat on the site. The site was previously graded for construction of the existing commercial building.

7. The design of the subdivisions and the proposed improvements are not likely to cause serious public health problems:

Staff Response: The proposed subdivisions design and improvements will not adversely affect the public health of the citizens of the City of Los Alamitos as the project is the type of use which is planned for in this area; the residential project will be compatible with the single-family and multi-family residential uses in the area. The mitigations required by the CEQA document will ensure the safety of the inhabitants of the Project and will contribute to the health of the community as a whole.

8. The design of the subdivisions and improvements will not conflict with public access easement(s) through the property:

Staff Response: The design of the subdivisions and the proposed improvements will not conflict with any existing telephone, street, and/or public utility easements. There are no public access easements through the property.

9. The design and improvements of the proposed subdivisions are suitable for the uses proposed, and the subdivisions can be developed in compliance with the applicable zoning regulations:

Staff Response: As conditioned, the Project will comply with applicable zoning regulations. Pursuant to the State's Density Bonus legislation, minor incentives, concessions, waivers, and/or reductions in development standards have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement.

10. The discharge of waste into an existing community sewer system will not result in or add to a violation of existing requirements prescribed by the Regional Water Quality Control Board.

Staff Response: The discharge of wastewater from the subdivision into the sewer system will not result in a violation of existing requirements prescribed by the Regional Water Quality Control Board.

To recommend approval of a Site Development Permit, the Planning Commission must consider the following findings (LAMC § 17.44.060). Staff responds to each of these findings, below.

1. The proposed project is allowed within the subject zone:

Staff Response: The property is designated and zoned for this type of development. The Project site has a land use designation of Multi-Family Residential - 25 and a zoning classification of Multi-Family Residential (R-3).

2. The proposed project complies with all of the applicable criteria identified in 17.44.030(B) (Application Processing, Filing, and Review—Generally):

Staff Response: The design and layout of the proposed residential units at 4665 Lampson Avenue is efficient, consistent with applicable City regulations and policies, and would not interfere with the use and enjoyment of neighboring residential developments, as the surrounding residential uses are comprised of single-family and multi-family. The location is appropriate for a 246-unit residential development that would be constructed in an architectural style that complements nearby homes. The Project will retain beautiful landscaping through the strength of a Homeowner's Association that will hire and maintain a maintenance crew. The Homeowner's Association will have regulations that are more exacting than the City' s Code concerning maintenance and parking. The location of the driveway ingress/egress access to the site would not create traffic or pedestrian hazards. The design and layout of the 246 residential units at 4665 Lampson Avenue, as conditioned, is consistent with the development and design standards/guidelines. Pursuant

to the State's Density Bonus legislation and LAMC 17.28.050, minor incentives, concessions, waivers, and/or reductions in development standards have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement.

3. The proposed project is in keeping with the character of the neighborhood in terms of the structure(s) general appearance:

Staff Response: The design of the 246 residential units would be in keeping with the neighborhood character and enhance the attractive, harmonious, and orderly development of the property. The design is in harmony with surrounding development and improves upon the City's architecture with quality detached single-family, townhome, and multi-family residential building design, extensive landscaping, and maintenance requirements.

4. The design of the proposed development will provide a desirable environment for its occupants and the visiting public as well as its neighbors through good aesthetic use of materials, texture, and color, and will remain aesthetically appealing and retain an appropriate level of maintenance:

Staff Response: The design of the 246 residential units would provide a desirable environment for its occupants, the visiting public, and its neighbors through good aesthetic use of materials, texture, landscaping, and color as described in the plan set. Site redevelopment would continue the attractive environment that the existing property previously enjoyed for years and maintain an appropriate level of maintenance, through the implementation of a homeowners' association and the use of covenants, conditions, and restrictions (see Condition Nos. 24 – 28).

5. The proposed development would not be detrimental to the public health, safety, or welfare or materially injurious to the properties or improvements in the vicinity. (Ord. 19-03 § 3, 2019):

Staff Response: The 246 residential units provide for public health, safety, and welfare of the residential and business communities by providing more living options to the City rather than causing sprawl at the fringes of this metropolitan area. The buildings will meet all building code requirements. The mitigation measures identified in the Environmental Impact Report prepared for the project would ensure the safety of the inhabitants of the project as well as other residents of Los Alamitos. Also, the 246 residential units would not depreciate property values in the vicinity, as the area is zoned for this type of use and it will improve the aesthetics of this residential neighborhood area (formerly a commercial and now vacant property).

FISCAL IMPACT

None.

Attachment:
1. PC RESO 2024-06_CEQA_4665_LAMPSON
2. PC RESO 2024-07_TPMVTTM_4665_LAMPSON
3. PC RESO 2024-08_AHU_4665_LAMPSON

4. PC RESO 2024-09_SDP_4665_LAMPSON
5. Plan Set
6. FEIR Draft Lampson_2024
7. FEIR Draft Lampson FOF-SOOC-2024
8. FEIR Draft A_Comment Letters 16&17 Attachments
9. FEIR Draft B_Updated VMT
10. FEIR Draft C1_Phase II ESA_Page 9 Revision
11. FEIR Draft C2_EFI Reponses to Comments Memorandum
12. FEIR Draft D_Nick Johnson Resume
13. FEIR Draft E_ Updated Hydrology Study
14. FEIR Draft E_Updated PWQMP
15. FEIR Draft F_Updated Noise Study
16. FEIR Draft G_Traffic Analysis Appendices
17. FEIR Draft G_Traffic Analysis
18. FEIR Draft H_Safety Evaluation
19. FEIR Draft I_Shade and Shadow Study
20. FEIR Draft J_FMP and FF
21. FEIR Draft K_Will Serve Letters
22. FEIR Fraft L_Old Ranch Country Club Sewer Demand Calculations
23. FEIR Draft M_Sanitary Sewer Analysis_20240326
24. FEIR Draft N_Historic Research for Moon Trees
25. FEIR Draft O_MMRP
26. CC RESO_CEQA_4665_LAMPSON
27. CC RESO_AHU_4665_LAMPSON
28. CC RESO_SDP_4665_LAMPSON
29. CC RESO_TPM&VTTM_4665_LAMPSON
30. Exhibit A CONDITIONS_4665_LAMPSON
31. Additional Comment Letters
32. Affordable Housing & Density Bonus Applications

PC RESOLUTION NO. 2024-06

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL CERTIFY THE FINAL ENVIRONMENTAL IMPACT REPORT, ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPT A MITIGATION MONITORING AND REPORTING PLAN FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and,

WHEREAS, an Environmental Impact Report ("EIR") for the Project, incorporated by reference herein, has been completed in compliance with the California Environmental Quality Act ("CEQA"), the guidelines promulgated by the State Secretary for Natural Resources, and the procedures for review as set forth in the 2007 City of Los Alamitos Guidelines for Implementation of the CEQA (Local CEQA Guidelines); and,

WHEREAS, notice regarding the EIR for the Project was sent to neighboring property owners pursuant to the City's CEQA Guidelines, concerning the review period commencing April 24, 2024; and,

WHEREAS, copies of the EIR have been made available for a 45-day review period to pertinent agencies and interested members of the public, commencing on April 24, 2024; and,

WHEREAS, all written comment letters received within the 45-day public review period have been noted in the record, responded to by Staff, and none of the comments alter the conclusions in the EIR; and,

WHEREAS, changes to the EIR have been made that amplify and clarify the analysis; and,

WHEREAS, it has been determined that the Project may potentially have significant effects on the environment, and revisions in the Project proposal would mitigate most of the effects to a point where clearly no significant effect would occur; and,

WHEREAS, potential off-site impacts related to vehicle miles travelled (VMT) result in a significant and unavoidable VMT impact on a direct and cumulatively considerable basis, and the City has prepared a Statement of Overriding Considerations to demonstrate that the Project's benefits outweigh the significant and unavoidable VMT impact identified in the EIR; and,

WHEREAS, the Planning Commission considered the EIR, the Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Plan ("MMRP"), incorporated by reference herein, at a duly noticed public hearing on September 25, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS DOES RESOLVE AS FOLLOWS:

SECTION 1. The Planning Commission of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The Planning Commission has reviewed and considered the environmental documentation as well as the conditions cited in Exhibit "A," for the Project prior to taking action. Based on the analysis contained in the EIR and the accompanying environmental information, in compliance with CEQA (Public Resources Code Section 21000, et seq., the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000, et seq.), and the City's Local CEQA Guidelines, the Planning Commission hereby recommends the City Council certify the EIR and adopt the Statement of Overriding Considerations and MMRP, incorporated by reference herein. In making the recommendation to the City Council to certify the EIR and adopt the Statement of Overriding Considerations, the Planning Commission finds as follows:

A. The EIR was prepared in accordance with all legal requirements, including all public notice and comment period requirements.

B. The CEQA requires preparation of an environmental impact report if there is substantial evidence in light of the whole record that the Project may have a potentially significant environmental effect on the environment. An environmental impact report was prepared which demonstrates that the proposed Project will not cause any significant onsite environmental damage as this is a Project on property that already has been designated as an area for residential units and there are no fish or wildlife habitat on site. The site was previously graded for the construction of the existing commercial building.

Regarding potential off-site impacts, Project components and mitigation measures available to reduce vehicle miles travelled (VMT) include developing pedestrian network improvements and implementing travel demand model (TDM) measures

such as those listed in Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis. All feasible mitigation measures were incorporated to reduce VMT impacts per measures identified in the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook; however, even with incorporation of all feasible mitigation measures, VMT impacts would remain significant and unavoidable.

C. The Project is consistent with the General Plan objectives, policies and programs. The proposed Project allows for the development of 246 residential units at a density of 20 dwelling units an acre which is within the General Plan multi-family residential land use designation of 20 – 25 units per acre. The proposed design and improvements of the 246 residential unit Project are consistent with the applicable General Plan goals, policies, and implementation measures.

D. The Project will not adversely affect the public health, safety and welfare. The proposed Project design and improvements will not adversely affect the public health of the citizens of the City of Los Alamitos as the Project is the type of use which is planned for in this area; the residential Project will be compatible with the single-family and multifamily residential uses in the area. The mitigation measures required by the CEQA document, along with the recommended Conditions of Approval, will ensure the safety of the inhabitants of the Project and will contribute to the health of the community as a whole.

E. The EIR identified potentially significant impacts to VMT which could result from the Project. Mitigation measures have been identified which reduce some of these impacts yet not to a level of less than significant. Even with incorporation of mitigation measures from the EIR into the conditions of Project approval, this impact is significant and unavoidable and would not be mitigated to a less than significant level. Per Public Resources Code section 21081(a)(3), specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible additional mitigation. Pursuant to the CEQA, with respect to the identified significant unavoidable environmental effects of the Project, the Planning Commission has weighed the economic, legal, social, technological, and other benefits, including region-wide and statewide environmental benefits, of the Project against its unavoidable significant environmental impacts in determining whether to recommend approval of the Project. The Planning Commission finds that the benefits of the Project outweigh its unavoidable adverse environmental effects such that the adverse environmental effects may be considered “acceptable.” A Statement of Overriding Considerations, incorporated by reference herein, was prepared and each of the separate benefits listed provides

a separate and independent ground for the City's decision that the Project's benefits outweigh the significant and unavoidable environmental impact identified in the EIR.

F. The City has complied with the CEQA. Pursuant to the provisions of the CEQA, an EIR was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this Project. The purpose of an environmental impact report is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the environmental impact report is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice regarding the EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

G. Together, the draft Environmental Impact Report ("DEIR"), the revisions to the DEIR, the comments of persons and organizations commenting on the DEIR and a list of all such persons and organizations, the responses to the comments, and other information added by the City constitute the final Environmental Impact Report ("FEIR") on the Project.

H. No new significant information has been added to the EIR since circulation of the DEIR that would require recirculation of the EIR. Recirculation of the draft EIR is not required where the new information merely clarifies, amplifies or makes minor modifications to an adequate EIR. The information provided since the draft EIR meets those criteria. All the text revisions to the draft EIR provide clarification and additional detail. After considering all comments received on the draft EIR, the City of Los Alamitos has determined that the changes do not result in a need to recirculate the draft EIR.

I. The final EIR reflects the City of Los Alamitos' independent judgement and analysis.

SECTION 3. Based on the entire record before the Planning Commission, including the written and oral record and the findings set forth in the Resolution, the Planning Commission hereby recommends the City Council certify the Environmental Impact Report, and adopt the Statement of Overriding Considerations and Mitigation Monitoring and Reporting Plan, incorporated by reference herein, for the 4665 Lampson Project at 4665 Lampson Avenue, APN 130-012-35.

SECTION 4. The Secretary of the Planning Commission shall forward a copy of this Resolution to the City Council, the Applicant, and any person requesting the same.

PASSED, APPROVED, AND ADOPTED this 25th day of September 2024.

_____
Mary Anne Cuilty, Chair

ATTEST:

_____
Ron Noda, Secretary

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Ron Noda, Planning Commission Secretary of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the Planning Commission held on the 25th day of September 2024, by the following vote, to wit:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:

_____
Ron Noda, Secretary

PC RESOLUTION NO. 2024-07

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE A TENTATIVE PARCEL MAP 2022-133 (FOR FINANCE AND CONVEYANCE PURPOSES) AND VESTING TENTATIVE TRACT MAP NO. 19263 (FOR CONDOMINIUM PURPOSES) FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and,

WHEREAS, a completed application for a Tentative Parcel Map and a Vesting Tentative Tract Map was submitted by Lampson Park Place, LLC, on November 18, 2023, requesting to subdivide the Project site; and,

WHEREAS, the Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. The Project would provide 577 parking spaces (475 spaces for the single-family detached and townhomes and 102 for the apartments) exceeding the 441 parking spaces that would be required pursuant to the State's Density Bonus Law; and,

WHEREAS, the application included a tentative parcel map and a vesting tentative tract map as required by Section 16.06.030 (Tentative Parcel Maps) and Section 16.06.020 (Tentative Tract Maps) of the Los Alamitos Municipal Code (LAMC); and,

WHEREAS, the Applicant shall offer a dedication in fee or an easement to the City of a 10-foot-wide strip of land (approximately 10,000 square feet) adjacent to Arbor Park for the purpose of public ingress, egress and access by vehicles and pedestrians and the parking of vehicles; and,

WHEREAS, the Planning Commission reviewed and considered the proposed Project and application, including the Tentative Parcel Map and the Vesting Tentative Tract Map, attached hereto as Exhibits "B" and "C" and incorporated by reference herein, at a duly noticed public hearing on September 25, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS DOES RESOLVE AS FOLLOWS:

SECTION 1. The Planning Commission of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The Planning Commission hereby makes the following findings as set forth in the Subdivision Map Act as well as those required by Los Alamitos Municipal Code (LAMC) Sections 16.10.100 and 16.10.110:

1. *The proposed maps are consistent with the City' s General Plan.* The proposed maps allow for the site redevelopment with 246 residential units at a density of 20 dwelling units an acre which is within the General Plan multi-family residential land use designation of 20 – 25 units per acre. The proposed design of the Project subdivision is consistent with the applicable General Plan goals, policies, and implementation measures.

2. *The design and improvement of the proposed subdivisions is consistent with the City's General Plan.* The design and improvement of the 246-unit Project is suitable for residential development in the R- 3 multi-family residential zone and the subdivisions can be developed in compliance with the General Plan.

3. *The site is physically suitable for the proposed type of development.* The site is physically suitable for a residential subdivision because the site is generally flat and will require minimal grading.

4. *The site is physically suitable for the proposed density of development.* The 12.3-acre site is capable of supporting the development of the proposed 246 residential units. The proposed Project is at 20 dwelling units per acre, within the maximum that the City's R- 3 zoning district allows at 25 dwelling units per acre under multi-family development.

5. *The requirements of the California Environmental Quality Act (CEQA) have been satisfied.* Pursuant to the provisions of the CEQA, an Environmental Impact Report ("EIR") was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for the Project. The purpose of an EIR is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the EIR is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice regarding the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

6. *The design of the subdivisions and proposed improvements are not likely to cause substantial environmental damage or substantial and avoidable injury to fish or wildlife in their habitat.* The proposed subdivisions will not cause any onsite environmental damage as this is an infill project on property that already has been designated as an area for residential units and there are no fish or wildlife habitat on the site. The site was previously graded for construction of the existing commercial building.

7. *The design of the subdivisions and the proposed improvements are not likely to cause serious public health problems.* The proposed subdivisions design and improvements will not adversely affect the public health of the citizens of the City of Los Alamitos as the Project is the type of use which is planned for in this area; the residential Project will be compatible with the single-family and multi-family residential uses in the area. The mitigations required by the CEQA document will ensure the safety of the inhabitants of the Project and will contribute to the health of the community as a whole.

8. *The design of the subdivisions and improvements will not conflict with public access easement(s) through the property.* The design of the subdivisions and the proposed improvements will not conflict with any existing telephone, street, and/or public utility easements. There are no public access easements through the property.

9. *The design and improvements of the proposed subdivisions are suitable for the uses proposed and the subdivisions can be developed in compliance with the applicable zoning regulations.* As conditioned, the Project will comply with applicable zoning regulations. Pursuant to the State's Density Bonus legislation, minor incentives, concessions, waivers, and/or reductions in development standards have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement.

10. *The discharge of waste into an existing community sewer system will not result in or add to a violation of existing requirements prescribed by the Regional Water Quality Control Board.* The discharge of wastewater from the subdivision into the sewer system will not result in a violation of existing requirements prescribed by the Regional Water Quality Control Board.

SECTION 3. Based upon such findings and determinations, the Planning Commission hereby recommends the City Council approve Tentative Parcel Map 2022-133 and Vesting Tentative Tract Map No. 19263 attached as Exhibits "B" and "C" and incorporated by reference herein, subject to the conditions located in Exhibit "A."

SECTION 4. The Secretary of the Planning Commission shall forward a copy of this Resolution to the City Council, the Applicant and any person requesting the same.

PASSED, APPROVED, AND ADOPTED this 25th day of September 2024.

_____
Mary Anne Cuilty, Chair

ATTEST:

_____
Ron Noda, Secretary

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Ron Noda, Planning Commission Secretary of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the Planning Commission held on the 25th day of September 2024, by the following vote, to wit:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:

_____
Ron Noda, Secretary

PC RESOLUTION NO. 2024-08

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE AN AFFORDABLE HOUSING UNIT APPLICATION FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS, INCLUDING 76 AFFORDABLE MULTI-FAMILY APARTMENT HOMES (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and,

WHEREAS, a completed Affordable Housing Unit Application for the Project was submitted by Lampson Park Place, LLC, on October 11, 2022, requesting approval for 246 residential units, including 76 affordable multi-family apartment homes; and,

WHEREAS, pursuant to the State's Density Bonus Law, the application also included requests for incentives, concessions and waivers for the following: reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement; and,

WHEREAS, pursuant to Government Code Section 65915, the verified application constitutes a request as required by Section 17.28.050 (Affordable Housing) of the Los Alamitos Municipal Code; and,

WHEREAS, the State Density Bonus Law codified in Government Code Section 65915 to 65918 provides a mechanism that allows housing developers to increase density on a property above the maximum allowed under a jurisdiction's General Plan or zoning and to request relief from development standards in exchange for offering to build or donate land for affordable or senior housing units. A developer who meets the requirements of the State law is entitled to receive the density bonus and other benefits (i.e., incentives, concessions, waivers, and reduction of development standards) as a matter of right; and,

WHEREAS, California Government Code Section 65589.5, also known as the Housing Accountability Act, prohibits a local agency from disapproving, or conditioning approval in a manner that renders infeasible, a housing development project for very low, low-, or moderate-income households or an emergency shelter unless the local agency makes specified written findings based on a preponderance of the evidence in the record; and,

WHEREAS, the receipt of a density bonus, incentive, concession, waiver, or reduction of development standards pursuant to Section 65915 shall not constitute a valid basis on which to find a proposed housing development project inconsistent, not in compliance, or not in conformity, with an applicable plan, program, policy, ordinance, standard, requirement, or other similar provision; and,

WHEREAS, the Planning Commission considered the Affordable Housing Unit Application, incorporated by reference herein, at a duly noticed Public Hearing on September 25, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS DOES RESOLVE AS FOLLOWS:

SECTION 1. The Planning Commission of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The Planning Commission hereby makes the following findings or determinations made in accordance with Section 17.28.050 of the LAMC, which is based on all the evidence presented, both written and oral;

The design and layout of the proposed development are consistent with the development and design standards/guidelines of the applicable zoning district: The design and layout of the 246 residential units at 4665 Lampson Avenue, as conditioned, is consistent with the development and design standards/guidelines of the Multiple Family (R-3) Residential Zoning District as well as with the requirements for residential development set forth in Section 17.34.060. The development meets, or will be conditioned to meet, all requirements. Each proposed unit and the entire Project meets the development standards for the R-3 zone including parcel area, parcel depth, maximum density, minimum dwelling area, and site coverage. Pursuant to the State's Density Bonus legislation, minor incentives, concessions, waivers, and/or reductions in development standards have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement as described below:

Reduction in setback distance between structures. LAMC Section 17.08.030, Table 2-03 requires a 10-foot minimum distance between structures. Though most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances, the setback distance is reduced to 6 feet at certain locations within the Project site plan. Meeting the required 10-foot minimum setback distance would require a significant change to the site plan and likely result in a reduction of residential units.

Exception for building step back requirements. LAMC Section 17.08.045.A.1 requires that for buildings higher than two stories, the third story must have a minimum 5-foot step back from the story below to minimize building bulk and create façade articulation. This requirement appears to govern regardless of building location within a project site or surrounding land uses. While the City interprets this requirement as applying only to perimeter buildings (i.e., buildings that are located along the perimeter of a Project site), given the requirement's ambiguity, the Applicant is requesting an exception from the required minimum 5-foot step back requirement for those structures identified on the site plan.

Reduction in minimum storage space. LAMC Section 17.08.030, Table 2-03, requires a minimum storage space in a garage or carport of 200 cubic feet per unit. For certain units within the Project, this storage space requirement will be difficult to satisfy because of limitations in garage and carport space. As such, the Applicant is requesting that the minimum storage space requirement be reduced to 175 cubic feet per unit for market rate units and 50 cubic feet per unit for affordable units identified on the site plan.

Reduced common area requirement. LAMC Section 17.08.030, Table 2-03 requires a minimum 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, but the Project will not be able to comply with the common area requirement. This is due to the proposed dedication or grant of an easement related to the northerly 10-foot strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of property. When this area is dedicated or granted to the City, then the Project will be unable to comply with the common area requirement because compliance with this requirement would physically preclude construction of the Project at the densities allowed and with the concessions described above. Therefore, the Applicant is requesting a reduction in the common area requirement from 200 to 150 square feet per unit.

Parking Reduction Request. The Project would provide 577 parking spaces (475 spaces for the single-family detached and townhomes and 102 for the apartments), which is below the City's required 679 parking spaces pursuant to LAMC Section 17.22.030, Required Parking Spaces. The State's Density Bonus Law specifies that for housing developments that qualify for a density bonus the local government

shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. (Gov't Code Section 65915(p)(1).) The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project, which is significantly more than the 441 parking spaces that would be required pursuant to the State's Density Bonus Law.

SECTION 3. Prior to final map approval, the applicant shall record covenants with the County Recorder for the low and/or very low affordability requirements of said 76 units to remain affordable for a period no less than 55 years in accordance with Government Code Section 65915 and Los Alamitos Municipal Code Section 17.28.050, as described in Condition Nos. 16 - 23.

SECTION 4. Pursuant to the provisions of the California Environmental Quality Act (CEQA) an Environmental Impact Report ("EIR") was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this project. The purpose of an EIR is to identify potential effects on the environment of the project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the EIR is to disclose and evaluate project impacts and inform decision makers for the project. To meet the 45-day circulation requirement, a notice regarding the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

SECTION 5. Based upon such findings and determinations, the Planning Commission hereby recommends the City Council approve an Affordable Housing Unit Application, including the requested incentives, concessions, waivers, and reductions in development standards, as represented by the plans and elevations incorporated by reference herein, and subject to the conditions located in Exhibit "A."

SECTION 6. The Secretary of the Planning Commission shall forward a copy of this Resolution to the City Council, the Applicant, and any person requesting the same.

PASSED, APPROVED, AND ADOPTED this 25th day of September 2024.

_____
Mary Anne Cuilty, Chair

ATTEST:

_____
Ron Noda, Secretary

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Ron Noda, Planning Commission Secretary of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the Planning Commission held on the 25th day of September 2024, by the following vote, to wit:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:

_____
Ron Noda, Secretary

PC RESOLUTION NO. 2024-09

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE A SITE DEVELOPMENT PERMIT – MAJOR FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and,

WHEREAS, a completed application for a Site Development Permit – Major was submitted for the Project by Lampson Park Place, LLC, on November 18, 2023; and,

WHEREAS, the Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the 441 parking spaces that would be required pursuant to the State's Density Bonus Law; and,

WHEREAS, the verified application constitutes a request as required by Section 17.44.040 and Section 17.08.020 Table 2-02 (Allowed Uses and Permit Requirements for Residential Zoning Districts) of the Los Alamitos Municipal Code (LAMC); and,

WHEREAS, the Planning Commission reviewed and considered the application for the Site Development Permit – Major, incorporated by reference herein, at a duly noticed public hearing on September 25, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF LOS ALAMITOS DOES RESOLVE AS FOLLOWS:

SECTION 1. The Planning Commission of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The Planning Commission hereby makes the following findings made in accordance with Section 17.44.060 of the LAMC, which is based on all of the evidence presented, both written and oral; the Staff report and final Environmental Impact Report are incorporated by reference herein:

1. *The proposed project is allowed within the subject zone:* The property is designated and zoned for this type of development. The Project site has a land use designation of Multi-Family Residential - 25 and a zoning classification of Multi-Family Residential - 25 (R-3).

2. *The proposed project complies with all of the applicable criteria identified in 17.44.030(B) (Application Processing, Filing, and Review—Generally):* The design and layout of the proposed residential units at 4665 Lampson Avenue is efficient, consistent with applicable City regulations and policies, and would not interfere with the use and enjoyment of neighboring residential developments, as the surrounding residential uses are comprised of single-family and multi-family. The location is appropriate for a 246-unit residential development that would be constructed in an architectural style that complements nearby homes. The Project will retain beautiful landscaping through the strength of a Homeowner's Association that will hire and maintain a maintenance crew. The Homeowner's Association will have regulations that are more exacting than the City' s Code concerning maintenance and parking. The location of the driveway ingress/egress access to the site would not create traffic or pedestrian hazards. The design and layout of the 246 residential units at 4665 Lampson Avenue, as conditioned, is consistent with the development and design standards/guidelines. Pursuant to the State’s Density Bonus legislation and LAMC 17.28.050, minor incentives, concessions, waivers, and/or reductions in development standards have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement.

3. *The proposed project is in keeping with the character of the neighborhood, in terms of the structure(s) general appearance:* The design of the 246 residential units would be in keeping with the neighborhood character and enhance the attractive, harmonious, and orderly development of the property. The design is in harmony with surrounding development and improves upon the City's architecture with quality detached single-family, townhome, and multi-family residential building design, extensive landscaping, and maintenance requirements.

4. *The design of the proposed development will provide a desirable environment for its occupants and visiting public as well as its neighbors through good aesthetic use of materials, texture, and color, and will remain aesthetically appealing and retain an appropriate level of maintenance:* The design of the 246 residential units would provide a desirable environment for its occupants, visiting public, and its neighbors through good aesthetic use of materials, texture, landscaping, and color

as depicted in the plan set incorporated by reference herein. Site redevelopment would continue the attractive environment that the existing property previously enjoyed for years and maintain an appropriate level of maintenance, through the implementation of a homeowners' association and the use of covenants, conditions, and restrictions.

5. *The proposed development would not be detrimental to the public health, safety, or welfare or materially injurious to the properties or improvements in the vicinity:* The 246 residential units provide for public health, safety, and welfare of the residential and business communities by providing more living options to the City rather than causing sprawl at the fringes of this metropolitan area. The buildings will meet all building code requirements. The mitigation measures identified in the Environmental Impact Report prepared for the Project would ensure the safety of the inhabitants of the Project as well as other residents of Los Alamitos. Also, the 246 residential units would not depreciate property values in the vicinity, as the area is zoned for this type of use and it will improve the aesthetics of this residential neighborhood area (formerly a commercial and now vacant property).

6. The proposed Project would assist the City of Los Alamitos in providing for the State mandated units identified in the General Plan for moderate, low and/or very low-income categories as described in the Regional Housing Needs Assessment. Remaining sites identified in the housing element are adequate to meet the requirements of Government Code Section 65583.2 and to accommodate the jurisdiction's share of the regional housing need pursuant to Section 65584.

   The City's Regional Housing Needs Allocation (RHNA) for the 6th Cycle Housing Element Update is a total of 769 units, which is comprised of 313 lower income units, 145 moderate income units, and 311 above moderate-income units. The City's Housing Element identified that the City's residential capacity is 817 total units, which exceeds the City's RHNA obligation of 769 units by 48 units. This surplus, or "buffer," of 48 units is comprised of 19 surplus lower income units, 14 moderate income units, and 15 surplus above moderate-income units.

   The Housing Sites Inventory identifies the total number of units for the proposed Project site as 246 units, and those units are projected to consist of 77 lower income units, zero moderate income units, and 169 above moderate-income units. The proposed residential Project proposes 76 lower income units, zero moderate income units, and 170 above moderate-income units

   As such, approval of the Project on the site identified in the Housing Sites Inventory will result in the need for the City to deduct one lower income unit from the City's surplus "buffer" of 19 lower income units, resulting in a remaining surplus "buffer" of 18 lower income units. Accordingly, even after approval of the Project, the remaining sites identified in the City's Housing Element are adequate to meet the requirements of Section 65583.2 and to accommodate the jurisdiction's share of the regional housing need pursuant to Section 65584.

SECTION 3. Pursuant to the provisions of the California Environmental Quality Act (CEQA) an Environmental Impact Report ("EIR") was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this Project. The purpose of an EIR is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the EIR is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice regarding the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

SECTION 4. Based upon such findings and determinations, the Planning Commission hereby recommends the City Council approve a Site Development Permit – Major, as represented by the plans and elevations incorporated by reference herein, and subject to the conditions located in Exhibit "A."

SECTION 5. The Secretary of the Planning Commission shall forward a copy of this Resolution to the City Council, the Applicant and any person requesting the same.

PASSED, APPROVED, AND ADOPTED this 25th day of September, 2024.

_____
Mary Anne Cuilty, Chair

ATTEST:

_____
Ron Noda, Secretary

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Ron Noda, Planning Commission Secretary of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the Planning Commission held on the 25th day of September 2024, by the following vote, to wit:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:

_____
Ron Noda, Secretary



LAMPSON/LOS ALAMITOS
SITE
LOS ALAMITOS, CALIFORNIA

BUILDER/DEVELOPER:
MJW INVESTMENTS, LLC
27702 CROWN VALLEY PKWY.
SUITE D-4-197
LADERA RANCH, CA 92694
www.mwinvestmentgroup.com|(626)710-6377

PLANNING ENTITLEMENTS:
T&B PLANNING, INC
3200 EL CAMINO REAL
SUITE 10
IRVINE, CA 92602
www.tbplanning.com|(714)505-6306

FIRE COORDINATION:
FIRESPACE PLANNING SOLUTIONS
2886 AIROSO STREET
RANCHO MISSION VIEJO, CA 92694
david@firesafeplanning.com|(949)240-5911

ARCHITECT:
KTGY GROUP, INC
17911 VON KARMAN AVE.
SUITE 200
IRVINE, CA 92614
www.ktgy.com|(949)859-2133

CIVIL|PLANNING|SURVEYING:
C&V CONSULTING, INC
9830 IRVINE CENTER DR.
IRVINE, CA 92618
www.cvc-inc.net|(949)916-3800

LANDSCAPE:
STUDIO PAD, INC
23195 LA CEDENA DR.
SUITE 103
LAGUNA HILLS, CA 92653
www.Studio-PAD.com|(949)770-8530

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C - 3	Preliminary Grading Plan
C - 4	Preliminary Utility Plan

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Ladera Ranch, CA 92694

LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

SCHEMATIC DESIGN

Plot Date:	01.16.24
Pre-App Submittal:	01.28.2022
1st Planning Submittal:	06.30.2022
2nd Planning Submittal:	10.10.2022
3rd Planning Submittal:	02.17.2023
4th Planning Submittal:	04.10.2024

SHEET INDEX

A0.1



SITE INFORMATION

Address: 4665 Lampson Ave. #C
City: Los Alamitos
County: Orange County
APN: 130-012-35
Current Zoning: C-F Community Facilities
Proposed Zoning: Adopted R-3 Ordinance (Pending)
Building Height: 35' to Roof (Exemption - 17.16.040 to 41')
Front Street Setback: 20' Avg. (15' Min.)
Rear Setback: 10'
Side Setback (Interior): 5'

SITE SUMMARY COMBINED DATA

	Net Site	Gross Site
Site Area:	±12.1 Acres^	±12.3 Acres
Total Units for SITE:	246 Units	246 Units
Mixed Density:	20.33 DUA	20.0 DUA
Combined Parking Required:	440 Spaces	
Combined Provided Parking:	577 Spaces	
Surplus Parking:	137 Spaces	

Open Space	Required	Provided
Common Open Space (COS)	49,200sf (200sf/Unit)	16,160sf (67sf/Unit)
(Per Section 17.08.030 Development Standard in Residential)		
Private Open Space (POS)	14,760sf (60sf /Unit)	51,320sf (216sf/Unit)
(Includes all Decks and Private Patios. See Landscape Sheet L-7)		

FOR SALE PRODUCT - Single Family Detached/Townhomes

Site Area: ±10.1 Acres
Density (SFD/Towns): 16.73 DUA
Total Units: 169

Plan/Unit Types

Detached SFD (Gross sf):
2 units - Plan 1 ALT - 1719 sf - 3Bd/2.5Ba, Bonus/Loft - 2 Story
18 units - Plan 1X - 2214 sf - 4Bd/3.5Ba, Bonus/Loft - 3 Story
19 units - Plan 2X - 2679 sf - 4Bd/3.5Ba, Bonus/Loft - 3 Story
10 units - Plan 3 - 2187 sf - 4Bd/3Ba, Loft/Opt.Bd/Den - 2 Story
6 units - Plan 3X - 2815 sf - 4Bd/4Ba, Bonus,Loft/Opt. Bd/Den/ - 3 Story
55 units (Total) 132,951sf

Townhomes (Gross sf):
10 units - Plan 1 - 1325sf - 2bd/2.5ba - 73sf Deck (Carriage)
19 units - Plan 1X - 1376sf - 2bd/2.5ba - 68sf Deck (Carriage)
9 units - Plan 1Y - 1266sf - 2bd/2.5ba - 71sf Deck (Carriage)
34 units - Plan 2 - 1803sf - 3bd/3.5ba (side/side)
7 units - Plan 2X - 1837sf - 3bd/3.5ba(side/side)
35 units - Plan 3 - 1928sf - 4bd/3.5ba - 72sf Deck (side/side)
114 units (Total) 192,429sf 5,181sf
(A) - Accessible Unit Provided at 10% (12 Units of Plan 2)

Parking Data

Parking Required (Per State Density Bonus, Section 65915):

2Bd:	38 units x 1.5 sp/unit =	57 spaces
3Bd:	43 units x 1.5 sp/unit =	65 spaces
4Bd (or more):	88 units x 2.5 sp/unit =	220 spaces
Total Required: (Max Parked)		342 spaces

Parking Provided:

Garages	338 spaces
(D) Driveways	51 spaces
(P) Open Parking**	86 spaces
Total Parking Provided	475 spaces (2.8 sp/unit)

(**) Required Four(4) Motor Cycle Parking Spaces to be provided at (MC) Open Spaces (Per 17.22.060 - 1 space : 20 Car Spaces)

Open Space Provided

Common Open Space
SFD/Towns Combined - see Landscape for areas (Sheet L-7)

Private Open Space - see Landscape for Open Space calculations (Sheet L-7)

ENERGY CODE NOTES

1. The Project will include solar photovoltaic panels with the capability to generate up to 1,229,520 kWh/annually.
2. The Project will be 100% electric and will not include natural gas.
3. The Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1.

FOR RENT AFFORDABLE APARTMENTS

Site Area : ±2.0 Acres
Density: 38.5 DUA

Open Space Provided
See Landscape for Open Space Calcs (Sheet L-7)

Unit Types

1 Bedroom 36 Units (46.8%)
Plan 1-1, 665 sf - 1 Bd/1 Ba - Deck 72 sf
Plan 1-2, 667 sf 1 Bd/1 Ba - Deck 76 sf
2 Bedroom 20 Units (26.0%)
Plan 2-1, 809 sf 2 Bd/1 Ba - Deck 64 sf
Plan 2-2, 802 sf 2 Bd/1 Ba - Deck 60 sf
Plan 2-3, 914 sf 2 Bd/1 Ba - Deck 66 sf
3 Bedroom 21 Units (27.3%)
Plan 3-1, 1081 sf 3 Bd/2 Ba - Deck 71 sf
Plan 3-1 Alt, 1112 sf 3 Bd/2 Ba - Deck 71 sf
Plan 3-2, 1034 sf 3 Bd/2 Ba - Deck 68 sf
Plan 3-3, 1168 sf 3 Bd/2 Ba - Deck 62 sf
Total Units - 77

Parking Data

Required:

1Bd - 36 Un. x 1.0* =	36 Spaces
2Bd - 20 Un. x 1.5* =	30 Spaces
3Bd - 21 Un. x 1.5* =	31.5 Spaces
Total - 97.5 =	98 Spaces

(*) Parking Ratio

Provided:

Garages	30 spaces
Open Spaces	72 spaces
Total (1.27 sp/Unit)	102 spaces

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LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

SCHEMATIC DESIGN

Plot Date:	07.23.2024
Pre-App Submittal:	01.28.2022
1st Planning Submittal:	06.30.2022
2nd Planning Submittal:	10.10.2022
3rd Planning Submittal:	02.17.2023

0 25 50 100

CONCEPTUAL
ARCHITECTURAL SITE PLAN

A1.0


1


2


3


4


5

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Plot Date:	02.17.2023
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3rd Planning Submittal:	02.17.2023

INSPIRATION/PRECEDENT IMAGES

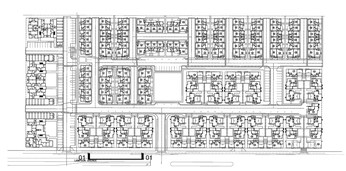
A1.1



PLAN 3A

PLAN 3B

LAMPSON STREET SCENE



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LOS ALAMITOS, CA # 2021-0812

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3rd Planning Submittal:	02.17.2023

0 4 8 12

STREET SCENE 01
ELEVATION

A1.2



PLAN 2XA 3-STORY | ALLEY ENTRY | PLAN 2XB 3-STORY | PLAN 2XA 3-STORY



PLAN 2XA 3-STORY | ALLEY ENTRY | PLAN 2XB 3-STORY

CLUSTER HOMES STREET SCENE



VICINITY MAP

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LOS ALAMITOS, CA # 2021-0812

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STREET SCENE 02
ELEVATION

A1.3





TOWNHOMES STREET SCENE



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LOS ALAMITOS, CA # 2021-0812

SCHEMATIC DESIGN

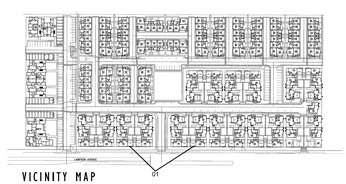
Plot Date:	02.17.2023
Pre-App Submittal:	01.28.2022
1st Planning Submittal:	06.30.2022
2nd Planning Submittal:	10.10.2022
3rd Planning Submittal:	02.17.2023

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STREET SCENE 03
ELEVATION

A1.4





VICINITY MAP

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STREET RENDERING
VIEW 1

A1.5





VICINITY MAP

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0 4 8 12

STREET RENDERING
VIEW 2

A1.6





VICINITY MAP

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LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

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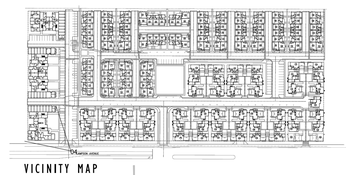
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2nd Planning Submittal:	10.10.2022
3rd Planning Submittal:	02.17.2023

0 4 8 12

STREET RENDERING
VIEW 3

A1.7





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LOS ALAMITOS, CA # 2021-0812

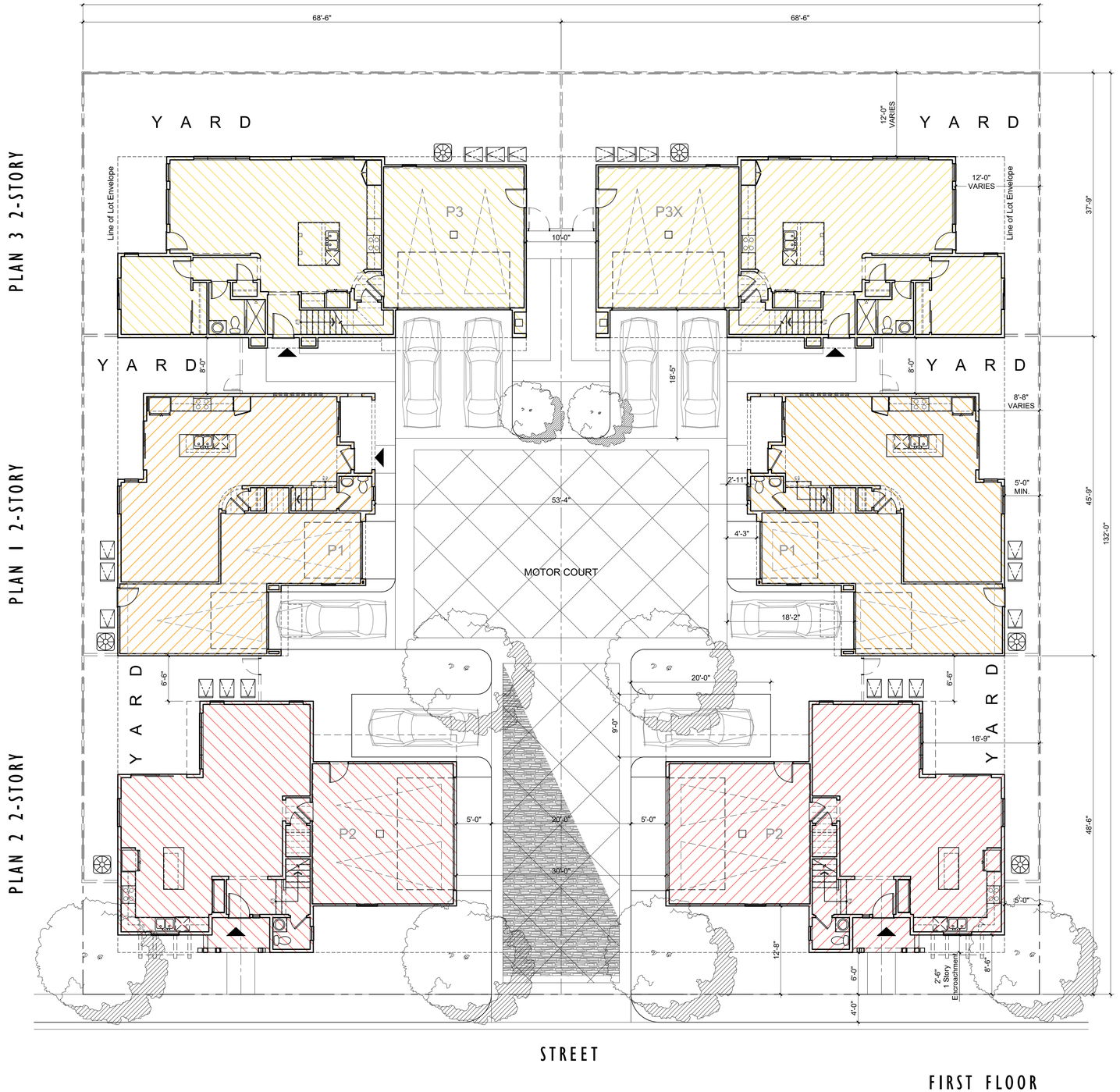
SCHEMATIC DESIGN

Plot Date:	02.17.2023
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STREET RENDERING
VIEW 4

A1.8



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LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

SCHEMATIC DESIGN

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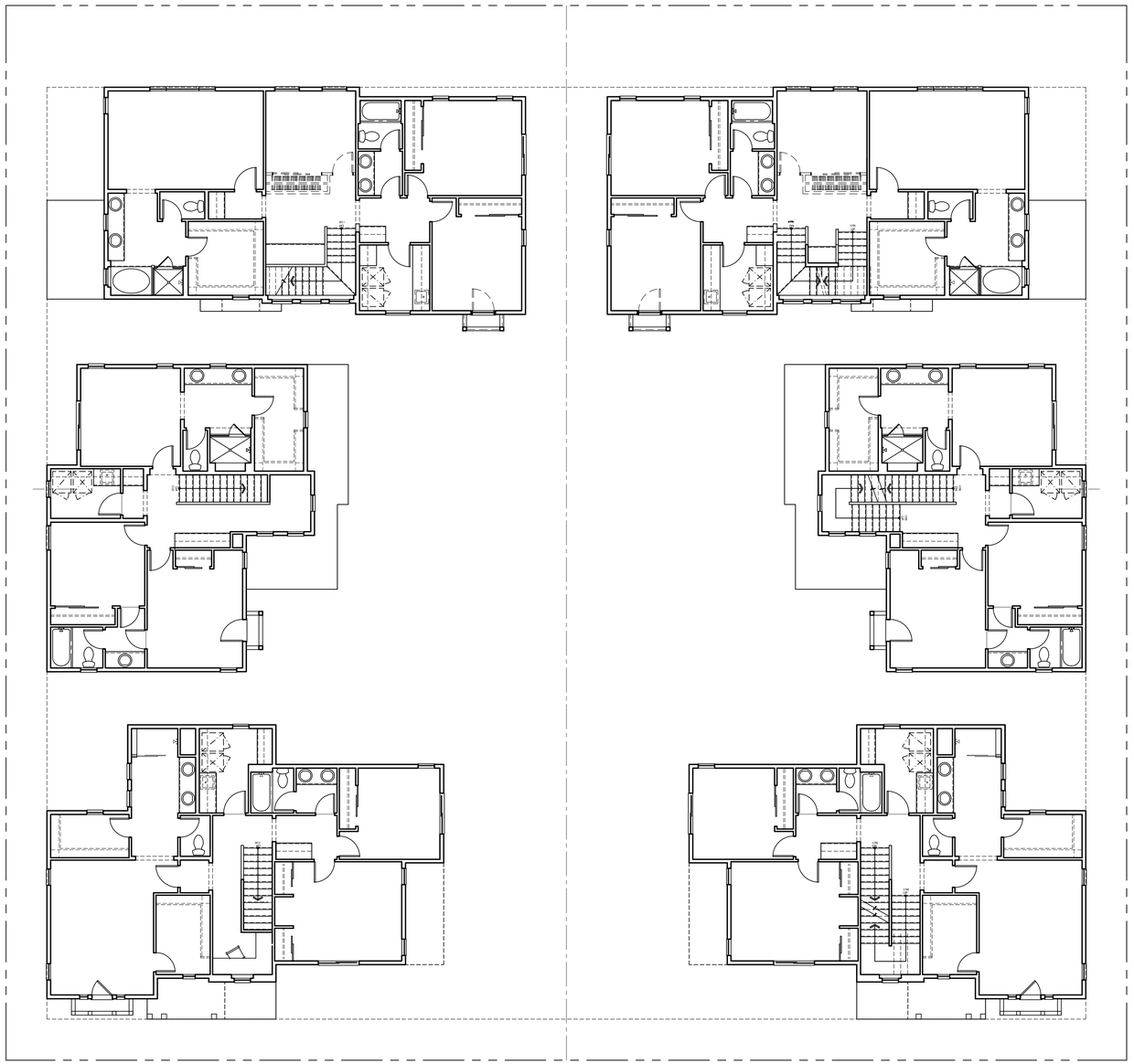
SINGLE FAMILY DETACHED
FIRST LEVEL CLUSTER PLANS

A3.0

PLAN 3 2-STORY

PLAN 1 2-STORY

PLAN 2 2-STORY



PLAN 3X 3-STORY
OCCURS AT INTERIOR
LOCATIONS ONLY

PLAN 1X 3-STORY ALT

PLAN 2X 3-STORY ALT

SECOND FLOOR

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SINGLE FAMILY DETACHED
SECOND LEVEL CLUSTER PLANS

A3.1



PLAN 3X 3-STORY
OCCURS AT INTERIOR
LOCATIONS ONLY

PLAN IX 3-STORY ALT

PLAN 2X 3-STORY ALT

THIRD FLOOR

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SINGLE FAMILY DETACHED
THIRD LEVEL CLUSTER PLANS

A3.2



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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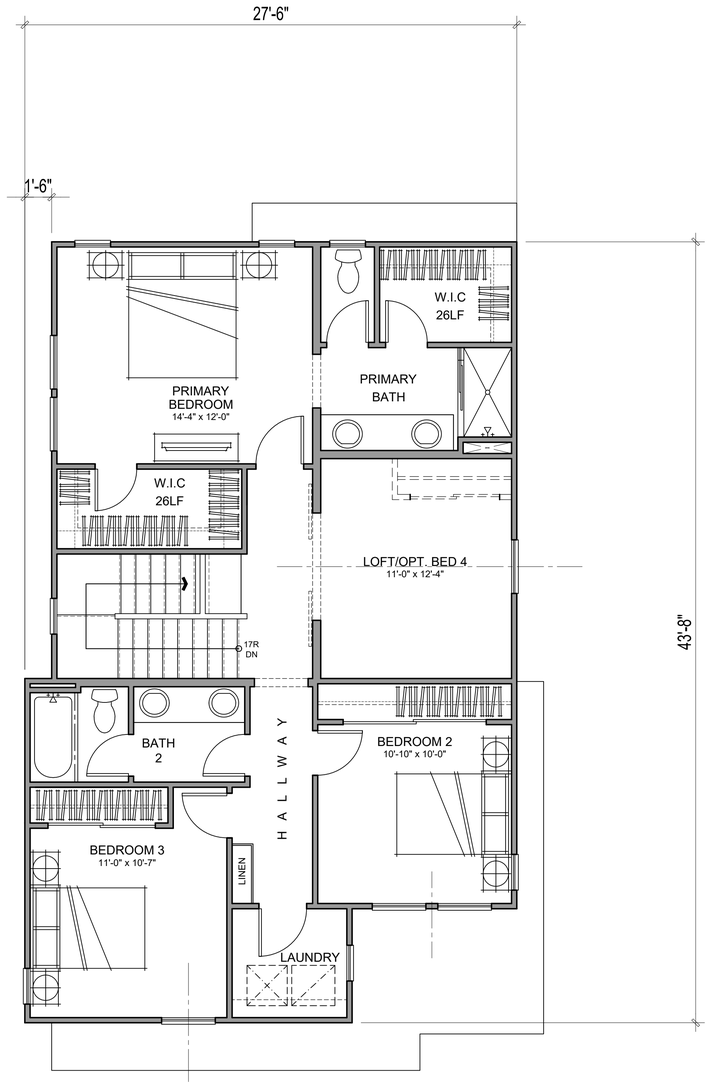
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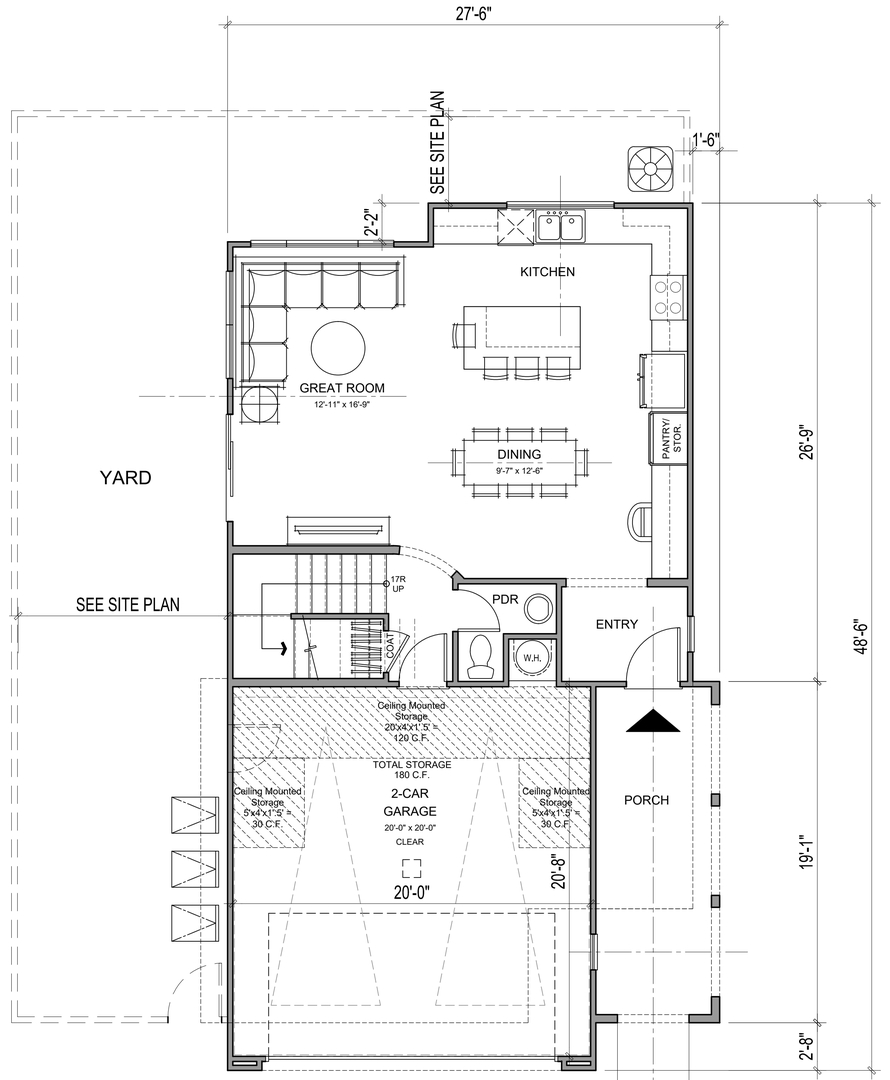
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SFD PLAN 1-ALT - 2-STORY
ELEVATIONS - STYLE B

A4.0



SECOND FLOOR



FIRST FLOOR

P4 - GROSS AREA	
1ST FLOOR	679 SQ. FT.
2ND FLOOR	1041 SQ. FT.
TOTAL LIVING	1720 SQ. FT.
GARAGE	431 SQ. FT.
PORCH	130 SQ. FT.

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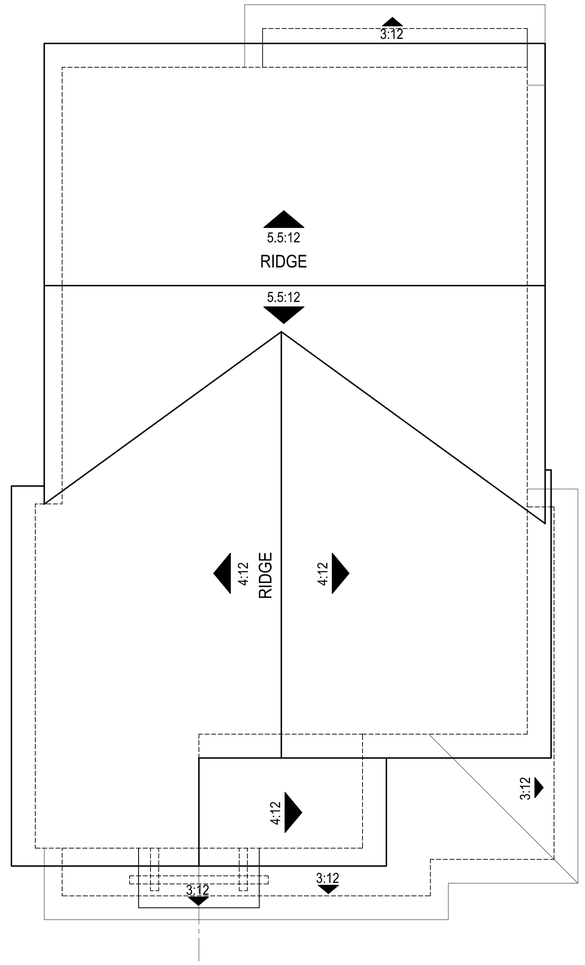
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PLAN 1-ALT FLOOR PLANS

A4.1



ROOF PLAN-'B' STYLE

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LOS ALAMITOS, CA # 2021-0812

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PLAN 1-ALT ROOF PLAN
B ELEVATION STYLE

A4.2



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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SFD PLAN 1 - 2-STORY
ELEVATIONS - STYLE A

A4.3



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
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28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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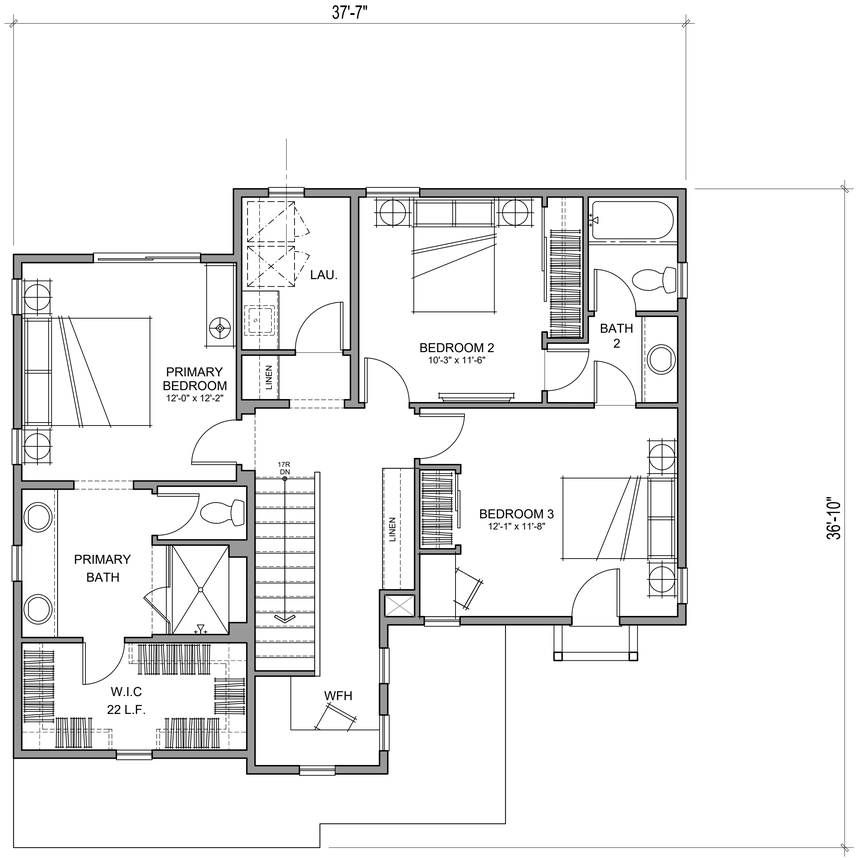
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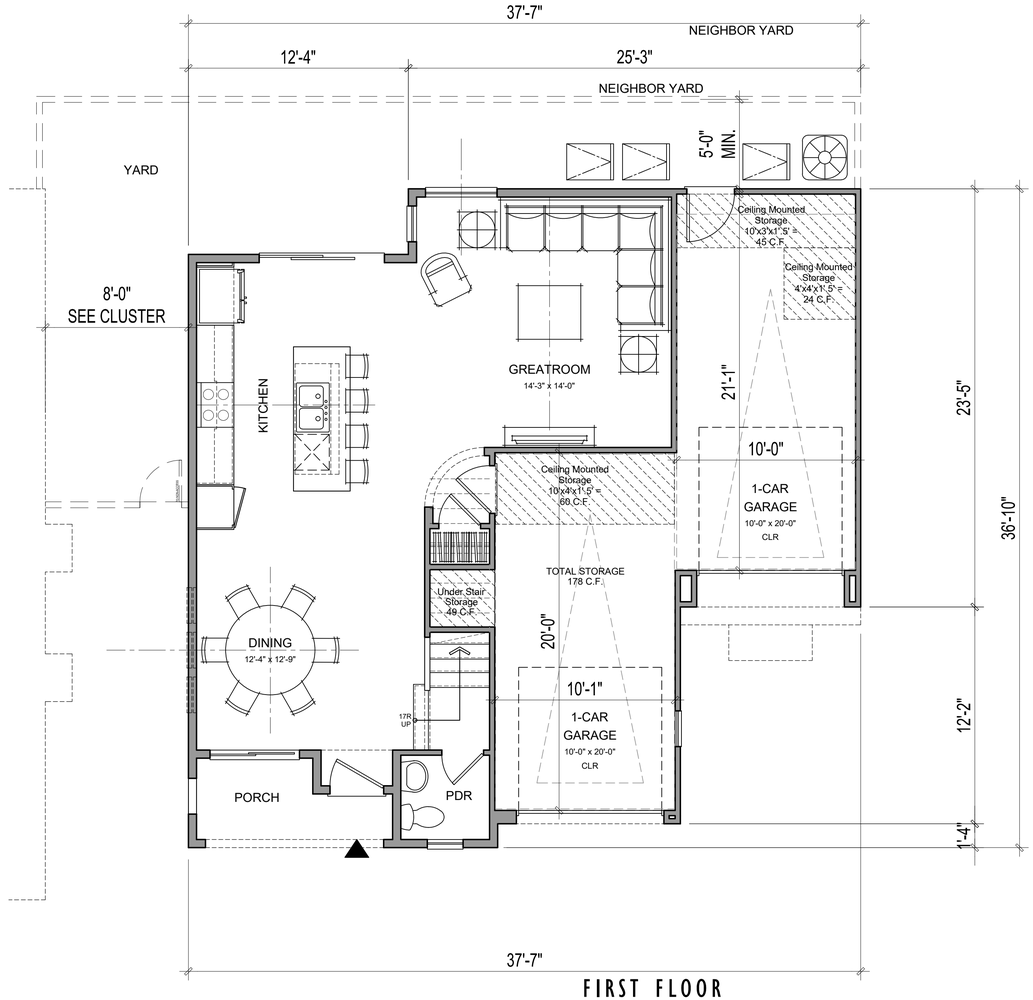
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SFD PLAN 1 - 2-STORY
ELEVATIONS - STYLE B

A4.4



SECOND FLOOR



FIRST FLOOR

P1 - GROSS AREA	
1ST FLOOR	688 SQ. FT.
2ND FLOOR	1034 SQ. FT.
TOTAL LIVING	1722 SQ. FT.
GARAGE	431 SQ. FT.
PORCH	48 SQ. FT.

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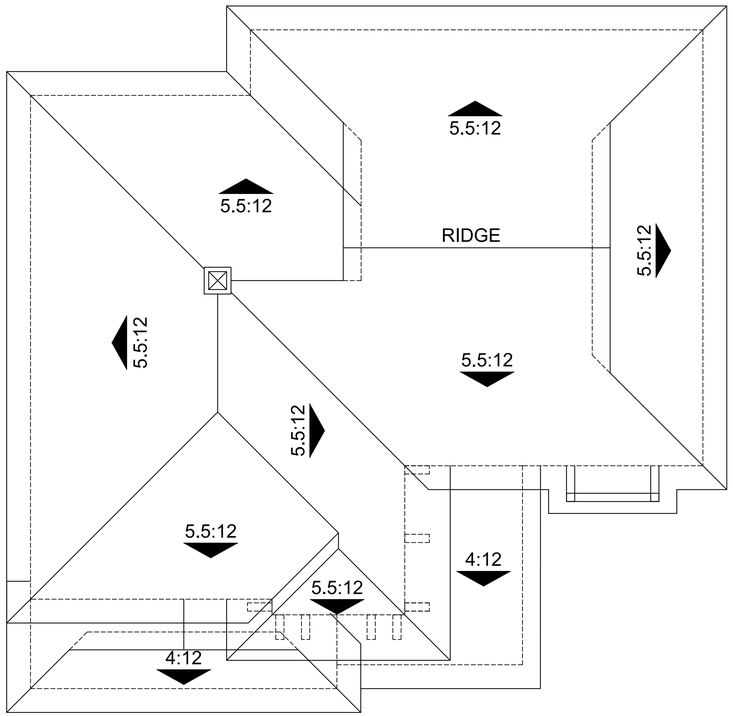
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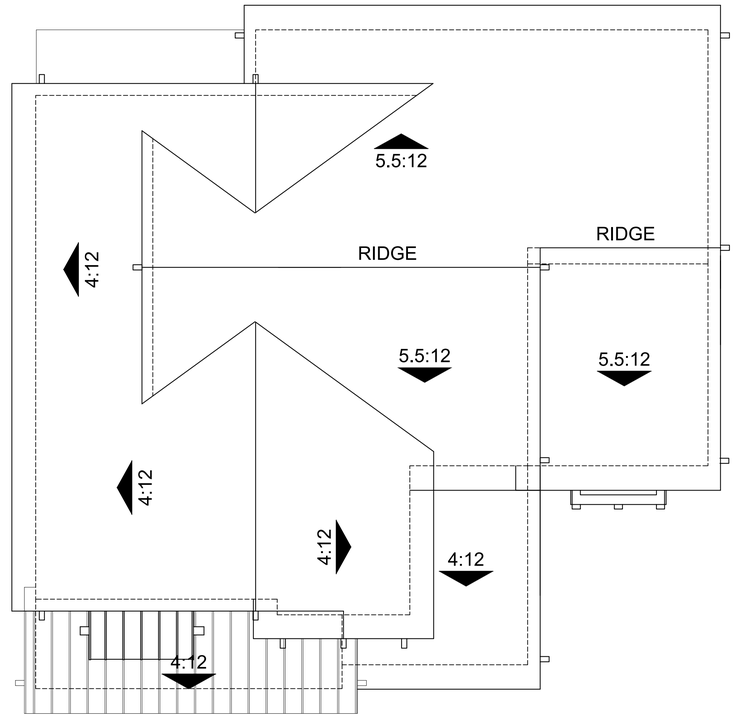
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SFD PLAN 1 - 2-STORY

A4.5



ROOF PLAN - 'B' STYLE



ROOF PLAN - 'A' STYLE

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PLAN 1 ROOF PLANS 2-STORY
A & B ELEVATION STYLE

A4.6



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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SFD PLAN 1X - 3-STORY
ELEVATIONS - STYLE A

A4.7



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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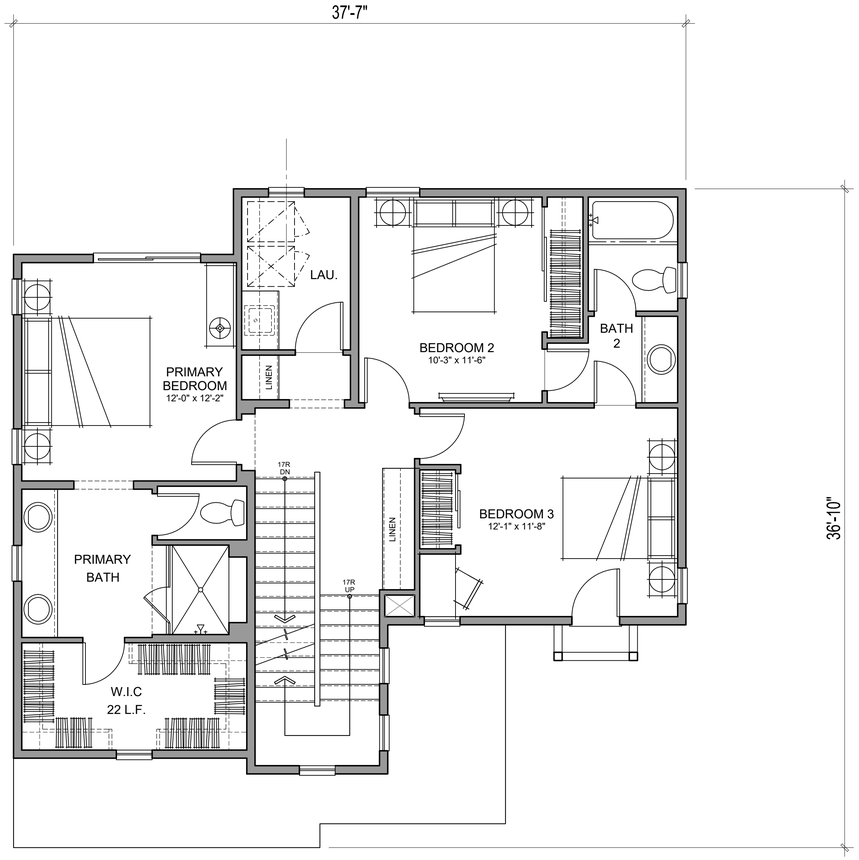
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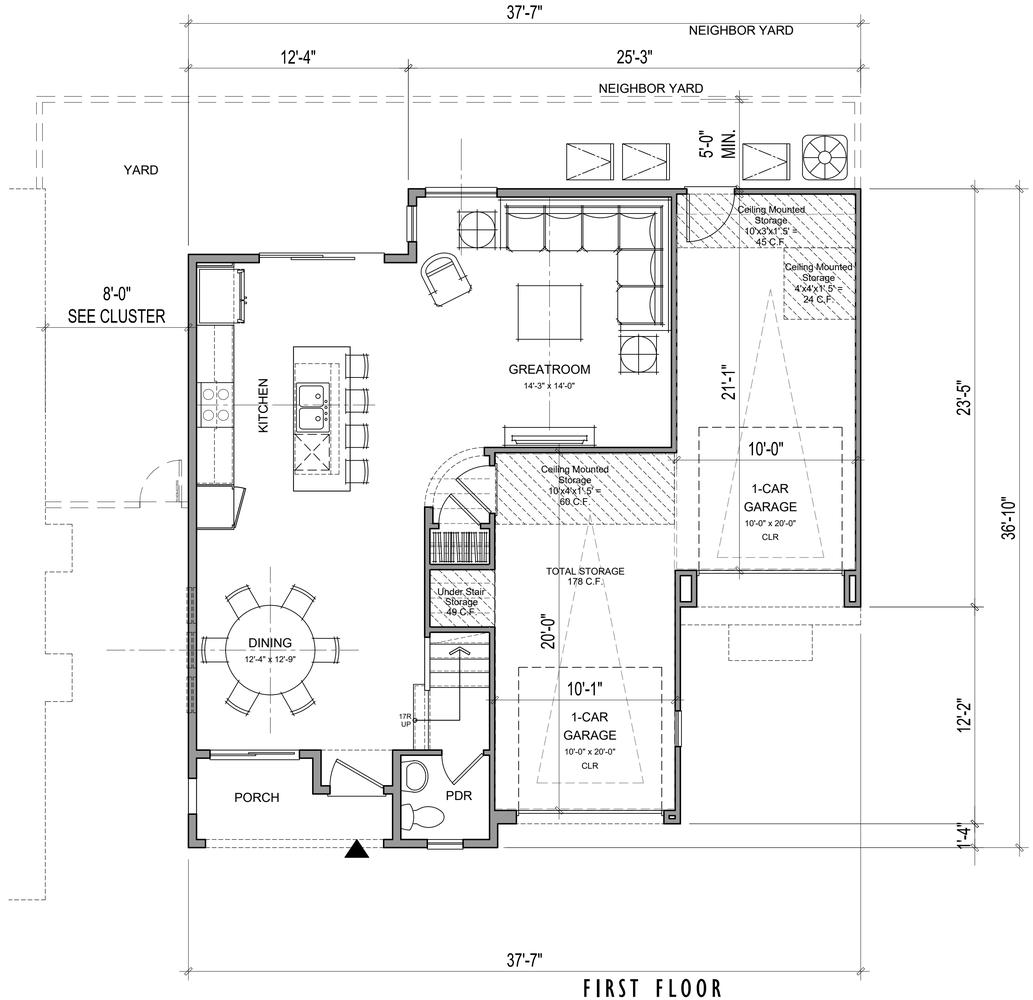
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SFD PLAN 1X - 3-STORY ALT
ELEVATIONS - STYLE B

A4.8



SECOND FLOOR



FIRST FLOOR

P1 - GROSS AREA	
1ST FLOOR	688 SQ. FT.
2ND FLOOR	1034 SQ. FT.
3RD FLOOR	492 SQ. FT.
TOTAL LIVING	2214 SQ. FT.
GARAGE	431 SQ. FT.
PORCH	48 SQ. FT.

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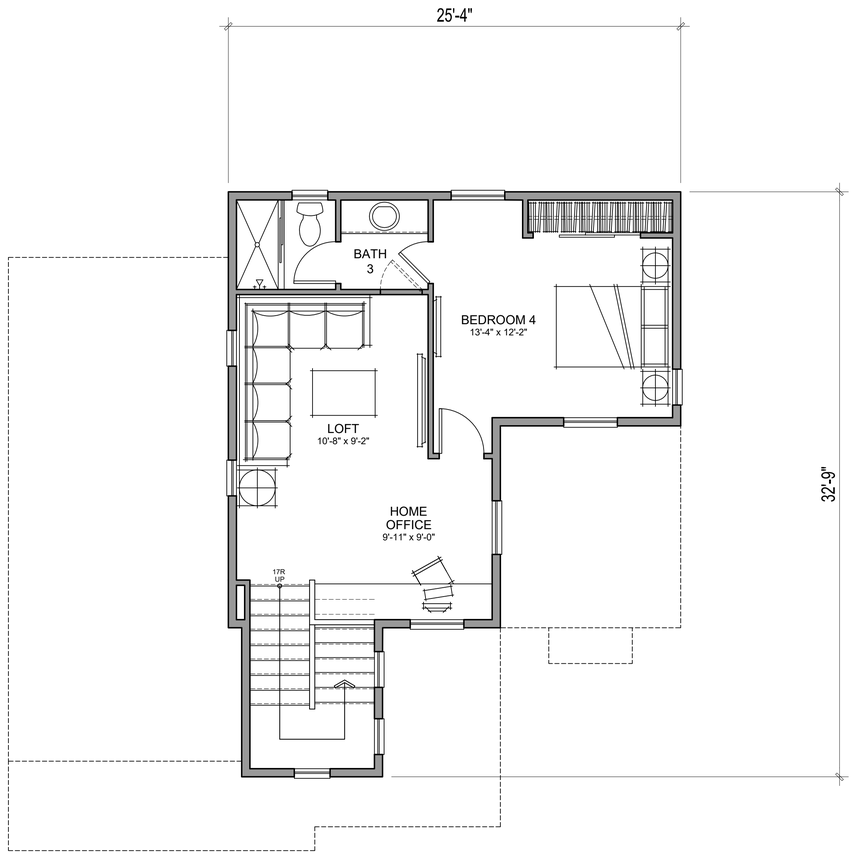
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SFD PLAN 1X - 3-STORY

A4.9



THIRD FLOOR

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LOS ALAMITOS, CA # 2021-0812

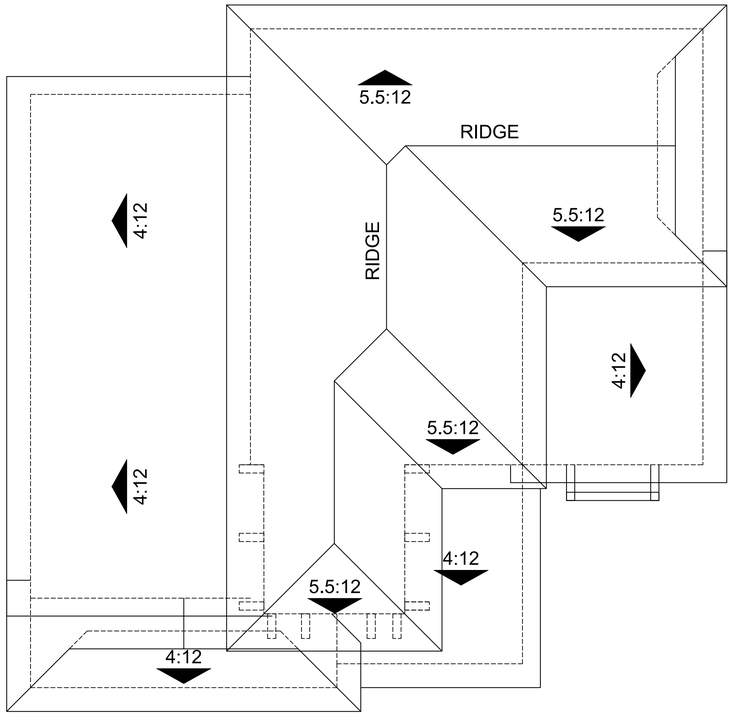
SCHEMATIC DESIGN

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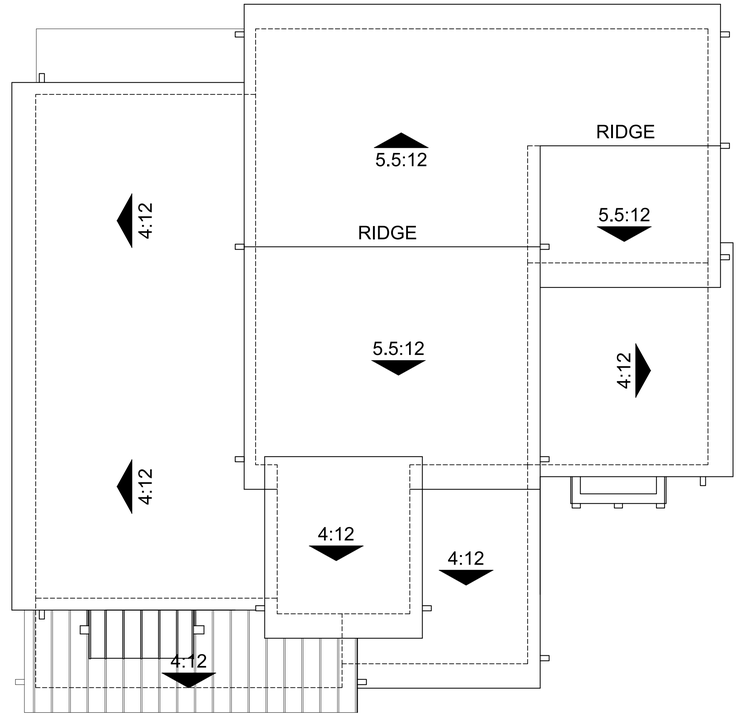
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SFD PLAN 1X - 3-STORY

A4.10



ROOF PLAN - 'B' STYLE



ROOF PLAN - 'A' STYLE

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PLAN 1X ROOF PLANS 3-STORY
A & B ELEVATION STYLE

A4.11



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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0 4 8 16

SFD PLAN 2 - 2-STORY
ELEVATIONS - STYLE A

A5.0



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
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27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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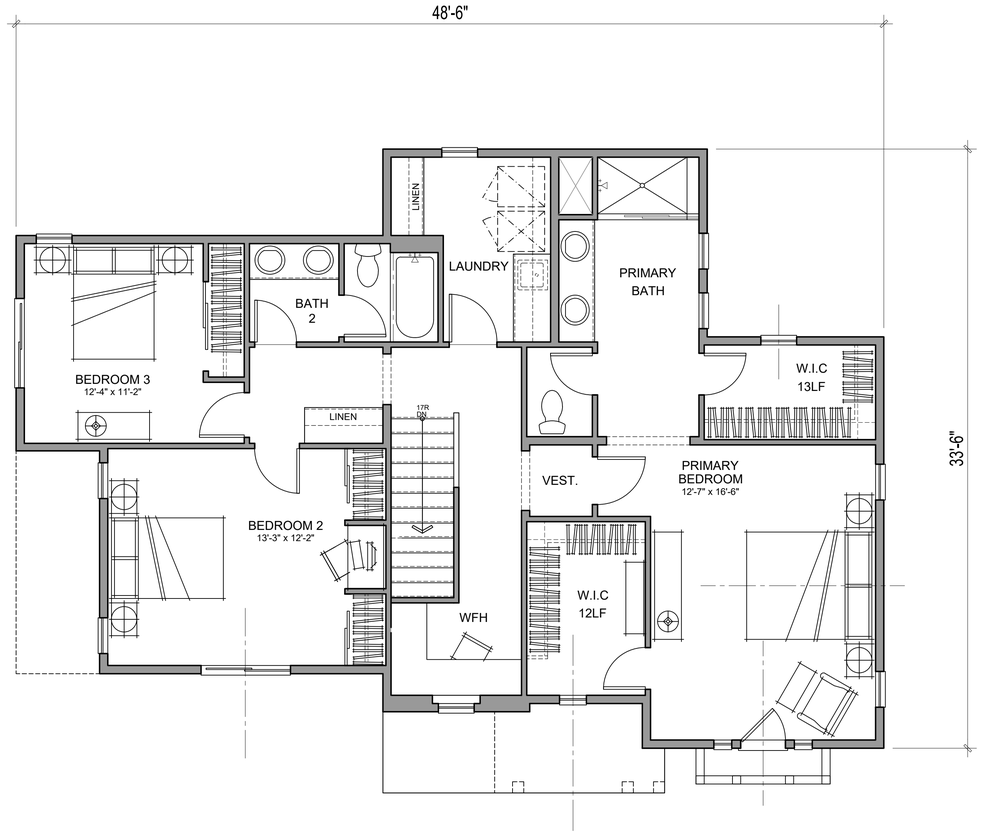
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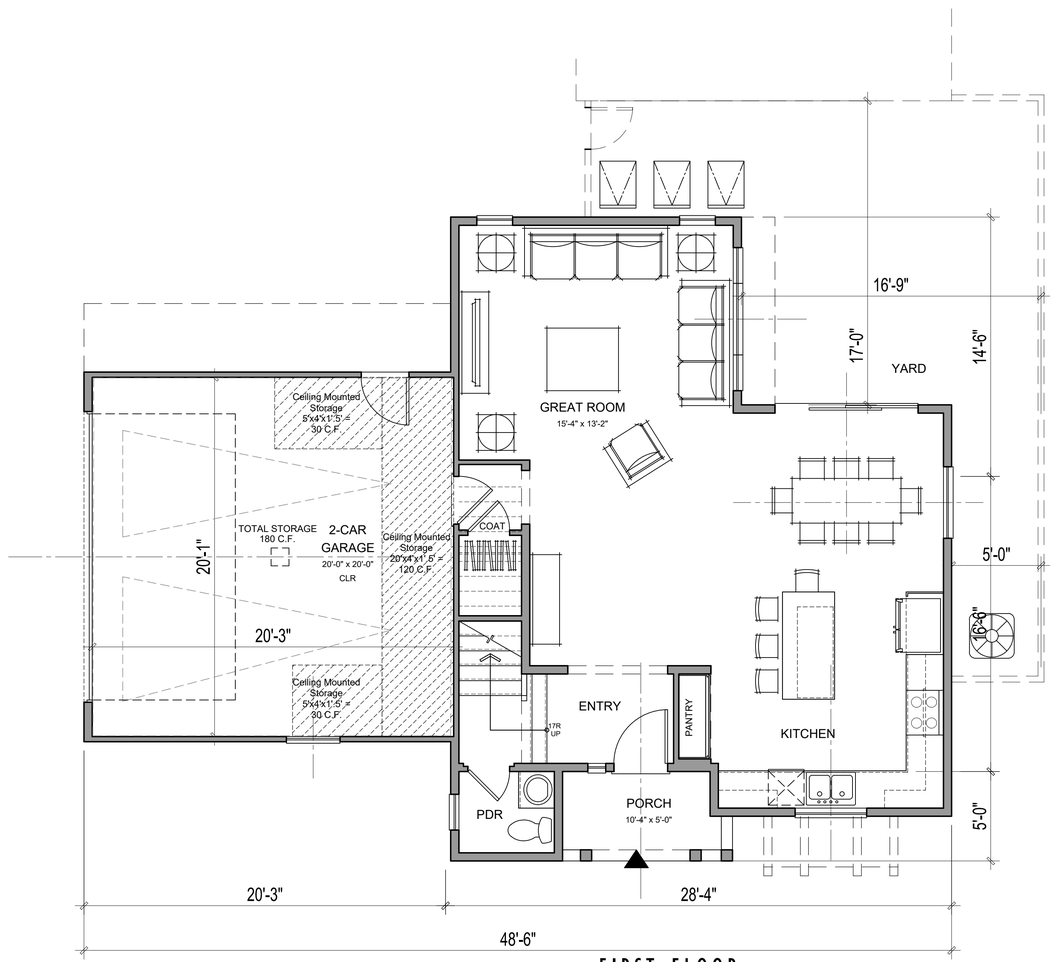
0 4 8 16

SFD PLAN 2 - 2-STORY
ELEVATIONS - STYLE B

A5.1



SECOND FLOOR



FIRST FLOOR

P2 - GROSS AREA	
1ST FLOOR	773 SQ. FT.
2ND FLOOR	1242 SQ. FT.
TOTAL LIVING	2015 SQ. FT.
GARAGE	427 SQ. FT.

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LOS ALAMITOS, CA # 2021-0812

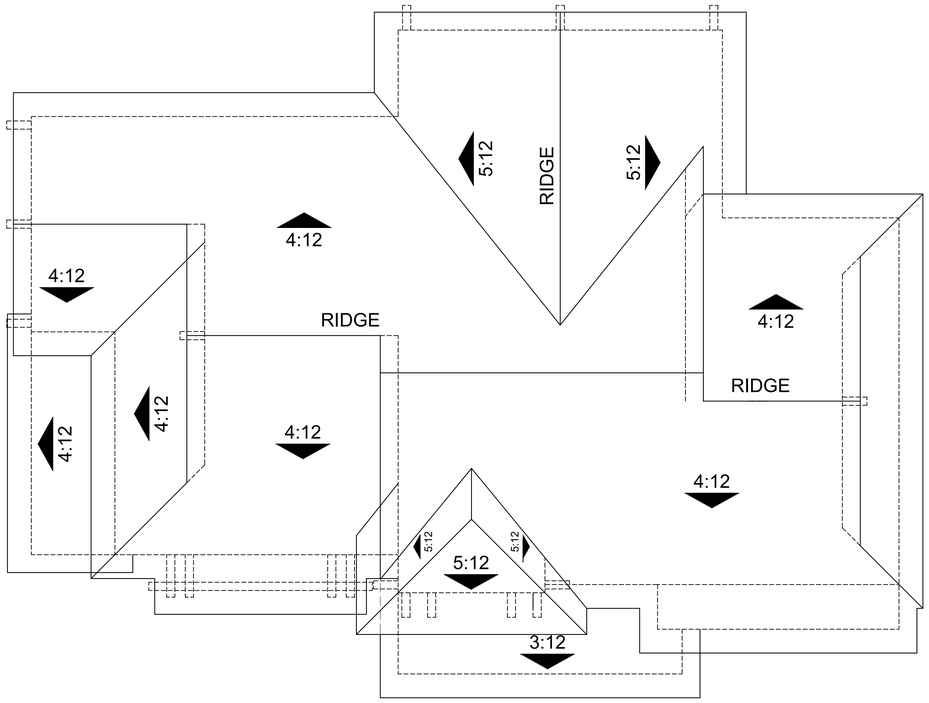
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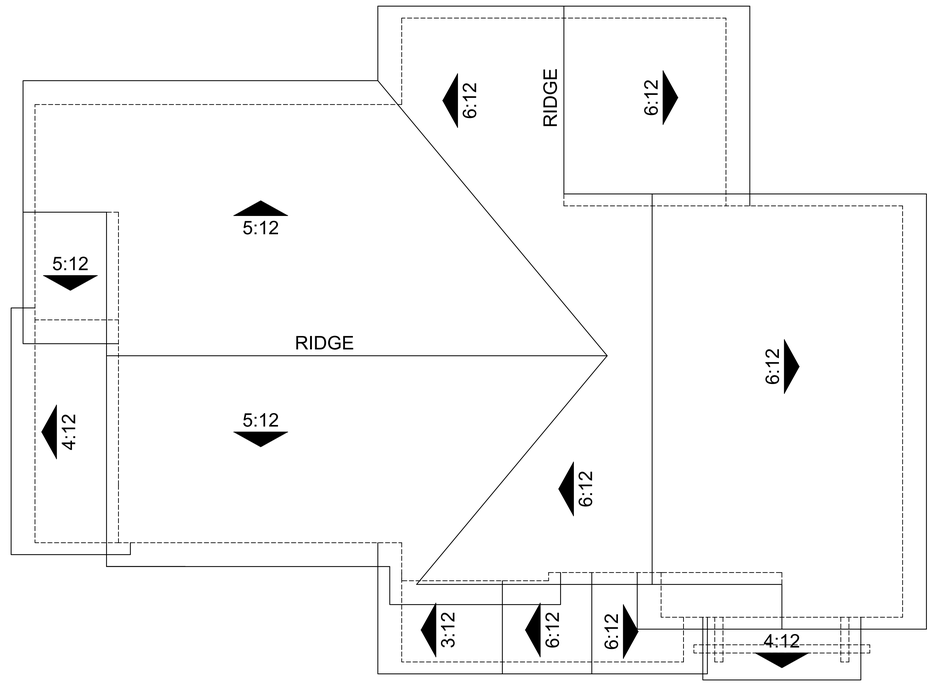
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SFD PLAN 2 - 2-STORY
AN ELEVATION PLAN STANDARD

A5.2



ROOF PLAN - 'B' STYLE



ROOF PLAN - 'A' STYLE

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0 2 4 8

PLAN 2 ROOF PLANS - 2-STORY
A & B ELEVATION STYLE

A5.3



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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0 4 8 16

SFD PLAN 2X - 3-STORY
ELEVATIONS - STYLE A

A5.4



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
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11. 2X BARGE BOARD
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31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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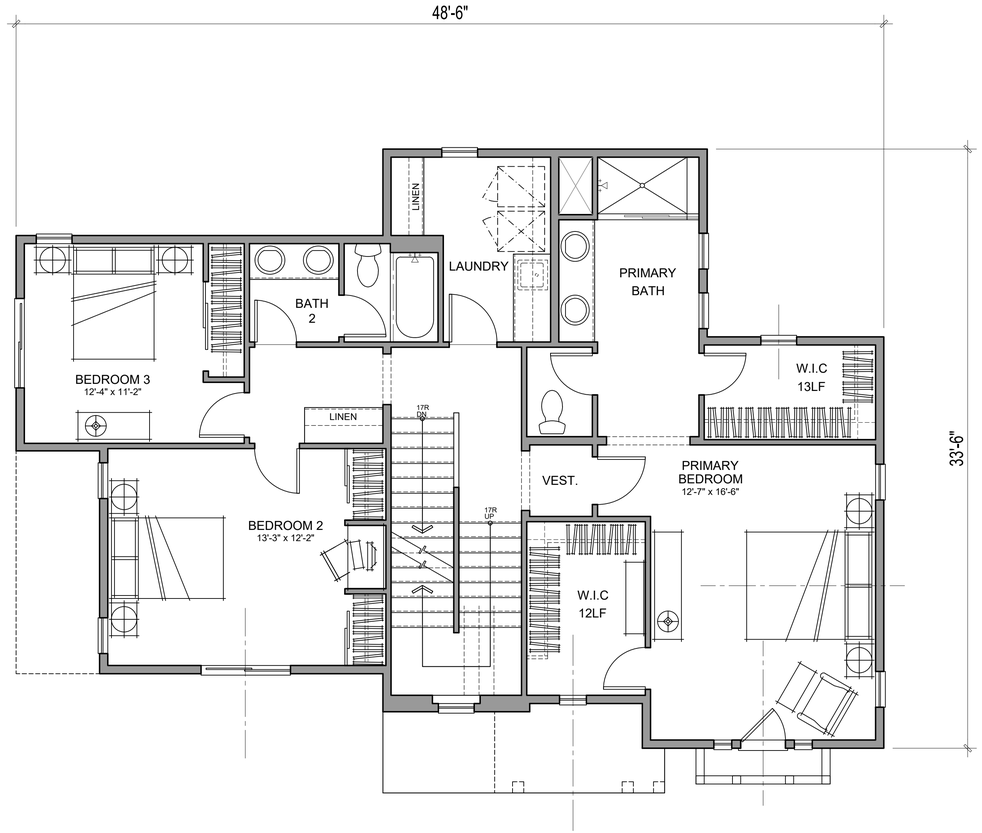
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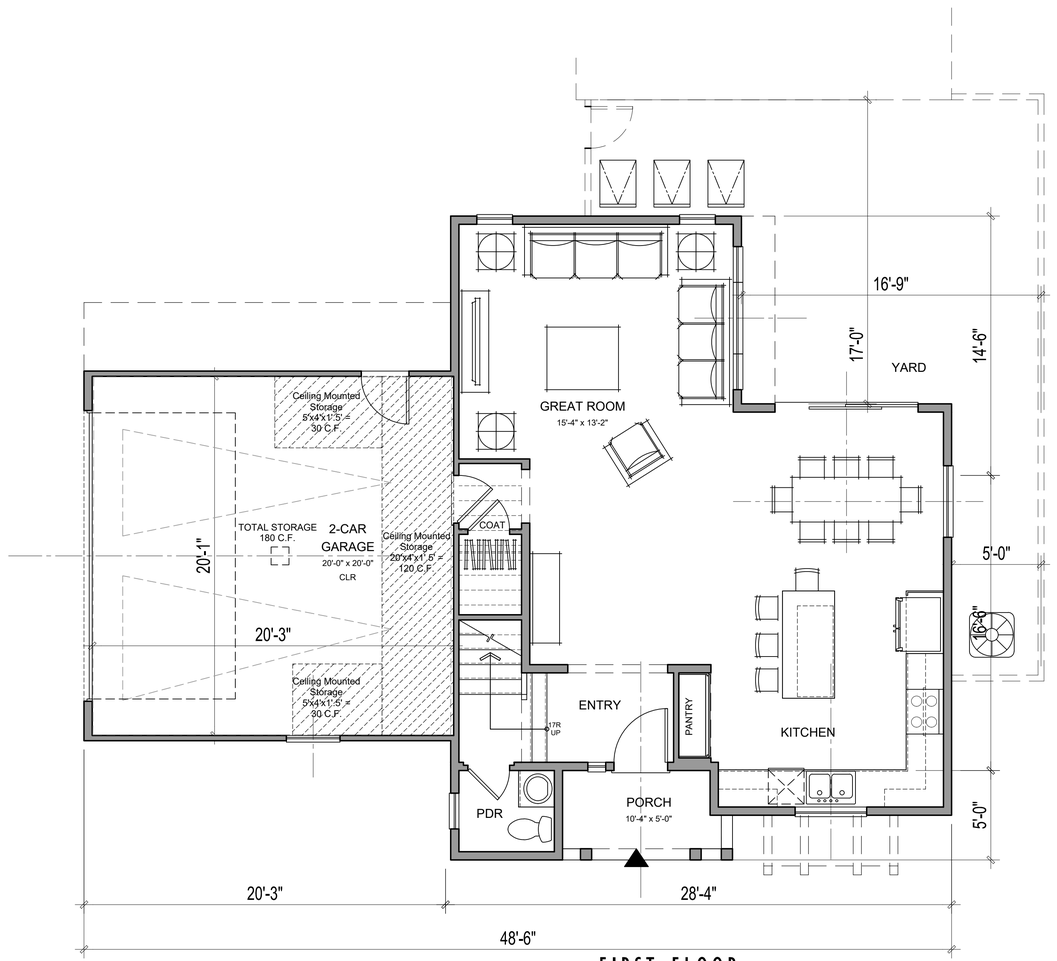
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SFD PLAN 2X - 3-STORY
ELEVATIONS - STYLE B

A5.5



SECOND FLOOR



FIRST FLOOR

P2 - GROSS AREA	
1ST FLOOR	773 SQ. FT.
2ND FLOOR	1242 SQ. FT.
3RD FLOOR	664 SQ. FT.
TOTAL LIVING	2679 SQ. FT.
GARAGE	427 SQ. FT.

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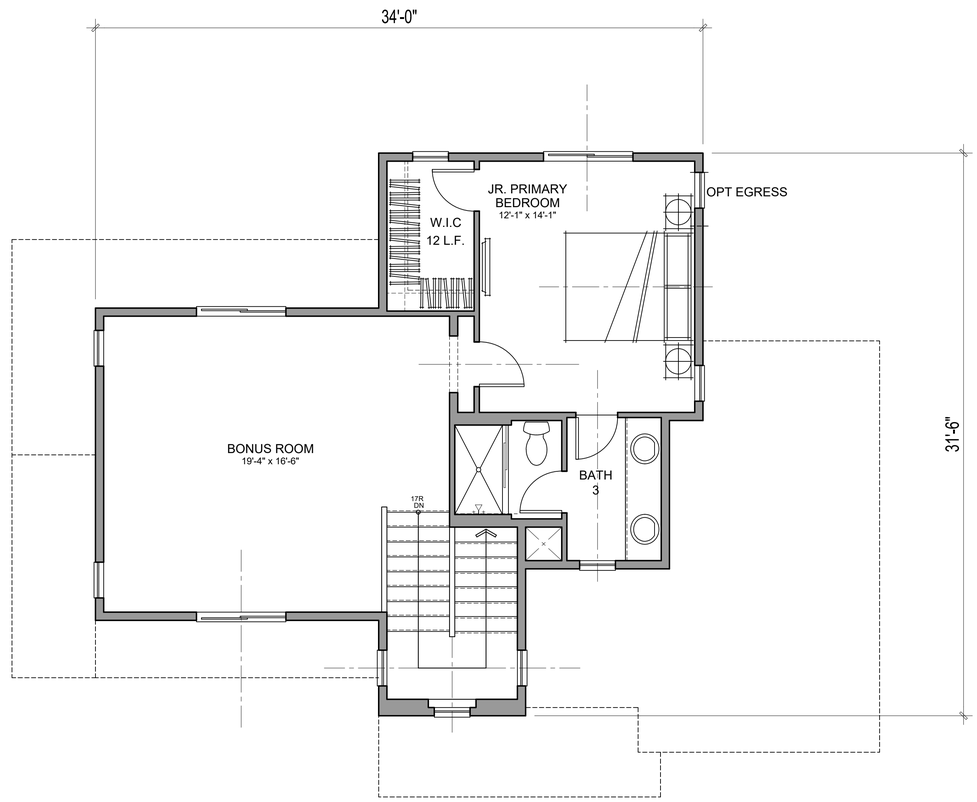
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0 2 4 8

SFD PLAN 2X - 3-STORY
AN ELEVATION PLAN STANDARD

A5.6



THIRD FLOOR

P2 - GROSS AREA	
1ST FLOOR	773 SQ. FT.
2ND FLOOR	1242 SQ. FT.
3RD FLOOR	664 SQ. FT.
TOTAL LIVING	2679 SQ. FT.
GARAGE	427 SQ. FT.

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LOS ALAMITOS, CA # 2021-0812

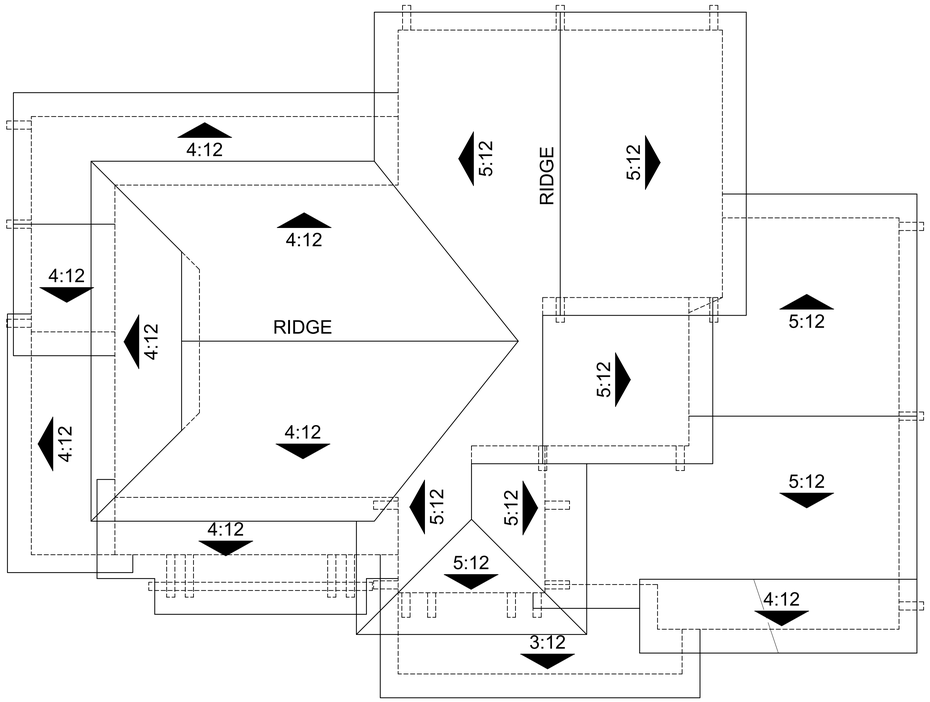
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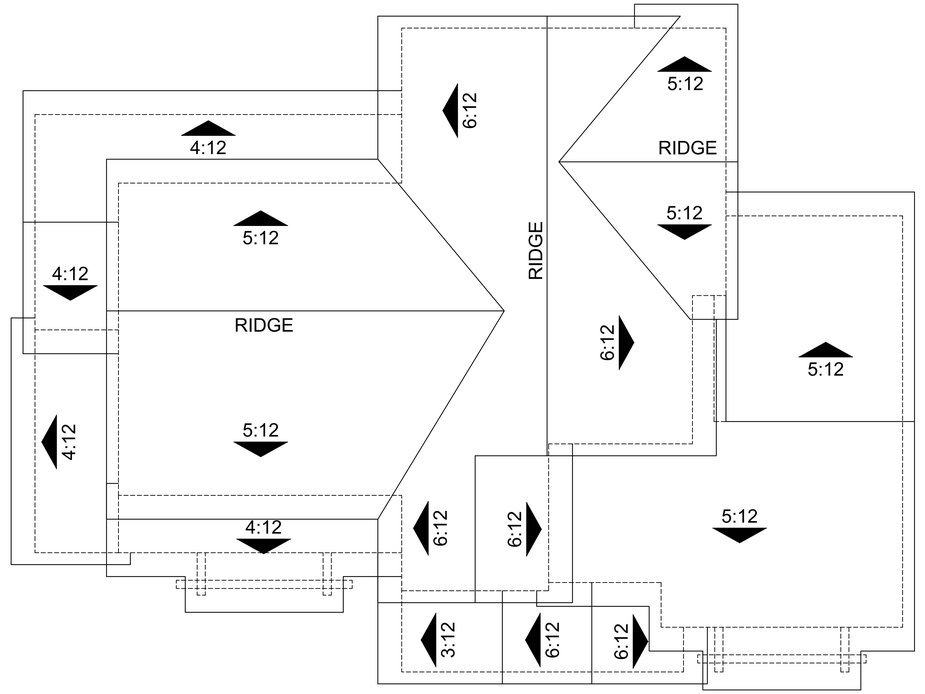
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SFD PLAN 2X - 3-STORY
AN ELEVATION PLAN STANDARD

A5.7



ROOF PLAN - 'B' STYLE



ROOF PLAN - 'A' STYLE

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PLAN 2X ROOF PLANS - 3-STORY
A & B ELEVATION STYLE

A5.8



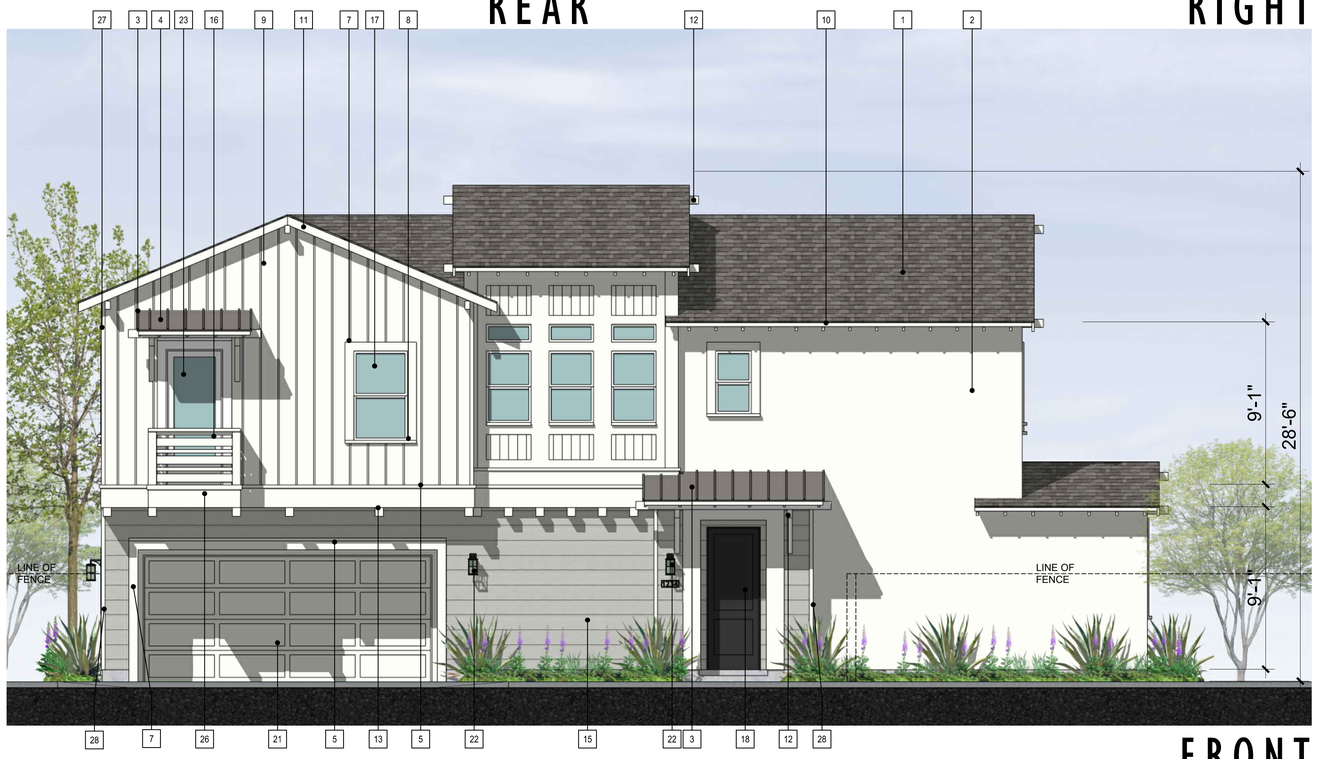
REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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0 4 8 16

SFD PLAN 3 - 2-STORY
ELEVATIONS - STYLE A

A6.0



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
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20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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LOS ALAMITOS, CA # 2021-0812

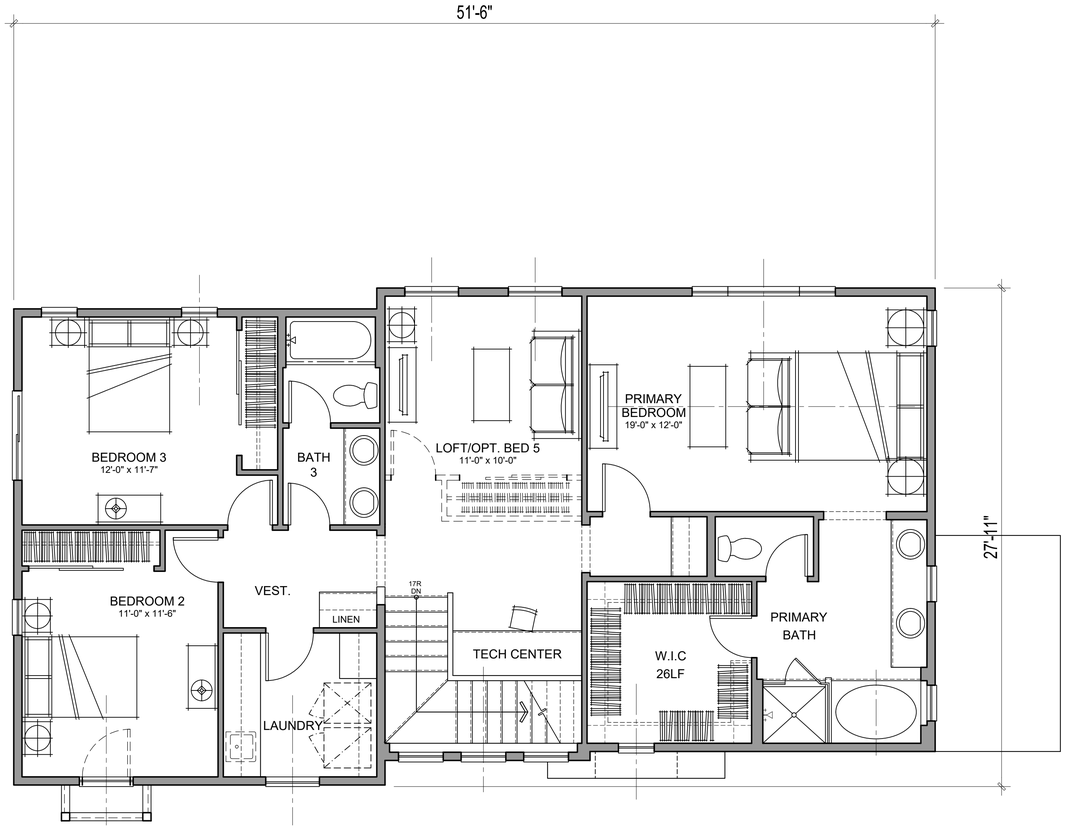
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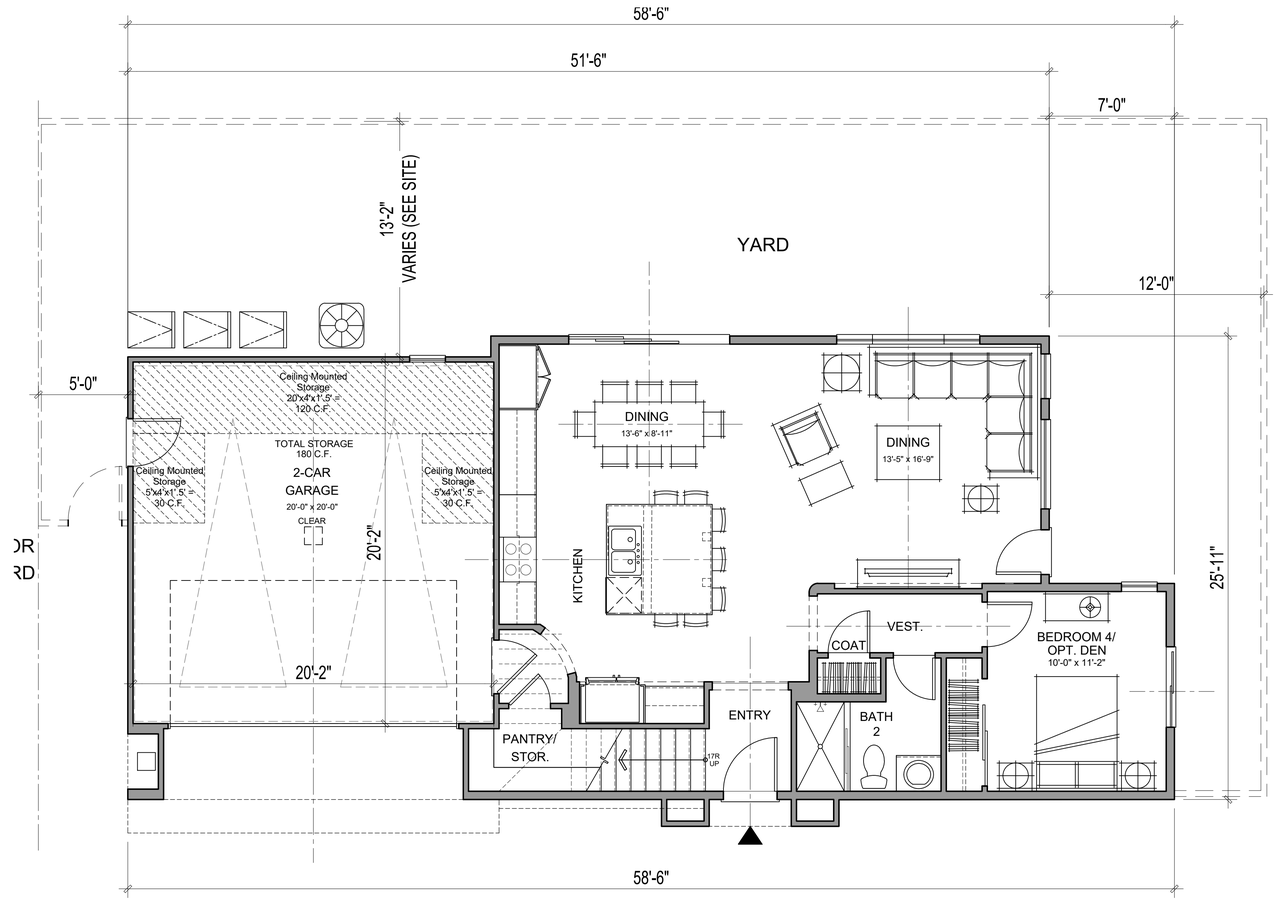
0 4 8 16

SFD PLAN 3 - 2-STORY
ELEVATIONS - STYLE B

A6.1



SECOND FLOOR



FIRST FLOOR

P3 - GROSS AREA	
1ST FLOOR	897 SQ. FT.
2ND FLOOR	1290 SQ. FT.
TOTAL LIVING	2187 SQ. FT.
GARAGE	425 SQ. FT.

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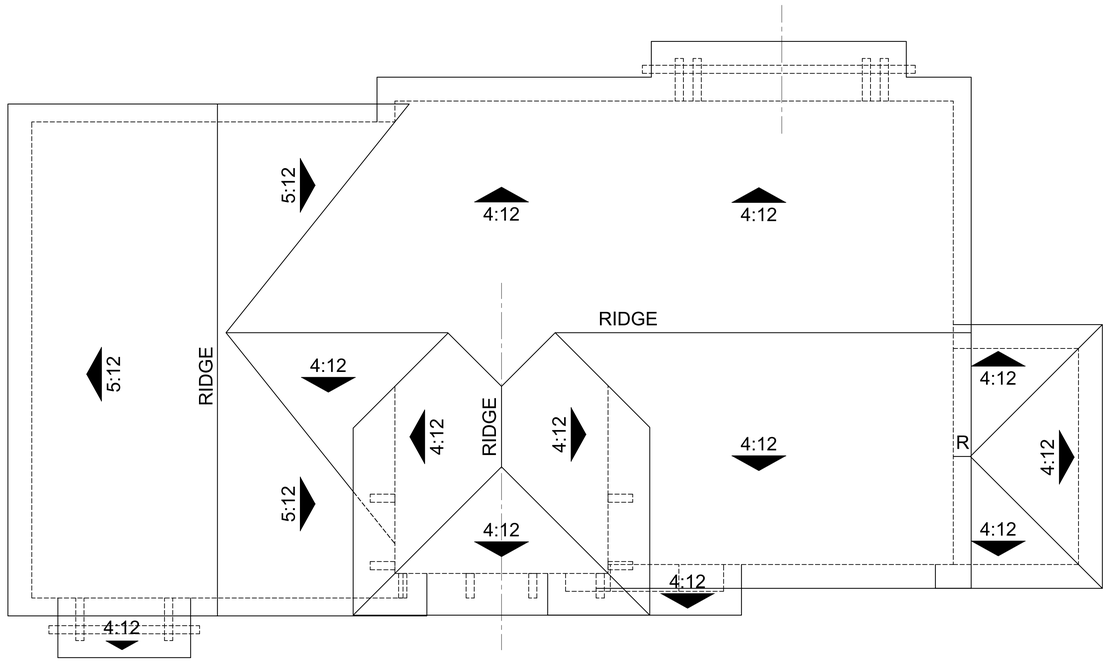
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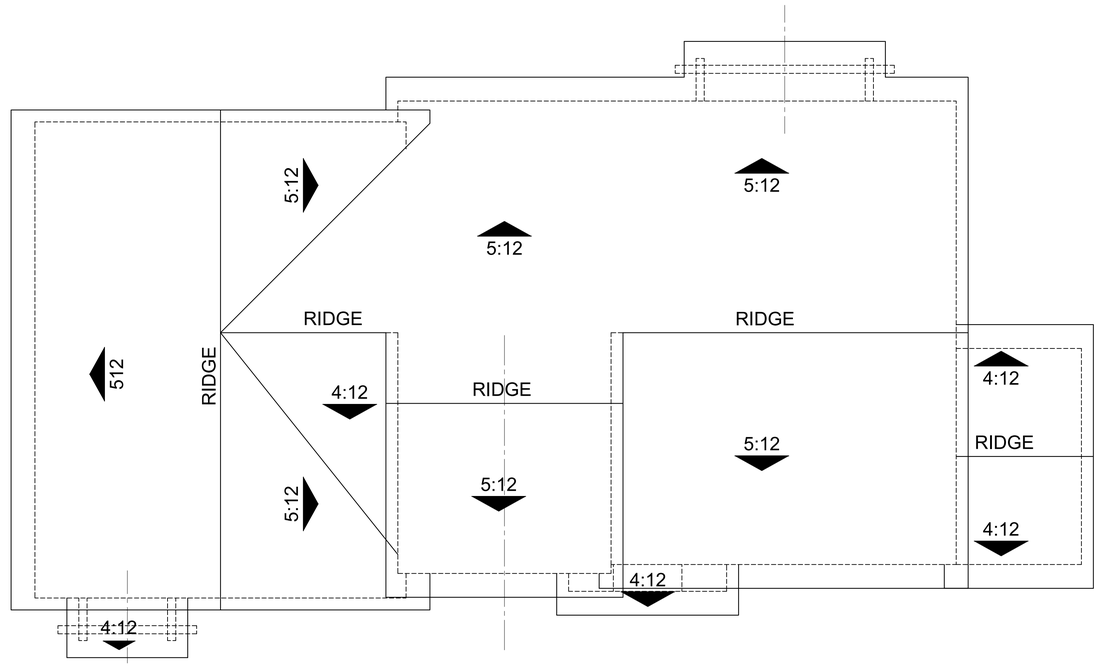
0 2 4 8

SFD PLAN 3 - 2-STORY
AN ELEVATION PLAN STANDARD

A6.2



ROOF PLAN-'B' STYLE



ROOF PLAN-'A' STYLE

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0 2 4 8

PLAN 3 ROOF PLANS
A & B ELEVATION STYLE

A6.3



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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0 2 4 8

SFD PLAN 3X - 3-STORY
ELEVATIONS - STYLE A

A7.0



REAR



RIGHT



LEFT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL / BRACKET W.O.
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
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32. HORIZ. FLAT 2X3 TRIM OVER 2X3 TRIM

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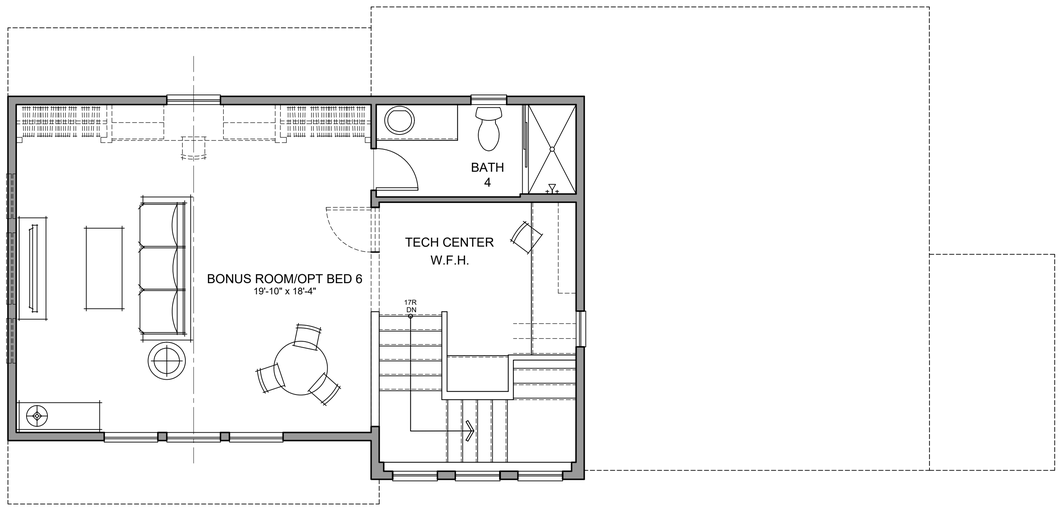
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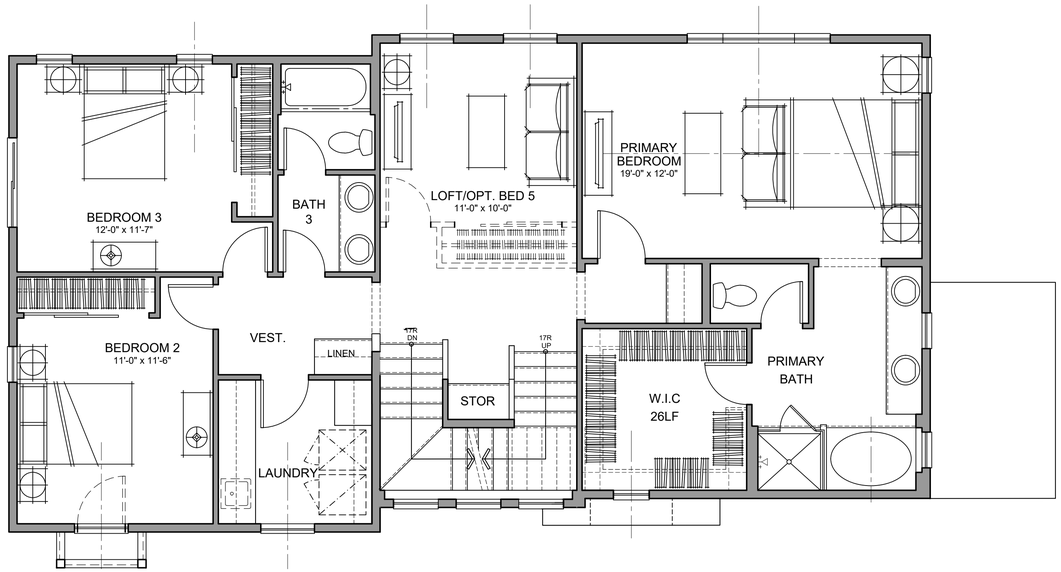
0 2 4 8

SFD PLAN 3X - 3-STORY
ELEVATIONS - STYLE B

A7.1



THIRD FLOOR



SECOND FLOOR

P3X - GROSS AREA	
1ST FLOOR	897 SQ. FT.
2ND FLOOR	1350 SQ. FT.
3RD FLOOR	568 SQ. FT.
TOTAL LIVING	2815 SQ. FT.
GARAGE	425 SQ. FT.

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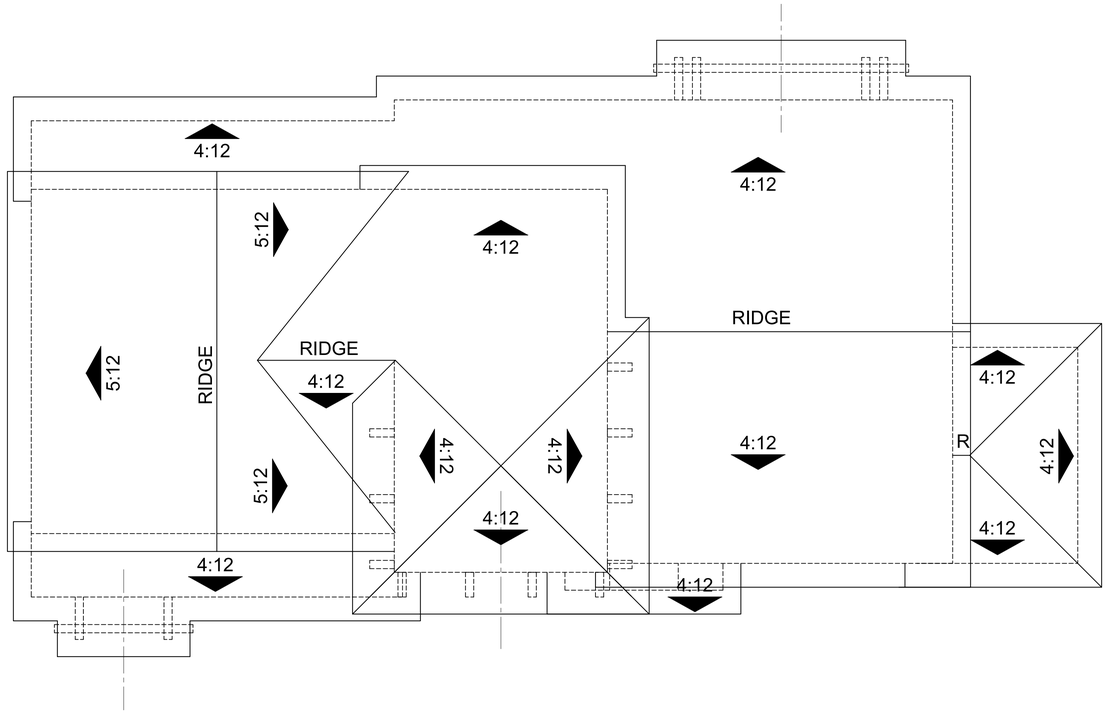
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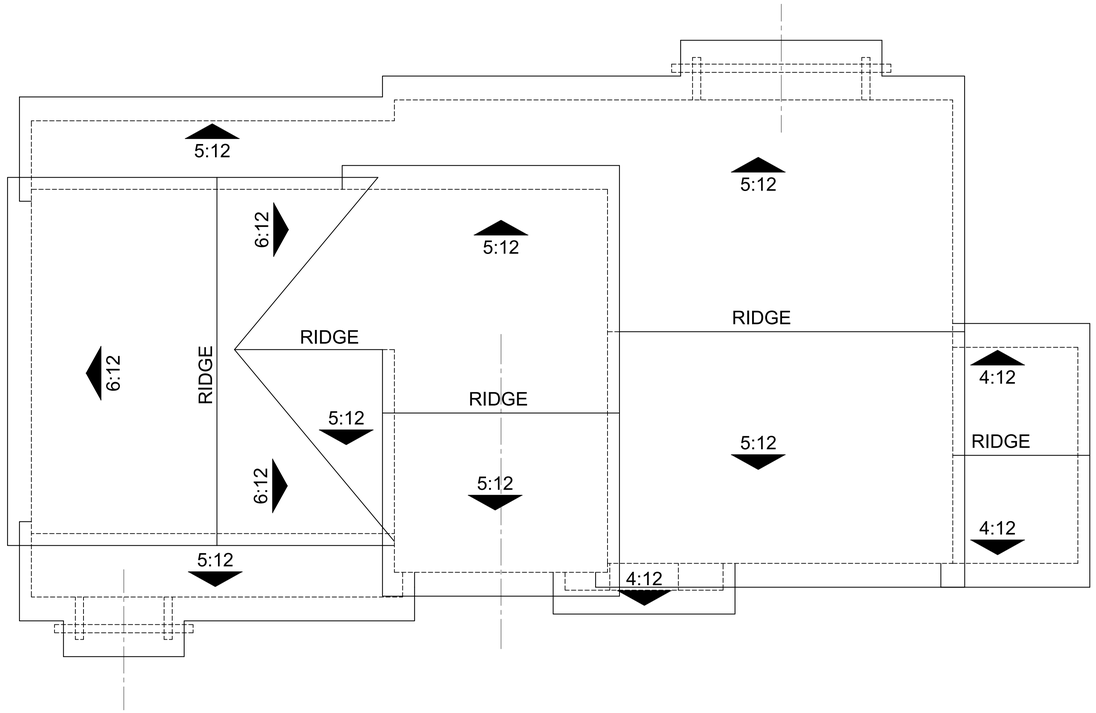
0 2 4 8

SFD PLAN 3X - 3-STORY
AN ELEVATION PLAN STANDARD

A7.2



ROOF PLAN - 'B' STYLE



ROOF PLAN - 'A' STYLE

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0 2 4 8

SFD PLAN 3X - 3-STORY
A & B ELEVATION STYLE

A7.3

MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, LIGHT SAND FINISH
3. STANDING SEAM METAL (WHERE OCCURS)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ FLAT TRIM
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL
9. DECORATIVE FAUX VENT (6" SPACED 1X4 BOARD) (B)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. HORIZONTAL SIDING (4" EXPOSURE) (WHERE OCCURS)
14. HORIZONTAL SIDING (10" EXPOSURE) (WHERE OCCURS)
15. VERTICAL BOARD & BATT SIDING (16" O.C.)
16. WOOD RAILING
17. VINYL WINDOWS
18. SLIDING GLASS DOOR
19. DECORATIVE FIBERGLASS ENTRY DOOR
20. DECORATIVE WOOD CORBELS
21. METAL UTILITY DOOR
22. PORCH/DECK COLUMNS (WHERE OCCURS)
23. METAL SECTIONAL GARAGE DOOR
24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



P3 P2R P1 FRONT



RIGHT



REAR

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0 4 8 12

C-100 (4-PLEX)
ELEVATIONS - STYLE A

A9.0

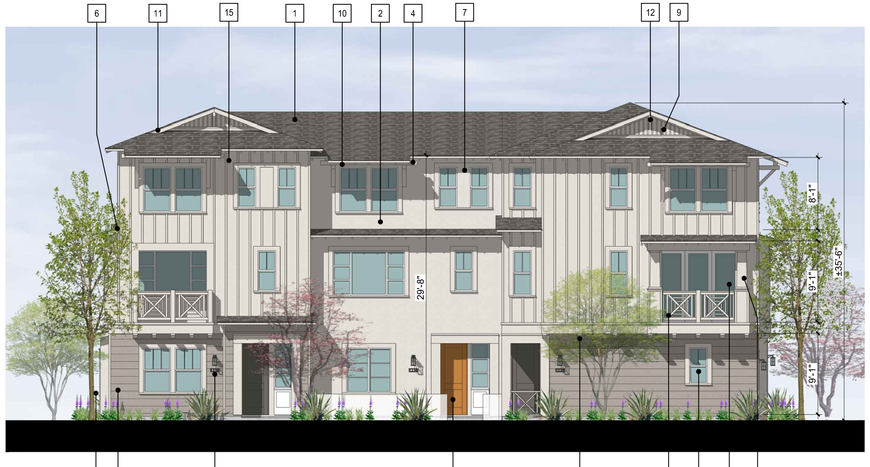
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3. STANDING SEAM METAL (WHERE OCCURS)
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14. HORIZONTAL SIDING (10" EXPOSURE) (WHERE OCCURS)
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20. DECORATIVE WOOD CORBELS
21. METAL UTILITY DOOR
22. PORCH/DECK COLUMNS (WHERE OCCURS)
23. METAL SECTIONAL GARAGE DOOR
24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



FRONT



RIGHT



REAR

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LOS ALAMITOS, CA # 2021-0812

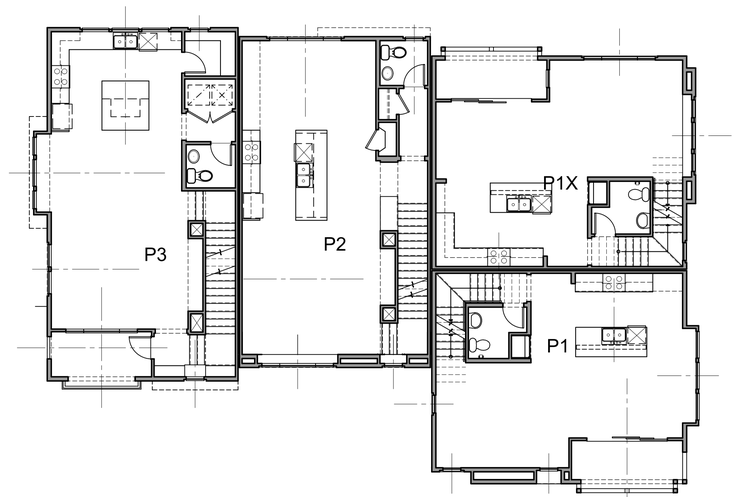
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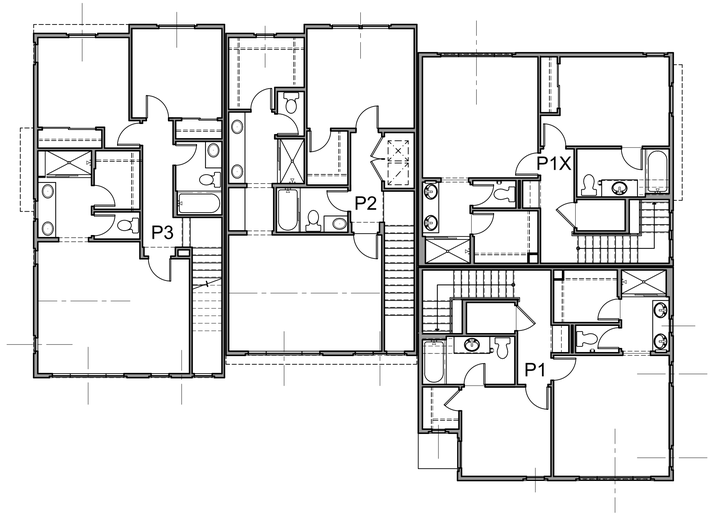
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C-100 (4-PLEX)
ELEVATIONS - STYLE B

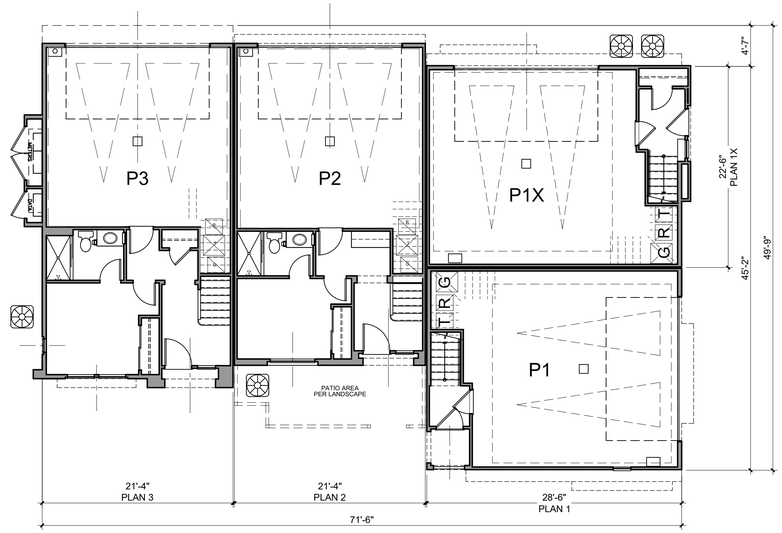
A9.1



SECOND FLOOR



THIRD FLOOR



FIRST FLOOR

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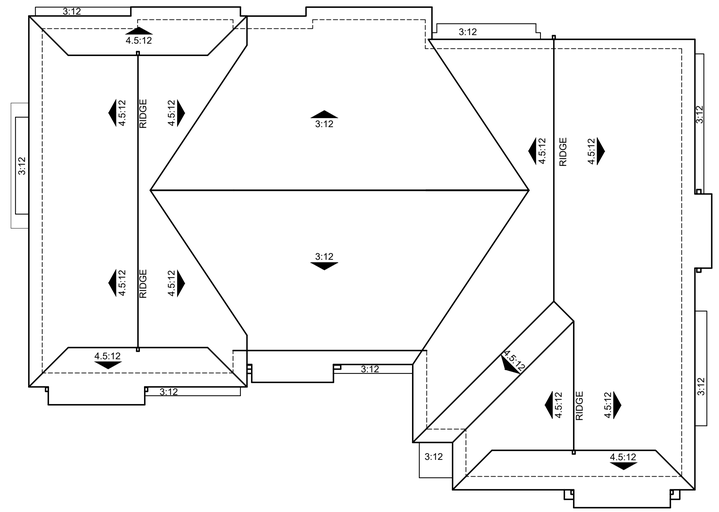
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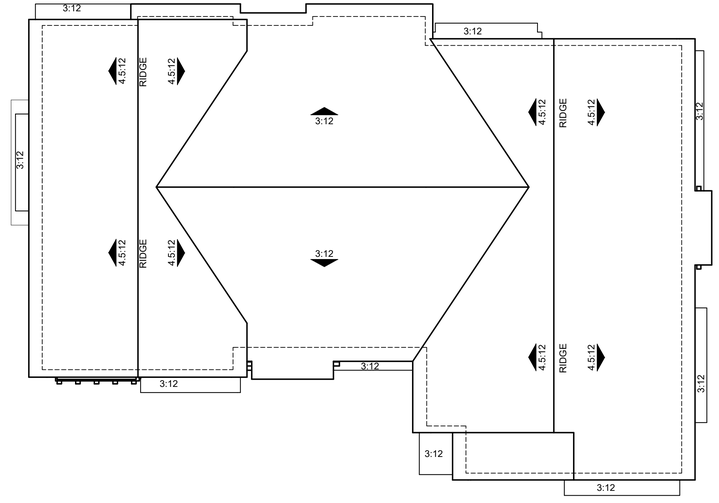
0 4 8 16

C-100 (4-PLEX)
BUILDING PLANS

A9.2



B STYLE



A STYLE

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0 4 8 16

C-100 (4-PLEX)
ROOF PLANS

A9.3

MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, LIGHT SAND FINISH
3. STANDING SEAM METAL (WHERE OCCURS)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ FLAT TRIM
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL
9. DECORATIVE FAUX VENT (6" SPACED 1X4 BOARD) (B)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. HORIZONTAL SIDING (4" EXPOSURE) (WHERE OCCURS)
14. HORIZONTAL SIDING (10" EXPOSURE) (WHERE OCCURS)
15. VERTICAL BOARD & BATT SIDING (16" O.C.)
16. WOOD RAILING
17. VINYL WINDOWS
18. SLIDING GLASS DOOR
19. DECORATIVE FIBERGLASS ENTRY DOOR
20. DECORATIVE WOOD CORBELS
21. METAL UTILITY DOOR
22. PORCH/DECK COLUMNS (WHERE OCCURS)
23. METAL SECTIONAL GARAGE DOOR
24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



P3 P2 P2R P1 FRONT



RIGHT



REAR

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0 4 8 12

C-200 (5-PLEX)
ELEVATIONS - STYLE A

A10.0

MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, LIGHT SAND FINISH
3. STANDING SEAM METAL (WHERE OCCURS)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ FLAT TRIM
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL
9. DECORATIVE FAUX VENT (6" SPACED 1X4 BOARD) (B)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. HORIZONTAL SIDING (4" EXPOSURE) (WHERE OCCURS)
14. HORIZONTAL SIDING (10" EXPOSURE) (WHERE OCCURS)
15. VERTICAL BOARD & BATT SIDING (16" O.C.)
16. WOOD RAILING
17. VINYL WINDOWS
18. SLIDING GLASS DOOR
19. DECORATIVE FIBERGLASS ENTRY DOOR
20. DECORATIVE WOOD CORBELS
21. METAL UTILITY DOOR
22. PORCH/DECK COLUMNS (WHERE OCCURS)
23. METAL SECTIONAL GARAGE DOOR
24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



FRONT



RIGHT



REAR

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Suite D-4-197
Ladera Ranch, CA 92694

LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

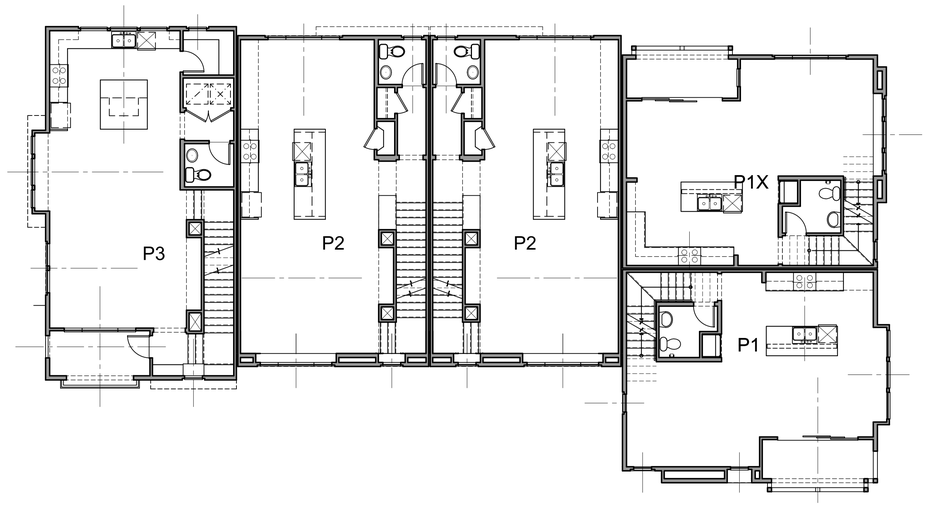
SCHEMATIC DESIGN

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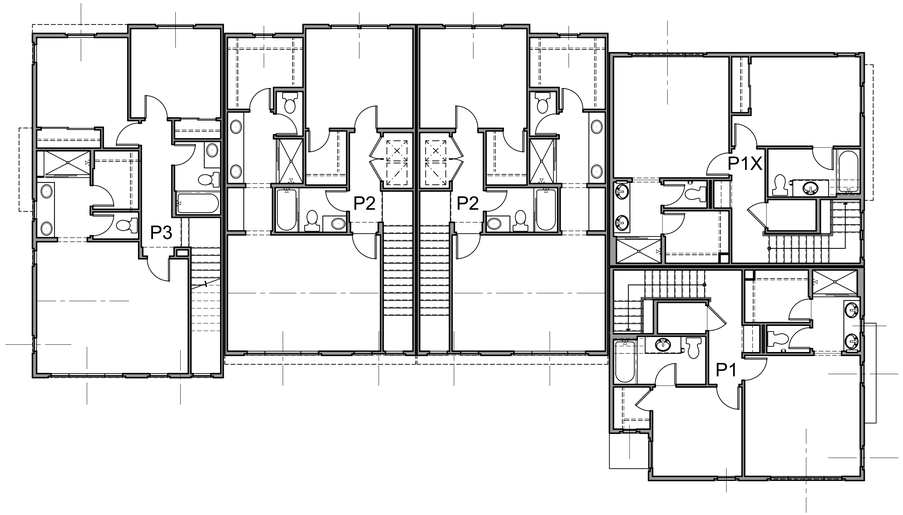
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C-200 (5-PLEX)
ELEVATIONS - STYLE B

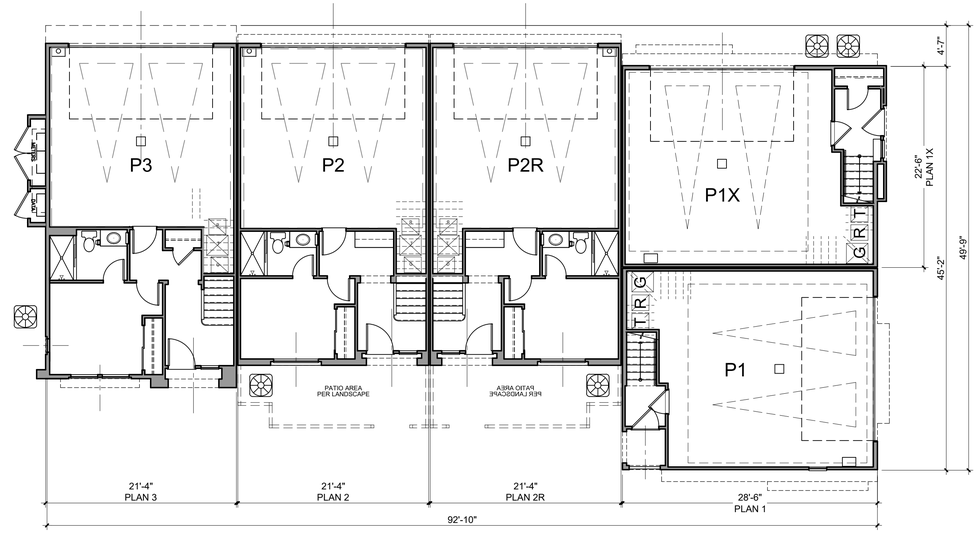
A10.1



SECOND FLOOR



THIRD FLOOR



FIRST FLOOR

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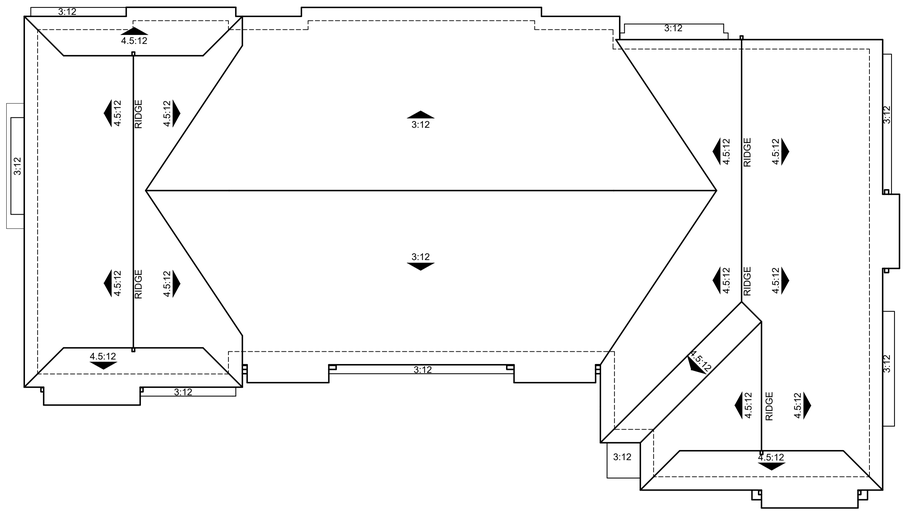
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0 4 8 16

C-200 (5-PLEX)
BUILDING PLANS

A10.2


3:12
4.5:12
RIDGE
3:12
4.5:12
RIDGE
3:12
4.5:12
RIDGE

MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, LIGHT SAND FINISH
3. STANDING SEAM METAL (WHERE OCCURS)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ FLAT TRIM
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL
9. DECORATIVE FAUX VENT (6" SPACED 1X4 BOARD) (B)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X BARGE BOARD
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16. WOOD RAILING
17. VINYL WINDOWS
18. SLIDING GLASS DOOR
19. DECORATIVE FIBERGLASS ENTRY DOOR
20. DECORATIVE WOOD CORBELS
21. METAL UTILITY DOOR
22. PORCH/DECK COLUMNS (WHERE OCCURS)
23. METAL SECTIONAL GARAGE DOOR
24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



FRONT



RIGHT



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C-300 (7-PLEX)
ELEVATIONS - STYLE A

A11.0

MATERIAL LEGEND

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2. STUCCO, LIGHT SAND FINISH
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(B) AT 'B' STYLE ELEVATION



LEFT



FRONT



RIGHT



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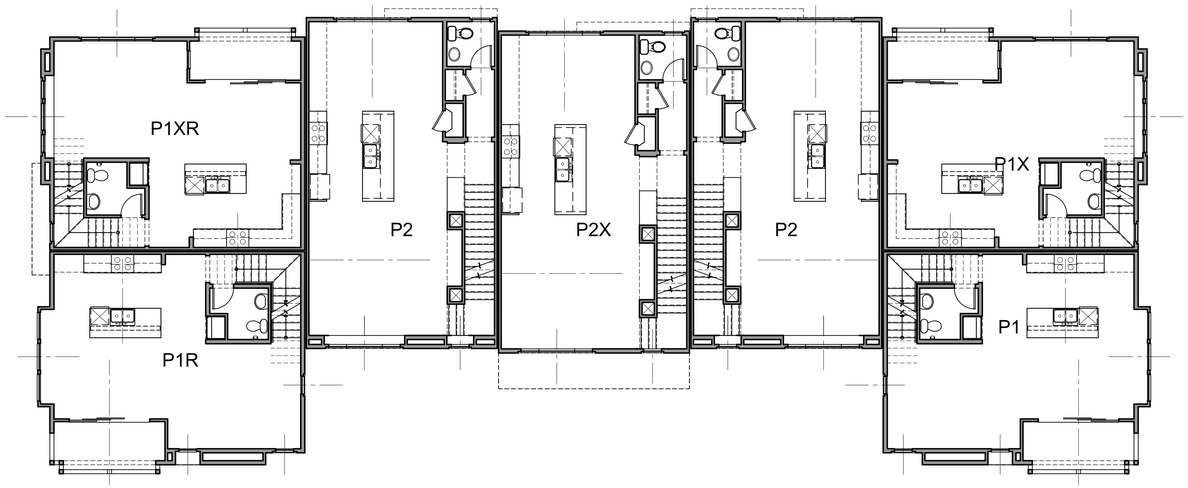
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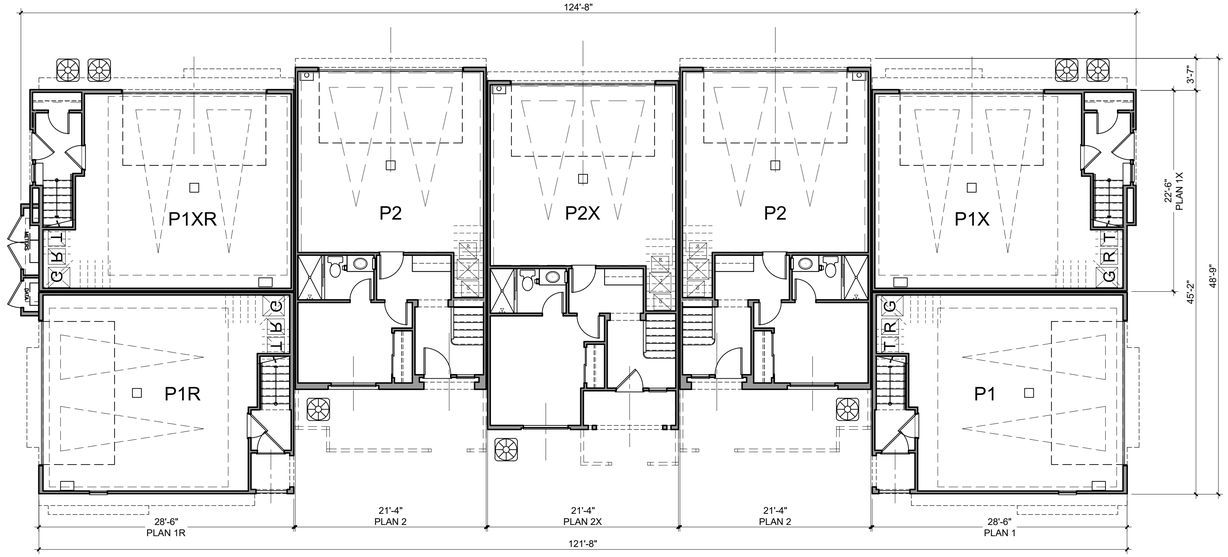
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C-300 (7-PLEX)
ELEVATIONS - STYLE B

A11.1



SECOND FLOOR



FIRST FLOOR

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LOS ALAMITOS, CA # 2021-0812

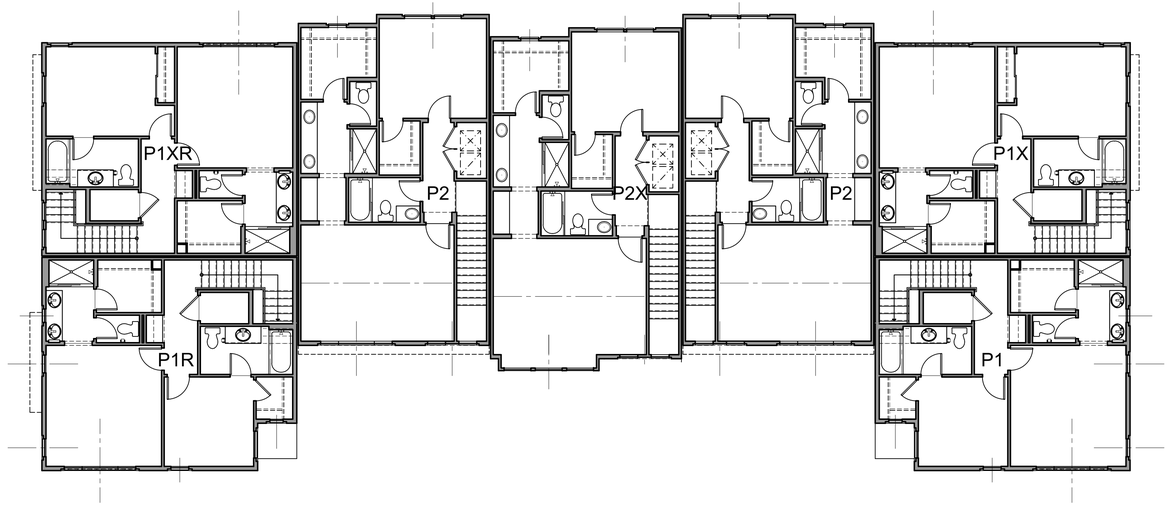
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0 4 8 16

C-300 (7-PLEX)
BUILDING PLANS

A11.2



THIRD FLOOR

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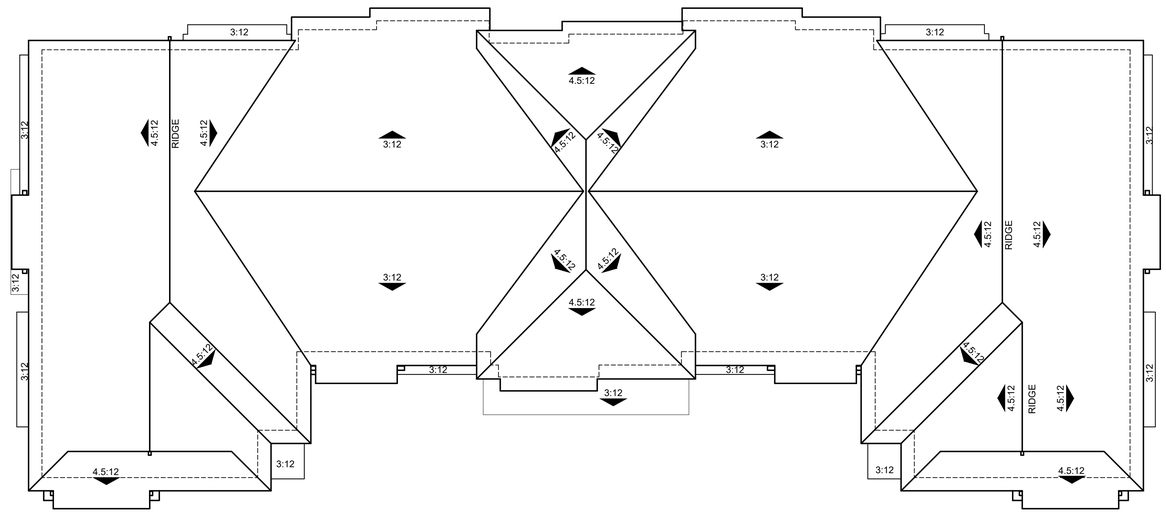
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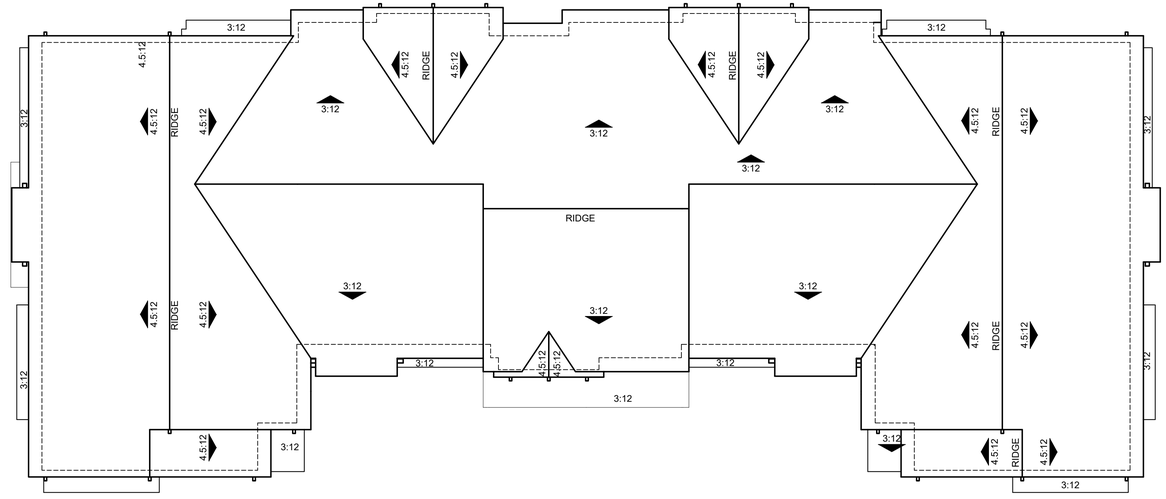
0 4 8 16

C-300 (7-PLEX)
BUILDING PLANS

A11.3



B STYLE



A STYLE

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0 4 8 16

C-300 (7-PLEX)
ROOF PLANS

A11.4

MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
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24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



P3 P2 P3X P3XR P2R P1Y

FRONT



RIGHT



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0 4 8 12

C-400 (7-PLEX)
ELEVATIONS - STYLE A

A12.0

MATERIAL LEGEND

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(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



P3 P2 P3X P3XR P2R P1Y FRONT



RIGHT



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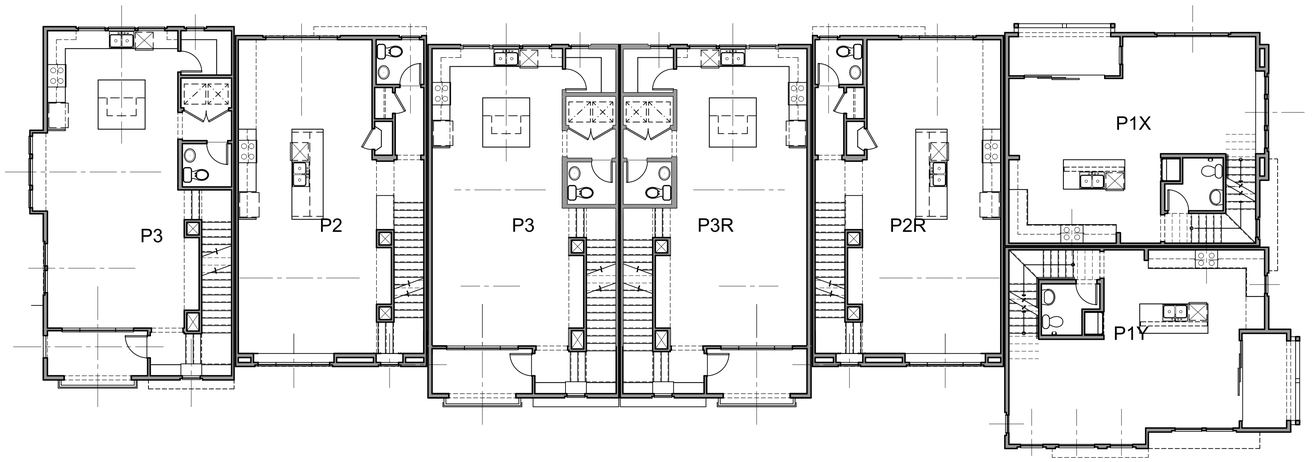
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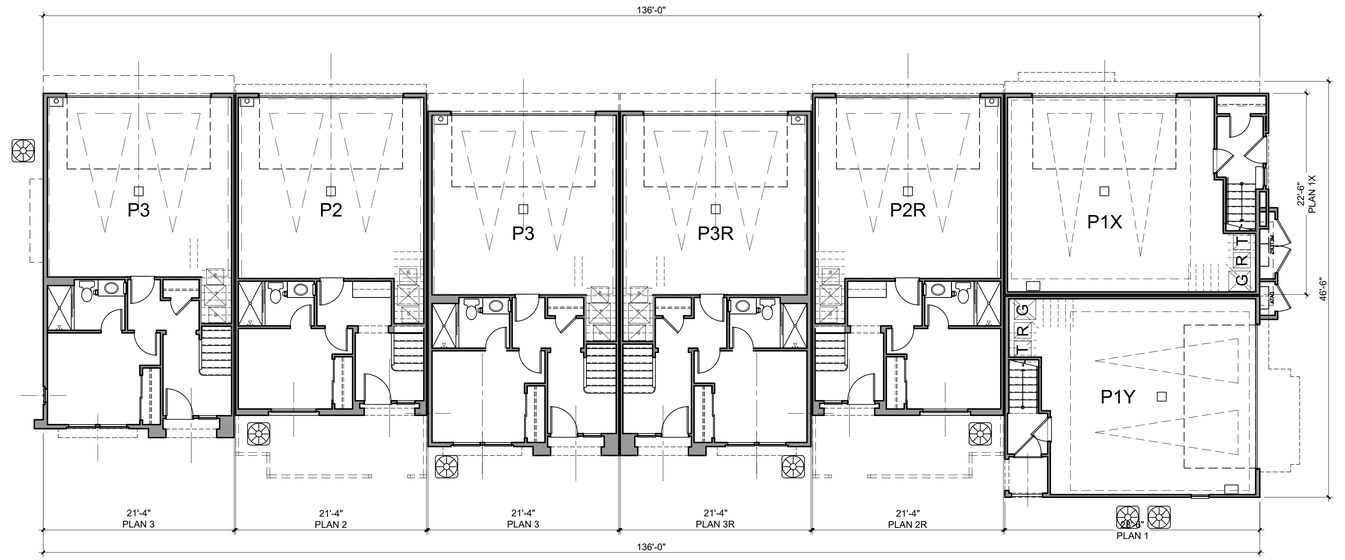
0 4 8 12

C-400 (7-PLEX)
ELEVATIONS - STYLE B

A12.1



SECOND FLOOR



FIRST FLOOR

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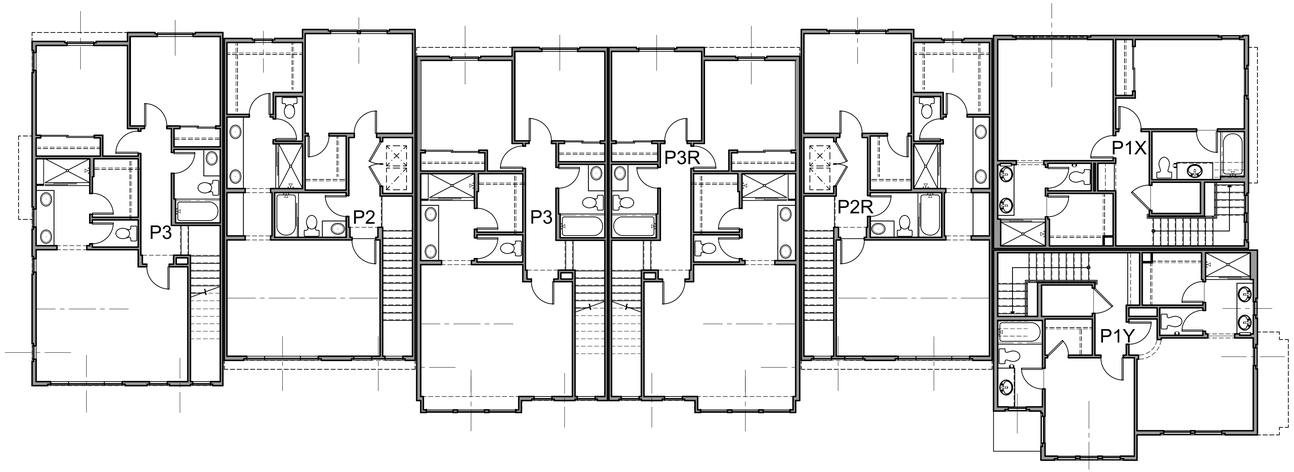
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0 4 8 16

C-400 (7-PLEX)
BUILDING PLANS

A12.2



THIRD FLOOR

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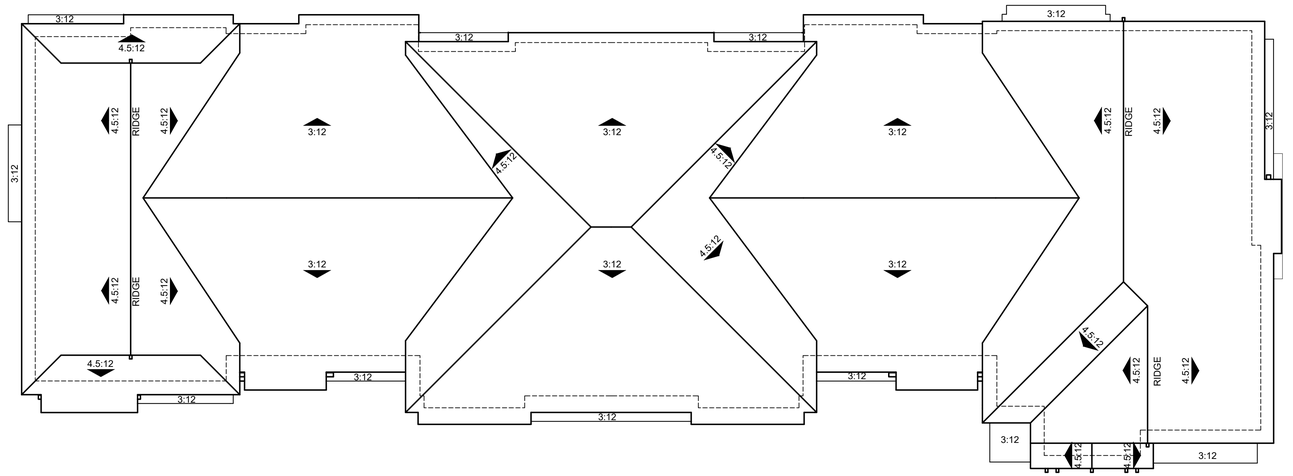
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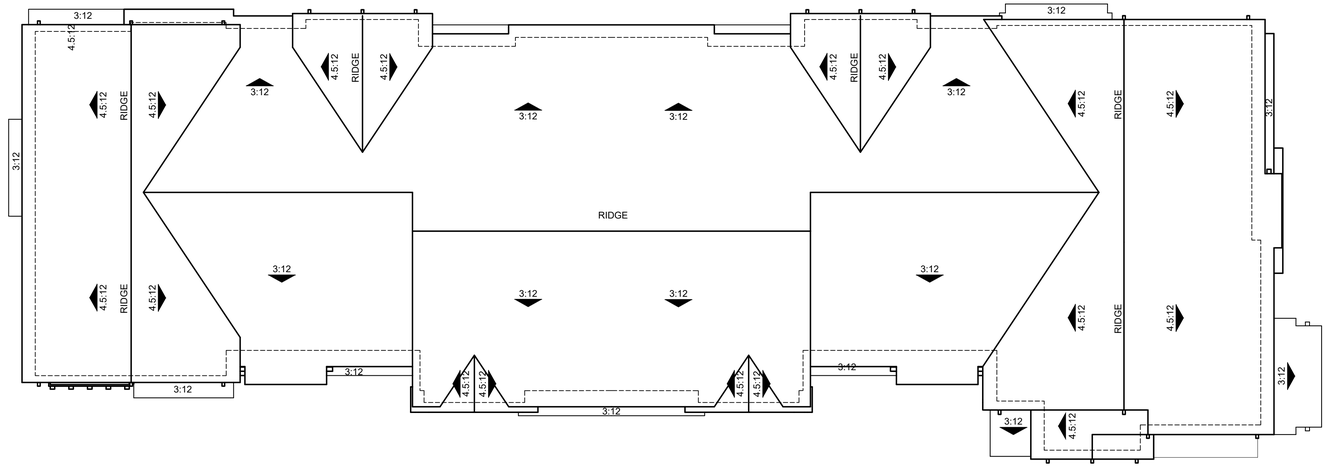
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C-400 (7-PLEX)
BUILDING PLANS

A12.3



B STYLE



A STYLE

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C-400 (7-PLEX)
ROOF PLANS

A12.4

MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, LIGHT SAND FINISH
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8. FAUX WOOD TRIM SILL
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24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



FRONT



RIGHT



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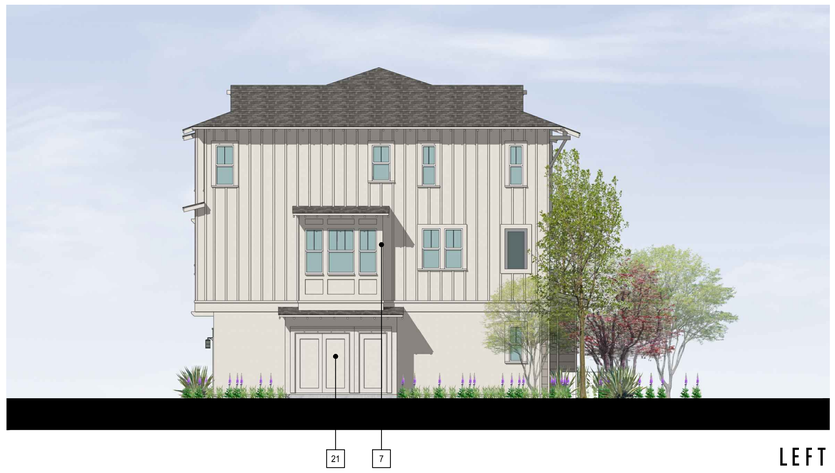
C-500 (6-PLEX)
ELEVATIONS - STYLE A

A13.0

MATERIAL LEGEND

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(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



FRONT



RIGHT



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LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

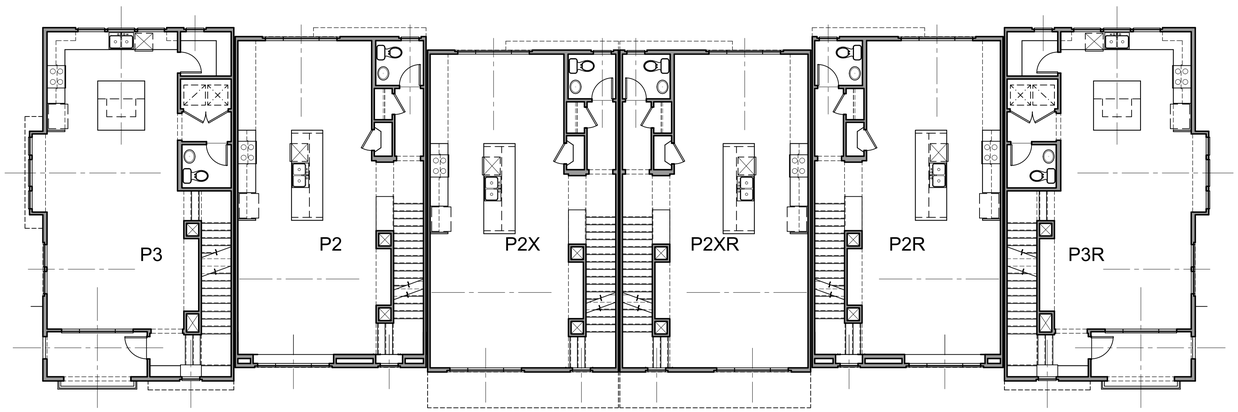
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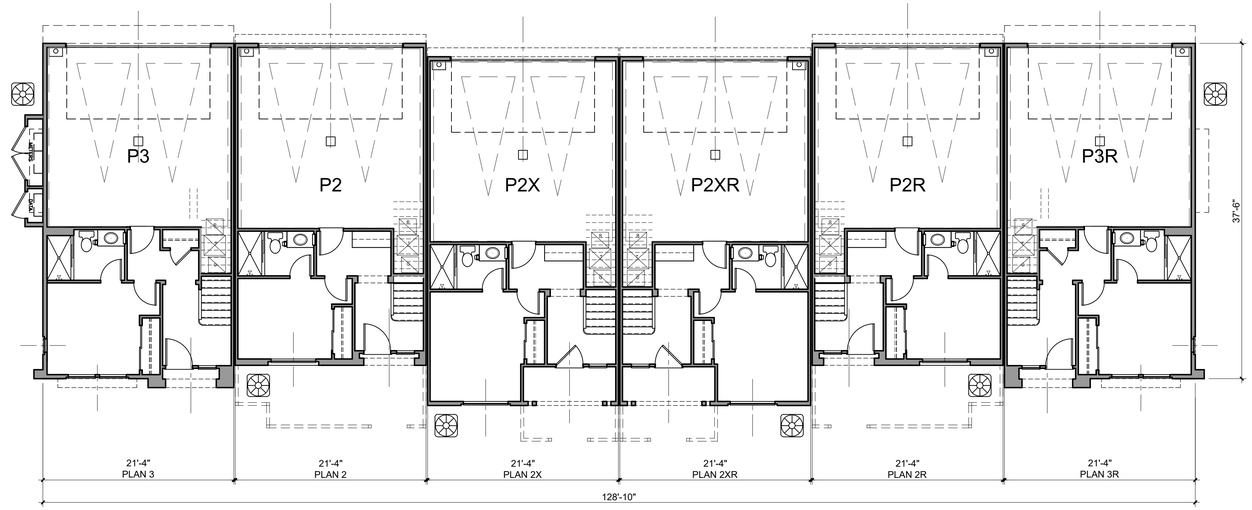
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C-500 (6-PLEX)
ELEVATIONS - STYLE B

A13.1



SECOND FLOOR



FIRST FLOOR

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LOS ALAMITOS, CA # 2021-0812

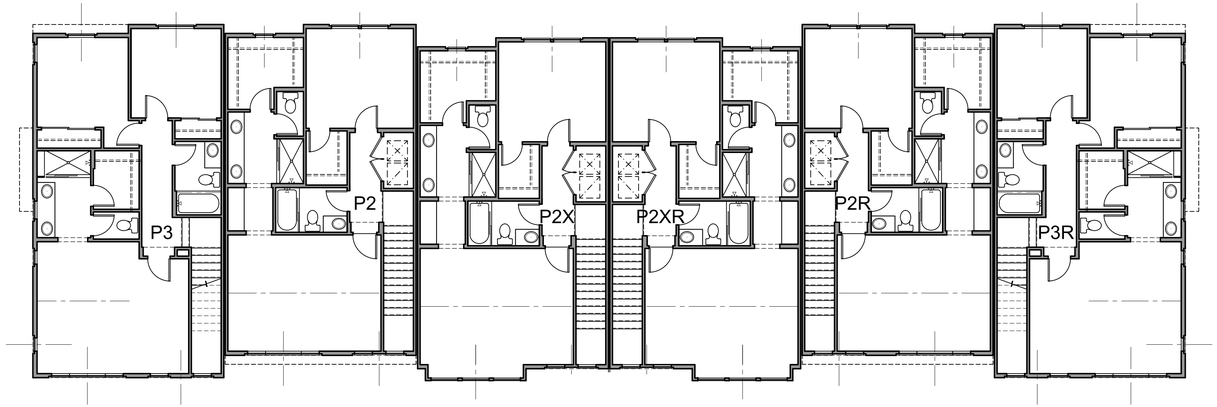
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0 4 8 16

C-500 (6-PLEX)
BUILDING PLANS

A13.2



THIRD FLOOR

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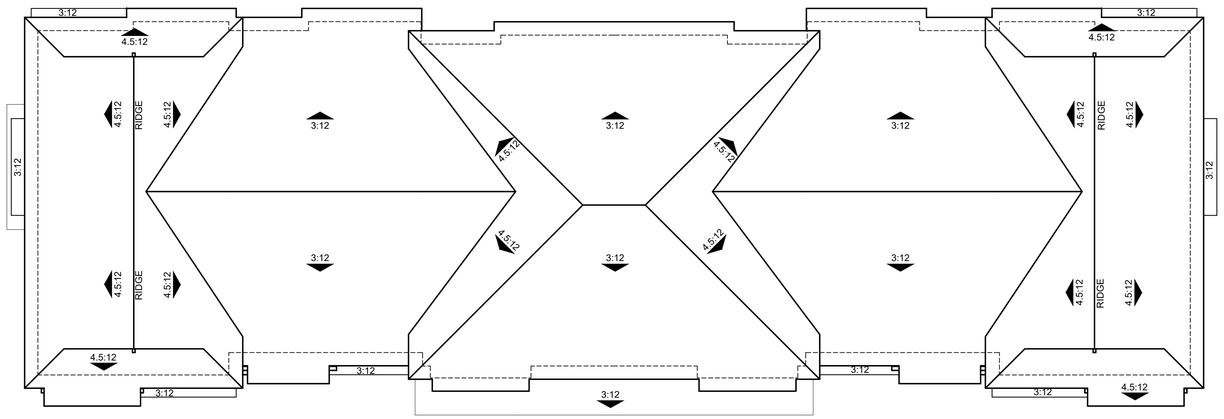
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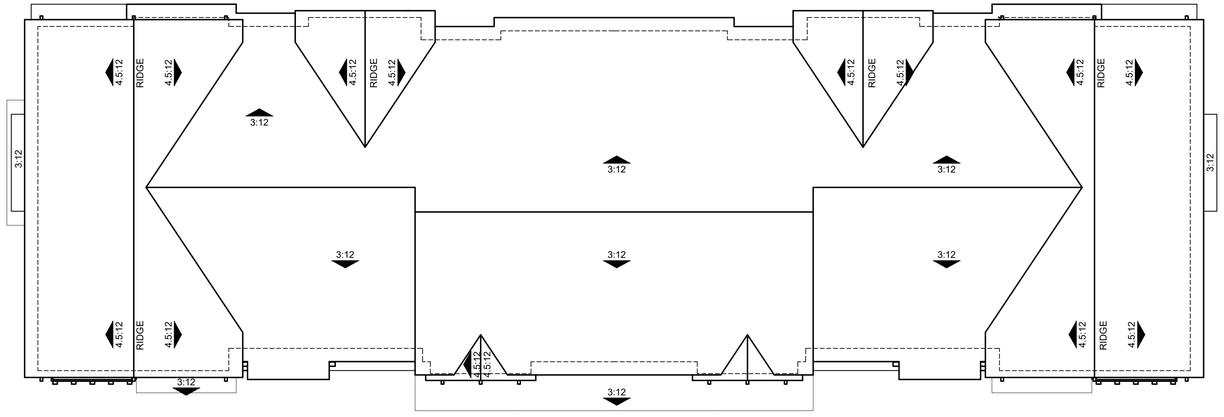
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C-500 (6-PLEX)
BUILDING PLANS

A13.3



B STYLE



A STYLE

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LOS ALAMITOS, CA # 2021-0812

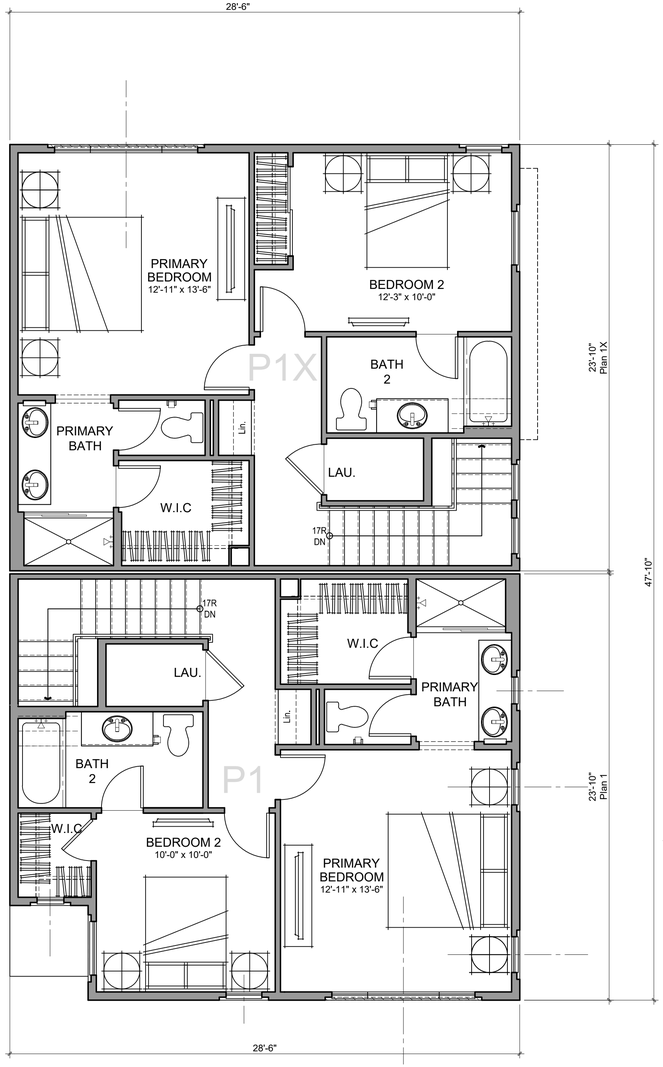
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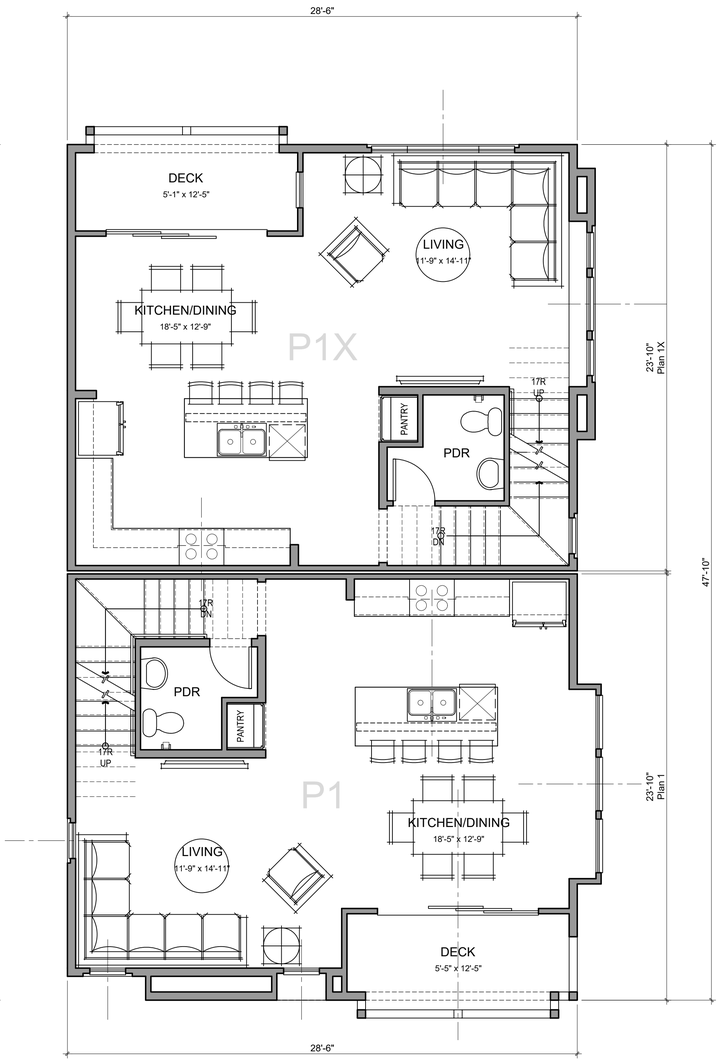
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C-500 (6-PLEX)
ROOF PLANS

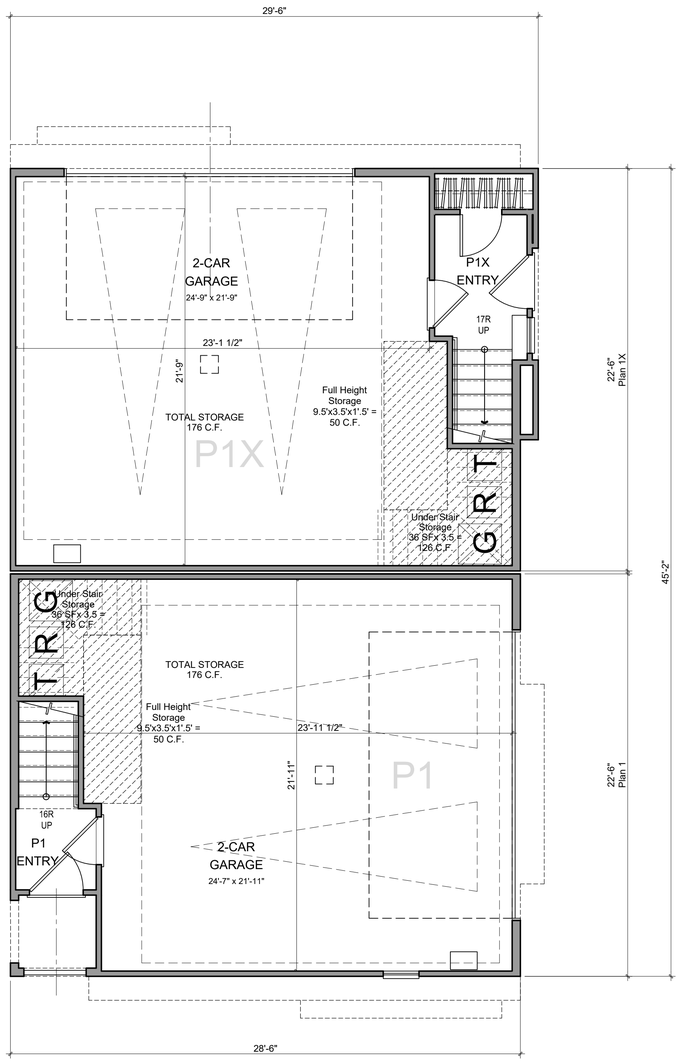
A13.4



THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

P1 - GROSS AREA	
1ST FLOOR	115 SQ. FT.
2ND FLOOR	611 SQ. FT.
3RD FLOOR	599 SQ. FT.
TOTAL LIVING	1325 SQ. FT.
PORCH	NA
DECK	73 SQ. FT.
GARAGE	568 SQ. FT.

P1X - GROSS AREA	
1ST FLOOR	127 SQ. FT.
2ND FLOOR	627 SQ. FT.
3RD FLOOR	622 SQ. FT.
TOTAL LIVING	1376 SQ. FT.
DECK	68 SQ. FT.
GARAGE	568 SQ. FT.

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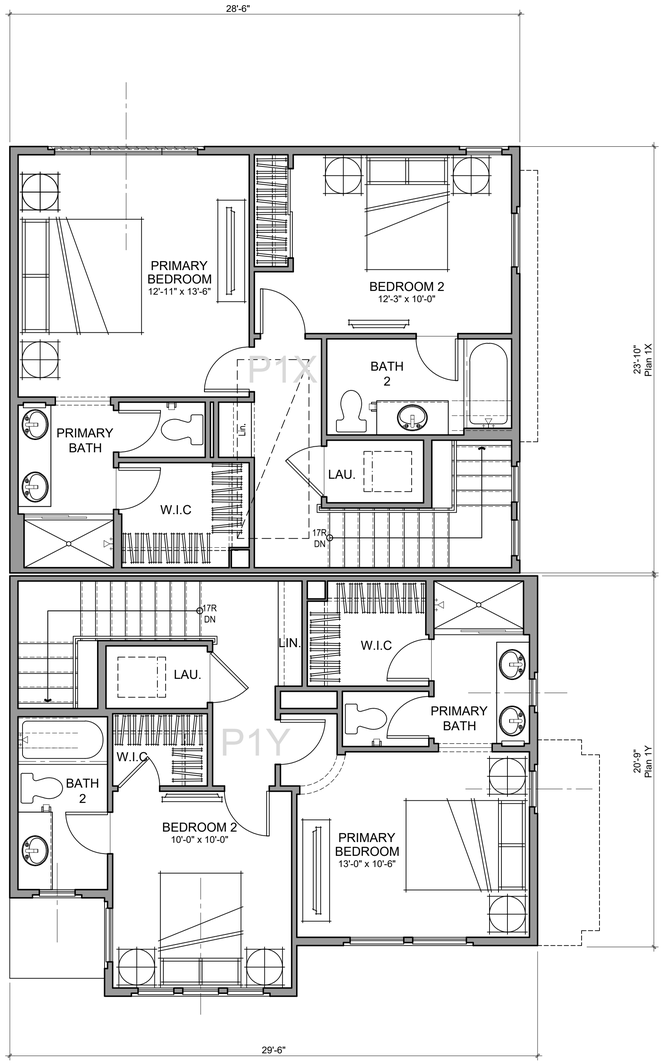
LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

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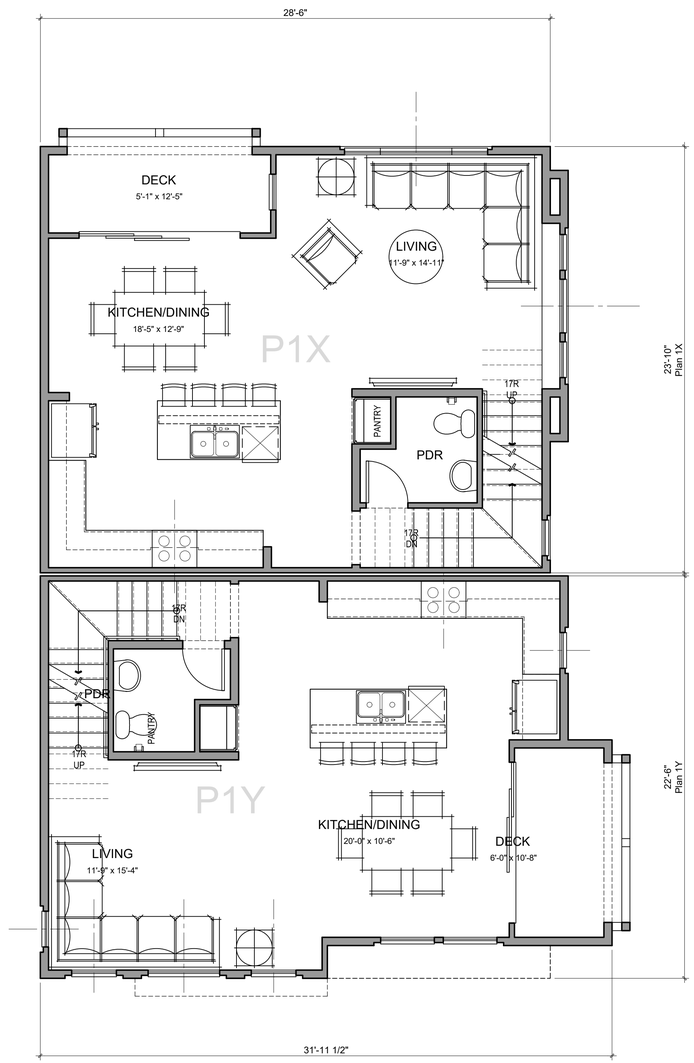
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PLAN 1/1X FLOOR PLANS

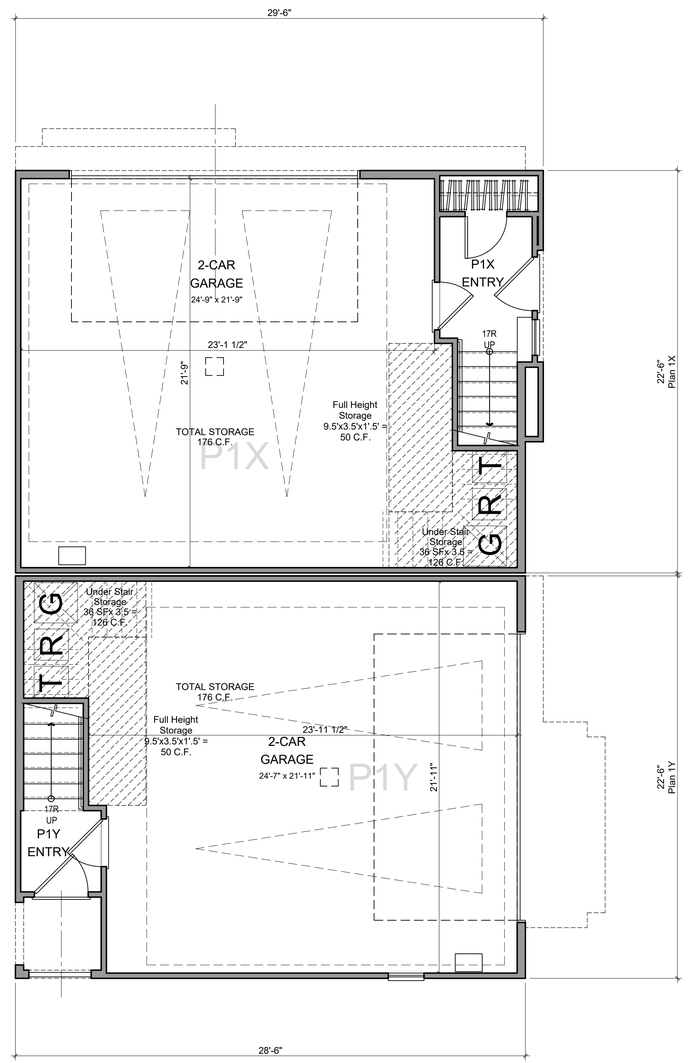
A14.0



THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

P1Y - GROSS AREA	
1ST FLOOR	91 SQ. FT.
2ND FLOOR	606 SQ. FT.
3RD FLOOR	569 SQ. FT.
TOTAL LIVING	1266 SQ. FT.
PORCH	NA
DECK	71 SQ. FT.
GARAGE	568 SQ. FT.

P1X - GROSS AREA	
1ST FLOOR	127 SQ. FT.
2ND FLOOR	627 SQ. FT.
3RD FLOOR	622 SQ. FT.
TOTAL LIVING	1376 SQ. FT.
DECK	68 SQ. FT.
GARAGE	568 SQ. FT.

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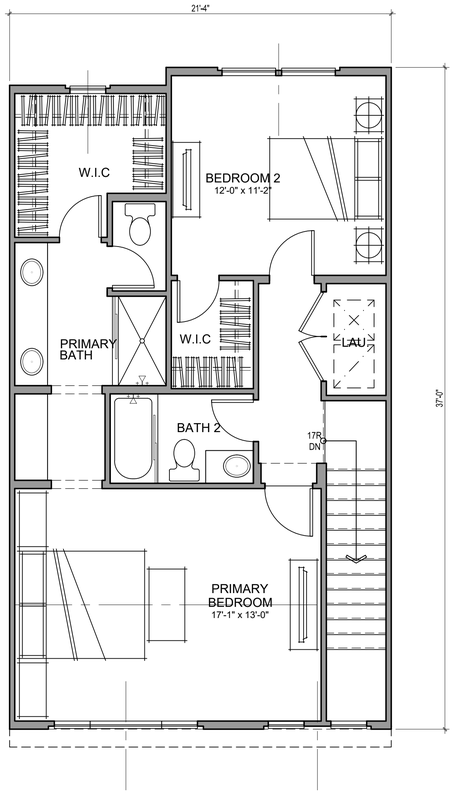
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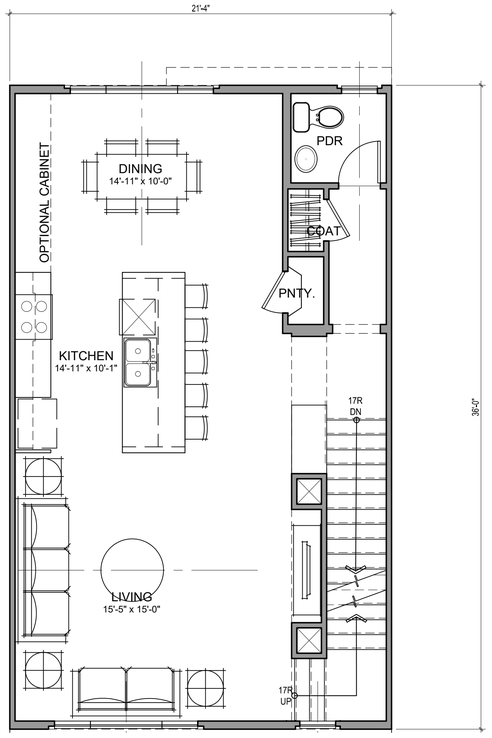
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PLAN 1Y/1X FLOOR PLANS

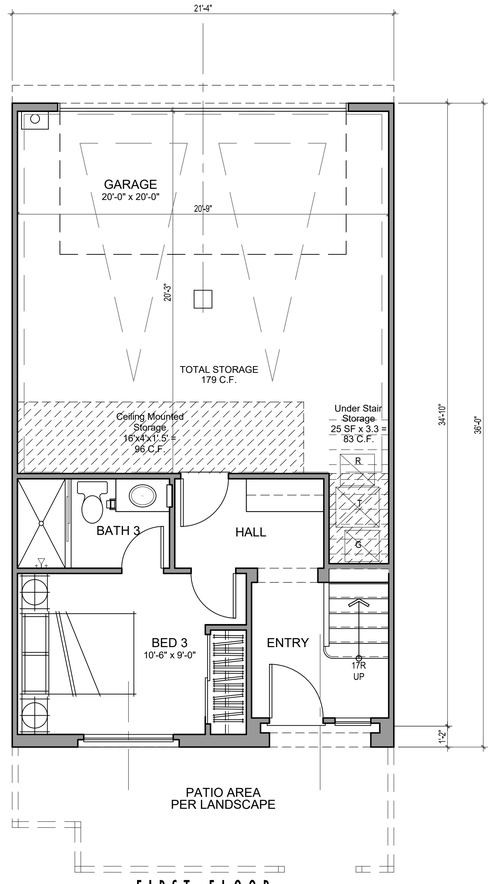
A14.1



THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

P2 - GROSS SF	
1ST FLOOR	321 SQ. FT.
2ND FLOOR	768 SQ. FT.
3RD FLOOR	714 SQ. FT.
TOTAL LIVING	1803 SQ. FT.
GARAGE	460 SQ. FT.

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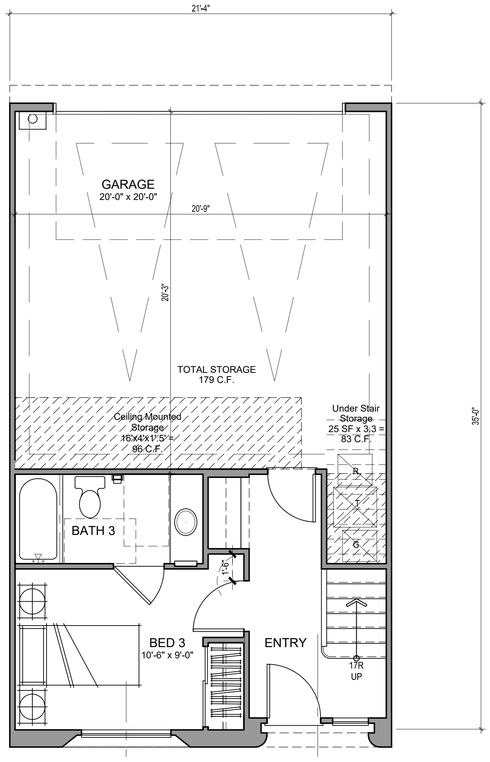
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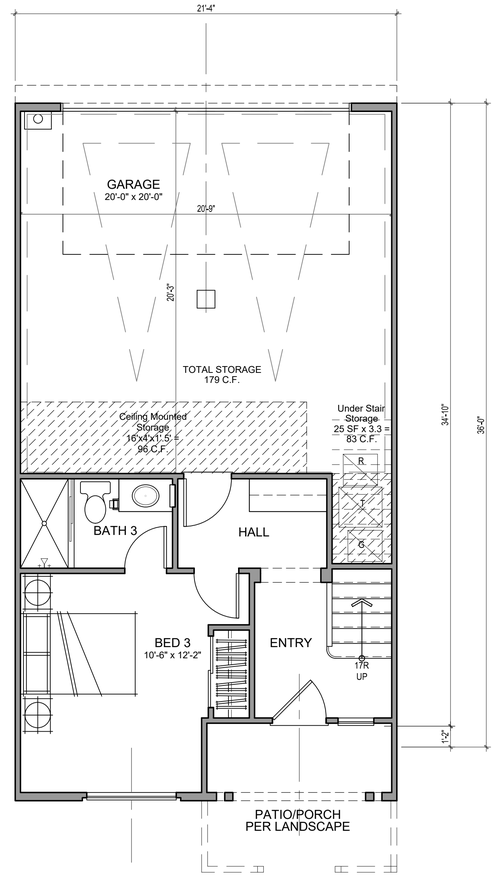
0 2 4 8

PLAN 2 FLOOR PLANS

A14.2



ACCESSIBLE UNIT FIRST FLOOR



FIRST FLOOR ALTERNATE

P2X - GROSS SF	
1ST FLOOR	355 SQ. FT.
2ND FLOOR	768 SQ. FT.
3RD FLOOR	714 SQ. FT.
TOTAL LIVING	1837 SQ. FT.
GARAGE	460 SQ. FT.

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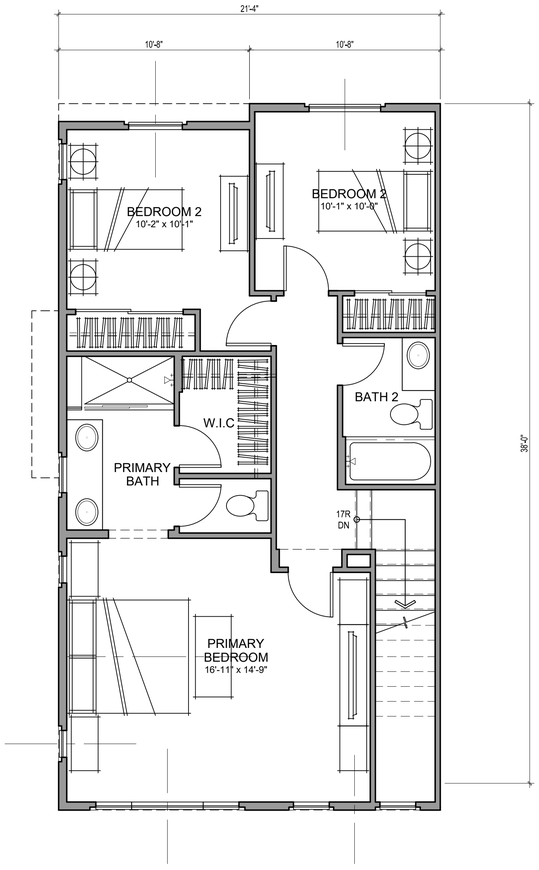
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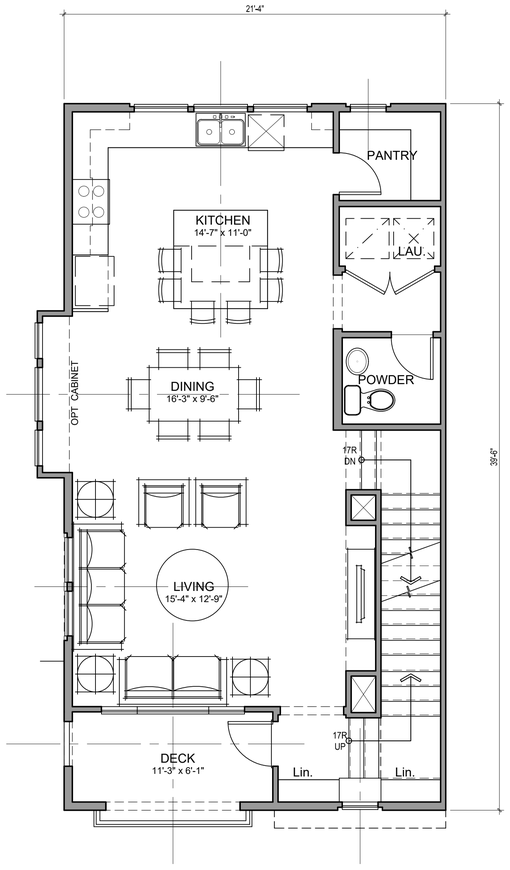
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PLAN 2X FLOOR PLANS

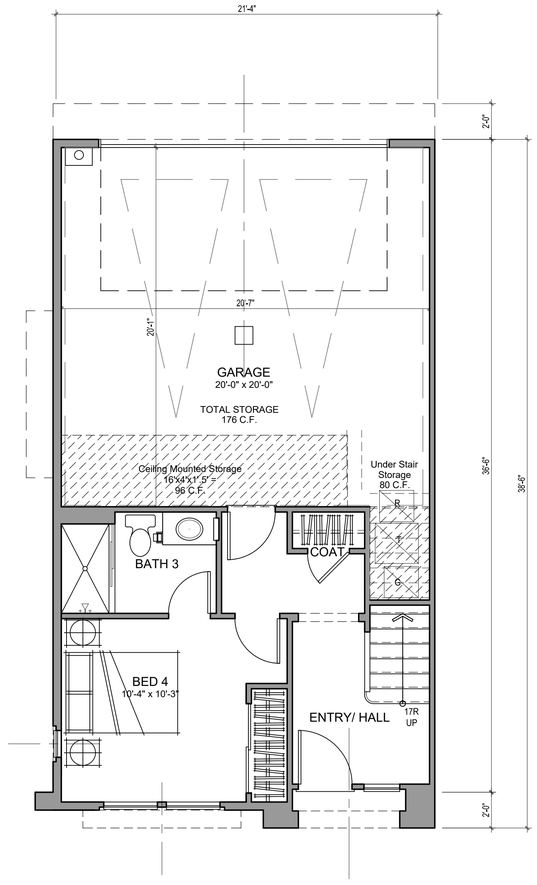
A14.3



THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

P3 - GROSS SF	
1ST FLOOR	372 SQ. FT.
2ND FLOOR	792 SQ. FT.
3RD FLOOR	764 SQ. FT.
TOTAL LIVING	1928 SQ. FT.
PORCH	15 SQ. FT.
GARAGE	457 SQ. FT.
DECK	72 SQ. FT.

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0 2 4 8

PLAN 3 FLOOR PLANS

A14.4

	SCHEME 1	SCHEME 2	SCHEME 3
GARAGE DOOR/ STUCCO/ B&B SIDING/ TRIM	EIDER WHITE (SW7014)	MERCURIAL (SW9550)	EXTRA WHITE (SW7006)
4" SIDING	LAKESIDE (SW9683)	SNOWBOUND (SW7004)	SILVERPOINTE (SW7653)
STUCCO 2/ 4" SIDING/ 10" SIDING	FUNCTIONAL GRAY (SW7024)	BIG CHILL (SW7648)	ELLIE GRAY (SW7650)
ENTRY 1	TASSEL (SW6369)	ROCKWOOD JADE GRAY (SW2812)	BORSCHT (SW7578)
ENTRY 2	GAUNTLET GRAY (SW7019)	SHORT AZURITE (SW9148)	CLOAK GRAY (SW6278)
METAL ROOFING	URBANE BRONZE (SW7048)	LINK GRAY (SW6200)	TRICORN BLACK (SW6258)
COMPOSITE ROOF	SAXONY 900 SHAKE - CHARCOAL BLEND	SAXONY 900 SHAKE - MONTEREY SAND BROWN FLASH	SAXONY 900 SHAKE - CHARCOAL BLEND

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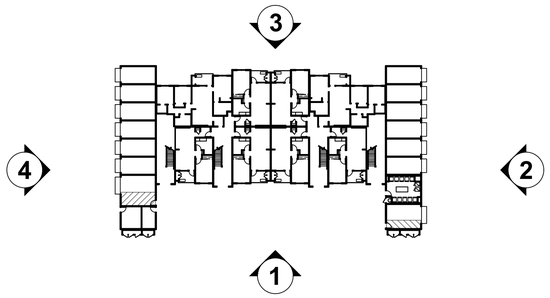
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COLOR AND MATERIALS BOARD

A15.0



Building Key Plan N.T.S.

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER



1. FRONT ELEVATION



3. REAR ELEVATION

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Tustin, CA 92780

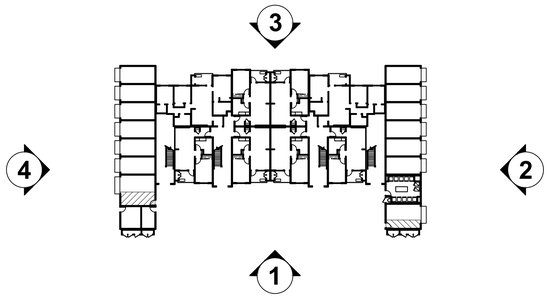
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

0 4 8 16

BUILDING ELEVATIONS
BUILDING TYPE A

AA2.0



Building Key Plan N.T.S.

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER



4. LEFT ELEVATION



2. RIGHT ELEVATION

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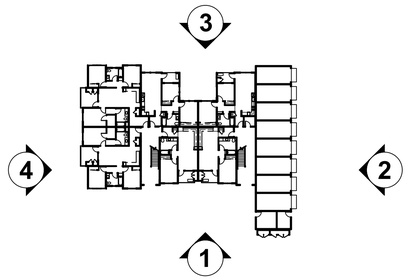
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

0 4 8 16

BUILDING ELEVATIONS
BUILDING TYPE A

AA2.1



Building Key Plan N.T.S.



1. FRONT ELEVATION



3. REAR ELEVATION

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER

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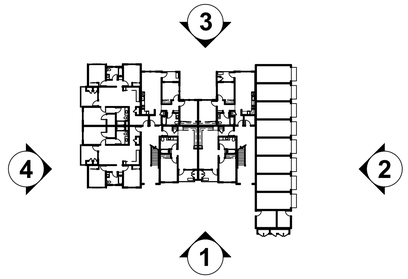
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

0 4 8 16

BUILDING ELEVATIONS
BUILDING TYPE B

AA2.2



Building Key Plan N.T.S.



4. LEFT ELEVATION



2. RIGHT ELEVATION

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER

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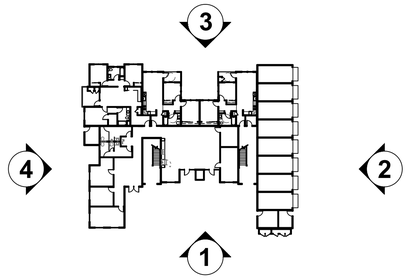
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AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

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BUILDING ELEVATIONS
BUILDING TYPE B

AA2.3



Building Key Plan N.T.S.



1. FRONT ELEVATION



3. REAR ELEVATION

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER

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Suite D-4-197
Ladera Ranch, CA 92694

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C&C DEVELOPMENT
14211 Yorba St
Tustin, CA 92780

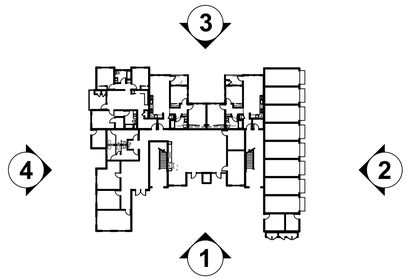
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

0 4 8 16

BUILDING ELEVATIONS
BUILDING TYPE C

AA2.4



Building Key Plan N.T.S.



4. LEFT ELEVATION



2. RIGHT ELEVATION

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER

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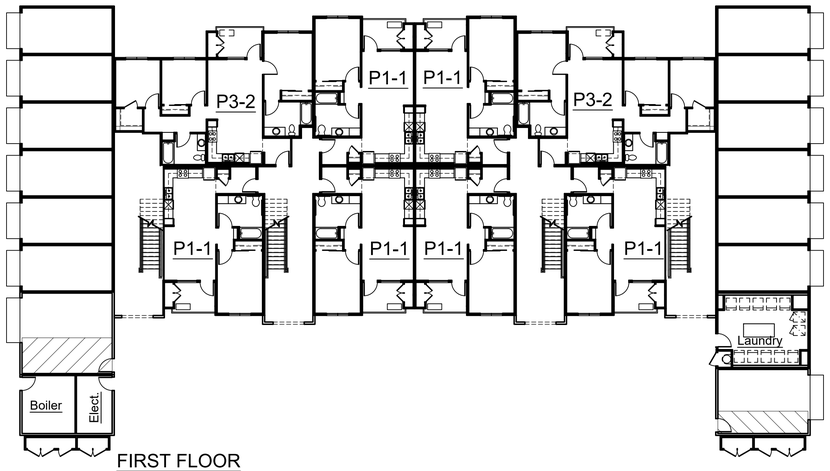
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LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

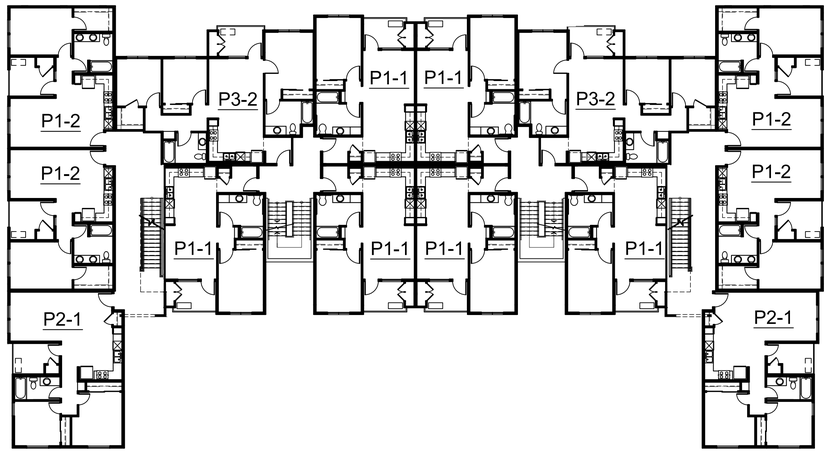
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BUILDING ELEVATIONS
BUILDING TYPE C

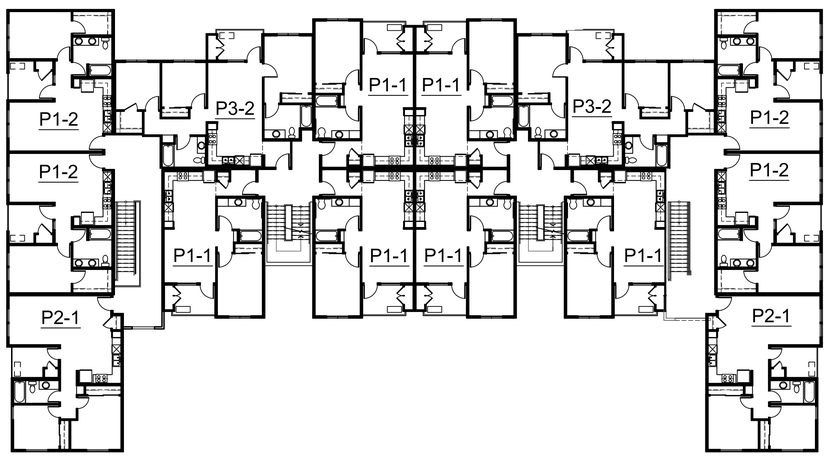
AA2.5



FIRST FLOOR



SECOND FLOOR



THIRD FLOOR

BUILDING LEVEL	AREA
FIRST FLOOR	12,702 S.F.
SECOND FLOOR	13,000 S.F.
THIRD FLOOR	13,000 S.F.
	38,702 S.F. TOTAL

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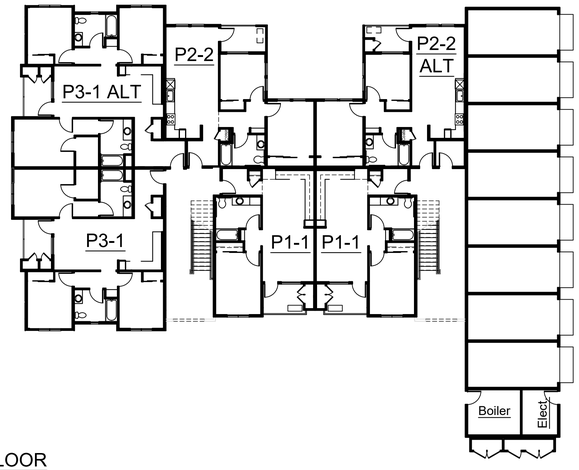
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

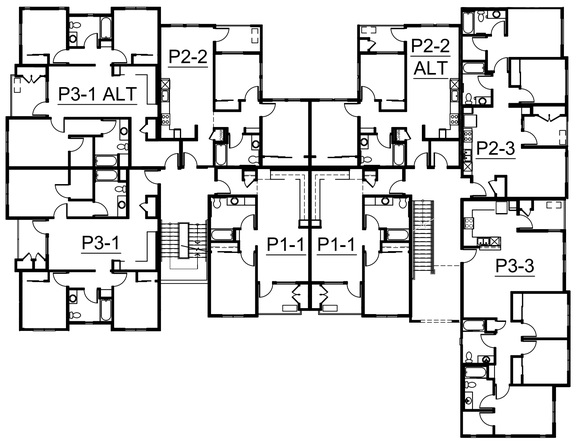
0 8 16 32

BUILDING PLAN
BUILDING A

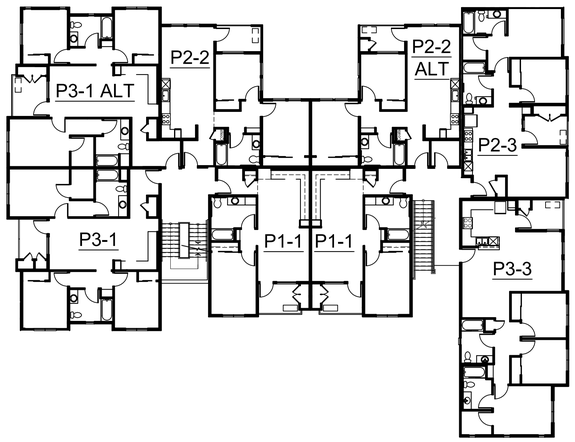
AA3.0



FIRST FLOOR



SECOND FLOOR



THIRD FLOOR

BUILDING LEVEL	AREA
FIRST FLOOR	8,462 S.F.
SECOND FLOOR	8,544 S.F.
THIRD FLOOR	8,515 S.F.
	25,521 S.F. TOTAL

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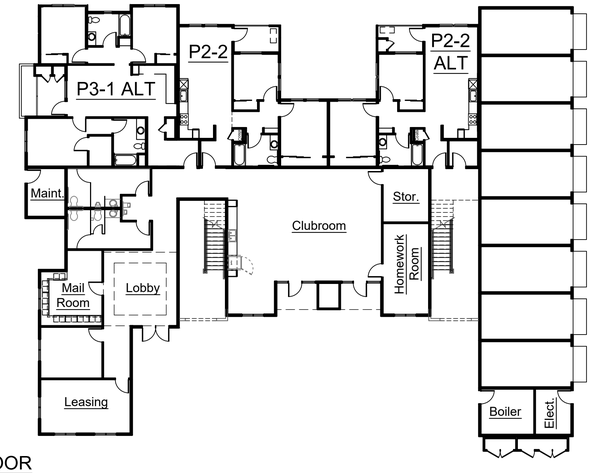
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

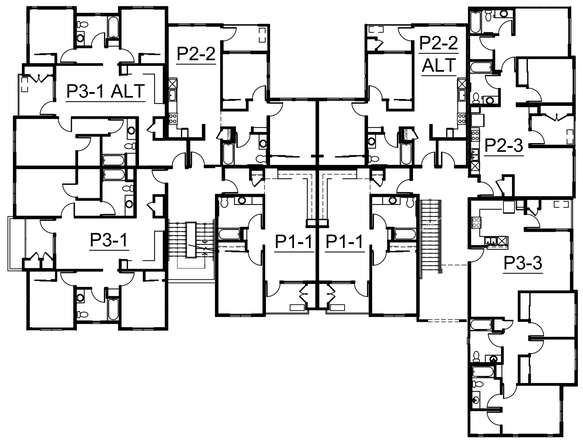
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BUILDING PLAN
BUILDING B

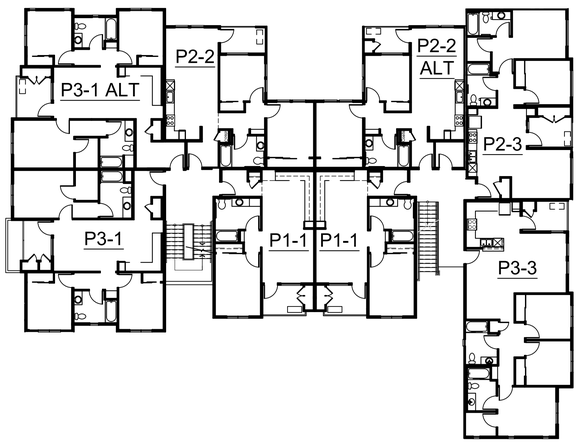
AA3.1



FIRST FLOOR



SECOND FLOOR



THIRD FLOOR

BUILDING LEVEL	AREA
FIRST FLOOR	8,898 S.F.
SECOND FLOOR	8,591 S.F.
THIRD FLOOR	8,561 S.F.
	26,050 S.F. TOTAL

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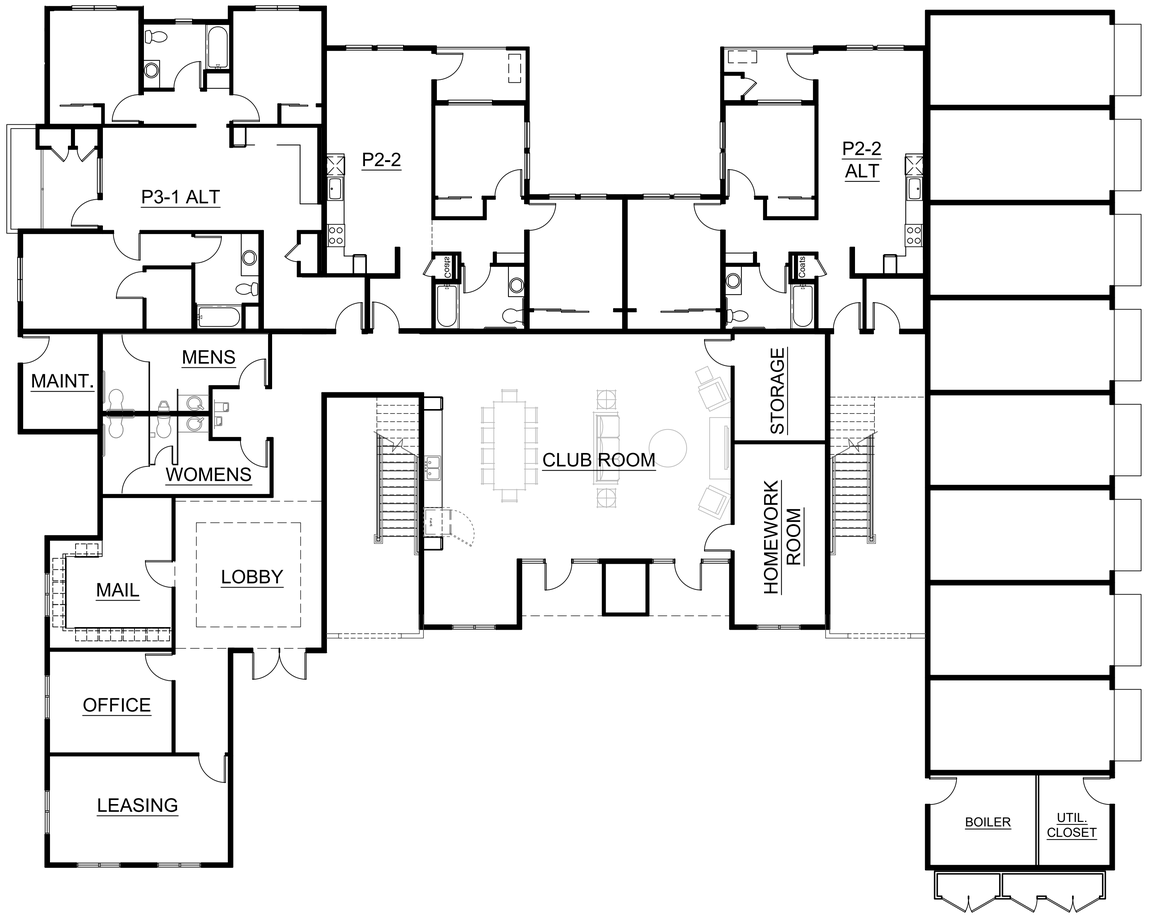
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
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FEBRUARY 17TH, 2023

0 8 16 32

BUILDING PLAN
BUILDING C

AA3.2



FIRST FLOOR

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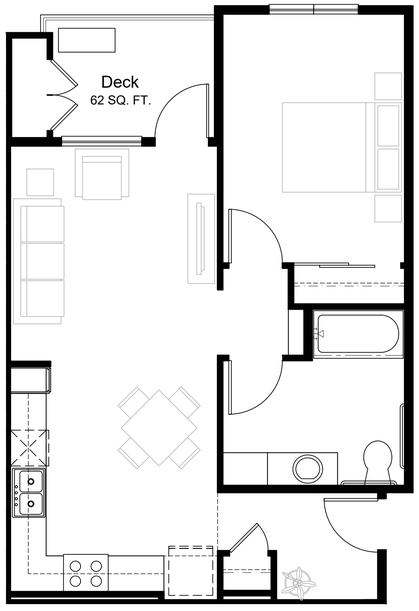
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

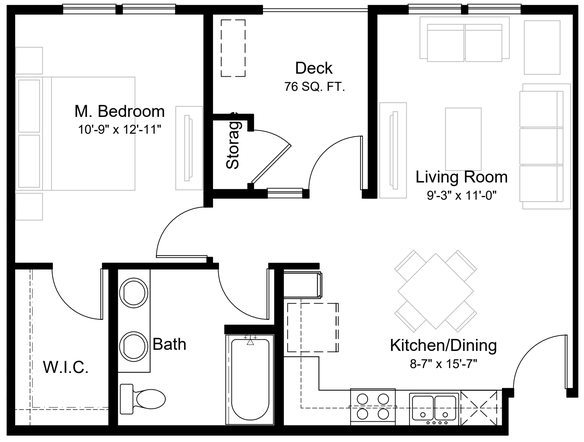
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BUILDING PLAN
BUILDING C - AMENITIES

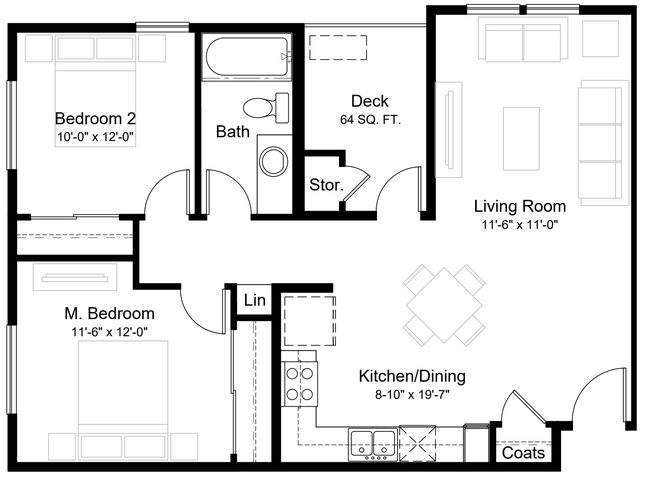
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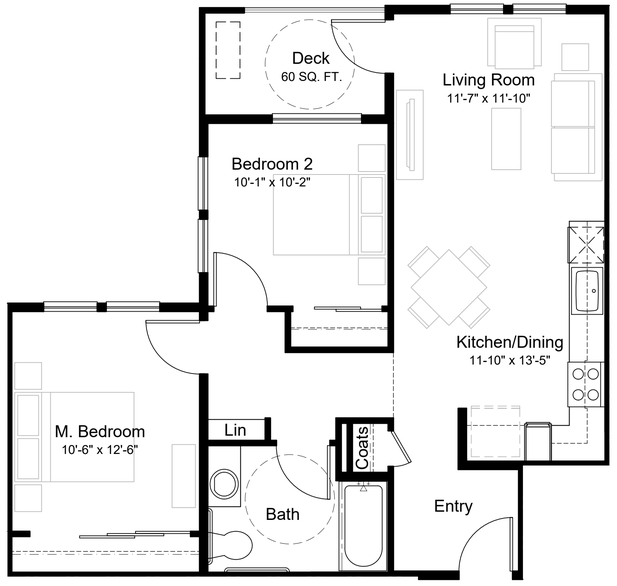
Plan 1-1
1 Bedroom / 1 Bathroom
665 SQ. FT.



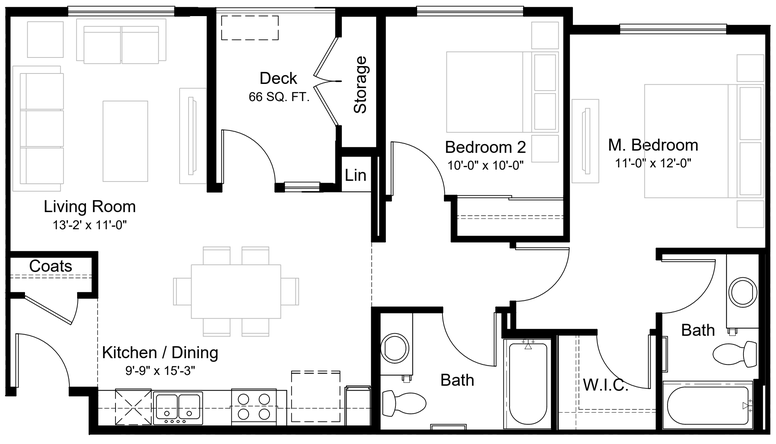
Plan 1-2
1 Bedroom / 1 Bathroom
667 SQ. FT.



Plan 2-1
2 Bedroom / 1 Bathroom
809 SQ. FT.



Plan 2-2
2 Bedroom / 1 Bathroom
802 SQ. FT.



Plan 2-3
2 Bedroom / 1 Bathroom
914 SQ. FT.

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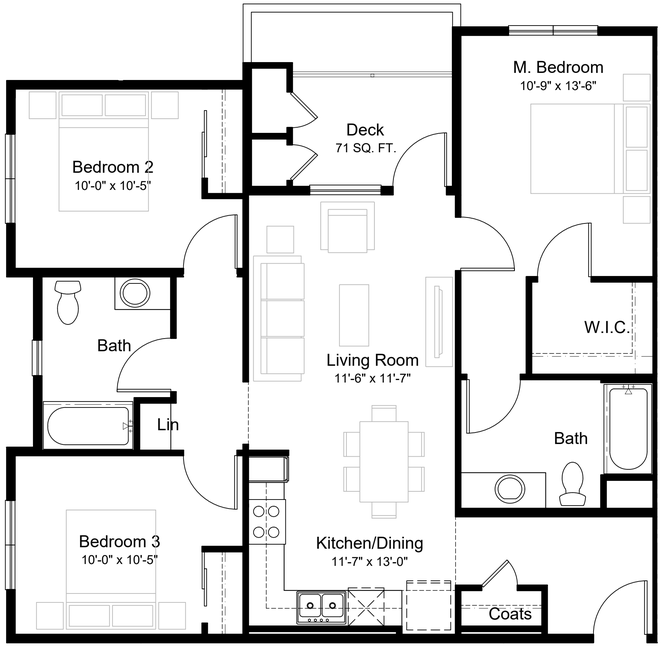
LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
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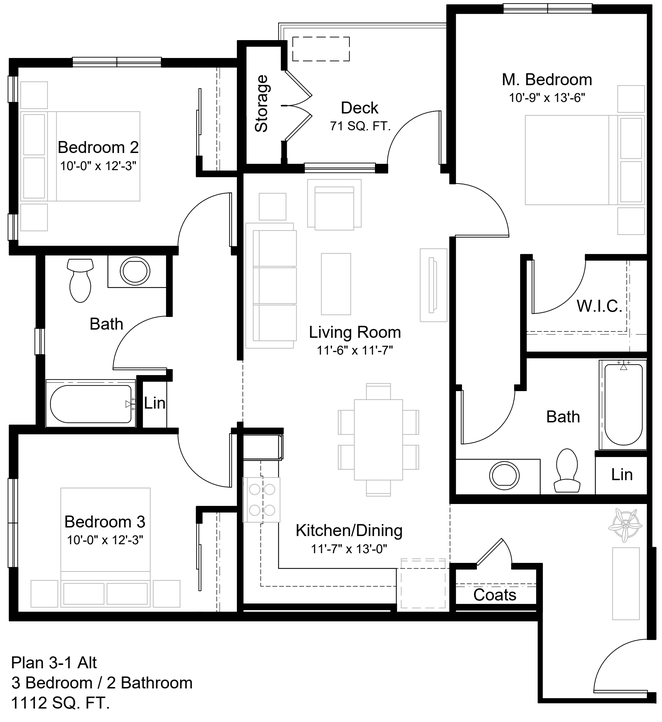
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UNIT PLANS

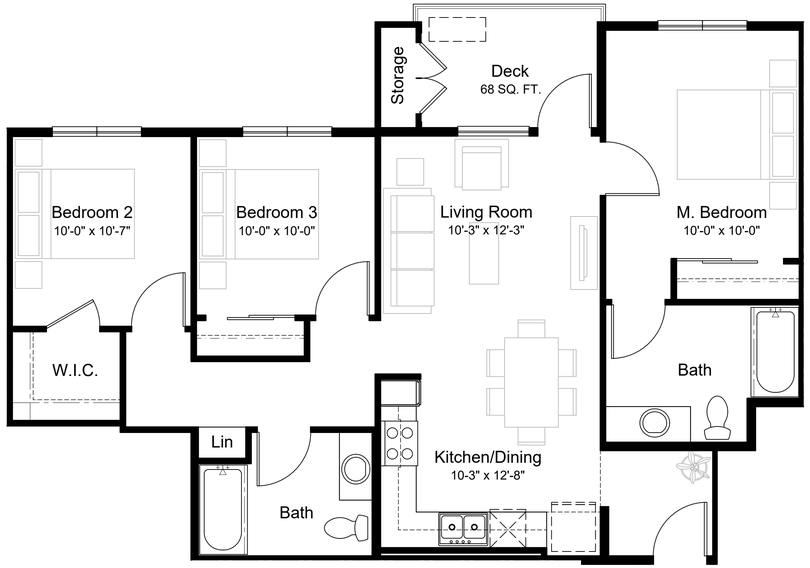
AA5.1



Plan 3-1
3 Bedroom / 2 Bathroom
1081 SQ. FT.



Plan 3-1 Alt
3 Bedroom / 2 Bathroom
1112 SQ. FT.



Plan 3-2
3 Bedroom / 2 Bathroom
1034 SQ. FT.



Plan 3-3
3 Bedroom / 2 Bathroom
1168 SQ. FT.

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LAMPSON - LOS ALAMITOS
LOS ALAMITOS # 2022-0524
AFFORDABLE APARTMENTS SITE

CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

0 2 4 8

UNIT PLANS

AA5.2



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LOS ALAMITOS # 2022-0524
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CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

RENDERINGS
VIEW OF APARTMENT PROJECT ENTRY

AA6.1



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LOS ALAMITOS # 2022-0524
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CONCEPTUAL DESIGN
FEBRUARY 17TH, 2023

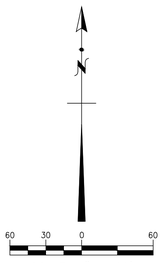
RENDERINGS
VIEW OF APARTMENT PROJECT FROM LAMPSON AVE

AA6.2

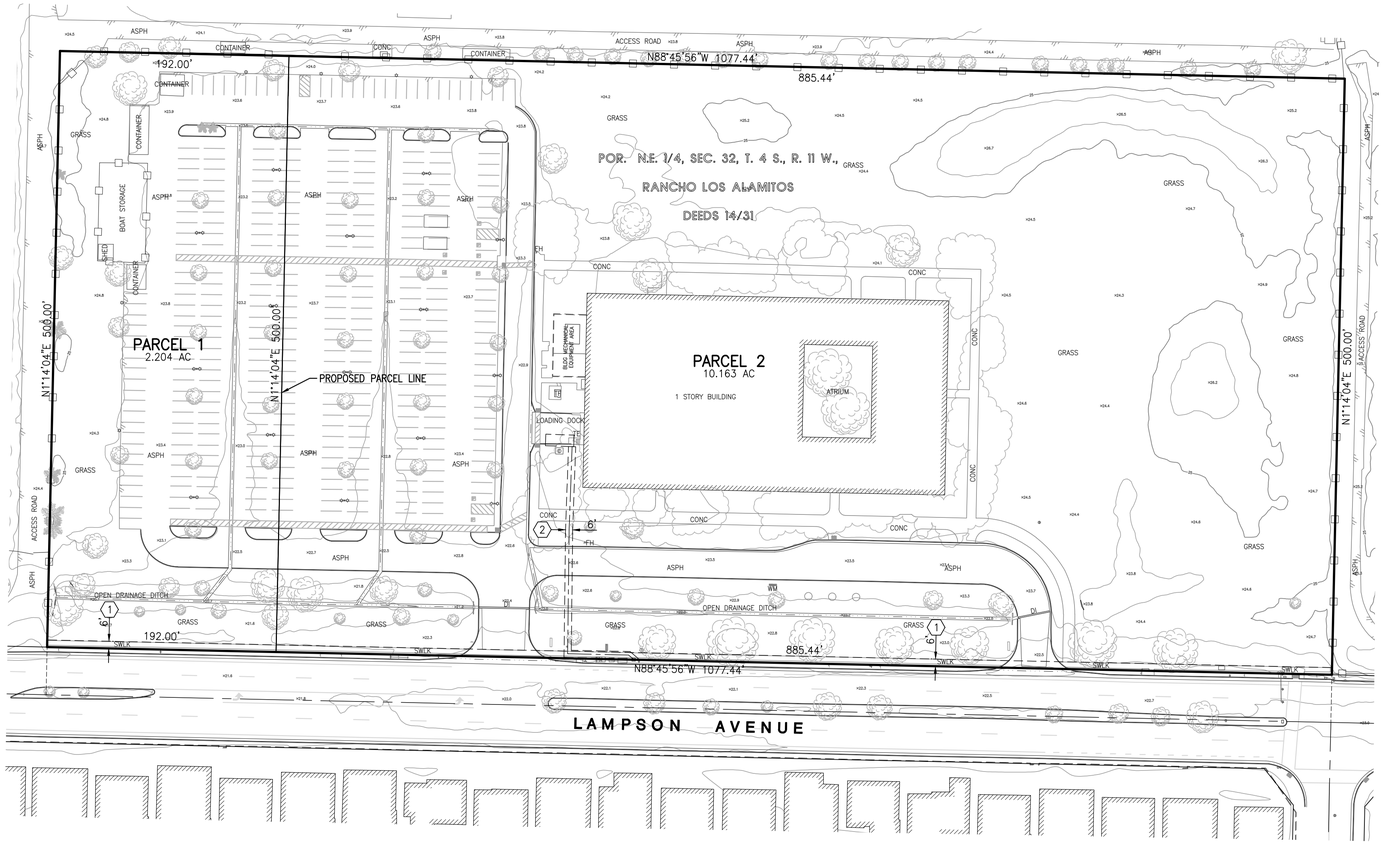
TENTATIVE PARCEL MAP NO. 2022-133

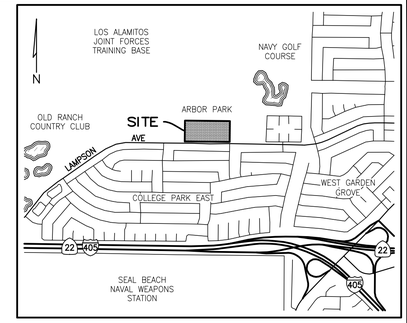
FOR FINANCE AND CONVEYANCE PURPOSES

IN THE CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA



SCALE: 1" = 60'





VICINITY MAP
SCALE: NONE

LEGAL DESCRIPTION:

BEING A SUBDIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 4 SOUTH, RANGE 11 WEST, IN THE RANCHO LOS ALAMITOS, AS PER MAP FILED IN DECREE OF PARTITION IN THE SUPERIOR COURT OF LOS ANGELES COUNTY, STATE OF CALIFORNIA, CASE NO. 13527, A CERTIFIED COPY OF THE FINAL DECREE OF SAID CASE HAVING BEEN RECORDED FEBRUARY 2, 1891, IN BOOK 14, PAGE 31 OF DEEDS OF SAID ORANGE COUNTY
APN: 130-012-35

SITE ADDRESS:

4665 LAMPSON AVENUE, LOS ALAMITOS, CALIFORNIA

VESTED OWNER:

LAMPSON PARK PLACE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING N28°33'38.9"W BETWEEN CALIFORNIA SPATIAL REFERENCE CENTER, (CSRC), CONTINUOUSLY OPERATING REFERENCE STATIONS, (CORS), "BLSA" AND "FVPK".

DATUM STATEMENT:

ALL COORDINATES SHOWN HEREON ARE GRID VALUES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE VI, NORTH AMERICAN DATUM OF 1983 (NAD83), 2017.50 EPOCH OCS GPS ADJUSTMENT, IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. A GENERALIZED COMBINATION SCALE FACTOR OF 0.99998924 WAS USED FOR THIS PROJECT AT NORTHING 2233124.607, EASTING 6015398.692. TO OBTAIN GRID DISTANCES, MULTIPLY GROUND DISTANCES BY THE COMBINATION SCALE FACTOR.

BLSA N: 2239164.39, E: 6021324.82
FVPK N: 2188769.57, E: 6048756.26

BENCHMARK STATEMENT:

COUNTY OF ORANGE BENCHMARK NO. GG-113
ELEV: 23.116 (NAVD88, LEVELED 2012)
DESCRIBED AS: FOUND 2 ½" BRONZE CITY OF GARDEN GROVE BENCHMARK DISK WITH PUNCH IN TRIANGLE, SET IN THE NORTHWEST CORNER OF A 6.5 FT. BY 4.5 FT. CONCRETE CATCH BASIN. MONUMENT IS LOCATED IN THE NORTHWEST CORNER OF THE INTERSECTION OF LAMPSON AVE. AND MANLEY AVE. 13 FT., NORTH OF THE B.C.R. AND 4 FT. WEST OF THE CURB FACE. (TABLE A-5)

FLOOD NOTE:

THE SUBJECT PROPERTY FALLS WITHIN "ZONE D – AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE" PER FEMA MAP NO. 06059C0116J, A PRINTED PANEL, EFFECTIVE DECEMBER 3, 2009

LAND USE SUMMARY:

GROSS AREA: 12.367 ACRES
TOTAL PROPOSED PARCELS: 2

REVIEW COMPLETED BY:

DAVID WOOLLEY, PLS 7304
714-403-6730
DWOOLLEY@WILLDAN.COM
JANUARY 24, 2023

No comments.

[HARDCOPY SIGNED AND SEALED]

SUBDIVIDER:

LAMPSON PARK PLACE, LLC
14665 LAMPSON AVE
LOS ALAMITOS, CA 90720
562-400-4473
CONTACT: GEORGE VOIGT

ENGINEER:

C&V CONSULTING, INC.
9830 IRVINE CENTER DRIVE
IRVINE, CA 92618
(949)916-3800

EXISTING EASEMENTS:

1. AN EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES IN FAVOR OF THE CITY OF SEAL BEACH, A MUNICIPAL CORPORATION, PER DOCUMENT RECORDED JUNE 21, 1973 IN BOOK 10762, PAGE 82 OF OFFICIAL RECORDS.

2. AN EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CALIFORNIA CORPORATION, PER DOCUMENT RECORDED SEPTEMBER 13, 1973 IN BOOK 10898, PAGE 202 OF OFFICIAL RECORDS.

AN EASEMENT FOR RIGHT OF ACCESS TO ALL PORTIONS OF THE PROPERTY FOR THE PURPOSES OF ENVIRONMENTAL INVESTIGATION, REMEDIATION, OR OTHER CORRECTIVE ACTION IN FAVOR OF THE UNITED STATES OF AMERICA, ACTING BY AND THROUGH THE ADMINISTRATOR OF GENERAL SERVICES PER DOCUMENT RECORDED DECEMBER 6, 2021 AS INSTRUMENT NO. 2021000734414 OF OFFICIAL RECORDS. EASEMENT IS BLANKET IN NATURE.

LEGEND:

AP	ANGLE POINT
ASPH	ASPHALT PAVEMENT
BC	BUILDING CORNER
BEG	BEGIN
BO	BLOW-OFF VALVE
BLDG	BUILDING
BW	BLOCK WALL
CB	CATCH BASIN
CF	CURB FACE
CLF	CHAIN LINK FENCE
CMF	CORRUGATED METAL FENCE
CONC	CONCRETE PAVEMENT
DI	DRAIN INLET
DWY	DRIVEWAY
FH	FIRE HYDRANT
GM	GAS METER
LS	LANDSCAPING
MH	MANHOLE
PKWY	PARKWAY
P/L	PROPERTY LINE
RET	RETAINING
ROW	RIGHT-OF-WAY
SFH	SINGLE-FAMILY HOME
ST LT	STREET LIGHT
TE	TRASH ENCLOSURE
TEMP	TEMPORARY
TF	TRANSFORMER
WF	WOOD FENCE
WL	WALL
WM	WATER METER
V	VALVE

SYMBOLS:

BO	BLOW-OFF VALVE
DI	DRAIN INLET
FH	FIRE HYDRANT
	LIGHT STANDARD
	STORM DRAIN MANHOLE
	SANITARY SEWER MANHOLE
	SIGN POST
GM	GAS METER
WM	WATER METER
V	UTILITY VALVE
	UTILITY/POWER POLE
	BLOCK/RETAINING SCREEN WALL
	BLOCK/RETAINING LOW WALL
	PLANTER/DECORATIVE WALL
OH-E	OVERHEAD WIRE
	EDGE OF ASPHALT PAVEMENT
	WOOD/WROUGHT IRON FENCE
X	CHAIN LINK FENCE
	DIRECTION OF FLOW
93	MINOR CONTOUR (1' INTERVAL)
100	MAJOR CONTOUR (5' INTERVAL)
×91.5	SPOT ELEVATION

ENGINEER'S STATEMENT:

THIS TENTATIVE MAP WAS PREPARED BY ME, OR UNDER MY DIRECTION ON NOVEMBER 7, 2022.

DANE P. MCDOUGALL, R.C.E. 80705

PREPARED BY:

C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING

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WWW.CVC-INC.NET

REGISTERED PROFESSIONAL ENGINEER
DANE P. MCDOUGALL
C 80705
CIVIL
STATE OF CALIFORNIA

CITY OF LOS ALAMITOS
DEPARTMENT OF DEVELOPMENT SERVICES

PROJECT NO. KBHO-007

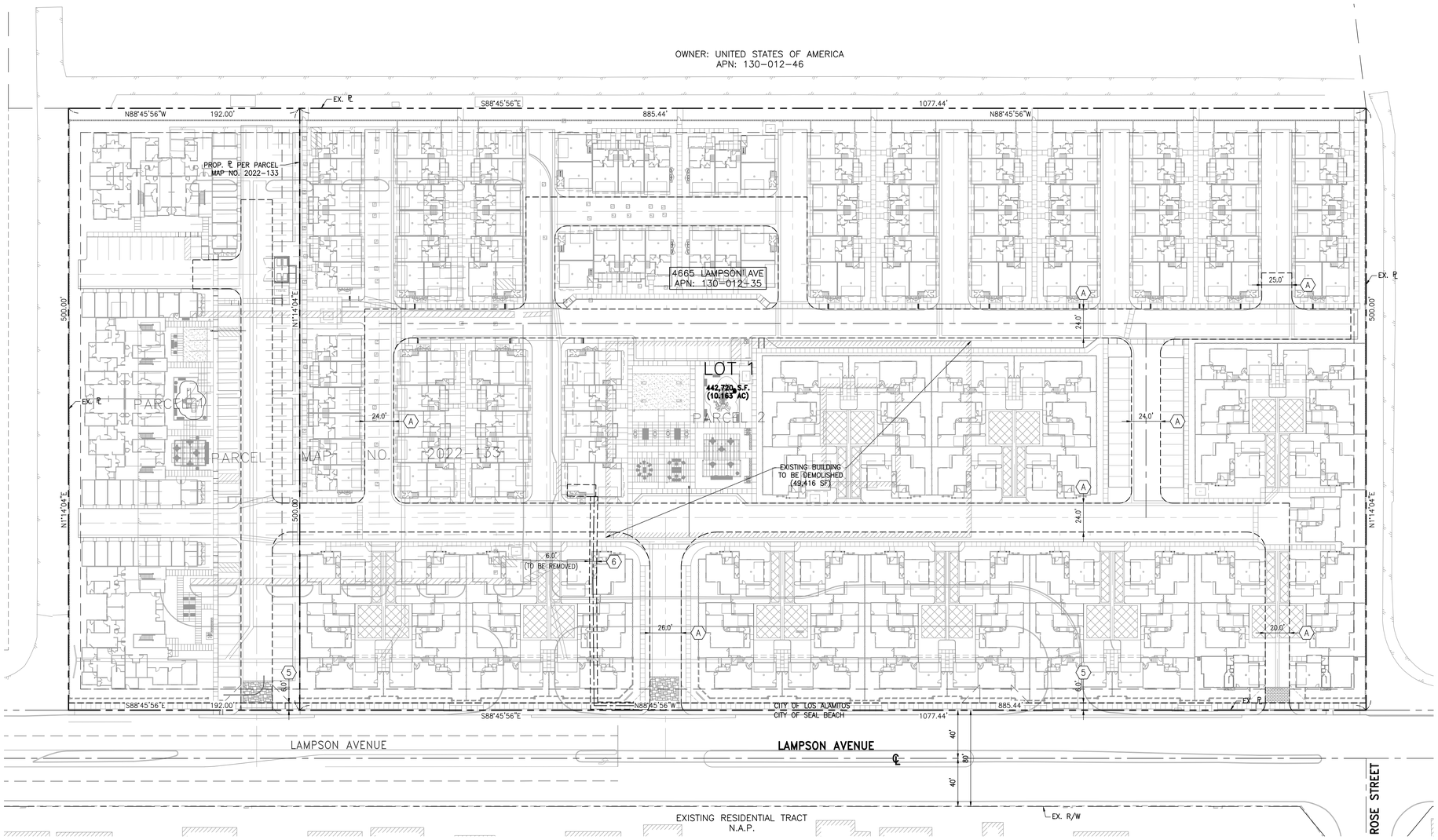
TENTATIVE PARCEL MAP NO. 2022-133
LAMPSON PARK PLACE
4665 LAMPSON AVENUE
TITLE SHEET AND PARCEL LAYOUT

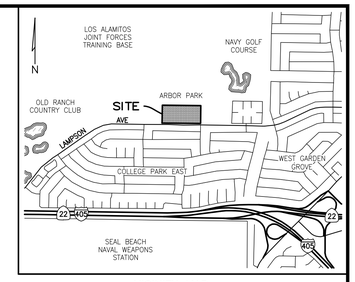
SHEET 1 OF 1

PLAN SET: PSD1
DATE: 1/18/2023

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BY: PETER JADANY

VESTING TENTATIVE TRACT MAP NO. 19263
IN THE CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA
FOR CONDOMINIUM PURPOSES





VICINITY MAP
N.T.S.

VESTED OWNER:
LAMPSON PARK PLACE, LLC,
A CALIFORNIA LIMITED
LIABILITY COMPANY

DEVELOPER:
MJW INVESTMENTS, LLC
1278 GLENNEYRE STREET, SUITE 439
LAGUNA BEACH, CA 92651
(626) 710-6377

SITE ADDRESS:
4665 LAMPSON AVENUE
LOS ALAMITOS, CA 90720

ASSESSOR'S PARCEL NO.:
APN: 130-012-35

PROPOSED LOT SUMMARY:
SINGLE LOT SUBDIVISION FOR CONDOMINIUM PURPOSES

PROPOSED LOT 1:
LOT SIZE: 10.163 AC (GROSS)
PROPOSED USE:
55 DETACHED CONDO UNITS
114 ATTACHED TOWNHOUSE UNITS
169 TOTAL CONDOMINIUM UNITS

UTILITY PURVEYORS:
ELECTRICITY
SOUTHERN CALIFORNIA EDISON
(800) 655-4555

GAS
SOUTHERN CALIFORNIA GAS COMPANY
(800) 427-2200

WATER
GOLDEN STATE WATER COMPANY
(800) 999-4033

SANITARY SEWER
CITY OF SEAL BEACH- PUBLIC WORKS DEPARTMENT
(562) 431-2527

FIRE PROTECTION AGENCY
ORANGE COUNTY FIRE AUTHORITY
(714) 573-6100

CIVIL ENGINEER:
C&V CONSULTING, INC.
9830 IRVINE CENTER DRIVE
IRVINE, CA 92618
(949) 916-3800

ARCHITECT:
KTGY GROUP, INC
17911 VON KARMAN AVENUE, SUITE 200
IRVINE, CA 92614
(714) 639-9860

GEOTECHNICAL ENGINEER:
LGC GEOTECHNICAL, INC.
131 CALLE IGLESIA, SUITE 200
SAN CLEMENTE, CA 92672
(949) 369-6141

FLOOD ZONE INFORMATION:
THE SUBJECT PROPERTY FALLS WITHIN "ZONE D – AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE" PER FEMA MAP NO. 06059C0116J, A PRINTED PANEL, EFFECTIVE DECEMBER 3, 2009 (TABLE A-3).

EXISTING ZONING/ LAND USE:
EXISTING LAND USE: 1 EXISTING OFFICE BUILDING AND PARKING LOT
EXISTING ZONING: "C-F COMMUNITY FACILITIES"

PROPOSED ZONING:
ADOPTED R-3 ORDINANCE (PENDING)

PROPOSED BUILDING SETBACKS:
FRONT STREET: 20' AVG. (15' MIN.)
REAR: 10-FT MIN.
SIDE: 5-FT MIN.

NOTES:
1. ON-SITE SANITARY SEWER STORM DRAIN PROPOSED TO BE PRIVATELY OWNED AND MAINTAINED
2. ON-SITE WATER PROPOSED TO BE PUBLICLY OWNED AND MAINTAINED

EXISTING EASEMENTS:
(5) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED JUNE 21, 1973 AS BOOK 10762, PAGE 82 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO REMAIN)

(6) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED SEPTEMBER 13, 1973 AS BOOK 10898, PAGE 202 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO BE REMOVED)

PROPOSED EASEMENTS
(A) AN EASEMENT FOR EMERGENCY VEHICLE ACCESS PURPOSES AS DEDICATED TO THE CITY OF LOS ALAMITOS.

LEGAL DESCRIPTION:

THE FOLLOWING TITLE INFORMATION WAS DERIVED FROM A PRELIMINARY REPORT ISSUED BY FIRST AMERICAN TITLE COMPANY, ORDER NO.: NHSC-6668752 DATED JULY 06, 2022:

THAT PORTION OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 4 SOUTH, RANGE 11 WEST, IN THE RANCHO LOS ALAMITOS, IN THE CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP FILED IN DECREE OF PARTITION IN THE SUPERIOR COURT OF LOS ANGELES COUNTY, STATE OF CALIFORNIA, CASE NO. 13527, A CERTIFIED COPY OF THE FINAL DECREE OF SAID CASE HAVING BEEN RECORDED FEBRUARY 11, 1891, IN BOOK 14, PAGE 31 OF DEEDS OF SAID ORANGE COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTERLINE INTERSECTION OF LAMPSON AVENUE AND ROSE STREET AS PER MAP OF TRACT NO. 5961 IN THE CITY OF SEAL BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA RECORDED IN BOOK 217, PAGES 41 THROUGH 44 INCLUSIVE OF MISCELLANEOUS MAPS, RECORDS OF SAID ORANGE COUNTY; THENCE N 0°11'35" E 40.00 FEET TO THE TRUE POINT OF BEGINNING, SAID POINT ALSO BEING IN THE SOUTH LINE OF SAID NORTHEAST QUARTER AND DISTANT N 89°48'25" W 842.72 FEET FROM THE SOUTHWESTERLY CORNER OF THE LAND DESCRIBED IN QUITCLAIM DEED RECORDED JULY 13, 1965, IN BOOK 7590 PAGE 539, OFFICIAL RECORDS OF SAID ORANGE COUNTY; THENCE ALONG SAID SOUTH LINE N 89°48'25" W 1077.44 FEET; THENCE N 0°11'35" E 500.00 FEET; THENCE S 89°48'25" E 1077.44 FEET; THENCE S 0°11'35" W 500.00 FEET TO THE TRUE POINT OF BEGINNING.

DATUM STATEMENT

ALL COORDINATES SHOWN HEREON ARE GRID VALUES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE VI, NORTH AMERICAN DATUM OF 1983 (NAD83), 2017.50 EPOCH OCS GPS ADJUSTMENT, IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. A GENERALIZED COMBINATION SCALE FACTOR OF 0.99998924 WAS USED FOR THIS PROJECT AT NORTHING 2233124.607, EASTING 6015398.692. TO OBTAIN GRID DISTANCES, MULTIPLY GROUND DISTANCES BY THE COMBINATION SCALE FACTOR.

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING N28°33'38.9"W BETWEEN CALIFORNIA SPATIAL REFERENCE CENTER, (CSRC), CONTINUOUSLY OPERATING REFERENCE STATIONS, (CORS), "BLSA" AND "FVPK". (TABLE A-5)

LEGEND

	PROP. SUBDIVISION BOUNDARY
	PROP. EASEMENT
	EX. LOT LINE
	EX. EASEMENT LINE
(DW)	EX. DW LINE
(SS)	EX. SS LINE
T	EX. TELEPHONE LINE
(G)	EX. GAS LINE
(E)	EX. ELECTRIC LINE
#	DENOTES PLOTTED ITEM
	EX. DRAINAGE PATTERN
PARCEL 1	EX. PARCEL PER SEPARATE MAP REFERENCE

ABBREVIATIONS:

BLDG	BUILDING	FW	FIRE WATER	R	RADIUS
CB	CATCH BASIN	HP	HIGH POINT	RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
℄	CENTER LINE	LP	LOW POINT	R/W	RIGHT OF WAY
C&G	CURB & GUTTER	MH	MANHOLE	SF	SQUARE FEET
DW	DOMESTIC WATER	MIN	MINIMUM	SL	STREET LIGHT
ESMT	EASEMENT	N'LY	NORTHERLY	SS	SANITARY SEWER
EX.	EXISTING	NAP	NOT A PART	S'LY	SOUTHERLY
FF	FINISHED FLOOR ELEVATION	NTS	NOT TO SCALE	S/W	SIDEWALK
FG	FINISHED GRADE	PL	PROPERTY LINE	TC	TOP OF CURB
FL	FLOW LINE	PP	POWER POLE	TG	TOP OF GRATE
FS	FINISHED SURFACE	PROP.	PROPOSED	TYP	TYPICAL
				W'LY	WESTERLY

REGISTERED PROFESSIONAL ENGINEER
PHILIP C. MALCOMSON
No. 67819
CIVIL
STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:

PHILIP C. MALCOMSON R.C.E. 67819 DATE

SCALE: 1" = 40'
0 20 40 80

REVISIONS

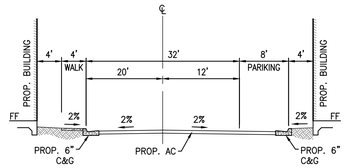
NUMBER	DATE	INITIALS	DESCRIPTION	APPROVED	INSTALLED

PLANS PREPARED BY:
C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
9830 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
949 916 3800
INFO@CVCINC.NET
WWW.CVCINC.NET

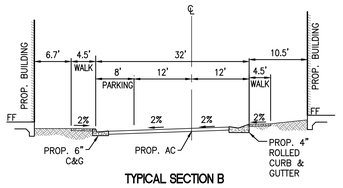
VESTING TENTATIVE TRACT MAP NO. 19263
TITLE SHEET & NOTES

PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

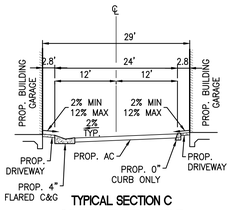
SHEET 1 OF 4



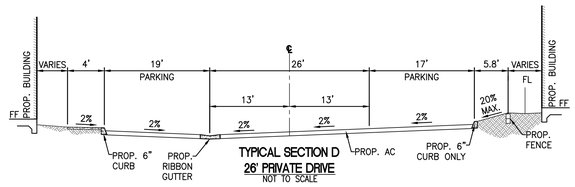
TYPICAL SECTION A
32' PRIVATE DRIVE
NOT TO SCALE



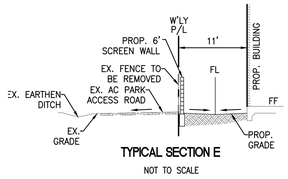
TYPICAL SECTION B
32' PRIVATE DRIVE
NOT TO SCALE



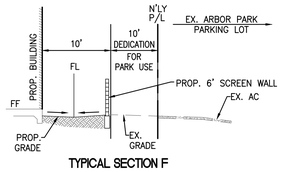
TYPICAL SECTION C
24' PRIVATE DRIVE AISLE
NOT TO SCALE



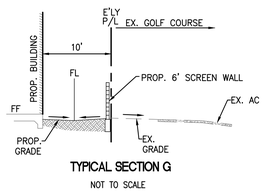
TYPICAL SECTION D
26' PRIVATE DRIVE
NOT TO SCALE



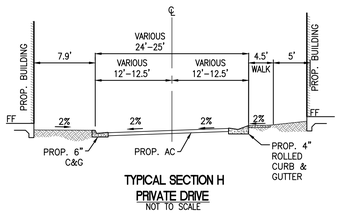
TYPICAL SECTION E
NOT TO SCALE



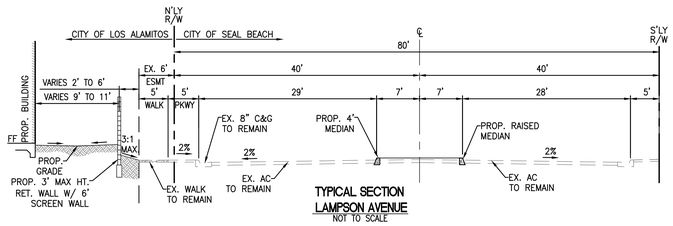
TYPICAL SECTION F
NOT TO SCALE



TYPICAL SECTION G
NOT TO SCALE



TYPICAL SECTION H
PRIVATE DRIVE
NOT TO SCALE



TYPICAL SECTION
LAMPSON AVENUE
NOT TO SCALE

REVISIONS					
NUMBER	DATE	INITIALS	DESCRIPTION	APPROVED	INSTALLED

PLANS PREPARED BY:

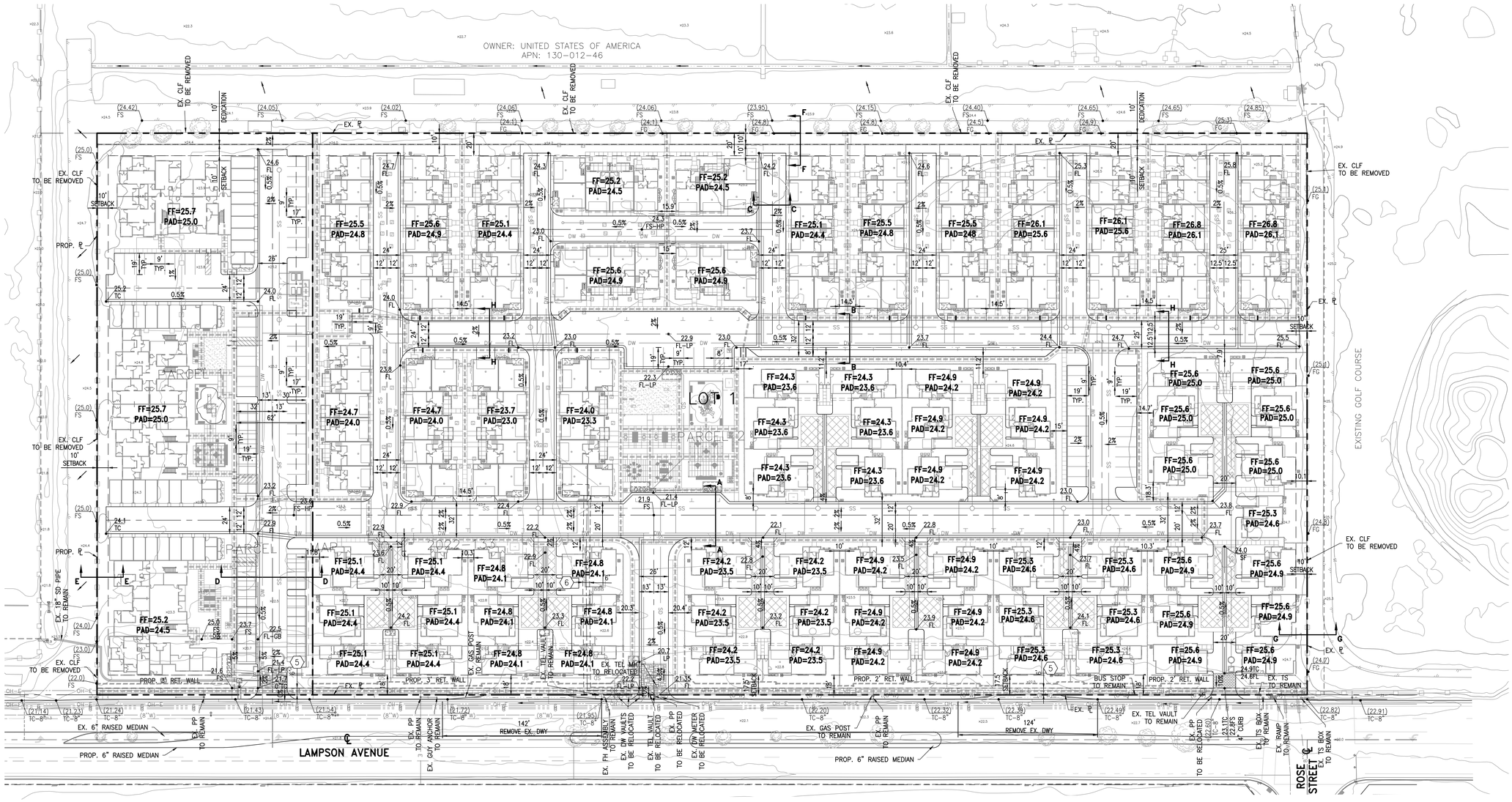
C&V CONSULTING, INC.
CIVIL ENGINEERING
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IRVINE, CALIFORNIA 92618
(949) 916-3800
INFO@CVC-INC.NET
WWW.CVC-INC.NET

VESTING TENTATIVE TRACT MAP NO. 19263
TYPICAL SECTIONS

PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

DWG: P:\projects\CAD\Dwg\Sheets\TTM\PE-EXCT-01.dwg BY: jmontagut Date: Jul 20, 2021 - 9:43:53am
PW2U - ANCAD

PRELIMINARY GRADING PLAN



TOPOGRAPHY NOTE:

TOPOGRAPHY AND CONTOURS SHOWN HEREON ARE BASED ON 1' CONTOUR INTERVALS FROM AERIAL PHOTOGRAMETRY FLOWN BY NEARMAP ON SEPTEMBER 9, 2021 WITH SUPPLEMENTAL FIELD TOPOGRAPHY COLLECTED BY C&V CONSULTING, INC. ON AUGUST 9, 2022.

EXISTING EASEMENTS:

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EARTHWORK SUMMARY

RAW CUT	5,800 CY
RAW FILL	11,500 CY
NET IMPORT	5,700 CY

LEGEND

- PROP. SUBDIVISION BOUNDARY
- PROP. EASEMENT
- EX. LOT LINE
- EX. EASEMENT LINE
- (DW) EX. DW LINE
- (SS) EX. SS LINE
- T EX. TELEPHONE LINE
- (G) EX. GAS LINE
- (E) EX. ELECTRIC LINE
- (F) DENOTES PLOTTED ITEM
- EX. DRAINAGE PATTERN
- PARCEL 1 EX. PARCEL PER SEPARATE MAP REFERENCE
- A.D.A. ACCESSIBLE PATH

ABBREVIATIONS:

BLDG	BUILDING	OH-E	OVERHEAD LINE
CB	CATCH BASIN	R	PROPERTY LINE
℄	CENTER LINE	PP	POWER POLE
C&G	CURB & GUTTER	POC	POINT OF CONNECTION
DW	DOMESTIC WATER	PROP.	PROPOSED
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MH	MANHOLE	TYP.	TYPICAL
MIN	MINIMUM	W'LY	WESTERLY
N'LY	NORTHERLY		
NAP	NOT A PART		
NTS	NOT TO SCALE		

SCALE: 1" = 40'

0 20 40 80

REVISIONS					
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PLANS PREPARED BY:

C&V CONSULTING, INC.
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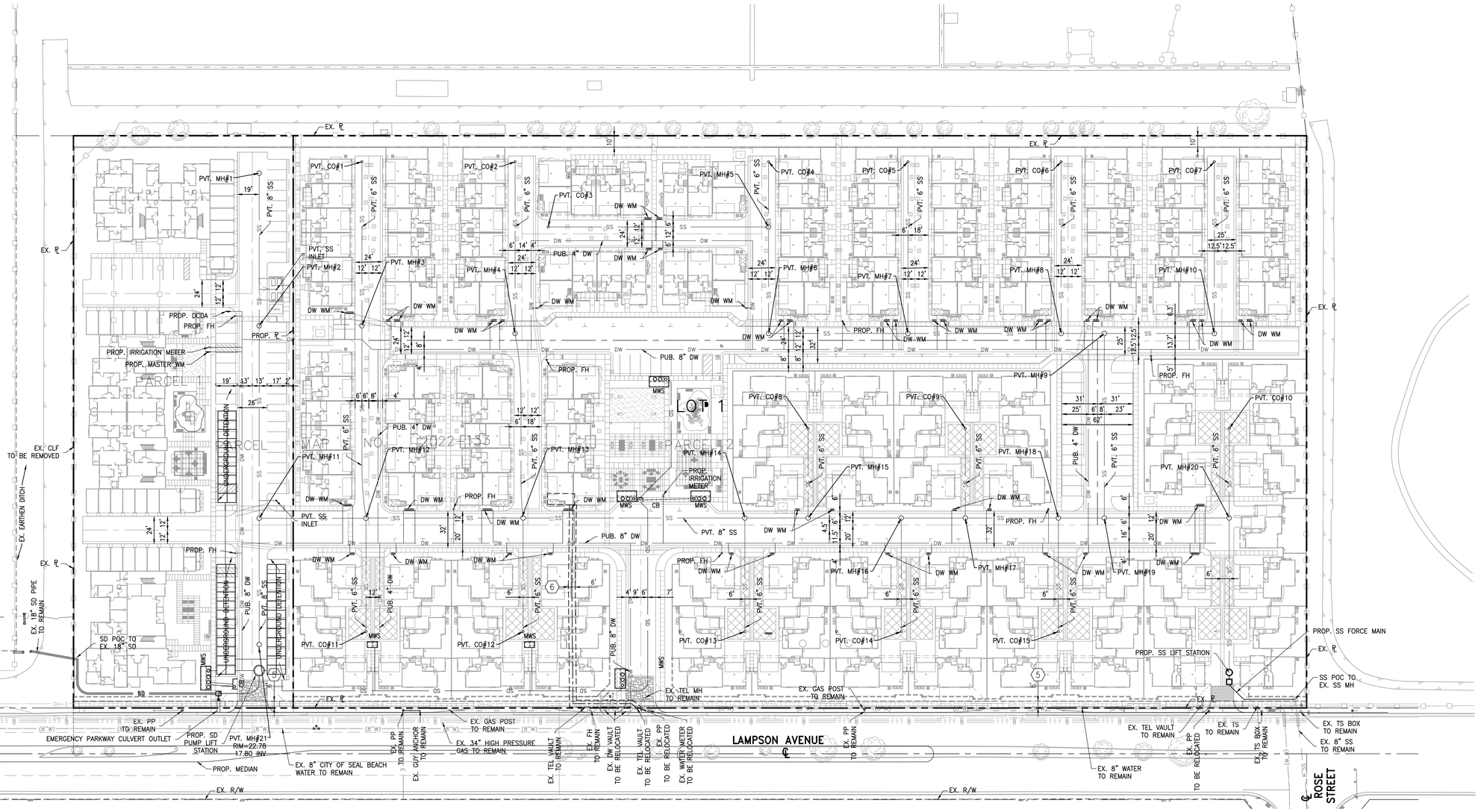
VESTING TENTATIVE TRACT MAP NO. 19263
PRELIMINARY GRADING PLAN

PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

SHEET 3 OF 4

PWD_PXXXXX-XX(Prelim)Sheet1TMP-PUBGRD1.dwg, By: Anuvrajit Jha 04.2021 - 8:43:00am
PWD_PXXXXX

PRELIMINARY UTILITY PLAN



EXISTING EASEMENTS:

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	EX. EASEMENT LINE
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PARCEL 1	EX. PARCEL PER SEPARATE MAP REFERENCE

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L	LENGTH	TC	TOP OF CURB
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MIN	MINIMUM	W'LY	WESTERLY
N'LY	NORTHERLY		
NAP	NOT A PART		
NTS	NOT TO SCALE		

SCALE: 1" = 40'

0 20 40 80

REVISIONS					
NUMBER	DATE	INITIALS	DESCRIPTION	APPROVED	INSTALLED

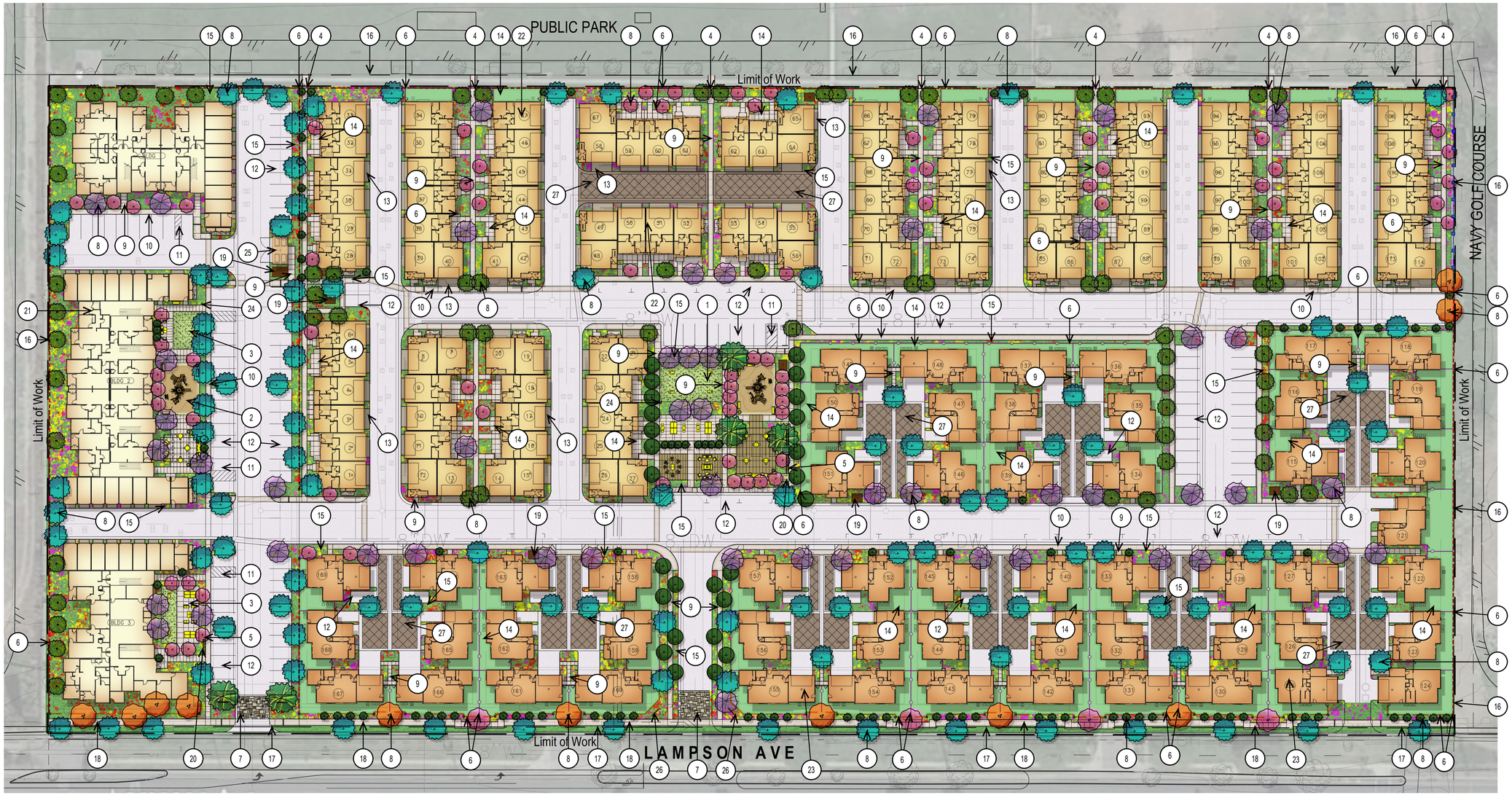
PLANS PREPARED BY:

C&V CONSULTING, INC. CIVIL ENGINEERING LAND PLANNING & SURVEYING
9630 IRVINE CENTER DRIVE IRVINE, CALIFORNIA 92618
(949) 916-3600
INFO@CVC-INC.NET
WWW.CVC-INC.NET

VESTING TENTATIVE TRACT MAP NO. 19263
PRELIMINARY UTILITY PLAN

PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

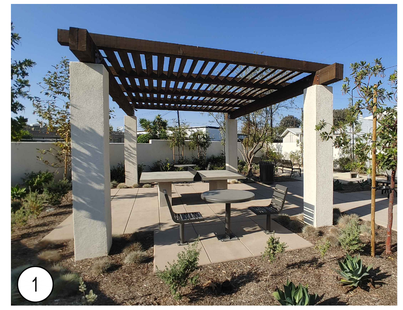
SHEET 4 OF 4



LEGEND

1. Central community open space area with lawn area for active / passive play, ping-pong table, corn hole, shade structure, BBQ counter, dining table seating, tot-lot, fire pit, Adirondacks seating and areas for social events and group gatherings. See sheet L-2 for Enlargement.
2. Tot Lot park with specimen trees and benches, shade structure, BBQ counter and dining table seating. See sheet L-2 for Enlargement.
3. Open space areas with lounge seating and/or fire pit for small gatherings and social events. See sheet L-2 for Enlargement.
4. Paseo to Park.
5. Community cluster mailboxes, per USPS review and approval.
6. Proposed wall, pilaster, gate or fence, per Wall & Fence Plan.
7. Enhanced paving at main project entry.
8. Proposed tree, per Planting Plan.
9. 4' wide community natural colored concrete sidewalk, with light top-cast finish and saw-cut joints.
10. 6' wide public natural colored concrete sidewalk with light top-cast finish and saw-cut joints.
11. Accessible parking stall and striping, per Civil plans.
12. Guest parking stall.
13. Natural colored concrete driveway, with light broom finish and tooled joints.
14. Private patio / yard area, homeowner maintained.
15. Common area landscape, builder installed and HOA maintained.
16. Property line.
17. Public street R.O.W.
18. Proposed public street sidewalk, per Civil plans.
19. Transformer to be screened with landscape, quantity and final locations to be determined.
20. Short term bike parking.
21. Affordable units, per Architect's plans.
22. Townhouse, per Architect's plans.
23. Cluster units, per Architect's plans.
24. Dog Bag Station.
25. Trash Enclosure.
26. Proposed Sign Monument.
27. Driveways with enhanced paving.

5


1


1

*Conceptual images (provided herein are conceptual and subject to change)



25


1


20


1

Scale: 1" = 40'

Schematic Landscape Plan

MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

L-1

Los Alamitos - Lampson Ave.

studio PAD Landscape Architecture
23276 S. Pointe Drive (Ste 103) Laguna Hills CA 92653 (www.studio-PAD.com)

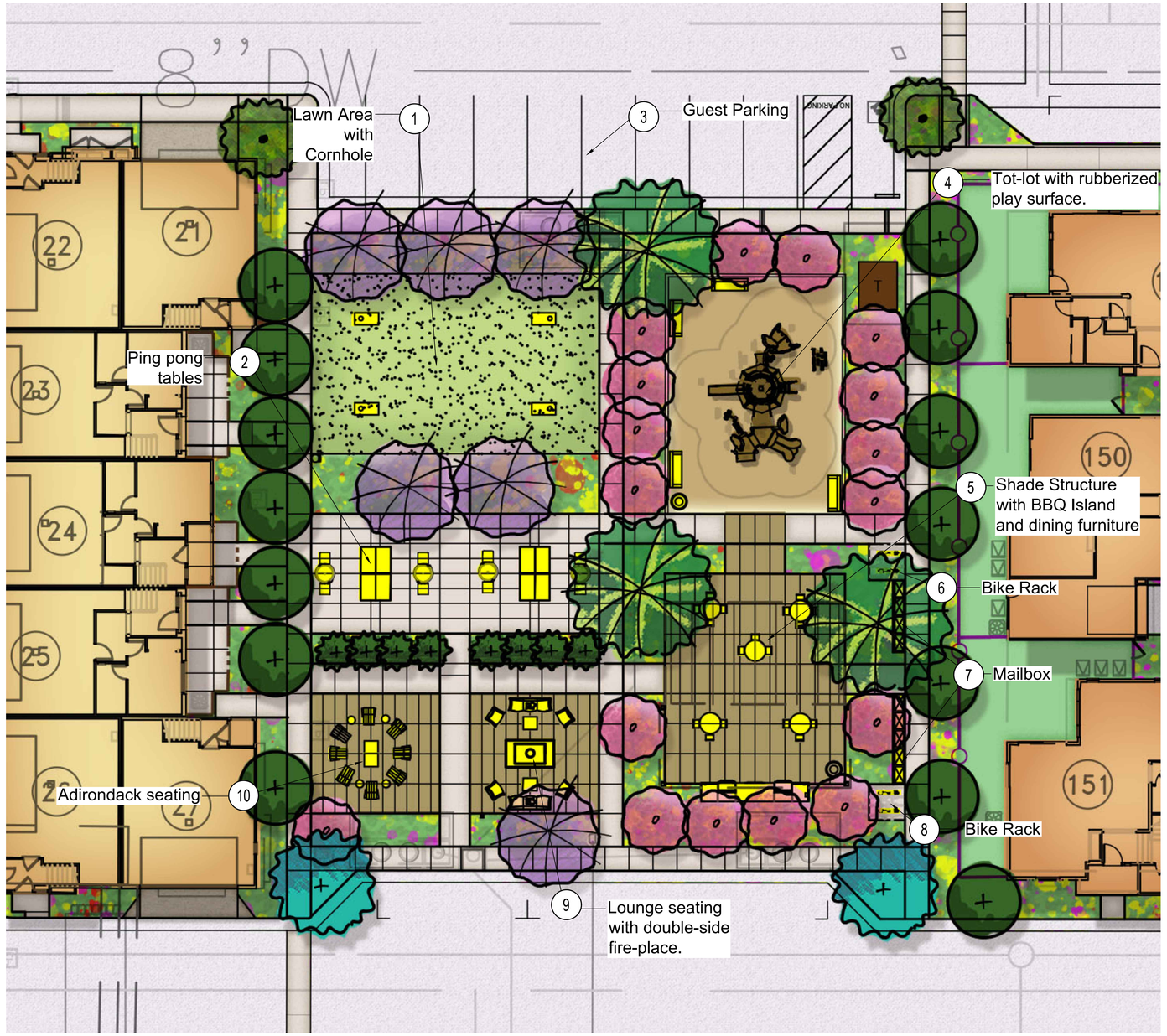








*Conceptual images (provided herein are conceptual and subject to change)



Enlargement A: Neighborhood Community Open Space

Scale: 1" = 10'









Key Map

Scale: N.T.S.

0 25' 50' 100'

Scale: 1" = 50'

Schematic Open Space Enlargement Plan A - Market Rate Units

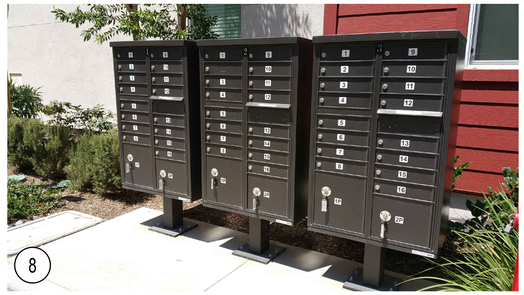
MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

L-2

Los Alamitos - Lampson Ave.

studio PAD Landscape Architecture
23276 S. Pointe Drive, Ste 120
Laguna Hills, CA 92653 (www.studio-PAD.com)

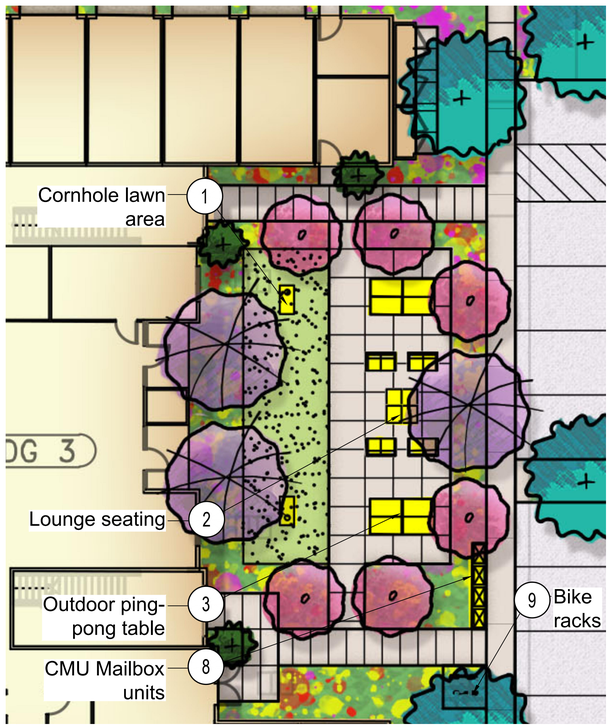




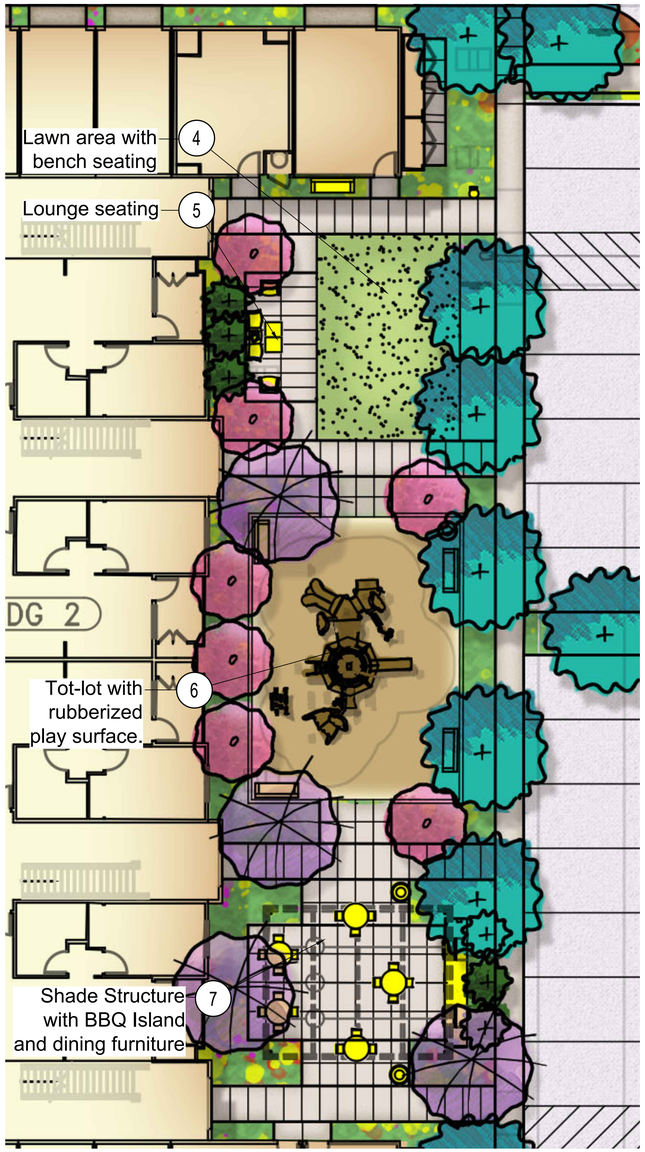




*Conceptual images (provided herein are conceptual and subject to change)



Enlargement B: Affordable Apartment Teen Game Zone/Area
Scale: 1" = 10'



Enlargement C: Affordable Apartment Open Space
Scale: 1" = 10'













Key Map
Scale: N.T.S.

0 25' 50' 100'
Scale: 1" = 50'

Schematic Open Space Enlargement Plan B & C- Affordable Units

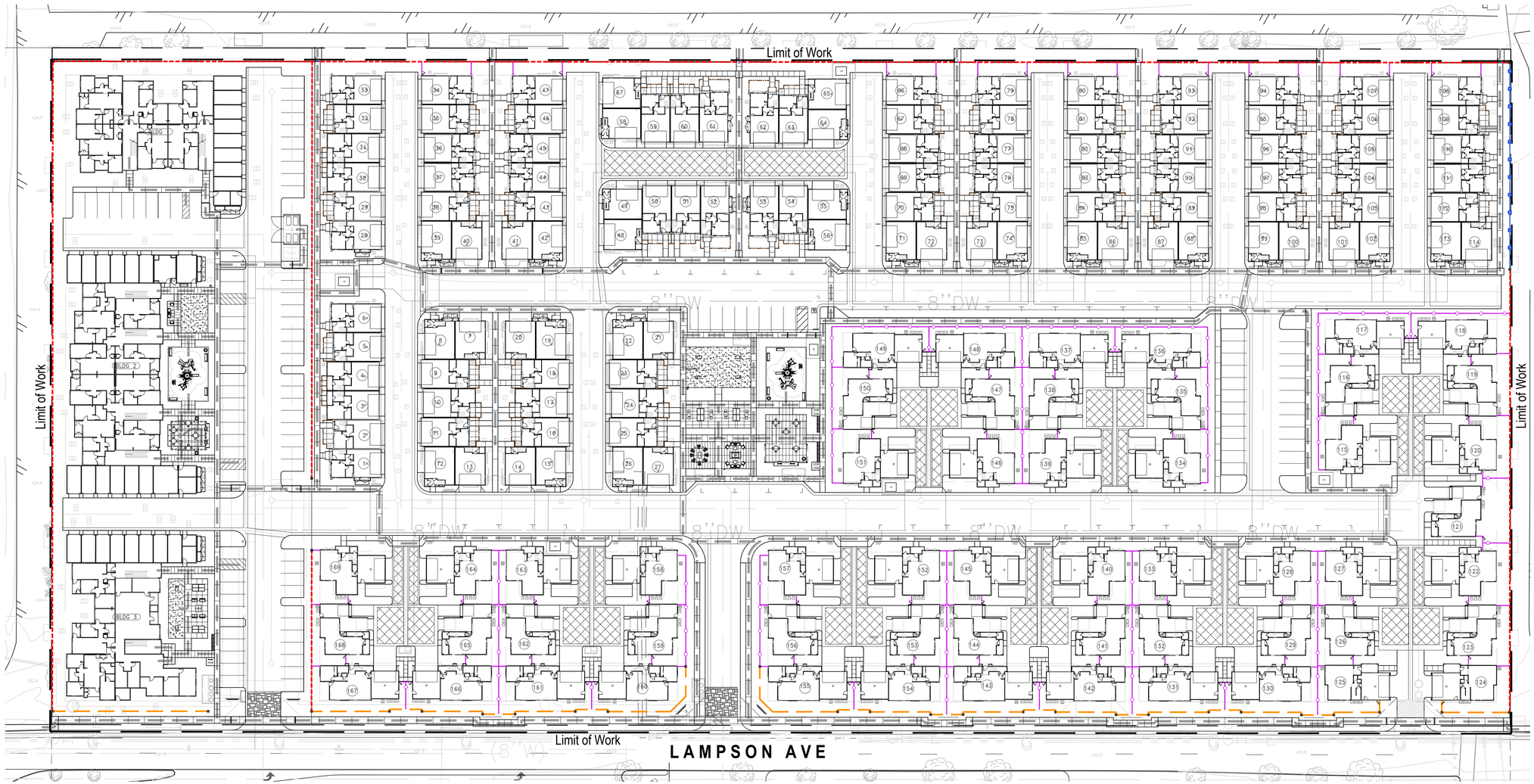
MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

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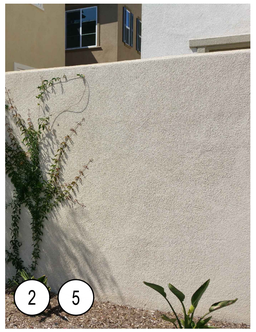
WALL, FENCE & GATE LEGEND

1. 6'-0" High split-face CMU wall, with CMU cap. Retaining per Civil plans (gray blend color).
2. 6'-0" High Stucco over CMU wall, with flat cap.
3. 5'-6" High vinyl fence (white color).
4. 4'-0" High combo metal guard-rail T.S. fence set on split-face CMU (6" min free-board). Retaining per Civil Engineer plans (black color).
5. 3'-6" High stucco CMU patio wall, with flat stucco cap.
6. 6'-6" High (16" sq.) split-face CMU pilaster, with 2" high CMU cap (gray blend color).
7. 6'-6" High (16" sq.) stone veneer over CMU pilaster, with precast cap.
8. 5'-6" High vinyl side yard gate (white color).
9. 5'-6" High metal pedestrian ADA access gate; for access to public park (black color).
10. Project monument sign wall / feature, stucco over CMU with lettering.

ADA Path of Travel.


4


1


2 5

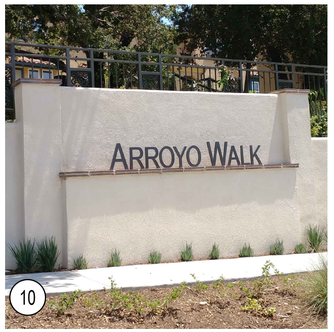

3


6

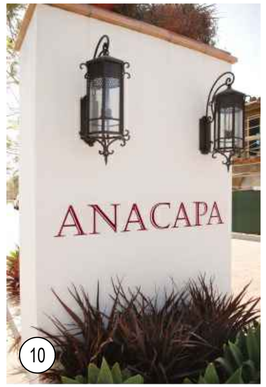

7


8


9



10



10

0 20' 40' 80'
Scale: 1" = 40'

Schematic Wall & Fence Plan

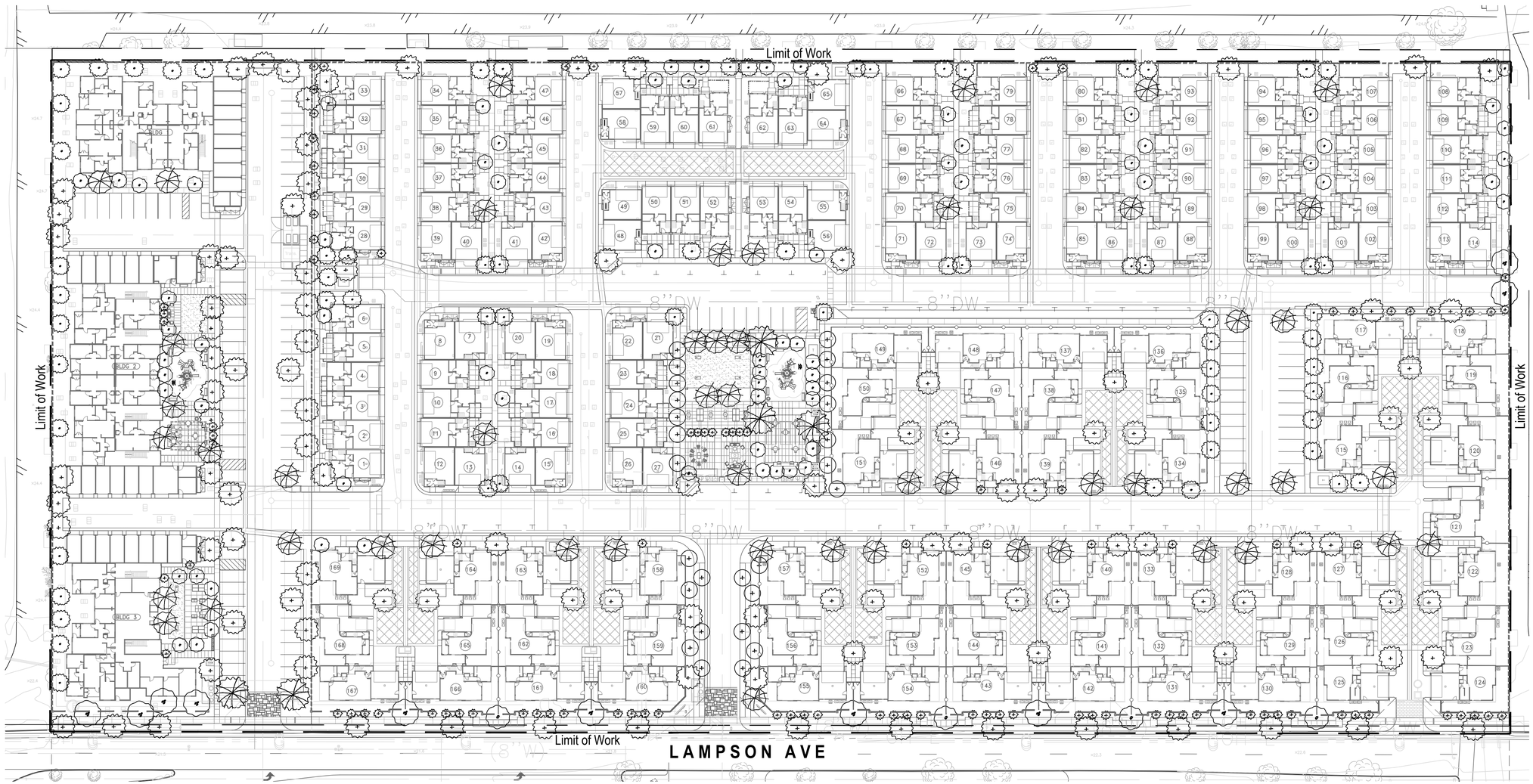
MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

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NOTES:
1. Irrigation (including spray and/or drip) will be provided, in the Construction Document phase, and to be installed per local California water regulations (AB1881) .
2. Transformers, back-flow preventers & other above-ground utilities to be screened with landscape as permitted per local codes & regulations.
3. Landscape lighting (landscape up-lights, path lights/bollards, etc.) to be coordinated with Electrical Engineer in future phase.
4. The plant palette listed provides a list of plant material to select from when preparing final landscape construction documents for this project. However, substitutions may be required due to availability, soils tests, or other conditions.
5. All trees within 5' of hardscape to be to be installed with deep root barriers.

SHRUBS and GROUND COVER		WUCOLS (R3)
Anigozanthos	Kangaroo Paw	Low
Agave sp.	Agave	Low
Aloe sp.	Aloe	Low
Bougainvillea sp.	Bougainvillea	Low
Callistemon citrinus 'Little John'	Dwarf Bottlebrush	Low
Carex divulsa	Berkeley Sedges	Low
Carissa m. 'Green Carpet'	Dwarf Natal Plum	Low
Chamaerops humilis	Mediterranean Fan Palm	Low
Dasylirion longissimum	Mexican Grass Tree	Low
Delosperma cooperi	Trailing Ice Plant	Low
Dianella revoluta 'Little Rev'	Little Rev™ Flax Lily	Low
Iris sp.	Iris	Low
Kalanchoe thyrsiflora	Flapjack Paddle Plant	Low
Lavandula stoechas 'Larkman Hazel'	Hazel™ Spanish Lavender	Low
Nassella pulchra	Purple Needlegrass	Low
Muhlenbergia rigens	Deer Grass	Low
Rhaphiolepis indica 'Clara"	India Hawthorn	Low
Westringia sp.	Westringia	Low
Xylosma congestum 'Compact'	Compact Xylosma	Low
Yucca gloriosa	Spanish Dagger	Low

VINES & ESPALIERS		WUCOLS (R3)
Antigonon leptopus	Coral Vine	Low
Bougainvillea 'Monka' (Oo-La-La® Bougainvillea)	Bougainvillea	Low
Macfadyena unguis-cati	Cat's Claw Vine	Low

PLANTING LEGEND

Symbol	Type/Form	Suggestions	Trunk	Size	WUCOLS (R3)	Qty.
	TREES	Botanical Name (Common Name)				
	Specimen	Olive sp. (Olive)	Natural	B&B 10x10' Canopy	Low	5
	Focal	Magnolia grandiflora (Southern Magnolia)	Single	36" Box	Mod.	51
	Canopy Deciduous	Sycamore racemosa (California Sycamore) Koelreuteria paniculata (Golden Rain Tree)	Single	24/36" Box	Mod. Low	11
	Deciduous Flowering	Lagerstroemia indica (Crape Myrtle)	Single	15 Gal	Mod.	26
	Evergreen Flowering	Arbutus u. 'Marina' (Marina Strawberry Tree)	Single	24/36" Box	Low	77

Symbol	Type/Form	Suggestions	Trunk	Size	WUCOLS (R3)	Qty.
	TREES	Botanical Name (Common Name)				
	Street	Tristania conferta (Brisbane Box) Geijera parviflora (Australian Willow)	Single	24/36" Box	Low Mod.	107
	Vertical Buffer / Screen	Melaleuca quinquenervia (Paperbark Melaleuca) Agonis f. 'After Dark' (After Dark Peppermint Willow)	Single Single	15 Gal	Low Low	66
	Columnar	Cupressus sempervirens (Italian Cypress) Podocarpus macrophylla (Yew Pine)	Single Single	15 Gal	Low Low	98
					TOTAL	441

Schematic Planting Plan

0 20' 40' 80'
Scale: 1" = 40'

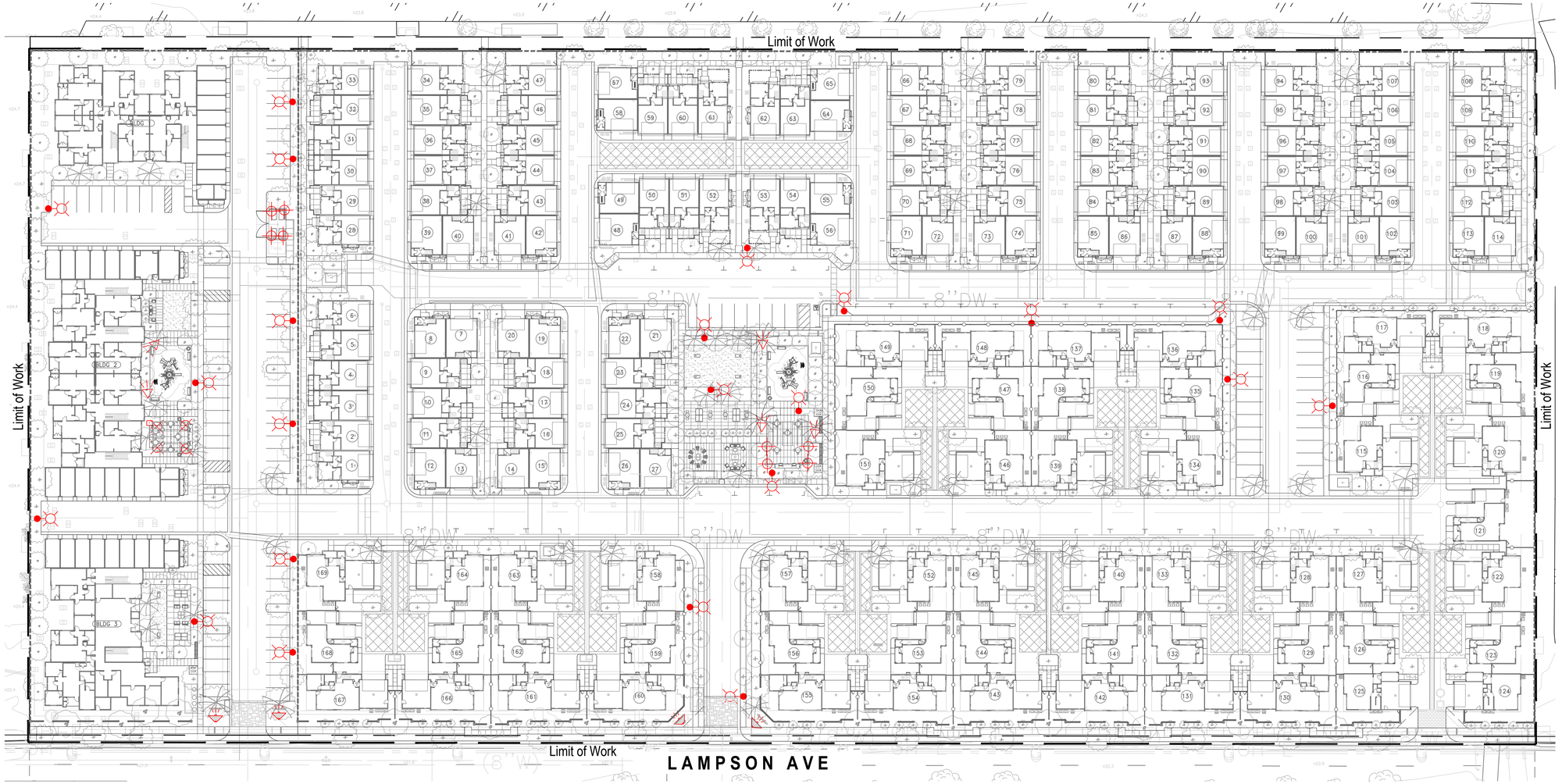
MJW Investments, LLC

4th City Submittal | Project No.: MJW06
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LIGHTING SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Area Pole Light, HID - Direct Lighting Sales, Model San Vicente #SVE-3 Cast Aluminum, Textured Bronze, RA21 Radius Lamp: Per Elec. Eng., Per Elec. Eng., Per Elec. Eng. Accessories: On DBC-1 Base & 10` round pole.	22
	FX Luminaire FB-Tree Up-light Fits well into tight spaces. 7.5" H x 2.0" Dia. Order code: FB, Aluminum Alloy, (BZ) Bronze Metallic, 3-Prong Spike Lamp: FB-3LED, 4.2W|4.5VA, 2700K, Beamspread: Spot	5

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	FX Luminaire Low Voltage Transformer Low-voltage transformer - FX model EX or PX. Cast Aluminum, Stainless Steel, Wall 300W Accessories: Install with Mechanical Transformer Timer (#15557BK & Plug-In Transformer Remote Photocell (#15534K).	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	FX Luminaire MD-Sh Structure Down-light Down light ideal for small space applications. 9.38" H x 2.62" Dia. Order code: MD, Aluminum, (FB) Flat Black, Mini J-Box for 1/2" Threa Lamp: 20W MR-16 LED Warm Flood, 4W|4.3VA, 2700K	12
	FX Luminaire PB-Flood Wall Up-light Ideal selection for large broad objects or washing light. 2.23" W x 6.72" H x 4.03" L. Order code: PB, Aluminum Alloy, (AB) Antique Bronze, Ground Mount Lamp: PB-3LEDT, 4.2W|4.5VA, Beamspread: Flood	4

0 20' 40' 80'

Scale: 1" = 40'

Schematic Lighting Plan

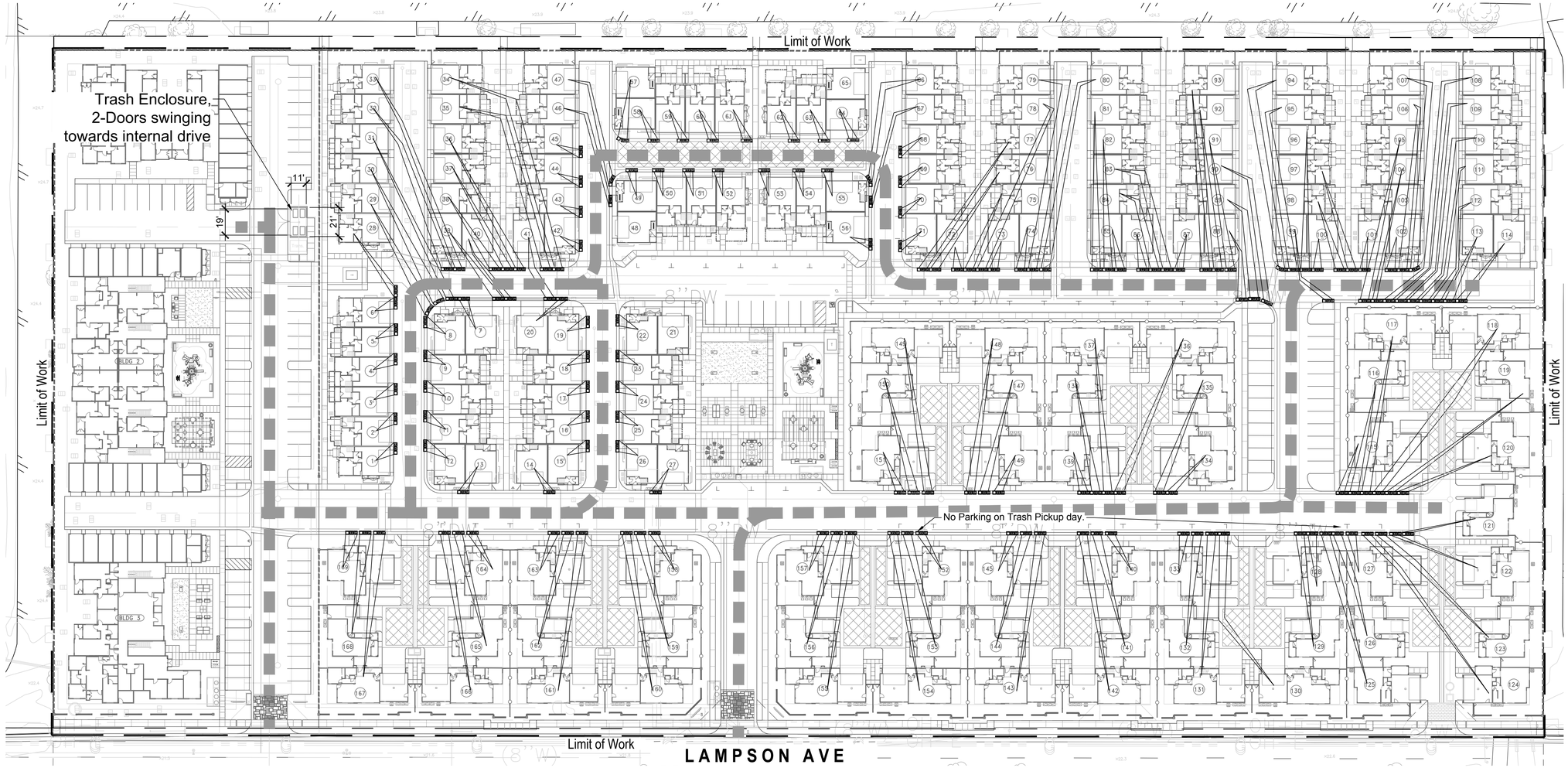
MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

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LEGEND

- Regular trash bin.
- Recycle bin.
- Green / Organic Waste bin.
- Trash hauler path of travel.
  (Backing up into one small lane would be required)

Green Waste would be disposed of by HOA Landscape Contractor

0 20' 40' 80'

Scale: 1" = 40'

Schematic Trash Exhibit & Hauler Circulation Plan

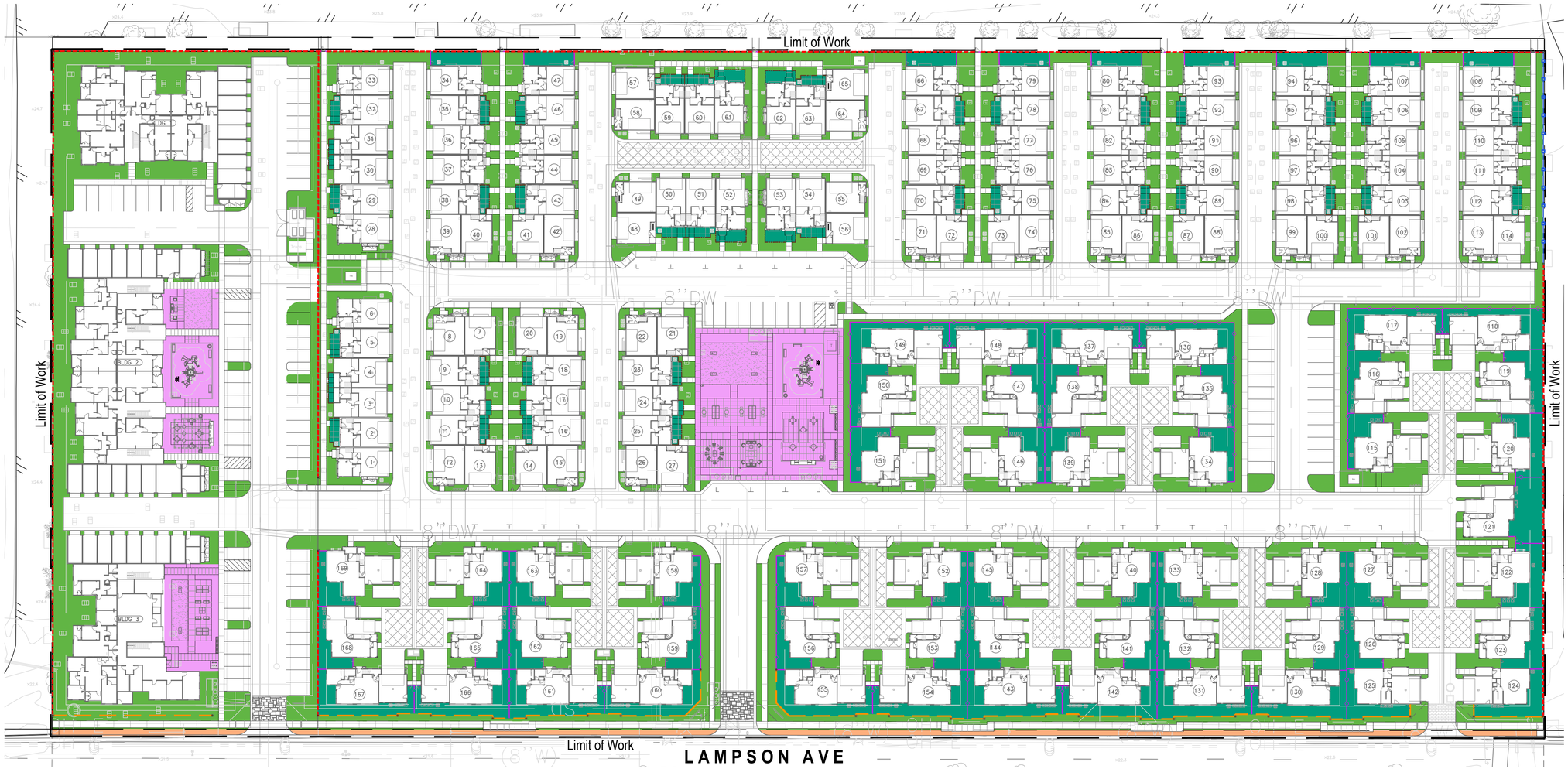
MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

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OPEN SPACE LEGEND

SYMBOL	NOTES	QTY
	USABLE COMMON OPEN SPACE (min. 20x20')	16,160 sf
	OPEN SPACE - PRIVATE YARD - HOMEOWNER MAINTAINED	41,519 sf
	PLANTING AREA- COMMON AREA	78,038 sf
	PUBLIC STREET R.O.W	3,827 sf
	OPEN SPACE - MULTI-FAMILY PRIVATE DECK	4,620 sf
	OPEN SPACE - TOWNHOMES PRIVATE DECK	5,181 sf
	TOTAL OPEN SPACE	149,345 sf

0 20' 40' 80'

Scale: 1" = 40'

Schematic Open Space Plan

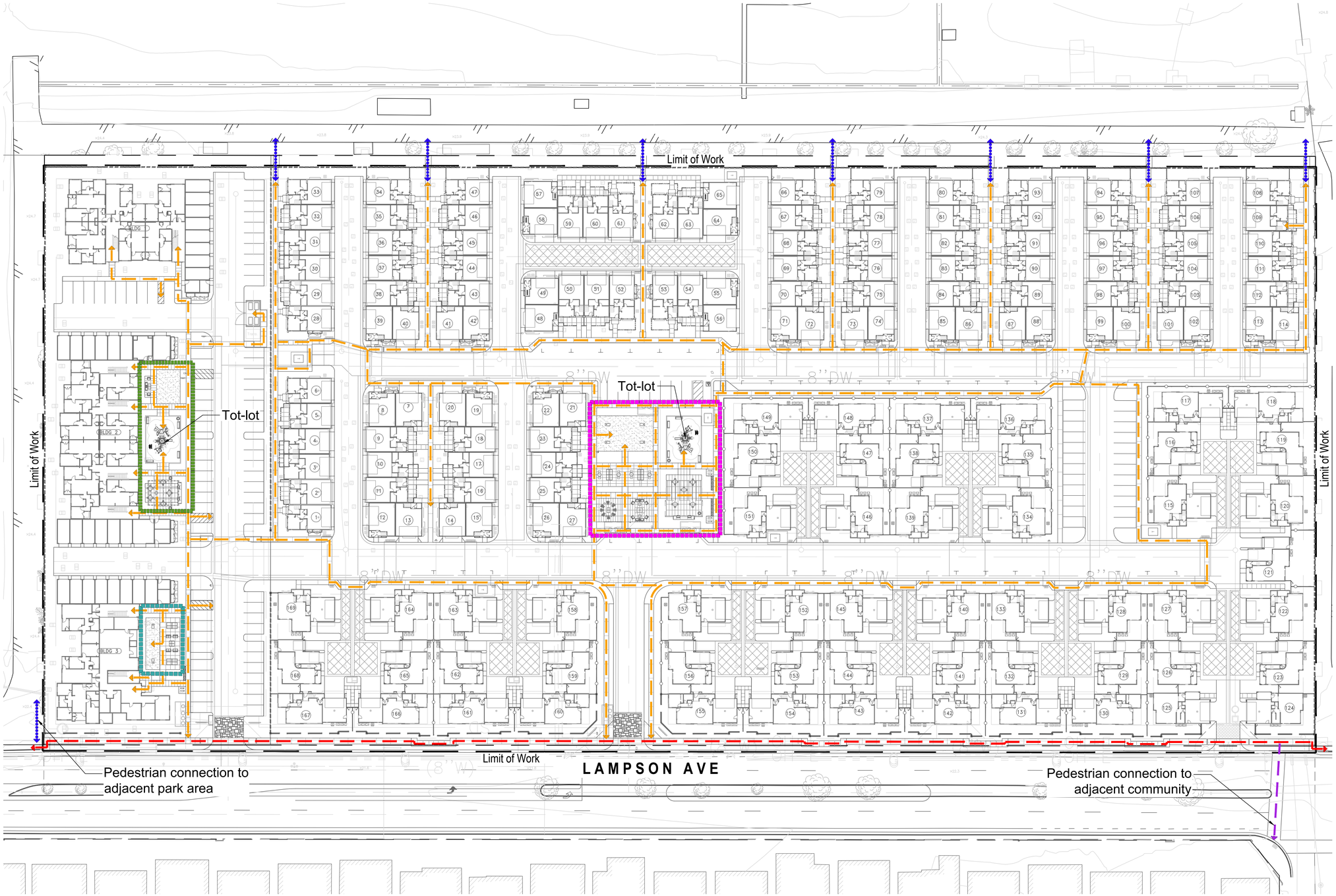
MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

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Landscape Architecture
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Laguna Hills CA 92653 (www.studio-PAD.com)



CIRCULATION SCHEDULE

ON-SITE PEDESTRIAN / ADA PATH OF TRAVEL

CONNECTION TO ADJACENT PARK AREA

OFF-SITE PEDESTRIAN / ADA PATH OF TRAVEL

PRIMARY OPEN SPACE AREA AT AFFORDABLE UNITS
Includes:
- Tot-lots (ages 2-12)
- Lawn areas for passive use and play
- Shade structure with BBQ and picnic table seating

PRIMARY OPEN SPACE AREA AT MARKET RATE UNITS
Includes:
- Tot-lots (ages 2-12)
- Young adult zone with cornhole, outdoor ping-pong tables, & seating
- Lawn areas for passive use and play
- Shade structure with BBQ and picnic table seating

SECONDARY OPEN SPACE AREA AT AFFORDABLE UNITS
- Young adult zone with cornhole, outdoor ping-pong tables, & seating

CONNECTION TO ADJACENT COMMUNITY

0 20' 40' 80'
Scale: 1" = 40'

Schematic Circulation Plan

MJW Investments, LLC

4th City Submittal | Project No.: MJW06
Date: Jan. 19, 2024

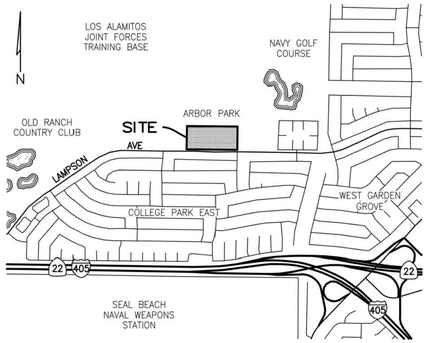
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ORANGE COUNTY FIRE AUTHORITY

FIRE MASTER PLAN



NOT TO SCALE

VICINITY MAP

OCFA STAMP

PROJECT INFORMATION REQUIREMENTS

PROJECT LOCATION: 4665 LAMPSON AVE., LOS ALAMITOS, CA 90720
PARCEL MAP NUMBER: 2022-133 PARCELS 1 & 2
TRACT NUMBER: VESTING TENTATIVE TRACT MAP NO. 19263
LOT NUMBER: 1

● EMERGENCY ACCESS EASEMENTS

DETAILED SCOPE OF WORK

THIS PRELIMINARY FIRE MASTER PLAN HAS BEEN PREPARED FOR THE LAMPSON PARK PLACE PROJECT IN THE CITY OF LOS ALAMITOS AS PART OF THE ENTITLEMENT REVIEW AND APPROVAL BY THE CITY. THIS PROJECT CONSISTS OF SINGLE FAMILY DETACHED UNITS, TOWN HOME WALK-UP UNITS, AND MULTI-FAMILY APARTMENT BUILDINGS. THE CONDOMINIUM SINGLE FAMILY DETACHED AND TOWN HOME WALK-UP BUILDINGS WILL BE A SEPARATE DEVELOPMENT THAN THE MULTI-FAMILY APARTMENT BUILDINGS AFTER ENTITLEMENT, AT WHICH TIME, A PRECISE FIRE MASTER PLAN FOR EACH DEVELOPMENT SITE SHALL BE SUBMITTED AND APPROVED BY OCFA AND SHALL INCLUDE RECIPROCAL EMERGENCY ACCESS EASEMENTS FOR EACH OF THE DEVELOPMENT SITES AS INDICATED ON THE VESTING TENTATIVE TRACT MAP PROVIDED AS REFERENCE ONLY WITH THIS PRELIMINARY FIRE MASTER PLAN SUBMITTAL.

NUMBER OF UNITS OR HOMES IN DEVELOPMENT

169 SINGLE FAMILY DETACHED AND MULTI-PLEX WALK-UP TOWN HOME UNITS (R-3 OCCUPANCY)
77 UNITS WITHIN 3 MULTIFAMILY ATTACHED APARTMENT BUILDINGS (R-2 OCCUPANCY)

SPECIAL CONDITIONS

○ FIRE HAZARD SEVERITY ZONE ○ STATE RESPONSE AREA ○ LOCAL RESPONSE AREA
○ STATE LICENSED FACILITY
○ AM&M ○ PENDING ○ COMPLETE SR:
○ METHANE MITIGATION

NUMBER OF STORIES

2 & 3 LEVELS

BUILDING HEIGHT

MAXIMUM 29'-11" HIGH TO LOWEST EAVE (37'-6" TO HIGHEST POINT OF THE ROOF)

OCCUPANCY TYPE (CHECK ALL THAT APPLY)

* INDICATES SFM REGULATED OCCUPANCY. OCFA PLAN SUBMITTAL REQUIRED
# GROUP S MOTOR VEHICLE REPAIR AND AIRCRAFT REPAIR REQUIRE OCFA PLAN SUBMITTAL

○ GROUP A1*	○ GROUP A2*	○ GROUP A3*	○ GROUP A4*	○ GROUP A5*
○ GROUP B	○ GROUP E*	○ GROUP F1	○ GROUP F2	○ GROUP H1*
○ GROUP H2*	○ GROUP H3*	○ GROUP H4*	○ GROUP H5*	○ GROUP I1*
○ GROUP I2*	○ GROUP I3*	○ GROUP I4*	○ GROUP M	○ GROUP R1*
● GROUP R2*	○ GROUP R2.1	○ GROUP R2.2	● GROUP R3	○ GROUP R3.1
○ GROUP R4*	○ GROUP S1#	○ GROUP S2#	○ GROUP U	

TYPE OF CONSTRUCTION

○ TYPE IA ○ TYPE IB
○ TYPE IIA ○ TYPE IIB
○ TYPE IIIA ○ TYPE IIIB
○ TYPE IV-A ○ TYPE IV-B ○ TYPE IV-C
● TYPE VA ● TYPE VB

MIXED USE AND OCCUPANCY (PER CBC 508 & 509)

○ ACCESSORY OCCUPANCIES (CBC 508.2)
(ACCESSORY OCCUPANCY < 10% OF STORY)
○ INCIDENTAL USES (CBC 509)
○ NONSEPARATED OCCUPANCIES (CBC 508.3)
○ SEPARATED OCCUPANCIES (CBC 508.4)

SPECIAL DETAILED REQUIREMENTS

○ HIGH RISE (CBC 403)
○ ATRIUM (CBC 404)
○ OPEN PARKING GARAGE (CBC 406.5)
○ GROUP I2 (CBC 407) SMOKE COMPARTMENTS REFUGE AREAS
○ HAZARDOUS MATERIALS (CBC 414, CFC CHAPTER 50)

SPRINKLERS

● NEW ● MANDATORY ○ VOLUNTARY
○ TENANT IMPROVEMENT

TYPE

● NFPA 13
● NFPA 13D
○ NFPA 13R

○ FIRE PUMP
○ STANDPIPES

FIRE ALARM

● NEW ● MANDATORY ○ VOLUNTARY
○ TENANT IMPROVEMENT
○ VOICE EVACUATION

FIRE FLOW REQUIREMENT PER OCFA GUIDELINE B-01 ATTACHMENT 4

FLOW (IN GPM @ 20 PSI): 1,750 GPM @ 20PSI DURATION: 3 HOURS

WATER AVAILIBILITY

*PROVIDE COPY OF OCFA WATER AVAILABILITY FORM
COMPLETED BY WATER DISTRICT ON FIRE MASTER PLAN*
FLOW: 1,937 GPM
PRESSURE: CALC'D AT 20PSI BY GOLDEN STATE WATER COMPANY

● ON SITE FIRE HYDRANTS
TOTAL NUMBER: EIGHT (8)

EMERGENCY RESPONDER RADIO COVERAGR (BDA)

○ THIS BUILDING SHALL BE EQUIPPED WITH AN EMERGENCY RESPONDER DIGITAL RADIO SYSTEM PER THE REQUIREMENTS OF THE ORANGE COUNTY SHERIFF'S DEPARTMENT-COMMUNICATIONS & TECHNOLOGY DIVISION. FOR THE INITIAL SUBMITTAL, OCSD/COMM REQUIRES THE ERRCS/BDA/DAS SYSTEM DESIGNER TO PROVIDE THE FOLLOWING FOR PRE-EVALUATION: A. PROJECT NAME. B. SITE ADDRESS. C. PROJECT DESCRIPTION. D. CONTRACTOR CONTACT INFORMATION. E. BDA MODEL (S/N IF AVAILABLE). F. PROPOSED MODE OF OPERATION (CLASS A/B). G. PROPOSED PROJECT TIMELINE. THIS INFORMATION IS TO BE SUBMITTED BY THE DESIGNER VIA EMAIL TO ERRCS@OCSD.ORG AND BDACERT@OCFA.ORG. CFC 510

OCFA STANDARD FIRE MASTER PLAN NOTES

INSPECTION REQUIREMENTS

1. OCFA SITE INSPECTIONS ARE REQUIRED FOR THIS PROJECT. PLEASE SCHEDULE ALL FIELD INSPECTIONS AT LEAST 48 HOURS IN ADVANCE. INSPECTIONS CANCELED AFTER 1 P.M. ON THE DAY BEFORE THE SCHEDULED DATE WILL BE SUBJECT TO A RE-INSPECTION FEE. CALL OCFA INSPECTION SCHEDULING AT (714) 573-6150.
2. A LUMBER DROP INSPECTION SHALL BE PERFORMED PRIOR TO BRINGING COMBUSTIBLE MATERIALS (OR COMBUSTIBLE FIXTURES AND FINISHES FOR STRUCTURES OF NON-COMBUSTIBLE CONSTRUCTION). ALL-WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 94,000 LBS., TOPPED WITH ASPHALT, CONCRETE, OR EQUIVALENT SHALL BE IN PLACE AND HYDRANTS OPERATIONAL AT TIME OF LUMBER DROP INSPECTION.
3. FOR PROJECTS WITH FUEL MODIFICATION, A VEGETATION CLEARANCE INSPECTION IS REQUIRED PRIOR TO A LUMBER DROP INSPECTION. USE THE FUEL MODIFICATION PLAN SERVICE REQUEST NUMBER TO SCHEDULE THE VEGETATION CLEARANCE INSPECTION.
4. PHASED INSTALLATION OF FIRE ACCESS ROADS REQUIRES ADDITIONAL INSPECTIONS NOT COVERED BY THE FEES PAID AT PLAN SUBMITTAL. CONTACT INSPECTION SCHEDULING TO ARRANGE FOR ADDITIONAL INSPECTIONS THAT MAY BE NEEDED AND ANY FEES THAT MAY BE DUE.
5. AN ORIGINAL APPROVED, SIGNED, WET-STAMPED OCFA FIRE MASTER PLAN SHALL BE AVAILABLE ON-SITE AT TIME OF INSPECTION.
6. ACCESS ROADS AND HYDRANTS SHALL BE MAINTAINED AND REMAIN CLEAR OF OBSTRUCTIONS AT ALL TIMES DURING AND AFTER CONSTRUCTION. AREAS WHERE PARKING IS NOT PERMITTED SHALL BE CLEARLY IDENTIFIED AT ALL TIMES. OBSTRUCTION OF FIRE LANES AND HYDRANTS MAY RESULT IN CANCELLATION OR SUSPENSION OF INSPECTIONS.
7. TEMPORARY FUEL TANKS OF 60 OR MORE GALLONS SHALL BE REVIEWED, INSPECTED, AND PERMITTED BY THE OCFA PRIOR TO USE.
8. THE PROJECT ADDRESS SHALL BE CLEARLY POSTED AND VISIBLE FROM THE PUBLIC ROAD DURING CONSTRUCTION.
9. ALL GATES IN CONSTRUCTION FENCING SHALL BE EQUIPPED WITH EITHER A KNOX OR BREAKAWAY PADLOCK.
10. BUILDINGS OF FOUR OR MORE STORIES SHALL BE PROVIDED WITH STAIRS AND A STANDPIPE BEFORE REACHING 40 FEET IN HEIGHT.

GENERAL REQUIREMENTS

11. FIRE LANE WIDTHS SHALL BE MEASURED FROM TOP FACE OF THE CURB TO TOP FACE OF THE CURB FOR FIRE LANES WITH STANDARD CURBS AND GUTTERS AND FROM FLOW-LINE TO FLOW-LINE FOR FIRE LANES WITH MODIFIED CURB DESIGNS (E.G., ROLLED, RAMPED, ETC.). THE DEVELOPER IS RESPONSIBLE TO VERIFY THAT ALL APPROVED PUBLIC WORKS OR GRADING DEPARTMENT STREET IMPROVEMENT PLANS OR PRECISE GRADING PLANS CONFORM TO THE MINIMUM STREET WIDTH MEASUREMENTS PER THE APPROVED OCFA FIRE MASTER PLAN AND STANDARDS IDENTIFIED IN OCFA GUIDELINE B-09 FOR ALL PORTIONS OF THE FIRE ACCESS ROADS.
12. PERMANENT, TEMPORARY, AND PHASED EMERGENCY ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. AND SURFACED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES.
13. FIRE LANE SIGNS AND RED CURBS SHALL MEET THE SPECIFICATIONS SHOWN IN OCFA GUIDELINE B-09 AND SHALL BE INSTALLED AS DESCRIBED THEREIN. ADDITIONAL FIRE LANE MARKINGS MAY BE REQUIRED AT THE TIME OF INSPECTION DEPENDING ON FIELD CONDITIONS.
14. ALL FIRE HYDRANTS SHALL HAVE A "BLUE REFLECTIVE PAVEMENT MARKER" INDICATING THEIR LOCATION PER THE OCFA STANDARD. ON PRIVATE PROPERTY MARKERS ARE TO BE MAINTAINED IN GOOD CONDITION BY THE PROPERTY OWNER.
15. ADDRESS NUMBERS SHALL BE LOCATED AND BE OF A COLOR AND SIZE SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE ROADWAY FROM WHICH THE BUILDING IS ADDRESSED IN ACCORDANCE WITH OCFA GUIDELINE B-09. WAYFINDING SIGNS, WHEN REQUIRED BY THE LOCAL AHJ, SHALL COMPLY WITH THE STANDARDS OF THAT AGENCY. WHEN WAYFINDING SIGNS ARE ALSO REQUIRED BY THE OCFA, THEY MAY BE DESIGNED TO LOCAL AHJ REQUIREMENTS PROVIDED THAT SUCH STANDARDS FACILITATE LOCATION OF STRUCTURES, SUITES, AND DWELLING UNITS BY EMERGENCY PERSONNEL.
16. ACCESS GATES SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL BE IN COMPLIANCE WITH CHAPTER 5 OF THE CFC AND OCFA GUIDELINES.
17. APPROVED ACCESS WALKWAYS SHALL BE PROVIDED TO ALL REQUIRED OPENINGS AND ALL RESCUE WINDOWS.
18. VEGETATION SHALL BE SELECTED AND MAINTAINED IN SUCH A MANNER AS TO ALLOW IMMEDIATE ACCESS TO ALL HYDRANTS, VALVES, FIRE DEPARTMENT CONNECTIONS, PULL STATIONS, EXTINGUISHERS, SPRINKLER RISERS, ALARM CONTROL PANELS, RESCUE WINDOWS, AND OTHER DEVICES OR AREAS USED FOR FIREFIGHTING PURPOSES. VEGETATION OR BUILDING FEATURES SHALL NOT OBSTRUCT ADDRESS NUMBERS OR INHIBIT THE FUNCTIONING OF ALARM BELLS, HORNS, OR STROBES.
19. DUMPSTERS AND TRASH CONTAINERS LARGER THAN 1.5 CUBIC YARDS SHALL NOT BE STORED IN BUILDINGS OR PLACED WITHIN 5 FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE ROOF EAVE LINES UNLESS PROTECTED BY AN APPROVED SPRINKLER SYSTEM.
20. ANY FUTURE MODIFICATION TO THE APPROVED FIRE MASTER PLAN OR APPROVED SITE PLAN, INCLUDING BUT NOT LIMITED TO ROAD WIDTH, GRADE, SPEED HUMPS, TURNING RADII, GATES OR OTHER OBSTRUCTIONS, SHALL REQUIRE REVIEW, INSPECTION, AND APPROVAL BY THE OCFA.
21. APPROVAL OF THIS PLAN SHALL NOT BE CONSTRUED AS APPROVAL OF ANY INFORMATION OR PROJECT CONDITIONS OTHER THAN THOSE ITEMS AND REQUIREMENTS IDENTIFIED IN OCFA GUIDELINE B-09 AND RELATED PORTIONS OF THE 2022 CFC AND CBC. THIS PROJECT MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS NOT STATED HEREIN UPON EXAMINATION OF ACTUAL SITE AND PROJECT CONDITIONS OR DISCLOSURE OF ADDITIONAL INFORMATION.

PROJECT-SPECIFIC REQUIREMENTS

22. AN UNDERGROUND PIPING PLAN IS REQUIRED FOR THE INSTALLATION OF AN AUTOMATIC FIRE SPRINKLER SYSTEM OR FOR A PRIVATE FIRE HYDRANT SYSTEM. A SEPARATE PLAN SUBMITTAL IS REQUIRED.
23. AN ARCHITECTURAL PLAN IS REQUIRED TO BE SUBMITTED TO THE OCFA FOR REVIEW AND APPROVAL FOR PROJECTS CONTAINING A, C, E, F, H, I, L, AND R-4 OCCUPANCIES. A PLAN MAY ALSO BE REQUIRED FOR R-1 AND R-2 OCCUPANCIES OVER TWO STORIES OR THOSE UTILIZING SPRINKLERS OR FIRE WALLS TO INCREASE THE MAXIMUM BUILDING SIZE ALLOWED–SEE OCFA INFO BULLETIN 02-13.
24. AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND LOCAL ORDINANCES, AMENDMENTS, AND GUIDELINES. SPRINKLER SYSTEMS, OTHER THAN THOSE LISTED IN CFC 903.4, SHALL BE MONITORED BY AN APPROVED CENTRAL STATION. SEPARATE PLAN SUBMITTALS FOR THE SPRINKLER AND MONITORING SYSTEMS ARE REQUIRED.
25. A FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND LOCAL ORDINANCES, AMENDMENTS, AND GUIDELINES. A SEPARATE PLAN SUBMITTAL IS REQUIRED.

GATES

○ MANUAL ○ ELECTRIC

OCFA NOTES FOR ELECTRIC VEHICLE GATES

1. A REMOTE OPENING DEVICE IS REQUIRED. THE REMOTE GATE OPENING DEVICE THAT WILL BE INSTALLED IS (CHECK ONE):

○ 3M OPTICOM
○ CLICK2ENTER* (SINGLE-PULSE MODE WITH 1.5 SECOND TRANSMISSION WINDOW)
○ FIRE STROBE ACCESS PRODUCTS, INC.
○ TOMAR

2. IN THE EVENT OF LOSS OF NORMAL POWER TO THE GATE OPERATING MECHANISM, IT SHALL BE AUTOMATICALLY TRANSFERRED TO A FAIL-SAFE MODE ALLOWING THE GATE TO BE PUSHED OPEN BY A SINGLE FIREFIGHTER WITHOUT ANY OTHER ACTIONS, KNOWLEDGE, OR MANIPULATION OF THE OPERATING MECHANISM BEING NECESSARY.
   A) A BATTERY MAY ONLY BE USED IN PLACE OF FAIL-SAFE MANUAL OPERATION WHEN THE GATE OPERATOR HAS A FAIL-OPEN MODE THAT WILL AUTOMATICALLY, IMMEDIATELY, AND COMPLETELY OPEN THE GATE AND KEEP IT OPEN UPON REACHING A LOW POWER THRESHOLD, REGARDLESS OF THE PRESENCE OF NORMAL POWER. SHOULD THE GATE BE TOO LARGE OR HEAVY FOR A SINGLE FIREFIGHTER TO OPEN MANUALLY, A SECONDARY SOURCE OF RELIABLE POWER BY MEANS OF AN EMERGENCY GENERATOR OR A CAPACITOR WITH ENOUGH RESERVE TO AUTOMATICALLY, IMMEDIATELY, AND COMPLETELY OPEN THE GATE UPON LOSS OF PRIMARY POWER SHALL BE PROVIDED FOR FAIL-OPEN OPERATION.
   B)
3. IN ADDITION TO THE REMOTE OPERATOR, THE GATE CONTROL SHALL BE OPERABLE BY A KNOX EMERGENCY OVERRIDE KEY SWITCH EQUIPPED WITH A DUST COVER. UPON ACTIVATION OF THE KEY SWITCH, THE GATE SHALL OPEN AND REMAIN OPEN UNTIL RETURNED TO NORMAL OPERATION BY MEANS OF THE KEY SWITCH. WHERE A GATE CONSISTS OF TWO LEAVES, THE KEY SWITCH SHALL OPEN BOTH SIMULTANEOUSLY IF OPERATION OF A SINGLE LEAF ON THE INGRESS SIDE DOES NOT PROVIDE FOR THE WIDTH, TURNING RADII, OR SETBACKS NECESSARY FOR FIRE APPARATUS TO NAVIGATE THE VEHICLE ENTRY POINT.
4. THE KEY SWITCH SHALL BE PLACED BETWEEN 42" AND 48" ABOVE THE ROADWAY SURFACE AT THE RIGHT SIDE OF THE ACCESS GATE WITHIN TWO FEET OF THE EDGE OF THE ROADWAY. IN IRVINE, THE SWITCH SHALL BE ON THE LEFT SIDE IN ACCORDANCE WITH IRVINE'S UNIFORM SECURITY ORDINANCE.
5. THE KEY SWITCH SHALL BE READILY VISIBLE AND UNOBSTRUCTED FROM THE FIRE LANE LEADING TO THE GATE.
6. THE KEY SWITCH SHALL BE LABELED WITH A PERMANENT RED SIGN WITH NOT LESS THAN ½" CONTRASTING LETTERS READING "FIRE DEPT" OR WITH A "KNOX" DECAL.

STAKEHOLDERS

BUILDING DEPARTMENT: CITY OF LOS ALAMITOS
PLANNING DEPARTMENT: CITY OF LOS ALAMITOS
PUBLIC WORKS DEPARTMENT: CITY OF LOS ALAMITOS
WATER DISTRICT: GOLDEN STATE WATER COMPANY

APPLICABLE CODES

● 2022 CALIFORNIA FIRE CODE
● 2022 CALIFORNIA BUILDING CODE
● 2022 CALIFORNIA RESIDENTIAL CODE
● 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
● 2022 CALIFORNIA MECHANICAL CODE
● 2022 CALIFORNIA ELECTRICAL CODE
● 2022 CALIFORNIA PLUMBING CODE
● 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS
● APPLICABLE NFPA STANDARDS
● LOCALLY ADOPTED ORDINANCES CITY: LOS ALAMITOS
● CONDITIONS OF APPROVAL CITY: LOS ALAMITOS
● OCFA GUIDELINES

DEFERRED SUBMITTALS

THIS PROJECT HAS BEEN PERMITTED WITHOUT REVIEW AND/OR APPROVAL OF THE FOLLOWING DEFERRED SUBMITTALS. PLANS APPROVED BY OCFA SHALL BE OBTAINED FOR EACH DEFERRED ITEM LISTED BELOW PRIOR TO COMMENCING ANY WORK WITHIN THE SCOPE OF SUCH DEFERRAL. DEFERRALS MUST BE REVIEWED AND ACCEPTED BY THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO SUBMITTING FOR REVIEW WITH OCFA. PORTIONS OF THE PROJECT THAT ARE DEFERRED SHALL BE SUBJECT TO THE CODES, STANDARDS, AND OTHER APPLICABLE REQUIREMENTS IN FORCE ON THE DATE THAT THE DEFERRED PLAN IS SUBMITTED TO OCFA.

● ARCHITECTURAL PLAN
○ HIGH PILED COMBUSTIBLE STORAGE
○ CHEMICAL USE AND/OR STORAGE
○ FUEL TANK (FOR GENERATOR, IF OVER 60 GALLONS)
○ BATTERY/ENERGY STORAGE SYSTEM
● UNDERGROUND SYSTEM SERVING SPRINKLERS, STANDPIPES, AND/OR PRIVATE HYDRANTS
● SPRINKLER SYSTEM
○ STANDPIPE SYSTEM
○ FIRE PUMP
○ HOOD AND DUCT EXTINGUISHING SYSTEM
● ALARM SYSTEM

PREREQUISITE PLANS

● PLANNING APPLICATION SR: SR# 300375 (PR105 SITE DEVELOPMENT REVIEW/CUP)
○ METHANE MITIGATION SR:
○ FUEL MODIFICATION PLAN SR:

REVISION

○ ORIGINAL PLAN SR:
COPY OF ORIGINAL APPROVED PLAN REQUIRED TO BE SUBMITTED WITH ALL REVISED PLANS.

REVISION SCOPE OF WORK

PROJECT DIRECTORY

ARCHITECT/ENGINEER
BUSINESS NAME: KTGY GROUP, INC
CONTACT NAME:
ADDRESS: 17911 VON KARMAN AVENUE, SUITE 200
CITY: IRVINE STATE: CA ZIP: 92614
PHONE: (714) 639-9860
EMAIL:

PROPERTY OWNER/HOA
BUSINESS NAME: LAMPSON PARK PLACE, LLC
CONTACT NAME:
ADDRESS:
CITY: STATE: ZIP:
PHONE:
EMAIL:

TENANT
BUSINESS NAME:
CONTACT NAME:
ADDRESS:
CITY: STATE: ZIP:
PHONE:
EMAIL:

NO.	DATE	REVISIONS
7		
6		
5		
4		
3		
2		
1		

DESIGNED: DAVID DATIS
DRAWN: FPS
CHECKED: FPS
DATE: 04/08/2024
SCALE: SPECIFIED ON SHEET

OCFA REVIEW AND INSPECTIONS [OCFA USE ONLY]
☐ NO OCFA REVIEW REQUIRED
☐ PLAN REVIEW ONLY
☐ PLAN REVIEW AND INSPECTION

PLANS PREPARED BY:
firesafe PLANNING SOLUTIONS
28506 AIROSO STREET
RANCHO MISSION VIEJO, CA 92694
(949) 240-5911

LAMPSON PARK PLACE
CITY OF LOS ALAMITOS
VTTM 19263

ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION
REVISED 6/2020 JAH

SERVICE REQUEST NUMBER
538311

SHEET
F-1

OF 5

PREMISES IDENTIFICATION & ADDRESSING

PREMISES IDENTIFICATION CBC 501.2, CFC 505.1
THREE POSSIBLE CONFIGURATIONS OF BUILDINGS OR UNITS WITHIN A BUILDING MAY EXIST AND ARE IDENTIFIED AS FOLLOWS: FREESTANDING BUILDINGS, MULTI-UNIT BUILDINGS, OR MULTI-BUILDING CLUSTERS. COMMON TO ALL CONFIGURATIONS ARE THE REQUIREMENTS LISTED IN SECTIONS A THROUGH E BELOW. PROJECTS MAY ALSO BE SUBJECT TO SPECIFIC ADDRESS AND WAYFINDING SIGNAGE REQUIREMENTS CONTAINED IN THE LOCAL JURISDICTION'S MUNICIPAL ORDINANCE OR SECURITY CODE, WHICH MAY BE MORE RESTRICTIVE THAN THE REQUIREMENTS LISTED IN THIS GUIDELINE. FOR PROJECTS LOCATED IN THE CITY OF IRVINE, PLEASE SEE IRVINE UNIFORM SECURITY CODE, SECTIONS 5-9-515.B & C AND SECTION 5-9-517L. FOR PROJECTS LOCATED IN SRA LAND, PLEASE SEE FSR ARTICLE 3 IN GUIDELINE B-09A FOR ADDITIONAL ADDRESSING REQUIREMENTS.

A. APPROVED NUMBERS OR ADDRESSES SHALL BE PLACED ON THE FRONT ELEVATION OF ALL NEW OR EXISTING BUILDINGS IN SUCH A POSITION THAT IS PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD ON WHICH THE PROPERTY IS ADDRESSED. ADDRESSES SHALL NOT BE LOCATED WHERE THEY HAVE THE POTENTIAL OF BEING OBSTRUCTED BY SIGNS, AWNINGS, VEGETATION, OR OTHER BUILDING/SITE ELEMENTS. AN ADDRESS MONUMENT AT THE VEHICLE ENTRANCE OR OTHER LOCATION CLEARLY VISIBLE AND LEGIBLE FROM THE PUBLIC ROAD MAY BE PROVIDED IN LIEU OF AN ADDRESS ON THE STRUCTURE WHERE ONLY A SINGLE BUILDING WITH A SINGLE STREET ADDRESS IS PRESENT AND NO OTHER STRUCTURES ARE ACCESSIBLE FROM THE FIRE LANE SERVING THAT STRUCTURE.

B. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND.

C. THE NUMBERS SHALL BE A MINIMUM OF 4 INCHES OR MORE IN HEIGHT FOR SINGLE-FAMILY RESIDENTIAL STRUCTURES/DUPLEXES, OR INDIVIDUAL UNIT NUMBERS IN MULTI-FAMILY RESIDENTIAL STRUCTURES AND 6 INCHES OR MORE FOR COMMERCIAL STRUCTURES OR THE PRIMARY BUILDING ADDRESS OR ADDRESS RANGE POSTED ON MULTI-FAMILY RESIDENTIAL STRUCTURES. THE 6-INCH NUMBERS SHALL HAVE A ONE-INCH STROKE AND THE 4-INCH NUMBERS SHALL HAVE A ½-INCH STROKE, OR AS REQUIRED BY LOCAL ORDINANCE, WHICHEVER IS MORE RESTRICTIVE. BUILDING SETBACKS, ELEVATION, AND LANDSCAPING CAN AFFECT THESE MINIMUM SIZE REQUIREMENTS.

D. ADDRESS NUMBERS MAY BE REQUIRED TO BE INTERNALLY OR EXTERNALLY ILLUMINATED BY THE LOCAL JURISDICTION'S SECURITY CODE. WHILE NOT REQUIRED BY THE OCFA, ILLUMINATION OF ADDRESSES IS RECOMMENDED TO FACILITATE RAPID LOCATION OF A SITE OR BUILDING.

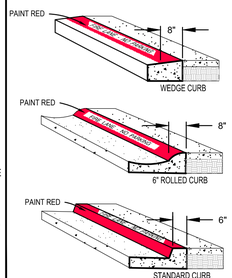
E. WHERE IT IS UNCLEAR AS TO WHICH STREET A BUILDING IS ADDRESSED TO (E.G., A BUILDING IS ACCESSED ONLY FROM A STREET OTHER THAN THE ONE IT IS ADDRESSED TO; MULTIPLE MAIN ENTRANCES TO THE SITE, OR BUILDING ITSELF, FRONT DIFFERENT STREETS), THE NAME OF THE STREET SHALL ALSO BE IDENTIFIED AS PART OF THE POSTED ADDRESS.

F. MULTI-UNIT BUILDINGS - SUITE/APARTMENT NUMBERS SHALL BE PLACED ON OR ADJACENT TO THE PRIMARY ENTRANCE FOR EACH SUITE/APARTMENT AND ANY OTHER DOOR PROVIDING ACCESS TO FIRE DEPARTMENT PERSONNEL DURING AN EMERGENCY. MULTIPLE RESIDENTIAL AND COMMERCIAL UNITS HAVING ENTRANCE DOORS NOT VISIBLE FROM THE STREET OR ROAD SHALL, IN ADDITION, HAVE APPROVED NUMBERS GROUPED FOR ALL UNITS WITHIN EACH STRUCTURE AND POSITIONED TO BE PLAINLY VISIBLE FROM THE STREET OR ROAD.

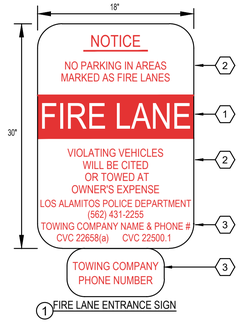
G. MULTI-BUILDING CLUSTERS - APPROVED NUMBERS OR ADDRESSES SHALL BE PLACED ON THE FRONT ELEVATION(S) OF ALL BUILDINGS THAT FORM THE CLUSTER. IF ALL BUILDING ADDRESSES ARE NOT CLEARLY VISIBLE OR LEGIBLE FROM THE PUBLIC ROAD SERVING THE STRUCTURES, AN ADDRESS MONUMENT SHALL ALSO BE PROVIDED AT THE ENTRY POINT(S) TO THE SITE INDICATING THE RANGE OF ADDRESSES ACCESSIBLE FROM THAT ENTRANCE.

RED CURB DETAILS

NOTE: CURBS ALONG ACCESS LANES SHALL BE PAINTED OSHA SAFETY RED OR EQUIVALENT. "FIRE LANE NO PARKING" SHALL BE PAINTED ON TOP OF CURB IN WHITE LETTERING 3 INCHES HIGH AND SHALL BE SPACED 30'-0" ON CENTER OR PORTION THEREOF.



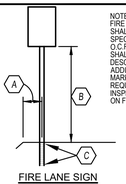
FIRE LANE ENTRY SIGN AND EMERGENCY VEHICULAR ACCESS SIGN



1 FIRE LANE ENTRANCE SIGN



2 EMERGENCY VEHICULAR ACCESS SIGN



FIRE LANE SIGN MOUNTING DETAIL

NOTE:
FIRE LANE SIGNS AND SHALL MEET SPECIFICATIONS PER O.C.F.A GUIDELINES AND SHALL BE INSTALLED AS DESCRIBED THEREIN. ADDITIONAL FIRE LANE MARKINGS MAY BE REQUIRED AT THE TIME OF INSPECTION DEPENDING ON FIELD CONDITIONS.

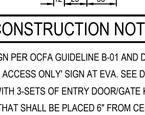
FIRE LANE SIGN MOUNTING LEGEND

1. THE WORDS "FIRE LANE" SHALL BE BOLD WHITE REFLECTIVE ON RED BACKGROUND, (2-3/4) INCHES IN HEIGHT.
2. LETTERING SHALL BE BOLD RED ON WHITE REFLECTIVE BACKGROUND, (1-3/8) INCHES IN HEIGHT.
3. LETTERING SHALL BE RED ON WHITE REFLECTIVE BACKGROUND, (1) INCHES IN HEIGHT.
4. LETTERING SHALL BE BOLD, CONDENSED WHITE REFLECTIVE LETTERING ON RED BACKGROUND, (2) INCHES IN HEIGHT.

A. DEPTH OF SIGN SHALL BE 18 INCHES FROM STANDARD CURB AND 24 INCHES WITH ROLLED CURB TO CENTER OF POST.
B. HEIGHT OF SIGN IN SIDEWALK OR PEDESTRIAN AREA SHALL BE 7'-0", AND 5'-0" IN ALL OTHER AREAS.
C. BURY DEPTH SHALL BE A MINIMUM OF 24 INCHES AND REBAR, A CONCRETE FOOTING, OR ANOTHER METHOD TO PREVENT REMOVAL OF THE SIGN IS RECOMMENDED. FOOTINGS FOR SIGNS LOCATED IN THE PUBLIC RIGHT-OF-WAY SHALL BE PER THE LOCAL JURISDICTION'S REQUIREMENTS.

LEGEND

- PROPOSED FIRE HYDRANT WITH BLUE REFLECTIVE FIRE HYDRANT MARKER. MARKER SHALL BE PLACED 6" FROM CENTERLINE OF HYDRANT SIDE OF STREET.
- PAINT CURB RED WITH 'NO PARKING FIRE LANE' STENCIL AT 30' O.C. PER DETAILS HEREON AND OCFA GUIDELINE B-01
- 150' MAXIMUM HOSE PULL DISTANCE
- 300' MAXIMUM HOSE PULL DISTANCE
- PROPOSED FIRE LANE ENTRY SIGN
- PROPOSED EMERGENCY VEHICULAR ACCESS (EVA) ENTRY SIGN
- INDICATES APPROXIMATE LOCATION OF KNOX BOX WITH 3-SETS OF ENTRY DOOR/GATE KEYS.
- PROPERTY LINES
- 6" MIN. BUILDING ADDRESSING (SEE ARCHITECTURAL PLAN FOR FINAL DESIGN AND LOCATIONS)
- 4" MIN. UNIT ADDRESSING (SEE ARCHITECTURAL PLAN FOR FINAL DESIGN AND LOCATIONS)
- LOCATION OF WAYFINDING SIGN PER CITY STANDARDS. SEE ARCHITECTURAL PLAN FOR FINAL DESIGN AND LOCATIONS
- INDICATES PROPOSED 3-STORY APARTMENT BUILDING (RESIDENTIAL AND INTERIOR COMMON USE)
- INDICATES PROPOSED 3-STORY TOWNHOME BUILDING
- INDICATES PROPOSED 3-STORY SINGLE FAMILY DWELLING UNIT
- INDICATES NOT A PART OF FIRE ACCESS
- PROPOSED PAVED ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
- PROPOSED EVA ENTRY ALL WEATHER DECORATIVE PAVING OR PAVERS THAT SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
- PROPOSED ALTERNATIVE DRIVABLE PAVERS OR PAVED SURFACE. NOT A PART OF FIRE ACCESS
- INDICATES FIRE APPARATUS TURNING RADII: 20' WIDE PATH WITH 20' INSIDE AND 40' OUTSIDE
- INDICATES GROUND LADDERING ACCESS POINT TO RESCUE LOCATIONS AT 2ND AND 3ND LEVELS. SEE DETAIL SHT. F-1 FOR SETBACKS AND NOTES. FINAL LOCATIONS SHALL PER BE PART OF THE PRECISE FIRE MASTER PLAN.
- NOTE: ALL FIRE DEPARTMENT ACCESS ROADS INCLUDING STREETS NOT A PART OF FIRE ACCESS SHALL BE INSTALLED TO MEET OCFA REQUIREMENTS TO SUPPORT VEHICULAR LOADS OF 94,000 LBS.





CONSTRUCTION NOTES

1. INSTALL FIRE LANE ENTRANCE SIGN PER OCFA GUIDELINE B-01 AND DETAIL SHT. F-2.
2. INSTALL 'EMERGENCY VEHICULAR ACCESS ONLY' SIGN AT EVA. SEE DETAIL SHT. F-2.
3. INSTALL SUB- KEYED KNOX BOX WITH 3-SETS OF ENTRY DOOR/GATE KEYS PER OCFA GUIDELINE B-01.
4. INSTALL FIRE HYDRANT MARKER THAT SHALL BE PLACED 6" FROM CENTERLINE ON HYDRANT SIDE OF STREET.
5. INSTALL HAMMERHEAD TURNAROUND PER OCFA GUIDELINE B-01.
6. INSTALL RED CURB PER OCFA GUIDELINE B-01 AND DETAILS SHT. F-2.
7. INSTALL WAYFINDER SIGN.
8. INSTALL EVA ENTRY ALL WEATHER DECORATIVE PAVING OR PAVERS THAT SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
9. PROPOSED ALTERNATIVE DRIVABLE PAVERS OR PAVED SURFACE NOT A PART OF FIRE ACCESS.
10. INSTALL 4" DROP CURB THAT SHALL BE PAINTED RED.

PARKING ENFORCEMENT LETTER

APRIL 8, 2024

PLANNING AND DEVELOPMENT SERVICES SECTION
ORANGE COUNTY FIRE AUTHORITY
1 FIRE AUTHORITY ROAD
IRVINE, CA. 92602

RE: PARKING ENFORCEMENT PLAN - OCFA SERVICE REQUEST NUMBER 538311
LAMPSON PARK PLACE -TRACT MAP NO.19263
4665 LAMPSON AVENUE
LOS ALAMITOS, CA 90720

THE FIRE LANE PARKING ENFORCEMENT PLAN FOR THE ABOVE REFERENCED PROJECT IS STATED AS FOLLOWS:

ALL FIRE LANES WITHIN PROJECT SHALL BE MAINTAINED AND IN NO EVENT SHALL PARKING BE PERMITTED ALONG ANY PORTION OF A STREET OR DRIVE THAT REQUIRED FIRE LANES OR ANY AREA DESIGNATED AS A FIRE LANE FOR TURN-AROUND OR DRIVE THROUGH PURPOSES.

PROJECT HOMEOWNER'S ASSOCIATION SHALL ADOPT REASONABLE RULES AND REGULATIONS REGARDING THE PARKING OF VEHICLES ALONG THE STREETS, ROADS AND OR DRIVES WITHIN THE PROJECT THAT ARE NOT IN CONFLICT WITH APPLICABLE LAW.

IN FURTHERANCE THEREOF, PROJECT HOMEOWNER'S ASSOCIATION, THROUGH ITS OFFICERS, COMMITTEES AND AGENTS WILL ESTABLISH THE "PARKING" AND "NO PARKING" AREAS WITHIN THE PROPERTY IN ACCORDANCE WITH SECTION 22658.2 OF THE CALIFORNIA VEHICLE CODE AND THE RANCH FIRE PROTECTION PROGRAM. THE LAW SHALL BE ENFORCED THROUGH SUCH RULES AND REGULATIONS BY ALL LAWFUL MEANS, INCLUDING, WRITTEN WARNINGS, CITING, LEVYING FINES AND TOWING VEHICLES IN VIOLATION.

PROJECT HOMEOWNER'S ASSOCIATION WILL CONTRACT WITH A CERTIFIED PATROL AND TOWING COMPANY TO REMOVE VEHICLES THAT VIOLATE NO PARKING RESTRICTIONS. FIRST TIME VIOLATORS WILL RECEIVE A WRITTEN WARNING AND WITH SUBSEQUENT VIOLATIONS, THE VEHICLE SHALL BE SUBJECT TO TOWING. THE VEHICLE OWNER SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED IN REMEDYING SUCH VIOLATION, INCLUDING WITHOUT LIMITATION TOWING COST, CITATIONS AND LEGAL FEES.

COMBUSTIBLE CONSTRUCTION LETTER

APRIL 8, 2024

ORANGE COUNTY FIRE AUTHORITY
1 FIRE AUTHORITY ROAD
IRVINE, CA 92502-0125

SUBJECT: COMBUSTIBLE CONSTRUCTION LETTER - OCFA SERVICE REQUEST NUMBER 538311 LAMPSON PARK PLACE -TRACT MAP NO.19263
4665 LAMPSON AVENUE
LOS ALAMITOS, CA 90720

THE PURPOSE OF THIS LETTER IS TO NOTIFY YOU THAT THIS PROJECT SHALL INSTALL ALL REQUIRED PAVED FIRE ACCESS ROADS THAT MEET O.C.F.A. GUIDELINES PER THE APPROVED PLANS. ALL FIRE HYDRANTS AND WATER SUPPLY FOR FIREFIGHTING PURPOSES SHALL BE INSTALLED PER THE APPROVED PLANS AND SHALL MEET ALL FIRE FLOWS REQUIREMENTS, PRIOR TO ANY COMBUSTIBLE CONSTRUCTION MATERIALS BEING DELIVERED FOR CONSTRUCTION.

BUILDING INFORMATION AND DATA

BUILDING	STORIES	TOP OF HIGHEST ROOF	CONSTRUCTION TYPE	AUTOMATIC FIRE SPRINKLERS	SQUARE FOOTAGE
SINGLE FAMILY	2 & 3	36'-0" ★	VB	NFPA 13D	2,815SF
TOWNHOUSE	3	37'-6" ★	VB	NFPA 13D	12,091SF
MULTI-FAMILY	3	37'-0" ★	V-A	NFPA 13	38,700SF

★NOTE THAT BUILDING HEIGHT TO EAVE SHALL NOT EXCEED 29'-11" AT DESIGNATED GROUND LADDERING AREAS.

FIRE FLOW INFORMATION & HYDRANT SPACING REQUIREMENTS PER 2023 OCFA GUIDELINE B-01

SINGLE FAMILY
FIRE FLOW OF 500GPM /1 HOUR FOR THE LARGEST BUILDING OF 2,815 SF WITH TYPE V-B CONSTRUCTION SHALL BE PROVIDED BY THE PROPOSED WATER SYSTEM. HYDRANT SPACING REQUIREMENT IS 600' MAXIMUM BETWEEN HYDRANTS ON A THRU ROAD.

TOWNHOUSE
FIRE FLOW OF 1,500GPM / 3 HOURS FOR THE LARGEST BUILDING OF 12,091 SF WITH TYPE V-B CONSTRUCTION SHALL BE PROVIDED BY THE PROPOSED WATER SYSTEM. HYDRANT SPACING REQUIREMENT IS 500' MAXIMUM BETWEEN HYDRANTS ON A THRU ROAD.

MULTI-FAMILY
FIRE FLOW OF 1,750GPM / 3 HOURS FOR THE LARGEST BUILDING OF 38,700 SF WITH TYPE V-A CONSTRUCTION SHALL BE PROVIDED BY THE PROPOSED WATER SYSTEM. HYDRANT SPACING REQUIREMENT IS 500' MAXIMUM BETWEEN HYDRANTS ON A THRU ROAD.

SHEET INDEX

F-1 OCFA COVER SHEET
F-2 OVERALL FIRE MASTER PLAN LAYOUT
F-3 STREET SECTIONS AND ENLARGED TURN RADIUS DETAIL A
F-4 FIRE FLOW REPORT & SINGLE FAMILY BUILDING ELEVATIONS
F-5 GROUND LADDERING REQUIREMENTS & TOWNHOUSE BUILDING ELEVATIONS
F-6 MULTI FAMILY BUILDING ELEVATIONS

N

GRAPHIC SCALE
0 40' 80'
1 inch = 40 ft.

CIVIL ENGINEER:
C&V CONSULTING INC.
9830 IRVINE CENTER DRIVE
IRVINE, CA 92618
P: 949.916.3800

ARCHITECTURE/PLANNING:
ktgy
Architecture + Planning
17911 Von Karman Ave, Suite 200
Irvine, CA 92614
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ktgy.com

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firesafe :PLANNING SOLUTIONS
28506 AIROSO STREET
RANCHO MISSION VIEJO, CA 92694
OFFICE: (949) 240-5911

PREPARED FOR:
LAMPSON PARK PLACE LLC
DEVELOPED BY: MJW INVESTMENTS LLC
1278 GLENNEYRE ST., STE. 439
LAGUNA BEACH, CA 92651
P:626.710.6377

TITLE:
FIRE MASTER PLAN LAYOUT PLAN LAMPSON PARK PLACE
4665 LAMPSON AVE - LOS ALAMITOS, CA 90720
APN: 130-012-35
OCFA SR 538311

ORANGE COUNTY FIRE AUTHORITY

DATE: 04/08/2024

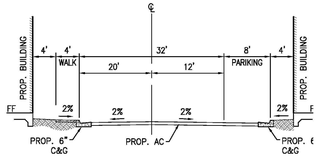
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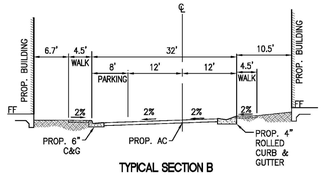
STREET SECTIONS

NOT TO SCALE

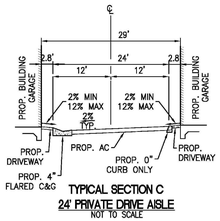
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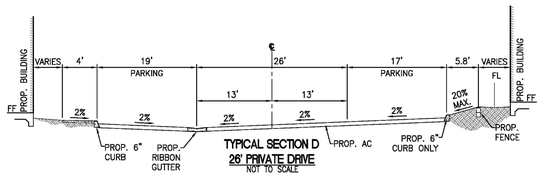
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NOT TO SCALE



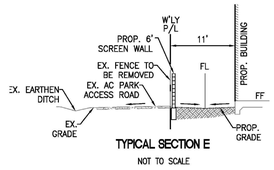
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32' PRIVATE DRIVE
NOT TO SCALE



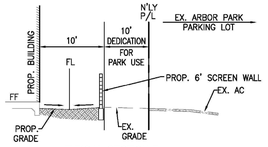
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24' PRIVATE DRIVE AISLE
NOT TO SCALE



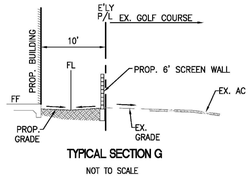
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26' PRIVATE DRIVE
NOT TO SCALE



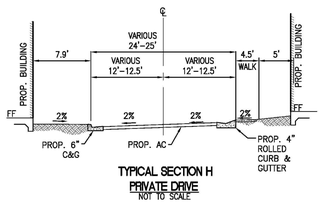
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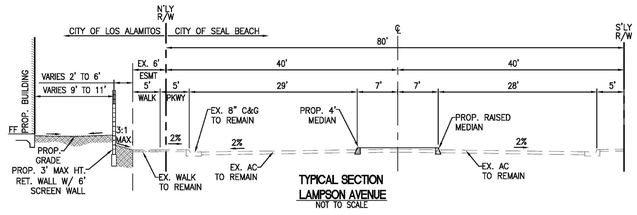
TYPICAL SECTION F
NOT TO SCALE



TYPICAL SECTION G
NOT TO SCALE



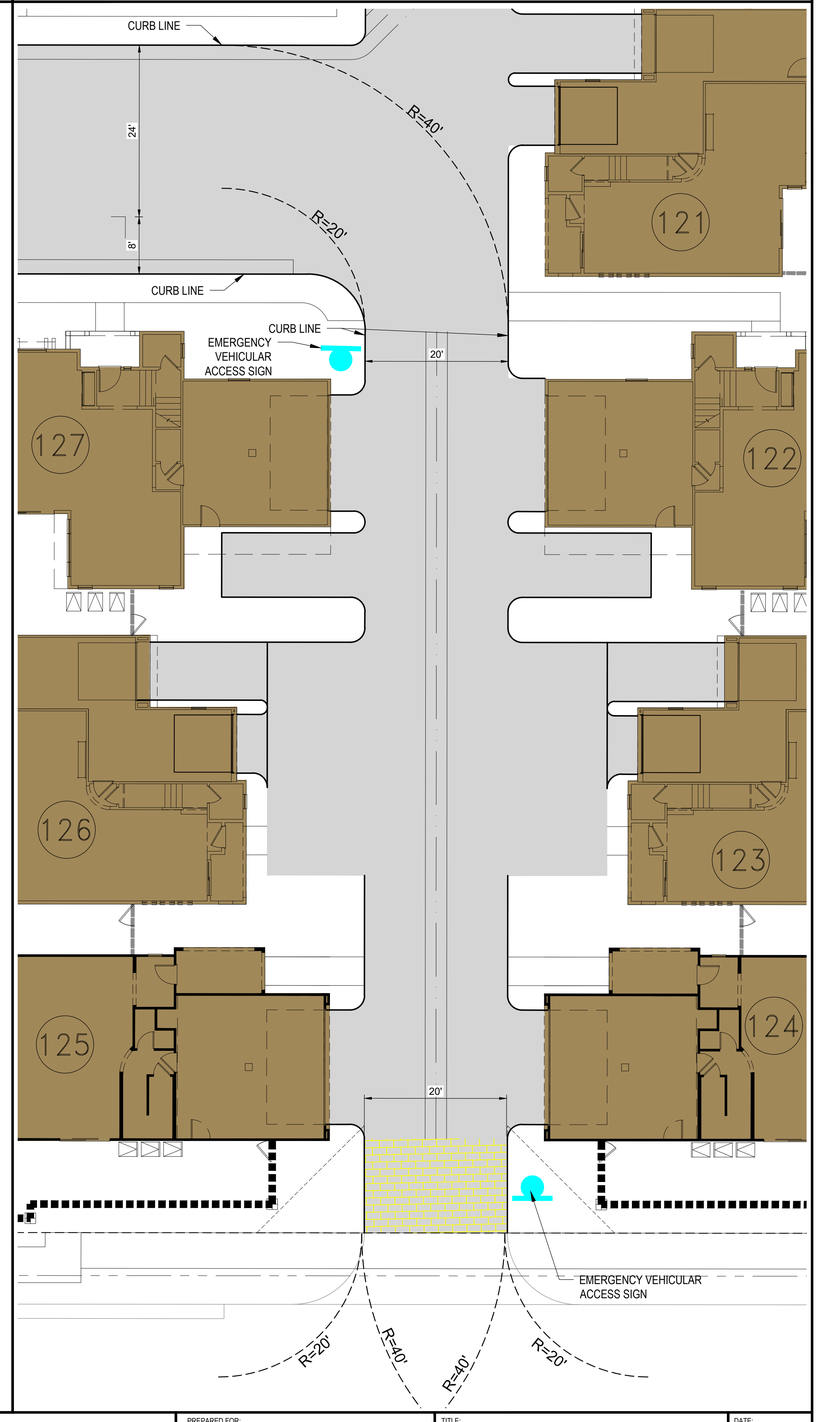
TYPICAL SECTION H
PRIVATE DRIVE
NOT TO SCALE



TYPICAL SECTION
LAMPSON AVENUE
NOT TO SCALE

TURNING RADIUS ENLARGED VIEW A

SCALE: 1"=5'



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1278 GLENNEYRE ST., STE. 439
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P:626.710.6377

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4665 LAMPSON AVE - LOS ALAMITOS, CA 90720
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OCFA SR 538311

ORANGE COUNTY FIRE AUTHORITY

DATE: 04/08/2024

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OF 6

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FIRE FLOW REPORT

OCFA WATER AVAILABILITY FORM

SECTION A: To be completed by customer

Project Name: Lampson Park Place — OCFA SR #: ASSIGNED UPON PLAN SUBMITTAL

Project Address: 4665 Lampson Ave — City: Los Alamitos

Applicant Phone #: (949)916-3800 — Fax #: (_____) _____

Area of largest building 38,700 ft²; Construction type? (check one): [ ] IA [ ] IB [ ] IIA [ ] IIB [ ] IIIA [ ] IIIB [ ] IV [ ] VA [✓] VB

Is this building sprinklered throughout? (check one) [ ] N [✓]

SECTION B: To be completed by local water department/district

Customer to provide results to OCFA

Water Department/District: Golden State Water Company

Test location (indicate address or cross-streets & provide reference map): _____

Hydrant number(s) (if applicable): NA

Elevation of test hydrant: _____ feet above sea level

Date of Test[1]: 2/22/24 — Time of test[1]: hydraulic model [ ] am [ ] pm

[1] Test to be performed as close as possible to the time that the lowest flows and pressures are expected (e.g., M-F, 6:00 – 9:00 am and 5:00 - 9:00 pm)

FLOW TEST RESULTS

TEST INFORMATION IS VALID FOR 6 MONTHS FROM DATE TEST IS PERFORMED

Static pressure:	95	psi	**Residual pressure:**		psi
Observed flow:		gpm	**Flow calc'd at 20 psi:**	1,937	gpm

[✓] Check the box if the test information above was obtained in a manner other than an actual flow test (i.e. by computer modeling).

Based on fluctuations known to exist at the site of the test, provide estimated values for the following:

Maximum static pressure	psi	**Minimum static pressure**	psi
Minimum residual pressure	psi	**Minimum residual flow**	gpm

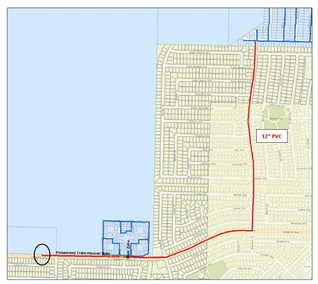
I have witnessed and/or reviewed this water flow information and by personal knowledge and/or on-site observation certify that the above information is correct.

Name: Melynda Holm — Company/Agency: Golden State Water Company

Signature: _____ — Title: Operations Engineer

Date: 2/23/2024

Revised 1/7/16 ese



1 TYPICAL SINGLE FAMILY DWELLING ELEVATIONS

NOT TO SCALE

NOTE: THESE DETAILS PROVIDED FOR REFERENCE ONLY.



RIGHT



RIGHT



FRONT



FRONT

MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X6 BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 BOARD

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ORANGE COUNTY FIRE AUTHORITY

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SHEET: F-4 OF 6

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TYPICAL TOWNHOUSE ELEVATIONS

NOT TO SCALE

GROUND LADDERING REQUIREMENTS TO SLEEPING AREAS PER OCFA GUIDELINE B-01

6.4. **Rescue Openings** - Group-R occupancies that are required by CBC 1031.1 to have rescue openings shall have a walkable path free of obstructions between the fire lane and each rescue opening.

6.4.1. An approved access walkway must be provided to enable firefighters to easily and safely reach a clear, flat space beneath each rescue opening. Obstructions including but not limited to shrubs, trees, trellises, carports, raised planters, walls, fences, pools, steeply sloped roofs, overhangs, vegetation, and similar building and site elements shall not impede the use of or access to the walkway or rescue opening.

6.4.2. Walkways may consist of hardscape, decomposed granite, grass, or other similar walkable material that does not inhibit access to or use of the area.

6.4.3. Trees that encroach on walkways shall provide a minimum 7-foot clearance underneath to allow unhindered passage by firefighters, however, trees and shrubs shall not encroach on areas outside the rescue opening.

6.5. **Laddering Pad and Setback at Rescue Openings of Group R-1, R-2, and R-2.1 Occupancies** - A clear, flat space for laddering rescue openings shall be provided beneath each rescue opening. The distance between the nearest edge of this laddering pad and the structure is based on standardized operational procedures and safe practice to achieve a proper laddering angle (next page, Figure 17). The plan provided must demonstrate that the vegetation (at fully-grown sizes), buildings, and site features will not obstruct the access walkways or laddering operations. It is incumbent upon the developer, architect, landscape architect, and facility maintenance personnel to collaborate on a design and plant palette that complies with these requirements through the *life of the building*.

6.5.1. Proper laddering angle calculation: ***d = (h/5) + 2***

Where **h** = The height of the window sill or balcony railing

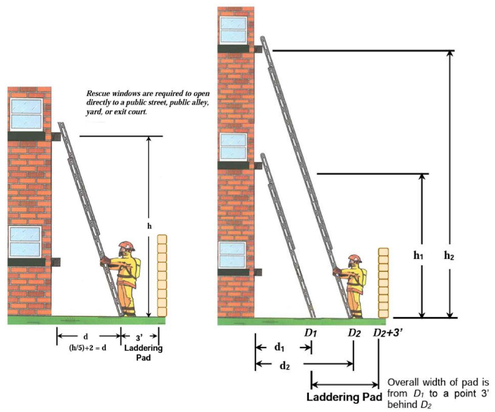
d = The distance in feet from the edge of the pad nearest the building to a point on the ground directly beneath the rescue window sill or balcony edge.

6.5.2. Dimensions for placement of ladders:

Placement of Ladders

Sill Height (h)	Distance (d)	Sill Height (h)	Distance (d)	Sill Height (h)	Distance (d)
35'	9'-0"	25'	7'-0"	15'	5'-0"
34'	8'-10"	24'	6'-10"	14'	4' to 5'
33'	8'-7"	23'	6'-7"	13'	4' to 5'
32'	8'-5"	22'	6'-5"	12'	3' to 5'
31'	8'-2"	21'	6'-2"	11'	3' to 4'
30'	8'-0"	20'	6'-0"	10'	2' to 4'
29'	7'-10"	19'	5'-10"	9'	2' to 4'
28'	7'-7"	18'	5'-7"	8'	2' to 3'
27'	7'-5"	17'	5'-5"	7'	1' to 3'
26'	7'-2"	16'	5'-2"	<7'	1' to 2'

Figure 17 - Ladder Pad Setback at Rescue Openings



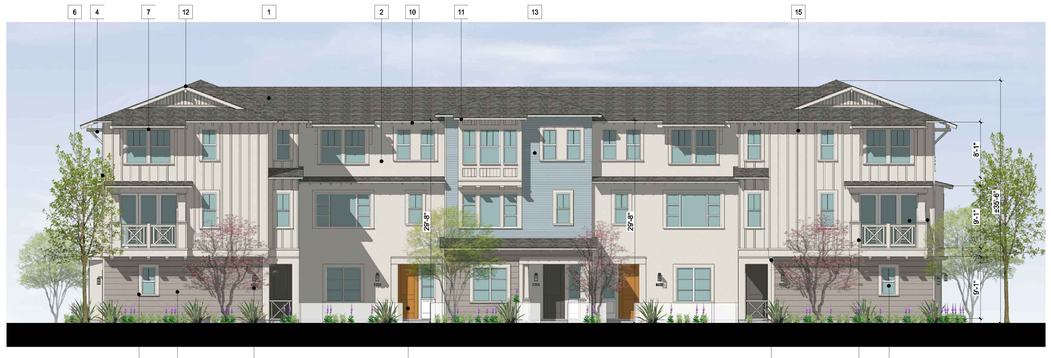
MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, LIGHT SAND FINISH (20/30)
3. STANDING SEAM METAL (WHERE OCCURS)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM (B)
5. FAUX WOOD HORIZONTAL TRIM w/ FLAT TRIM
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL
9. DECORATIVE FAUX VENT (6" SPACED 1X4 BOARD) (B)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X4/ 2X6 BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. HORIZONTAL SIDING (4" EXPOSURE) (WHERE OCCURS)
14. HORIZONTAL SIDING (10" EXPOSURE) (WHERE OCCURS)
15. VERTICAL BOARD & BATT SIDING (16" O.C.)
16. WOOD RAILING
17. VINYL WINDOWS
18. SLIDING GLASS DOOR
19. DECORATIVE FIBERGLASS ENTRY DOOR
20. DECORATIVE WOOD CORBELS
21. METAL UTILITY DOOR
22. PORCH/DECK COLUMNS (WHERE OCCURS)
23. METAL SECTIONAL GARAGE DOOR
24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION



LEFT



P1 P2 P2X P2R P1 FRONT



RIGHT



REAR

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TYPICAL MULTI-FAMILY ELEVATIONS

NOT TO SCALE

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1. FRONT ELEVATION



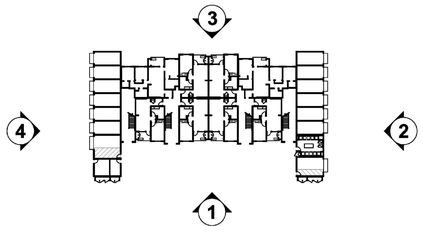
4. LEFT ELEVATION



3. REAR ELEVATION



2. RIGHT ELEVATION



Building Key Plan N.T.S.

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER

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PLANNING COMMISSION REVIEW DRAFT

Final Environmental Impact Report

SCH No. 2022090476

4665 Lampson Avenue

City of Los Alamitos, California

DRAFT

Lead Agency

City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

CEQA Consultant

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

Project Applicant

Lampson Park Place, LLC
119 E. St Joseph Street
Arcadia, CA 91006

September 17, 2024

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DRAFT

Attachments (Provided on USB Drive)

A, Comment Letters 16 & 17 Attachments
B, VMT Analysis
C1, Updated Phase II Environmental Site Assessment Slip Sheet, EFI RTC
C2, EFI Technical Memorandum
D, Nick Johnson Resume
E1, Updated Hydrology Study
E2, Updated PWQMP
F, Updated Noise Impact Analysis
G, Traffic Analysis
H, Safety Evaluation

Attachments (cont.)

I, Shade and Shadow Study
J, Fire Master Plan & Fire Flow
K, Will-Serve Letters
L, Old Ranch Country Club Sewer Demand Calculations
M, Updated Sewer Analysis
N, Historic Research for Moon Trees
O, Mitigation Monitoring and Reporting Program

DRAFT

1.0 INTRODUCTION

In accordance with Section 15088 of the California Environmental Quality Act (CEQA) Guidelines, the City of Los Alamitos, as the Lead Agency, has evaluated the comments received on the Draft Environmental Impact Report (Draft EIR) for the 4665 Lampson Avenue Project (Project) (SCH No. 2022090476) and has prepared written responses to these comments. This document has been prepared in accordance with CEQA and represents the independent judgment of the lead agency.

Public Resources Code Section 21082.1(a) authorizes lead agencies, such as the City of Los Alamitos here, to prepare an EIR either directly by its own staff or under contract with a public or private entity. More specifically, Section 15084(d) of the CEQA Guidelines provides that:

> *The lead agency may choose one of the following arrangements or a combination of them for preparing a draft EIR.*
>
> *(1) Preparing the draft EIR directly with its own staff.*
>
> *(2) Contracting with another entity, public or private, to prepare the draft EIR.*
>
> *(3) Accepting a draft prepared by the applicant, a consultant retained by the applicant, or any other person.*
>
> *(4) Executing a third party contract or memorandum of understanding with the applicant to govern the preparation of a draft EIR by an independent contractor.*
>
> *(5) Using a previously prepared EIR.*

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Pursuant to Public Resources Code Section 21082.1 and CEQA Guidelines 15084(e), to the extent a lead agency authorizes a consultant to prepare an EIR, the lead agency shall subject the draft to the agency's own review and analysis. The EIR must reflect the independent judgment of the lead agency, and the lead agency remains responsible for the adequacy and objectivity of the EIR.

This document has been prepared in accordance with CEQA and represents the independent judgment of the lead agency.

According to State CEQA Guidelines Section 15132, the Final EIR shall consist of:

> *(a) The Draft EIR or a revision of the draft;*
>
> *(b) Comments and recommendations received on the Draft EIR either verbatim or in summary;*
>
> *(c) A list of persons, organizations, and public agencies commenting on the Draft EIR;*
>
> *(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and*

(e) Any other information added by the Lead Agency.

The City of Los Alamitos will consider certification of the EIR, adoption of a Mitigation Monitoring and Reporting Program, Findings and Facts, and a Statement of Overriding Considerations as part of the approval process for the Project.

This Final EIR document is organized as follows:

Section 1 provides a brief introduction to this document, a summary of the public review process, and a list of commenters.

Section 2 provides master responses for comments that were made by many commenters on the same issue.

Section 3 provides responses to the public comments received on the Draft EIR during the public review period. Responses are provided in the form of individual responses to comment letters received. Comment letters are followed immediately by the responses to each letter.

Section 4 contains revisions and clarifications to the Draft EIR as a result of the comments received from agencies and interested persons as well as errata to clarify, amplify, or make insignificant modifications to the EIR as authorized under CEQA. This information does not constitute significant new information pursuant to CEQA, and therefore recirculation of the EIR for further review pursuant to CEQA Guidelines Section 15088.5 is not required.

1.1 Public Review Process

In compliance with Section 15201 of the State CEQA Guidelines, the City of Los Alamitos (City) has taken steps to provide opportunities for public participation in the environmental review process. A Notice of Preparation (NOP) was distributed on October 3, 2022 to responsible agencies, local government agencies, and interested parties for a 30-day public review period (from October 3, 2022 to November 2, 2022) in order to solicit responses that would help the City identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. The NOP was also distributed to the State of California Office of Planning and Research, State Clearinghouse (SCH) for distribution to State agencies. The Project was described; potential environmental effects associated with Project implementation were identified; and agencies and the public were invited to review and comment on the NOP. A copy of the NOP and comments received are included in Appendix A of the Draft EIR. The City received comment letters from eight (8) agencies and organizations and 201 individuals in response to the NOP. Substantive issues raised in response to the NOP and during the Scoping Meeting are summarized in Table 1-1, *Summary of NOP Comments*, and Table 1-2, *Summary of Scoping Meeting Comments* of the Draft EIR.

CEQA requires that a Draft EIR have a review period lasting at least 45 days for projects that have been submitted to the SCH for review (State CEQA Guidelines, Section 15105[a]). The Draft EIR was distributed to various public agencies, organizations, and individuals on April 24, 2024; the EIR was available for public review and comment for a period of 45 days. The review period ended on June 10,

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2024. The City used several methods to elicit comments on the Draft EIR. A Notice of Availability (NOA) and the Draft EIR was distributed to the SCH for distribution to State agencies and was posted on the City's website. The NOA was also posted at the Orange County Clerk's office on April 24, 2024. The NOA was mailed to responsible agencies, local government agencies, and interested parties that received the NOP, to individuals who had previously requested the NOA or EIR, and to individuals who provided NOP comments on April 24, 2024. The NOA was also published in the Event News Enterprise which started the week of April 22 through the week of May 6; the NOA and Draft EIR were made available for review, on the City's web site at: https://cityoflosalamitos.org/203/Planning-Commission-Projects.

The Planning Commission and City Council, are scheduled to hold public hearings on September 25, 2024 and Month ##, 2024 to consider whether to approve the proposed Project and associated actions and whether to certify the Final EIR for the Project.

1.2 List of EIR Commenters

In accordance with Section 15132 of the State CEQA Guidelines, the following includes a list of the agencies, organizations, and individuals that submitted comments on the Draft EIR and indicates the environmental topics raised by each commenter regarding the Draft EIR. The City received a total of 6 comments from agencies and organizations and 74 comments from individuals and interested parties on the Draft EIR during the public review period.

Section 2.0 provides Master Responses in response to environmental topical areas that were raised by several of the commenters. The use of master responses by lead agencies is a well-accepted means of responding to issues frequently raised in comments on a draft EIR. (S. Kostka & M. Zischke, Practice Under the California Environmental Quality Act (rev. 2023) Section 16.9.) Responses to each comment are in Section 3.0. The agency and organization comment letters have been assigned a letter (i.e., A, B, C) and the individual comment letters have been assigned a number (i.e., 1, 2, 3). Each comment within the transmittal is divided into sequential numbered comments (i.e., A-1, A-2, A-3; or 1-1, 1-2, 1-3).

Comment Letter Number	Agency, Organization, or Name	Date
Agencies and Organizations		
A	Airport Land Use Commission (ALUC) for Orange County	June 10, 2024
B	California Department of Transportation (Caltrans)	June 10, 2024
C	City of Garden Grove	May 29, 2024
D	City of Seal Beach	June 10, 2024
E	Department of Toxic Substances Control (DTSC)	June 5, 2024
F	Orange County Transportation Authority (OCTA)	June 5, 2024
Individuals		
1	A., Alexandria	May 24, 2024
2	Balderama, Lelisa	May 19, 2024
3	Balderama, Lelisa	April 29, 2024
4	Barembaum, Susan	May 13, 2024

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Comment Letter Number	Agency, Organization, or Name	Date
5	Beaini, Maria	April 29, 2024
6	Biery, James	June 10, 2024
7	Boland, John	June 6, 2024
8	Boyer, Barbara	May 20, 2024
9	Brandt, Daniel	June 10, 2024
10	Burstein, Valerie	May 20, 2024
11	Campbell, Patty	June 10, 2024
12	Chesser, Steven	May 18, 2024
13	Chinn, Donna	June 10, 2024
14	Chirco, Vita	May 12, 2024
15	Chow, Mark and Julia	April 28, 2024
16	Churchhill, Carol	June 9, 2024
17	Churchhill, Carol	May 20, 2024
18	De Boer, Kristal	June 9, 2024
19	Deaton, Ellery	June 7, 2024
20	DuRose, Kellie	June 10, 2024
21	Eble, Chris	May 5, 4024
22	Farjami, Fred and Susanne	June 9, 2024
23	Frenkiel, Rosemary	May 2, 2024
24	Fulton, L.C	May 4, 2024
25	Garthwaite, Kim	May 19, 2024
26	Gulec, Gizem	May 19, 2024
27	Gulec, C.K.	June 10, 2024
28	Gunvalsen Saks, Ann	April 25, 2024
29	Horning, Donald	June 10, 2024
30	Huffington, Leah, Lidia, and Hector	June 7, 2024
31	Kalish, David	No date
32	Lasser, Tom	June 9, 2024
33	Lindow, Valerie	June 6, 2024
34	Liu, Robert	June 9, 2024
35	Lloyd, Renee	June 8, 2024
36	Lundblad, Herbert	May 22, 2024
37	Madison, Tamara	April 29, 2024
38	Manzo, N	June 10, 2024
39	Maulhardt, Thomas	April 29, 2024
40	Maulhardt, Luciann	May 23, 2024
41	Maurer, Robbi	April 30, 2024
42	McGuire, Donna and Dean	June 10, 2024
43	Miller, Gary	June 10, 2024
44	Mokhtari, Suzy	May 1, 2024
45	Morgan, Ed and Sylvia	May 20, 2024
46	Naime, Bayan	May 5, 2024
47	Noud-Ikuta, Mary	May 15, 2024
48	Orland, Jean	June 4, 2024
49	Osburn, Justin	June 10, 2024

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Comment Letter Number	Agency, Organization, or Name	Date
50	Penney, Jennifer	June 10, 2024
51	Polye, Jessica	April 24, 2024
52	Riness, Janet	May 7, 2024
53	Saad, Abram and Mirna	April 25, 2024
54	Salling (Sakkubf), Brittany	May 5, 2024
55	Senecal, Patty	June 10, 2024
56	Serlin, Marc	May 5, 2024
57	Shores, Julia and James	May 7, 2024
58	Showalter, Catherine	June 4, 2024
59	Smith, Paulette	May 4, 2024
60	Smith, David	May 4, 2024
61	Smitson, Eric	April 29, 2024
62	Sprong, Marty	June 10, 2024
63	Stathopoulos, Dora	May 14, 2024
64	Still, Timothy	May 16, 2024
65	Stohler, Michelle	June 6, 2024
66	Sugihara, Tom	May 17, 2024
67	Sustarsic, Schelly	June 10, 2024
68	Thomas, Thom and Elizabeth	June 3, 2024
69	Tilson, Jeffrey	May 13, 2024
70	Werner, Teresa	May 6, 2024
71	Wheeler, Curt and Cindy	May 22, 2024
72	Wiest, Nancy	May 17, 2024
73	Williams, Ksatria	June 2, 2024
74	Williams, John	June 6, 2024

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2.0 Master Responses to Comments Received During the Public Review Period

All of the comment letters received by the City have been included and responded to in this Final Environmental Impact Report (Final EIR). Comments that raise significant environmental concerns have been thoroughly addressed. Comments that do not require a response are indicated below and include those that (1) do not address the adequacy or completeness of the Draft EIR (i.e., are outside the scope of CEQA); (2) do not raise significant environmental issues; (3) do not address the Project; or (4) request the incorporation of additional information not relevant to environmental issues.

CEQA Guidelines Section 15204(a) outlines the parameters for public agencies and interested parties to submit comments and the Lead Agency's responsibility for responding to specific comments. Per CEQA Guidelines Section 15204(a), comments should be related to:

> *[T]he sufficiency of the document in identifying and analyzing possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible…CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or suggested by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.*

CEQA Guidelines Section 15204(c) further advises that, "[r]eviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to CEQA Guidelines Section 15064, an effect shall not be considered significant in the absence of substantial evidence." Additionally, CEQA Guidelines Section 15204(d) notes that, "[e]ach responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility;" but, pursuant to CEQA Guidelines Section 15204(e), "[t]his section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section [CEQA Guidelines Section 15204]."

Section 15088 of the California Environmental Quality Act (CEQA) Guidelines, Evaluation of and Response to Comments, states:

a) *The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall*

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respond to comments raising significant environmental issues received during the noticed comment period and any extensions and may respond to late comments.

b) The lead agency shall provide a written proposed response, either in a printed copy or in an electronic format, to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.

c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice. The level of detail contained in the response, however, may correspond to the level of detail provided in the comment (i.e., responses to general comments may be general). A general response may be appropriate when a comment does not contain or specifically refer to readily available information, or does not explain the relevance of evidence submitted with the comment.

d) The response to comments may take the form of a revision to the draft EIR or may be a separate section in the final EIR. Where the response to comments makes important changes in the information contained in the text of the draft EIR, the lead agency should either:

1. *Revise the text in the body of the EIR; or*
2. *Include marginal notes showing that the information is revised in the response to comments.*

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As further discussed in Section 4.0 of this document, the Draft EIR revisions and information presented in the responses to comments do not result in any of the conditions set forth in CEQA Guidelines Section 15088.5; therefore, the EIR does not need to be recirculated prior to its certification.

This section presents detailed responses to comments that were made by many commenters on the same environmental issue. The master responses provide a means of giving a broader context to the response than may be possible in individual responses and eliminates unnecessary duplication in the responses In some cases, one or more master responses may be responsive to an individual comment.

2.1 MASTER RESPONSE

2.1.1 TRANSPORTATION AND TRAFFIC CONGESTION

Several commenters raised concerns regarding the Project's traffic increases in areas that are currently congested during peak hours. As discussed in Section 4.15, *Transportation*, of the Draft EIR, pursuant to Senate Bill (SB) 743, changes to the CEQA Guidelines were adopted in December 2018, which

require all lead agencies to adopt Vehicle Miles Travelled (VMT) as the measure for identifying transportation impacts for land use projects under CEQA. This Statewide mandate went into effect July 1, 2020. The issue of congestion is no longer a CEQA issue and for this reason is not addressed in the Draft EIR (refer to Page 4.15-1 of the Draft EIR). With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by "level of service" and other similar metrics, no longer constitute a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3)). Transportation analysis under CEQA is now based on VMT rather than impacts to automobile delay-based level of service (LOS) (traffic congestion).

Nonetheless, a Traffic Analysis (TA; *Technical Appendix N1* of the Draft EIR [Updated TA is also included as *Attachment G* to the Final EIR]) was prepared for the Project to evaluate the Project's traffic impacts with respect to congestion, the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary to recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. This TA was primarily prepared for non-CEQA purposes, although it does provide information (e.g. trip generation) to support the analyses in other technical reports (e.g., air quality, etc.).

A. Non-CEQA Topic for Informational Purposes

Although the Project is located in the City of Los Alamitos, access to the site via Lampson Avenue lies within the City of Seal Beach's jurisdiction. The Project's traffic study has been prepared in accordance with the City of Los Alamitos' requirements and the City of Seal Beach's Transportation Analysis Guidelines (June 2020, referred to as City Guidelines) as the study area intersections lie within the City of Seal Beach. The Project traffic study scoping agreement, provided in Appendix 1.1 of the TA, was provided for review and approval by the cities of Los Alamitos, Seal Beach, and Garden Grove.

Based on consultation with the City of Los Alamitos and the City of Seal Beach, ten study area sections were selected for analysis in the TA, shown in Table 1-1 in the TA. Additionally, a total of nine study area roadway segments were selected for evaluation based on City of Seal Beach's Guidelines which require analysis of any roadway segment where a project contributes 1% or more of the total traffic on the segment. Pursuant to comments received on the Draft EIR and TA from the City of Seal Beach (see Comment Letter D in Section 3.0 of this Final EIR) and the City of Garden Grove (see Comment Letter C in Section 3.0 of this Final EIR), an updated TA was prepared and included as *Attachment G* to this Final EIR.

In the TA, Seal Beach Boulevard & Lampson Avenue was identified as a deficient intersection under Opening Year Cumulative (2026) and under General Plan Buildout traffic conditions. Restriping the number two westbound left turn lane as a shared left-right turn lane would improve the intersection operations to an acceptable LOS D. The Project Applicant's responsibility for the Project's contributions towards the deficient intersection would be addressed by payment of fair share fees to the jurisdiction that would construct the recommended improvement.

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Moreover, as discussed in Section 3.0, *Project Description*, of the Draft EIR, according to the City of Seal Beach General Plan, Lampson Avenue is a divided roadway with a raised median and designed to accommodate a maximum of 37,500 daily vehicle trips. The City of Seal Beach's General Plan identifies two roadway segments that generally comprise the portion of Lampson Avenue fronting the Project site: Rose Street to Tulip (east of the Project) and Rose Street to Heather Street (adjacent and West of the Project). The Project is anticipated to generate 1,658 daily trips. At General Plan Buildout with the Project, these two segments of Lampson Avenue would carry between 15,350 and 15,750 daily trips (see *Technical Appendix N1* of the EIR), below the maximum of 37,500 daily trips. Therefore, the Project's anticipated trip generation is well within the capacity of Lampson Avenue even at General Plan Buildout (refer to Page 3-17 of the Draft EIR).

Many commenters also expressed concerns regarding U-turns on Lampson Avenue at Heather Street. As discussed in the Project's Traffic Analysis, there are existing westbound U-turns occurring at the intersection of Heather Street and Lampson Avenue, however, the intersection operates at an acceptable LOS with the inclusion of these existing peak hour U-turns. Additionally, Project traffic is not anticipated to utilize Heather Street for U-turns along Lampson Avenue as all components of the Project would have access to the full access driveway at the primary neighborhood entry on Lampson Avenue for making southbound left turns.

Many commenters also expressed concerns on cut-through traffic into existing neighborhoods. Project traffic would utilize Lampson to access either Seal Beach Boulevard or Valley View to access the regional freeway system. There would be no reason for Project traffic to use roads within the existing neighborhoods to the south since they do not provide direct access or a shorter route to Seal Beach Boulevard or Valley View. The existing surrounding residential neighborhoods do not provide any direct connection to these facilities. Therefore, internal residential streets, including College Park East, are not a desirable alternative route to the regional roadway network. Minimal travel may occur within the adjacent neighborhood to access public parks, since there is an existing park directly adjacent to the Project site.

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B. CEQA-Related Topic

As discussed in Section 4.15, *Transportation*, of the Draft EIR, the Project would result in significant VMT impacts with the implementation of Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Draft EIR identified a significant and unavoidable VMT impact for the Project on a direct and cumulatively considerable basis (refer to Page 4.15-20 of the Draft EIR).

2.1.2 ROADWAY SAFETY ON LAMPSON AVENUE

Many commenters expressed concerns regarding vehicle and pedestrian safety on Lampson Avenue due to the potential for decreased visibility and an increase in traffic. A Safety Evaluation was prepared for the Project (see *Attachment H* of this Final EIR) which analyzed collision data, pedestrian and

bicycle safety, and site access management (e.g. driveway sight distance, driveway spacing, project access and queuing, multimodal conflict points, and pedestrian/bicycle connections). A summary of the main findings are presented below.

Additionally, several comments were made regarding the proposed traffic signal at the primary neighborhood entry on Lampson Avenue. The Project's Traffic Analysis (see *Attachment G* of this Final EIR) evaluated this issue and determined that the primary neighborhood entry is not anticipated to meet peak hour or planning level (daily volume) based traffic signal warrants and no traffic signal at this location is needed or required. However, due to public comments received during the Notice of Preparation and scoping period, the Project initially proposed to install a traffic signal at the primary neighborhood to alleviate neighborhood concerns related to safety. Subsequent public comments received on the Draft EIR during the 45-day public review period expressed concern with installing a traffic signal and after further traffic signal warrant and safety analyses, it was determined that the proposed traffic signal is not warranted (see *Attachment G* of this Final EIR). Therefore, the Project no longer proposes a traffic signal at this entryway. However, to address the public comments expressing concerns related to safety in this area, a Safety Evaluation was prepared for the Project (see *Attachment H* of this Final EIR). Based on the Safety Evaluation and for the reasons summarized below, the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature.

A. Collision

As discussed in the Safety Evaluation (see *Attachment H* of this Final EIR), collision data was gathered by California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS). The collision data includes 5 years of collision data gathered by CHP staff and members of its allied agencies throughout California (including the City of Los Alamitos). Table 1 of the Safety Evaluation provides a summary of the types of collisions by intersection for eight intersections. Table 2 of the Safety Evaluation provides a summary of the crash rate compared to the statewide average. The results indicated the following:

- **Basswood Street & Lampson Avenue** had a total of 1 reported collision in a 5-year period. The common collision included a sideswipe collision. Sideswipe collisions are commonly caused by failure to yield or impaired/distracted driving. The intersection of Basswood St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Candleberry Avenue & Lampson Avenue** had a total of 1 reported collision in a 5-year period. The common collisions included a broadside collision. Broadside collisions are commonly caused by failure to yield, failure to stop, or impaired/distracted driving. The intersection of Candleberry Av. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Rose Street & Lampson Avenue** had a total of 2 reported collisions in a 5-year period. The common collisions included broadside and overturn collisions. Overturned vehicles are commonly caused by unsafe speeds, improper maneuvers, or loss of vehicle control.

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The intersection of Rose St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Tulip Street & Lampson Avenue** had a total of 1 reported collision in a 5-year period. The common collision included a broadside collision. The intersection of Tulip St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Valley View St. & Lampson Avenue** had a total of 14 reported collisions in a 5-year period. The common collisions included rear-end and broadside collisions. Rear-end collisions are commonly caused by failure to yield, failure to stop, or impaired/distracted driving. The intersection of Valley View St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

The existing crash rates for the study area intersections are lower than the statewide average crash rates. A Project would have the potential to create an increase in collision rate if it introduced a geometric design feature that did not meet safety standards or incompatible uses (e.g. farm equipment). As demonstrated in the analysis below in Master Response 2.1.2C through 2.1.2E, implementation of Project improvements (within the public right-of-way) per Los Alamitos and Seal Beach standards ensures all that sight distance requirements, pedestrian crossing requirements, and street design requirements are met. Additionally, the Project vehicle mix is consistent with the adjacent land uses, including the residential neighborhood to the south. Therefore, it is not anticipated that the Project will result in a significant change in collision rates or result in an accident rate higher than the statewide average.

B. Bicycle and Pedestrian Facilities

As discussed in Section 4.7, *Transportation*, of the Draft EIR, existing sidewalks are present on both the westbound and eastbound side of Lampson Avenue, adjacent to the Project site. Crosswalks are present at the intersections of Lampson Avenue/Heather Street and Lampson Avenue/Rose Street (refer to Page 4.15-3 of the Draft EIR). Frontage improvements for the Project would include median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards (refer to Page 3-4 of the Draft EIR).

As discussed in the Safety Evaluation (*Attachment H* of this Final EIR), there are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. In addition, there is a Class I bike/pedestrian path on Seal Beach Boulevard north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project would not remove any existing bike/pedestrian paths and would maintain the existing Class II bike lane on Lampson Avenue along its frontage to maintain bicycle safety. The existing sidewalks adjacent to the Project met design standards and the Americans with Disabilities Act (ADA) standards at the time they were constructed.

As stated, the sidewalks along the Project frontage will be improved as part of the Project. Frontage improvements include sidewalks, driveway modifications to accommodate site access, median modifications, and landscaping improvements as required by City standards. The proposed sidewalk

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along the Project's frontage on the north side of Lampson Avenue will provide connectivity with proposed sidewalks and paths internal to the Project.

The intersections at Lampson Avenue at Heather Avenue and Lampson Avenue at Rose Avenue are currently signalized and both have pedestrian crosswalks for Lampson Avenue. The wheelchair ramp on the north side of Lampson Avenue at Heather Avenue does not meet current ADA standards. However, the wheelchair ramp on the north side of Lampson Avenue at Rose Avenue does meet ADA standard requirements.

All Project driveways will be designed to meet current City standards and accommodate pedestrian crossing per current ADA standards. These improvements will ensure the Project meets all compliance requirements.

C. Intersection Sight Distance

Intersection sight distance at the primary neighborhood entry was evaluated by identifying limited use areas pursuant to Orange County Standard Plan 1117 – Intersection Sight Distance. The limited use areas determine the necessary sight distance to allow 7 ½ seconds for the driver on the crossroad (or left turn pocket) to safely cross the main roadway or turn left while the approach vehicle travels at the assumed design speed of the main roadway. All Project driveways are required to meet these sight distance requirements. Exhibit 3 of the Safety Evaluation shows that the primary neighborhood entry will meet the sight distance requirements, and that the Project would not create any new sight distance issues or contribute to decreased visibility along Lampson Avenue.

D. Stopping Sight Distance

According to the Highway Design Manual (HDM), stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads when passing sight distance is not economically obtainable. Stopping sight distance also is to be provided for all users, including motorists and bicyclists, at all elements of interchanges and intersections at grade, including private road connections. Lampson Avenue has a posted speed limit of 45 miles per hour (mph). As stated in HDM Table 201, a stopping sight distance of 360 feet is the standard for a design speed of 45 mph. Therefore, the Project does not introduce any new stopping sight distance issues to Lampson Avenue.

E. On-Site Vehicle Circulation

The Project does not involve freight operations because the Project is a residential project. Since the proposed use is residential, a limited number of trucks would travel to the Project site (e.g. trash trucks, emergency vehicles, delivery vans). Therefore, congestion from freight trucks to and from the Project site would be negligible and there will be no conflicts between freight trucks and passenger vehicles.

Attachment D of the Safety Evaluation identifies the on-site circulation for the site. The exhibits identify various vehicle paths (front-loading garbage trucks, fire trucks, delivery trucks, etc.) for various internal drive aisles, which allow for two-way traffic. Access to and from the site will be

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accommodated via driveways on Lampson Avenue. As shown in Attachment D of the Safety Evaluation, the vehicle turning templates show acceptable turning movements for the various vehicles and trucks anticipated to access the site. Therefore, there will be no conflicts between garbage trucks, fire trucks, and delivery trucks and passenger vehicles.

F. Conclusion

A review of available collision data indicates that the study area intersections have lower crash rates than the statewide average of intersections with similar configuration and settings. The addition of Project traffic is not anticipated to increase the crash rates by a significant margin. As discussed throughout this evaluation, the implementation of Project improvements (within the public right of way) per Los Alamitos, Seal Beach, Orange County Public Works, Highway Design Manual (HDM), and American with Disabilities Act (ADA) standards ensures all sight distance requirements, pedestrian crossing requirements, and street design requirements are met. Additionally, the Project TA, *Attachment G* of the Final EIR, indicates the highest peak hour volume along Lampson Avenue at Driveway 2 is 561 vehicles (Refer to Exhibit 3-8 of the TA). The highest Project peak hour volume of 50 vehicles occurs at Driveway 2 in the evening (Refer to Exhibit 4-2 of the TA). The Project contributes 9% of the additional vehicles to the evening peak hour ([50/561]*100=9%). Therefore, the addition of Project-related traffic is not anticipated to cause any new or exacerbate any existing safety deficiencies along Lampson Avenue or in the vicinity of the Project's interface with Lampson Avenue. The City will impose upon the Project a condition of approval that will ensure that the intersection sight distance, pedestrian/bike facilities, and street facilities satisfy CA MUTCD, ADA, City of Los Alamitos, and City of Seal Beach standards.

2.1.3 PARKING

As of 2010, the CEQA Guidelines Appendix G, no longer requires an evaluation of parking for a project. This elimination of the requirement to analyze parking was in response to case law holding that the inconvenience resulting from a parking shortage is a social impact; pursuant to these cases, a parking shortage is not an environmental impact necessary for analysis under CEQA unless secondary indirect environmental impacts may result from any such parking shortage as indirect environmental impacts. Moreover, a condition of approval has been included which requires the parking garages onsite be used for primarily parking purposes. Nevertheless, due to previous comments received during the NOP period related to concerns about parking, two technical studies were prepared for the Project and incorporated into the Draft EIR to analyze the Project's onsite parking supply (*Technical Appendix P* of the Draft EIR) and potential parking impacts to nearby parks (*Technical Appendix Q* of the Draft EIR). A summary of the findings from these technical studies is further discussed below.

A. Arbor Park/Arbor Dog Park Parking

Many commenters expressed concerns regarding parking for Arbor Park and Arbor Dog Park. As discussed in Section 4.15, *Transportation*, of the Draft EIR, Walker Consultants prepared an analysis to evaluate the parking need at Arbor Park and Arbor Dog Park, including American Youth Soccer Organization (AYSO) Region 159 uses at Arbor Park for soccer practices on weeknights and soccer

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games on weekends (see *Technical Appendix Q* of the Draft EIR). AYSO parking demand is highest during Saturday soccer games with a parking demand that fluctuates between 97 to 339 spaces between the hours of 8:00 AM and 2:00PM and a peak parking demand of 339 spaces at noon. AYSO currently uses parking spaces on the Project site on an informal basis (i.e., the owner of the Project site does not have a formal arrangement with AYSO) for soccer games, many of which would not be available upon Project implementation.

Walker was engaged to evaluate options to assist AYSO in resolving its parking needs following Project buildout. Two options were considered: 1) a voluntary commitment by the Project to provide a 10-foot strip of land along the north boundary of the Project site, or 2) a voluntary commitment by the Project to provide a 10-foot strip of land in addition to improvements 2'-10" to 4'- 3" in width on the north side of the Arbor Park parking lot (see Figures 1 and 4 *of Technical Appendix Q* of the Draft EIR for the proposed parking layouts). The Project's voluntary commitment to either of these options would allow for up to 154 or 200 parking spaces for users of Arbor Park, respectively.

Following implementation of these options, if an inadequate amount of parking still remained to accommodate an AYSO soccer game event, vehicles would have the option of dropping off players/visitors at the park and/or seeking available parking off-site and walking to the park. Ultimately, Walker concludes that to resolve any parking shortages related to these soccer events, the AYSO could re-program its event schedule to ensure that these events are distributed throughout the day in such a way as to accommodate simultaneous arrivals of attendees for these events. Additionally, any change in vehicle trip distance over time would be negligible, as it would only occur on Saturdays during soccer season,[1] which typically lasts from 8AM to 2PM. Moreover, attendees in vehicles would arrive at certain appointed times to watch or participate in these events, and therefore these vehicles are not expected to circle or idle in the parking lot to wait until a parking space became available.

The potential for parking in adjacent neighborhoods would not cause any indirect environmental impacts. Attendees for these events who are unable to find parking even with these additional parking spaces voluntarily provided by the Project could search for parking elsewhere, such as the nearby College Park East or West Garden Grove neighborhoods. The final destination for these attendees and the number of attendees seeking parking elsewhere is unknown given the potential for existing or future parking regulatory controls (e.g. neighborhood permitted parking) in these neighborhoods, the possibility that AYSO may ultimately re-program its event schedule, and the inherent variations in the number of attendees and participants from season to season.

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[1] *Parking demand is low on weeknights for AYSO practices. As documented in Technical Appendix Q of the Draft EIR: "On the weekday, parking demand related to the AYSO leagues was low and could have been entirely accommodated within the existing gravel parking area, if needed. Over the course of the observations, a small number of soccer-related parking occurred in the 4665 Lampson parking lot.*

Nonetheless, the need for attendees to seek parking in nearby neighborhoods would not constitute additional new vehicle trips or vehicle miles traveled attributable to the Project because soccer events at Arbor Park are not an element of the Project. Additionally, any change in vehicle trip distance over time would be negligible, as it would only occur on Saturdays during soccer season, which typically lasts from 8AM to 2PM. Moreover, attendees in vehicles would arrive at certain appointed times to watch or participate in these events, and therefore these vehicles are not expected to circle or idle in the parking lot to wait until a parking space became available. As such, vehicles unable to find adequate parking would not result in any significant transportation impacts related to congestion at the site (which is a level of service concept no longer considered a significant impact under CEQA in any event) or air quality impacts related to emissions (refer to Pages 4.15-15 through 4.15-16 of the Draft EIR).

B. On-site Parking

Many commenters expressed concerns regarding the lack of proposed onsite parking and the potential for overflow parking from the Project to nearby streets and Arbor Park. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments). These 577 spaces exceed the 441~~0~~ parking spaces that would be required pursuant to the State's Density Bonus Law (refer to Page 3-4 of the Draft EIR).

As part of the Project, Walker Consultants prepared a parking analysis (*Technical Appendix P* of the Draft EIR) to determine the appropriate amount of parking needed for the Project. Based on the City's off-street parking requirements in the Municipal Code, the Project would be required to provide 679 parking spaces. The Project qualifies for a density bonus and parking concessions under the State Density Bonus Law (Government Code Section 65915) which would reduce the Project's minimum off-street parking requirement to 441 parking spaces. The Project is proposing to provide 577 parking spaces, approximately 15% fewer than City code requirements, but 30.8% above what is required under Government Code Section 65915(p).

Therefore, the Project would provide more than adequate parking based on nationally recognized Urban Land Institute/National Parking Association Standards for market-rate residential development and would meet the minimum parking requirements of the City of Seal Beach, the adjacent jurisdiction.

Based on the analysis conducted in the parking analysis, the Project's proposed parking supply is appropriate to serve the potential parking needs of the Project. As a result, Project residents would have adequate parking on-site and would not park on streets in the adjacent neighborhood or Arbor Park. Moreover, a condition of approval would be included which requires the parking garages onsite be used for primarily parking purposes.

2.1.4 HYDROLOGY AND WASTEWATER INFRASTRUCTURE ANALYSIS

A number of residents expressed concern that the Project would exacerbate flooding conditions in College Park East and stated that the Project would add additional flows down Lampson to Ironwood

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and Hazelnut Avenues. A Hydrology Study (*Technical Appendix I3* of the Draft EIR) was prepared for the Project, which demonstrated that the Project's peak hour flows would not exceed the existing condition flows.

Based on comments received from the City of Seal Beach (Comment Letter D, herein), the Hydrology Study was updated and included as *Attachment E* of this Final EIR. The updated analysis expanded the hydrologic analysis and street capacity analysis for the Lampson Avenue downstream tributary area to the existing sump catch basin within Lampson Avenue. The peak flow rates were reduced based on the detention routing analysis and incorporation of the storm water sump pump system onsite which controls the outflow, mitigating the peak flow discharge rate. The updated analysis resulted in the following changes to the Draft EIR.

1. Pages 3-9, 3-10 of the Draft EIR are revised as follows:

D. Stormwater Drainage Infrastructure

1. Preferred Stormwater Drainage

The proposed Project site's stormwater runoff would be conveyed by roof downspouts or street surface flow to the proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the Project site. From the detention system, a stormwater sump pump located in the southwest corner of the Project site would outlet flow into the existing 18" outlet storm drain pipe at the southwest corner of the site, which conveys stormwater runoff to ~~match the historical flow pattern across~~ the Los Alamitos Joint Forces Training Base (JFTB) property directly west of the site. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing conditions for all storm events. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will be conveyed through a parkway drain discharging flow onto Lampson Avenue, matching historical overflow drainage patterns.

2. Alternate Stormwater Drainage

An alternate plan for stormwater conveyance is proposed in the event the preferred route (historical flow) across the JFTB, as described above, is not available. The alternate would include stormwater outflow onto Lampson Avenue, which would subsequently flow west to an existing stormwater catch basin approximately 2,200 feet west of the Project site. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows to Lampson Avenue would resume. Under the Alternate Off-Site Storm Drain

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plan, stormwater will be detained and mitigated onsite such that Lampson Avenue meets OC Hydrology flooding standards. Approximately 33,106 ~~32,300~~ cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates.

2. Pages 4.9-17 and 4.9-19 are hereby modified as follows to reflect the changes made in the updated Hydrology Study.

1. Storm Drain Facilities – Preferred Route

The preferred treatment of stormwater runoff for the Project would be conveyance by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via onsite underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows into the existing 18" storm drain pipe at the southwest corner of the site to outlet to the JFTB. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing flows. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will flow onto Lampson Avenue matching historical overflow drainage patterns.

The combined, total 100-year peak flow rate for the Project site is 31.51~~40.28~~ cfs under existing conditions. The combined, total 100-year peak flow rate for the Project Site is approximately 42.15~~44.31~~ cfs under the proposed conditions without improvements. Figure 4.9-4, *Proposed Conditions Hydrology Map* illustrates the post development drainage conditions of the Project site. The proposed drainage design would follow the existing drainage pattern with surface flows to on-site drainage facilities that would ultimately outlet into the existing storm drain pipe at the southwest corner of the Project site. The results from the hydrology study demonstrate that the proposed conditions of the Project site of 42.15~~44.31~~ cfs would generate a higher peak runoff flowrate than the existing condition of the site of 31.51~~40.28~~ cfs.

Due to increased peak runoff flows created from the proposed change in land use and increased impervious coverage by 48%, stormwater would need to be detained and minimized ~~mitigated~~ on-site to match existing conditions. ~~By matching the maximum flows conveyed by the outlet pipe and providing a 20 percent factor for safety for preliminary sizing, approximately 10,000 cubic feet (cf) would be required to be detained on-site based on a conservative 100-year storm event.~~ To prevent overflow into Lampson Ave, the detention system will be sized to match the maximum flows conveyed by the outlet pipe, approximately 33,106 cubic feet. In addition, a proposed stormwater pump system with upstream detention storage has been incorporated into the onsite drainage design to provide onsite peak flow and volume detention for the development for all storm events. The pump system will control the outflow discharge rate

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matching the existing 2-year peak flow at approximately 8.9 cfs. As such, the proposed on-site detention facilities will be designed to detain ~~a minimum volume of 10,000 cf and detained~~ volumes that would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. As such, downstream facilities would not be hydrologically impacted by the proposed Project. Impacts would be less than significant and no mitigation is required.

2. Alternate Drain Facilities

In the event the preferred route (historical flow across the JFTB) is not available, an alternate treatment of stormwater runoff for the Project would be conveyance to offsite storm drain facilities. Figure 4.9-5, *Proposed Alternate Conditions Hydrology Map* illustrates the post-development drainage conditions for this drainage and detention alternate. The proposed site's stormwater runoff would be conveyed by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows onto Lampson Avenue via a parkway culvert. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the pre-development ~~allowed~~ 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the pre-development ~~allowed~~ 25-year storm event in Lampson Avenue, onsite flows would continue pumping to Lampson Avenue normally.

Under the Alternate Storm Drain plan, stormwater will need to be detained and minimized ~~mitigated~~ onsite such that Lampson Avenue meets OC Hydrology flooding standards. Onsite and offsite small unit hydrographs were analyzed using AES Rational Method Analysis to identify the time that the flows exceed the allowed offsite 25-year storm event flows to prevent flooding of one travel lane of the half-street per the OC Local Drainage Manual. Approximately 33,106 ~~32,300~~ cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. By matching the maximum flows and providing an additional 20 percent factor of safety for preliminary sizing, approximately 38,800 cf of water would be detained onsite. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed improvements. Additionally, the proposed finished floor elevations for the onsite buildings would be set 1-foot minimum above the 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements.

3. Page 4.9-21 of the Draft EIR is hereby modified as follows to reflect the changes made in the updated Hydrology Study.

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3. Outlet Runoff to Arbor Park to North: Arbor Park is within the JFTB and drains south to the same earthen channel outlet as the project site. If the proposed flows from the Project are not allowed to outlet to the JFTB at the southwest corner of the site, proposed flows from the Project would not be allowed to outlet to the JFTB to the north of the site either since they are essentially the same outlet location. In addition, the existing site does not flow in the northerly Arbor Park/ JFTB area as the site drains in the southwesterly direction, therefore directing stormwater runoff to the north would change the historic drainage pattern which can potentially cause downstream flooding.

4. Outlet Runoff to Golf Course to East: The golf course to the east is within the JFTB and drains east, ultimately ~~outletting~~ to the Bolsa Chica Channel. ~~Outletting~~Discharging to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the Project site; therefore, runoff to the golf course to the east would potentially cause downstream flooding. In addition, the golf course and Bolsa Chica Channel are upstream from the site, therefore, this option would not be feasible due to elevation differences.

5. Construct storm drain pipe under Lampson Avenue to east: ~~Outletting~~Discharging to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the site. Additionally, installation of underground storm drain pipe within Lampson Avenue is infeasible due to conflicts with existing utilities, maintenance concerns, and head losses as described above (see #1). Similarly to item #4, changing the historical drainage pattern may potentially cause unforeseen drainage impacts.

4. Page 4.9-23 of the Draft EIR is hereby modified as follows to reflect the changes made in the updated Hydrology Study.

1. On-Site Drain Facilities

The results from the hydrology report demonstrate that the proposed drainage conditions would generate a higher peak runoff flowrate than the existing conditions on the Project site due to an increase in impervious area and change in land use. The preferred detention facilities would be designed to detain the increased peak flow between the existing outlet pipe flows and proposed conditions. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements (C&V, 2024a).

2. Alternative Storm Drain Facilities

A second hydrology report was prepared for the alternate stormwater conveyance plan. The results from the report demonstrated that the proposed condition of the alternate would generate a ~~10 percent (44.31 cfs proposed/40.28 cfs existing)~~ higher 100-year storm event peak runoff flowrate than the existing condition of the site due to an increase in impervious area and change

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in land use. The proposed underground detention facilities would be designed to detain the increased flows under the proposed conditions, which would be discharged from the site via a pump station at flow rates that would not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements. ~~(C&V, 2023)~~ (C&V, 2024a).

2.1.5 FLOODING

Many commenters expressed flooding and storm drainage concerns on Lampson Avenue and impacts to College Park East. As shown in Figure 4.9-3, *Existing Flood Hazard Zone*, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06059C0116J (effective 12/03/2009), the Project site is located within FEMA Flood Zone D. Flood Zone D is correlated with a possible risk of flooding, but the probability has not been determined. It may be noted that the area south of the Project site, including adjacent Lampson Avenue, is located within FEMA Flood Zone X (areas determined to be outside the 0.2% annual chance floodplain) according to the FEMA FIRM No. 06059C0118J (effective 12/03/2009). According to the Hydrology Report for the proposed storm drain facilities, during a peak 100-year storm event, stormwater flows would be detained within the on-site underground detention basin. Detained volumes will be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Additionally, the Project's proposed finished floor elevations would be set at least 1 foot above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection requirements.

Similarly, according to the Hydrology Report for the alternate stormwater conveyance plan, during a peak 100- year storm event, stormwater flows would be detained with the proposed detention facilities. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed improvements. Additionally, proposed floor elevations for the onsite buildings would be set at least 1 foot above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection requirements (refer to Page 4.9-24 of the Draft EIR).

As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The Project's preferred storm drain system and alternate storm drain system would be sized and designed in accordance with the City's drainage requirements and Orange County Hydrology Manual to ensure that off-site flows are conveyed through the Project site and flows originating off-site are discharged from the site at a volume and rate that can be accommodated by existing and planned downstream storm drain facilities. Additionally, the Project's storm drainage infrastructure would adequately detain 100-year flows, discharge detained flows at rate that do not exceed existing flows, and the Project's finish floor elevations would be at least 1 foot above the water surface elevation. Accordingly, the Project is not

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anticipated to risk the release of pollutants due to project inundation. Impacts would be less than significant and no mitigation is required (refer to Pages 4.9-23 through 4.9-25 of the Draft EIR).

Cumulative development such as Old Ranch Country Club Specific Plan development would be required to comply with federal, State, and local regulations and applicable regional and local master drainage plans in order to mitigate flood hazards both on- and off-site. Compliance with federal, State, and local regulations and applicable drainage plans would require development sites to be protected from flooding during peak storm events (i.e., 100-year storm) and also would not allow development projects to expose downstream properties to increased flooding risks during peak storm events. In addition, future development proposals within the San Gabriel-Coyote Creek Watershed would be required to prepare hydrologic and hydraulic calculations, subject to review and approval by the responsible City Engineer, to demonstrate that substantial on- and/or off-site flood hazards would not occur. Accordingly, the construction and operation of the Project would not contribute to cumulatively considerable flooding impacts (refer to Pages 4.9-27 of the Draft EIR).

2.1.6 SEWER

Many commenters expressed concerns with the increase in wastewater to the existing system and the old age of the infrastructure.

As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, the existing sewer mains of three manholes (Basswood and Aster Street [Manhole A-16]; Candleberry Avenue and Aster Street [Manhole A-21]; and Elder Avenue [Manhole A-25]) were analyzed. Flow monitoring was conducted under the existing conditions of the three manholes. The existing Project site peak flow was subtracted from the projected Project site flow. The delta flow was then added to the existing monitored peak flows to obtain the proposed development conditions. The results from the Sanitary Sewer Analysis (refer to *Technical Appendix O* of the Draft EIR) demonstrate that the proposed flows, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems. Based on sewer monitoring data collected in preparation of the Sanitary Sewer Analysis, the sewer systems in all three locations indicated good flow, along with hydraulics and relatively low depths. Wastewater volumes produced by the proposed development would not exceed the existing sewer capacity in the public system, and the existing sewer system has adequate capacity for the proposed development. Accordingly, impacts would be less than significant, and no mitigation is required (refer to Pages 4.17-17 to 4.17-19).

Many commenters also expressed concerns regarding the increase in cost for utility infrastructure improvements that may be needed due to the increase in capacity to existing systems and aging infrastructure. The Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Additionally, the Project Applicant would be required to pay development impact fees which will be used for any future needed improvements on the infrastructure systems.

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2.1.7 EMERGENCY VEHICLE ACCESS

Several commenters raised concerns regarding potential impacts to emergency access and evacuations.

In the event of an evacuation in the nearby area, Lampson Avenue has adequate capacity to handle vehicle evacuations. As described above, Lampson Avenue is a divided roadway with a raised median and designed to accommodate a maximum of 37,500 daily vehicle trips. The City of Seal Beach's General Plan identifies two roadway segments that generally comprise the portion of Lampson Avenue fronting the Project site: Rose Street to Tulip (east of the Project) and Rose Street to Heather Street (adjacent and West of the Project). At General Plan Buildout with the Project, these two segments of Lampson Avenue would carry between 15,350 and 15,750 daily trips (see *Technical Appendix N1* of the EIR), below the maximum of 37,500 daily trips. Therefore, the Project's anticipated trip generation is well within the capacity of Lampson Avenue even at General Plan Buildout (refer to Page 3-17 of the Draft EIR). Additionally, in the event of an evacuation, traffic would be controlled by local law enforcement and vehicles would be directed away from the area.

As discussed in Section 4.15, *Transportation*, of the Draft EIR, the Project would provide adequate emergency access for emergency vehicles via Lampson Avenue. A restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project also includes a fire master plan (see *Attachment J* of this Final EIR) to ensure proper installation and maintenance of fire access roadways, proper siting of hydrants, adequate water supply, and access to the structures. The Project would be required to comply with all applicable fire codes and ordinances for construction, access, water mains, fire flows, and fire hydrants.

The effectiveness of emergency response and firefighting operations is directly related to the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures. In accordance with OCFA Guideline B-09, Fire Master Plans for Commercial & Residential Development, Firesafe Planning Solutions prepared a Fire Master Plan for the Project (see Figure 4.8-3, *Fire Master Plan*, of the Draft EIR). The Fire Master Plan demonstrates the Project's compliance with the California Fire and Building Codes and other regulations regarding emergency access to the Project site, including but not limited to required fire access and roadway design, fire lane identification, and access to structures. Compliance with OCFA Guidelines ensures that the Project is designed and constructed to provide adequate emergency access for emergency vehicles.

Furthermore, the Project would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirements based upon the tenant type, building size, and building type. Access to and around structures would meet OCFA and CFC requirements. Additionally, pursuant to LAMC Section 12.08, the Project would be required to provide adequate emergency access along abutting roadways during temporary construction activities within the public right-of-way. Specifically, the Project's compliance with LAMC 12.08.200 would ensure adequate access for all vehicles during temporary lane closures (refer to Pages 4.15-17 through 4.15-18 of the Draft EIR).

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2.1.8 PUBLIC SAFETY

Many commenters raised concerns regarding public safety due to the Project's increase in population. As discussed in Section 4.13, *Public Services*, the Los Alamitos Police Department was contacted to document the existing and planned police protection facilities and to determine whether the Project would require the construction or expansion of new facilities. Buildout of the Project would increase demands for police protection services in the City, including the potential need for parking enforcement. During the construction and operation of the Project, the need for police services is expected to grow due to the increase in population. Crime and safety issues during Project construction may include theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism. After construction, the Project is anticipated to generate a typical range of police service calls as similar developments. Additionally, it should be noted that an increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities.

However, per correspondence with Los Alamitos Police Department, the anticipated increase in demands on police services resulting from the implementation of the Project would not adversely impact Los Alamitos Police Department's existing resources. There are currently no staffing or equipment deficiencies in the service area. The increase in potential services needed would not require the construction of a new police station or improvements to the existing station that serves the Project site. The existing resources would be adequate to meet the additional demands generated by the Project. The Los Alamitos Police Department has not indicated the need for a new police station or expansion of existing facilities due to the Project. Responses times and service ratios would be met and would not require the construction of new facilities.

The Seal Beach Police Department indicated that the Project site is within the City of Los Alamitos and serviced by Los Alamitos Police Department. The Seal Beach Police Department provides service to Lampson Avenue and requested that the Draft EIR address traffic flow and safety, which were addressed in the Draft EIR and Master Responses 2.1.1, Transportation and Traffic Congestion, and 2.1.2 *Roadway Safety on Lampson Avenue*, above.

Moreover, Project development would result in increased property tax and, indirectly, sales tax revenue proportionally increasing the City's General Fund revenue, providing funding for police protection services, equipment, and/or personnel. Because the Project does not include construction of new police facilities and does not generate a need for additional facilities, increases in demands for police protection resulting from implementation of the Project impacts would be less than significant. No mitigation is required (refer to Pages 4.13-8 through 4.13-10 of the Draft EIR).

As discussed in Section 4.13, *Public Services* of the Draft EIR, considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Per correspondence with the OCFA, there are currently no deficiencies in fire protection service provided to the Project site. In order to maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs.

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Project development would occur in an area of the City already served by OCFA; therefore, the Project would not result in an expansion of OCFA's service area. In the event of an emergency within the Project site that requires more resources than the primary fire stations that serve the area could provide, OCFA would direct resources to the site from other OCFA stations nearby (refer to Page 4.13-8 through 4.13-10 of the Draft EIR). As a result, response times would not decrease to necessitate the construction of a new fire station.

2.1.9 PROXIMITY TO THE LOS ALAMITOS JOINT FORCES TRAINING BASE (JFTB)

A. Safety

Many commenters expressed concerns related to safety hazards based on the Project's proximity to the Los Alamitos JFTB and stated that two State Agencies, Cal Trans Division of Aeronautics and the California Airport Land Use Commission, had issued warnings that projects within close proximity to the JFTB have safety and health issues. As discussed in Section 2.4.3, *Airport Environs Land Use Plan for The Joint Forces Training Base Los Alamitos*, the Airport Land Use Commission's (ALUC) previous finding that the City's Housing Element, including the Project site, was inconsistent with the Airport Environs Land Use Plan for the Joint Forces Training Base Los Alamitos, was overruled by the Los Alamitos City Council on December 11, 2023, pursuant to Public Utilities Code Sections 21670 and 21676.

As discussed in Section 4.8, *Hazards and Hazardous Materials*, of this EIR, the Project site is not located within the CZs or APZ (refer to Figure 4.8-1, *JFTB Impact Zones*) for the JFTB. Therefore, the Project does not concentrate people in areas susceptible to aircraft accidents. Moreover, the FAA issued Determinations of No Hazard to Air Navigation (*Technical Appendix J2* of the Draft EIR) after its aeronautical study of the Project determined that the structures would not exceed obstruction standards and would not be a hazard to air navigation on January 26, 2022. Military safety areas are intended to protect people on the ground from airplanes and the FAA airspace determinations are intended to protect airplanes from structures and interference on the ground. As such, the Project would not result in a safety hazard for people residing at the Project site (refer to Page 4.8-18 of the Draft EIR).

Additionally, as shown in Figure 4.8-2, *Los Alamitos JFTB Flight Patterns*, the Project site is not located within any of the flight patterns in the JFTB. As discussed in Section 4.10, *Land Use and Planning*, of the Draft EIR, the ALUC mandates the provision of the State's real estate disclosure regarding buyer and renter notification for new residential land uses within an airport influence area even if these state laws were to be revised or rescinded. The ALUC also requires that signs providing these disclosures and notices be "prominently posted" in real estate sales offices and within the new development depicting overflight areas and helicopter traffic patterns. Buyer awareness is required as part of the City's approval process for the Project. The buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location (refer to Page 4.10-18 of the Draft EIR).

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Many comments also provided suggested mitigation measures to be included in the Draft EIR. However, based on the preceding information, the Project would not result in significant impacts related to any safety hazards associated with the JFTB. Therefore, additional mitigation measures related to safety hazards are not warranted.

B. Noise Impacts and Noise Insulation

Many commenters expressed concerns regarding noise impacts for Project residents due to the proximity of the Los Alamitos JFTB. Additionally, commenters expressed concerns regarding the need for noise insultation in walls, windows, and ceilings for the Project's structures. As discussed in Section 4.11, *Noise*, of the Draft EIR, an on-site exterior aircraft noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent JFTB Los Alamitos aircraft noise sources in the Project study area, and to identify environmental impacts from the proposed Project and potential noise abatement measures for the proposed Project that would achieve acceptable Project noise levels, if required.

The JFTB Los Alamitos is located adjacent to, and northwest of the Project. Figure 4.11-4, *APHC 2020 Airport Noise Level Contour Boundaries*, of the Draft EIR shows the Project site in relation to the airport's projected noise level contour boundaries, as provided by the 2020 Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos. As shown on Figure 4.11-5, *On-Site Aircraft Noise Level Contours*, of the Draft EIR, the northwestern portion of the Project site would locate residential uses between the 60 and 65 dBA CNEL noise level contours. Residential land uses exposed to noise levels less than 60 dBA CNEL are "normally consistent." Residential uses exposed to noise levels between 60 and 65 dBA CNEL are considered "conditionally consistent" with AELUP Noise limitations, requiring that sound attenuation as identified by the California Noise Insulation Standards, Title 25, California Code of Regulations is implemented to ensure that the interior CNEL does not exceed 45 dBA.

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction would provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings.

The Project will implement sound attenuation methods to ensure the interior CNEL does not exceed 45 dB. For example, the Project will provide mechanical ventilation (e.g. air conditioning) in all units. In addition, with implementation of PDF-N-2, which includes the use of windows with a STC rating of 29 on all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos, the Project would be designed to achieve a 25 dBA reduction and meet the 45 dBA CNEL interior noise standard. Accordingly, the Project would not expose people residing or working in the Project area to excessive

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noise levels from airport or aircraft operations, and impacts would be less than significant. No mitigation is required (refer to Page 4.11-31 of the Draft EIR).

2.1.10 Loss of Existing Open Space and Provision of On-Site Amenities

Many commenters expressed concerns regarding loss of existing open space and failure to provide on-site amenities for Project residents. As discussed in Section 2.0, *Environmental Setting*, under existing conditions, the Project site is currently developed with a vacant two-story, 88,000 sf commercial office building (most recently occupied by WestEd, California Department of Fish and Wildlife, National Comfort Institute, Inc., and James J. Mentas Attorney at Law) located centrally within the Project site and surface parking lot located within the western portion of the Project site. The remainder of the Project site consists of undeveloped/vacant land, which includes approximately 5.97 acres of developed/ornamental land and approximately 6.40 acres of disturbed/ornamental land (refer to Pages 2-6 through 2-7 of the Draft EIR) which provides very little value as open space or for recreation as the site was used for commercial uses and existing trees appear to be in declining health from possibly a variety of reasons including but not limited to an unknown disease and stress from drought.

The Project would provide a variety of common open space amenities, as well as a variety of privately maintained open space and decks. The Project would provide a total of 58,027 square feet (sf) or 1.33 acres of open space on the Project site, including 16,508 sf of usable common open space and 41,519 sf of private open space (homeowner maintained). The Project would result in an increase in residents; however, as explained in the following paragraph, the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated.

Based on the Project's Parks Impact Analysis (*Technical Appendix M* of the Draft EIR), it is anticipated that a negligible amount of Project residents will regularly visit parks in close proximity to the Project site specifically, Arbor Park, Arbor Dog Park, and Heather Park. Specifically, it is anticipated that a total of 178 Project residents would visit the designed neighborhood open spaces within the Project site and 131 Project residents would visit Arbor Park, Arbor Dog Park, and Heather Park as the parks they visit most often. Project residents are anticipated to visit (frequent) Arbor Park and Heather Park as follows: approximately 22 users 2 times per week, 18 users once per week, 27 users once or twice per month, 32 users several times per year, and 20 users once or twice per year (see Table 2, *Technical Appendix M* of this Draft EIR). Project residents' dogs are anticipated to visit (frequent) Arbor Dog Park 147 times once per week. (sees Tables 3 and 4, *Technical Appendix M* of this Draft EIR).

The carrying capacity of Arbor Park and Heather Park is 270 and 67 visitors, respectively, and there is no calculation for carrying capacity for Arbor Dog Park due to the nature of a dog park. Carrying capacity (referring to the number of visitors that can be accommodated in a park without unacceptable impacts to the quality of the visitor experience) can be calculated for a park utilizing the amenities, such as playgrounds, baseball fields, and open lawn areas present in the park. Because the projected number of Project visitors to these parks are well within the carrying capacity stated above, there is sufficient capacity at existing nearby neighborhood parks to accommodate the Project residents. With full occupancy of the Project, the designed neighborhood open spaces within the Project site, the

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capacity and existing maintenance and usage of existing parks, and the anticipated visitation of the Project residents to the existing parks; the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated.

Based on the Project's Parks Impact Analysis (*Technical Appendix M* of this EIR), there is sufficient capacity at existing neighborhood parks to accommodate the Project residents and impacts would be less than significant. Refer to Section 4.14, *Recreation*, of the Draft EIR for further discussion (refer to Pages 4.14-8 to 4.14-9 of the Draft EIR).

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3.0 RESPONSES TO COMMENTS RECEIVED DURING THE PUBLIC REVIEW PERIOD

This section includes responses to substantive Draft EIR comments received by the City. With respect to comment letters received, aside from certain courtesy statements, introductions, and closings, individual comments within the body of each letter have been identified and numbered. A copy of each comment letter and the City's responses to each applicable comment are included in this section. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each comment identified are included on the page(s) following each comment letter. Responses to comments are being sent to the agencies and organizations that provided comments at least 10 days prior to the City's consideration of the Project and EIR.

Revisions to the Draft EIR have been prepared to make minor corrections and clarifications to the Draft EIR as a result of City review, and comments received during the public review period (refer to Section 4.0, *Draft EIR Clarifications and Revisions*, of this document). Therefore, this Response to Comments section, and the Draft EIR Clarifications and Revisions section, are included as part of this Final EIR along with the Draft EIR for consideration by the City prior to a vote to certify the EIR.

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COMMENT LETTER A

AIRPORT LAND USE COMMISSION
FOR ORANGE COUNTY
3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

June 10, 2024

Tom Oliver, Associate Planner
City of Los Alamitos Planning Division
3191 Katella Avenue
Los Alamitos, CA 90720

Subject: Draft Environmental Impact Report for 4665 Lampson Avenue Project

Dear Mr. Oliver:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the 4665 Lampson Avenue Project in the context of the Airport Land Use Commission's (ALUC) *Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos.* The proposed project would redevelop the existing office building on the 12.3-acre site with a residential development consisting 246 residential units including: 55 single family homes, 114 townhomes, and 77 affordable multi-family apartment homes. The proposal also includes 21,000 square feet of common open space and 557 parking spaces. The proposed discretionary approvals include a General Plan Amendment, Zone Change, Specific Plan and Tentative Tract Map. A-1

The proposed project site was included in the City's Housing Element Update which was submitted to ALUC for a consistency review. On January 19, 2023, the ALUC found the Los Alamitos Housing Element Update to be inconsistent with the *Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base Los Alamitos* (*JFTB Los Alamitos)* due in part to the subject site (Site 6), along with other sites in the City, being changed from non-residential uses to residential. The inconsistent finding was based on: A-2

1. AELUP Section 2.1.1 Aircraft Noise, that the "aircraft noise emanating from airports may be incompatible with general welfare of the inhabitants within the vicinity of an airport." A-3

2. PUC Section 21674, (as referenced in Section 1.2 of the *AELUP for JFTB Los Alamitos*) which states that the Commission is charged by PUC Section 21674(a) "to assist local agencies in ensuring compatible land uses in the vicinity of …existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses," and PUC Section 21674(b) "to coordinate planning at the state, regional and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety and welfare." A-4

3. AELUP General Land Use Policies in Section 3.2.1 which states that "within the boundaries of the AELUP, and land use may be found to be Inconsistent with the AELUP which (1) Places people so that they are affected adversely by aircraft noise and (2) Concentrates people in areas susceptible to aircraft accidents."

A-5

While the City overruled ALUC on December 11, 2023, in accordance with PUC 21676(b), ALUC has the following comments.

Section 4.11 Noise of the DEIR indicates that there would be a less-than-significant impact and no mitigation is required for "Threshold c: For a project located within the vicinity of … an airport land use plan..., would the Project expose people residing or working in the project area to excessive noise levels?" The project site is within the airport land use plan area for JFTB Los Alamitos, and within the 60 dB noise contour for JFTB Los Alamitos. Sites within the AELUP noise contours must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations. Residential use sound attenuation is required to ensure that the interior CNEL does not exceed 45 dB.

A-6

In addition, for noise sensitive uses, the Commission recommends a posting of: "NOTICE OF AIRPORT IN VICINITY: This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibrations, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."

A-7

Thank you again for the opportunity to comment on the initial study. Please contact me at (949) 252-5170 or via email at jfitch@ocair.com should you have any questions related to the Airport Land Use Commission for Orange County.

A-8

Sincerely,

Julie Fitch

Julie Fitch
Interim Executive Officer

Responses to Comment A

Airport Land Use Commission (ALUC) for Orange County, dated June 10, 2024.

A-1 The commenter provides introductory remarks and a summary of the Project. For clarification regarding the proposed open space, the Project would provide 58,027 sf of open space, including approximately 16,508 sf of usable common open space, approximately 41,519 sf of private open space, and approximately 78,038 sf of planting area (refer to Page 3-7 of the Draft EIR).

A-2 The commenter states the Project site was included in the City's Housing Element Update and ALUC had previously found the updated Housing Element to be inconsistent with the Airport Environs Land Use Plan (AELUP) for JFTB for reasons listed in the comment. The Draft EIR acknowledges that ALUC previously found the Housing Element to be inconsistent with the AELUP. As provided in Section 2.0, *Environmental Setting*, of the Draft EIR, City's Housing Element received certification from the State Housing and Community Development Department (HCD). However, the Housing Element received an inconsistent finding from ALUC on January 19, 2023. On February 21, 2023, the City Council adopted Resolution 2023-04, providing notice of the City's intent to overrule ALUC's determination. The City Council conducted a Study Session and reviewed information related to ALUC's finding of inconsistency on July 17, 2023. A Public Hearing was held on August 21, 2023, where the City Council considered the adoption of a resolution overruling the ALUC's determination but failed to receive the required two-thirds affirmative vote (four affirmative votes were required). On September 21, 2023, the ALUC voted to require the City to submit all discretionary actions related to Housing Element Sites 6 (4655 Lampson Avenue), 7 (Laurel Park), and 10 (5030-5084 Katella) to ALUC for review until such time as the General Plan is revised, or the City overrules ALUC's determination. On December 11, 2023, the City received a four/fifths vote from the Los Alamitos City Council to overrule ALUC's finding and adopt the City's Housing Element pursuant to the State Aeronautics Act. Accordingly, approval from ALUC is not required for the Project because the Project site is listed as a Housing Opportunity Site in the City's Housing Element, which was included in the City Council's vote to overrule the ALUC (refer to Page 2-6 of the Draft EIR).

Refer to Response to Comment A-3 through A-5 related to the inconsistency reasoning.

A-3 The commenter states that the Housing Element inconsistency finding was based on AELUP Section 2.1.1 – "aircraft noise emanating from airports may be incompatible with the general welfare of inhabitants in the vicinity of an airport." The commenter merely restates the text of this section and does not provide further information to evaluate the assertion that the Project is inconsistent or explain why the Project would be inconsistent with this finding. Refer to Response to Comment A-6 related to noise impacts from aircrafts.

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A-4 The commenter states that the Housing Element inconsistency finding was also based on Public Utilities Code (PUC) Section 21674, which states that the Commission is charged to assist local agencies in ensuring compatible land uses in the vicinity of existing airports. The commenter merely restates the text of this section and does not provide further information to evaluate the assertion that the Project is inconsistent or to assess why the commenter believes the Project would be inconsistent with this finding. The Draft EIR documented the proper procedural requirements with respect to ALUC input as described in Response to Comment A-2.

A-5 The commenter states that the Housing Element inconsistency finding was based on AELUP General Land Use Policies in Section 3.2.1, which states that Land uses may be found to be inconsistent with the AELUP if it 1) places people so that they are affected adversely by aircraft noise and 2) concentrates people in areas susceptible to aircraft accidents. Refer to Response to Comment A-3 regarding aircraft noise impacts. As discussed in Section 4.10, *Land Use and Planning*, of the Draft EIR, the Project site is not located within the clear zones or accident potential zone (refer to Figure 4.8-1, JFTB Impact Zones) for the JFTB. Therefore, the Project does not concentrate people in areas susceptible to aircraft accidents and would not result in a safety hazard for people residing at the Project site (refer to Page 4.10-15 of the Draft EIR). The commenter does not provide additional information related to aircraft accidents that would affect the finding documented in the Draft EIR.

A-6 The commenter states while the City overruled ALUC on December 11, 2023, the commenter has additional comments regarding the Project. The commenter summarizes threshold c in Section 4.11, *Noise*, of the Draft EIR, and states that projects within the 60 dB noise contour must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations. The Draft EIR acknowledges that the Project is near JFTB and evaluates noise emanating from the airport in Section 4.11, *Noise*, of the Draft EIR. An on-site exterior aircraft noise impact analysis has been completed to evaluate the potential noise exposure levels that would result from adjacent JFTB Los Alamitos aircraft noise sources in the Project study area, and to identify environmental impacts from the proposed Project and potential noise abatement measures for the proposed Project that would achieve acceptable Project noise levels, if required. As shown on Figure 4.11-5, *On-Site Aircraft Noise Level Contours*, the northwestern portion of the Project site would locate residential uses between the 60 and 65 dBA CNEL noise level contours. Residential land uses exposed to noise levels less than 60 dBA CNEL are "normally consistent." Residential uses exposed to noise levels between 60 and 65 dBA CNEL are considered "conditionally consistent" with AELUP Noise limitations, requiring that sound attenuation as identified by the California Noise Insulation Standards, Title 25, California Code of Regulations is implemented to ensure that the interior CNEL does not exceed 45 dBA.

The Project will implement sound attenuation methods to ensure the interior CNEL does not exceed 45 dBA. For example, the Project will provide mechanical ventilation (e.g. air conditioning) in all units. In addition, with implementation of PDF-N-2, which includes the

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use of windows with a STC rating of 29 on all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos, the Project would be designed to achieve a 25 dBA reduction and meet the 45 dBA CNEL interior noise standard. Accordingly, the Project would not expose people residing or working in the Project area to excessive noise levels from airport or aircraft operations, and impacts would be less than significant. No mitigation is required (refer to Page 4.11-31 of the Draft EIR).

Refer also to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, related to noise impacts. A portion of the Project is within the 60 dBA noise contour, and as such, the Project will implement PDF-N-2, which includes the use of windows with a STC rating of 29 on all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos, ensuring the Project is designed to achieve a 25 dBA reduction and meet the 45 dBA CNEL interior noise standard. Thus, no further response is required.

A-7 The commenter also recommends a posting of "NOTICE OF AIRPORT IN VICINITY". The commenter's recommendation is already addressed in Section 4.10, *Land Use and Planning*, of the Draft EIR (refer to Page 4.10-18 of the Draft EIR). As discussed in Section 4.10, *Land Use and Planning of the Draft EIR*, the buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location. Buyer awareness is required as part of the City's approval process for the Project including the statement "NOTICE OF AIRPORT IN VICINITY". Refer also to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, related to buyer awareness. Thus, no further response is required.

A-8 The commenter provides concluding remarks, and the City acknowledges Julie Fitch as the contact person for ALUC. No further response is required.

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COMMENT LETTER B

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 12
1750 East 4th Street, Suite 100 | SANTA ANA, CA 92705
(657) 328-6000 | FAX (657) 328-6522 TTY 711
https://dot.ca.gov/caltrans-near-me/district12

June 10, 2024

Mr. Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90740

File: LDR/CEQA
SCH: 2022090476
12-ORA-2022-02577
I-405, PM 21.086
SR 22, PM R0.668
SR-39, PM 9.279

Dear Mr. Oliver,

Thank you for including the California Department of Transportation (Caltrans) in the review of the Draft Environmental Impact Report (EIR) for the 4665 Lampson Avenue Project. The Project Applicant proposes to redevelop the existing office building with a residential development consisting of a variety of different product types, including: cluster homes, townhomes, and apartments. The unit mix would include 55 cluster homes, 114 townhomes, and 77 affordable multi-family apartment homes. The mixed density for the Project would be 20 dwelling units per acre (DUA). The Project would provide approximately 21,000 sf of common open space, which includes a central 14,000 sf neighborhood open space area. Under the City's R-3 development standards, the maximum building height for the Project is 35 feet. The Project would provide a total of 557 parking spaces: 459 parking spaces for the cluster homes and townhomes and 98 parking spaces for the affordable multifamily apartment homes. Vehicle access to the Project site would be provided via one driveway on Lampson Avenue.

The 4655 Lampson Avenue Project (Project) site is located in the City of Los Alamitos, Orange County, California. The 12.3-acre Project site is located north of Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street. The project is located less than a half mile from Interstate 405 (I-405), The project is also two and a quarter mile from Interstate 605 (I-605), two miles from State Route (SR) SR-39 and almost a mile from SR-22. All four State Routes are owned and operated by Caltrans. Caltrans is a responsible agency on this project, and has the following comments:

B-1

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City of Los Alamitos
June 10, 2024
Page 2

1. To ensure safe operations, please assess the capacity(s) (storage length) of the off-ramps at Valley View St./Bolsa Chica Rd. This assessment should determine if the ramp(s) is/are able to accommodate the demand(s) and will not create a back-up onto the freeway mainline. B-2

2. Regional access to the project is through the I-405, I-605, and SR 22 freeway. Therefore, the document should include a discussion on any potential impacts of this project I-405, I-605, and SR 22 ramps and mainline. B-3

3. In the Traffic Impact Analysis, please include HCM intersection analysis along with current and projected capacities of local street, and state highways or freeways including ramps that might be impacted. B-4

4. If impact analysis leads to findings of significance on State facilities, please coordinate with Caltrans District 12 Local Development on development of a Traffic Mitigation Agreement or similar effort. B-5

5. Caltrans encourages the design of Complete Streets that include high-quality pedestrian, bicycle, and transit facilities that are safe and comfortable for users of all ages and abilities. Improvements may include providing secure bicycle parking, pedestrian-oriented LED lighting, and comfortable connections to nearby active transportation and/or transit facilities. Complete Streets improvements also promote regional connectivity, improve air quality, reduce congestion, promote improved first-/last-mile connections, and increase safety for all modes of transportation. B-6

6. New residential infill development offers an opportunity to encourage multimodal transportation options. Caltrans encourages the project to look at opportunities to include Complete Streets improvements in the project, and/or to improve bicycle, pedestrian, and transit access and connectivity to nearby bikeway, sidewalk, and transit facilities. B-7

7. Encourage the use of transit among future residents, visitors, and workers of the development. Increasing multimodal transportation may lead to a reduction to congestion, Vehicle Miles Traveled, and improve air quality. Provide adequate wayfinding signage and related amenities to the transit stops within the project vicinity. B-8

8. There is an existing Class II bike lane on Lampson Avenue. Consider adding signage for drivers to watch for bicyclists and pedestrians near driveways on Lampson Avenue. Also, consider green conflict zone paint on the Class II near driveways. B-9

"Provide a safe and reliable transportation network that serves all people and respects the environment"

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9. During project construction, if there are any impacts to the existing bike lanes on Lampson Avenue, please ensure that appropriate temporary detours are provided to maintain safe bicycle access to Lampson Ave. B-10

10. Please ensure that truck parking, ingress and egress, and staging will not interfere with vehicle parking, pedestrian paths, or bicycle lanes/bicycle parking. B-11

11. Establish freight pick up and drop off times that do not coincide with peak commute hours to reduce passenger vehicle conflicts and congestion for freight. Consider designating on-street freight-only parking and delivery time windows so trucks will not resort to double parking, thus causing street traffic congestion. B-12

Caltrans' mission is to provide a safe, sustainable, equitable, integrated, and efficient transportation system to enhance California's economy and livability. Please continue to coordinate with Caltrans for any future developments that could potentially impact State transportation facilities. If you have any questions, please do not hesitate to contact Julie Lugaro at: Julie.lugaro@dot.ca.gov. B-13

Sincerely,

Scott Shelley
Branch Chief, Regional-LDR-Transit Planning
Caltrans, District 12

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"Provide a safe and reliable transportation network that serves all people and respects the environment"

Responses to Comment B

California Department of Transportation (Caltrans), dated June 10, 2024.

B-1 The commenter provides an introductory statement and summarizes the Project and states that Caltrans is a responsible agency on the project. For clarification regarding the proposed common open space, the Project would provide 58,027 sf of open space, including approximately 16,508 sf of usable common open space, approximately 41,519 sf of private open space, and approximately 78,038 sf of planting area (refer to Page 3-7 of the Draft EIR). Additionally, vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Furthermore, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site (refer to Page 3-4 of the Draft EIR). There are no expected discretionary or administrative actions needed from Caltrans on this Project; therefore, Caltrans is not considered a responsible agency for this Project.

B-2 The commenter requests an analysis of the capacities (storage length) of off-ramps at Valley View Street and Bolsa Chica Road to determine if the ramps are able to accommodate the demand and will not create a back-up onto the freeway mainline. Although the Caltrans guidelines have been updated and no longer include guidelines related to level of service, Caltrans used to require an analysis of capacities at State facilities when a Project contributes 50 or more peak hour trips to a State off-ramp or intersection. However, this is still a reasonable metric to determine whether a Project would have a measurable impact on State facilities. As shown in Exhibit 4-2 of the Traffic Analysis (*Attachment G* of this Final EIR), the Project would send less than 50 peak hour trips to the off-ramps at Valley View Street and Bolsa Chica Road (25 AM and 42 PM peak hour trips, respectively). As a result, since the Project would contribute less than 50 peak hour trips to a State off-ramp, and industry standard recognizes that any contribution less than 50 peak hour trips does not cause a significant increase in delay or create a safety hazard; therefore, an analysis of capacities of off-ramps at Valley View Street and Bolsa Chica Road is not needed or required.

B-3 The commenter states that the document should include a discussion on any potential impacts of the Project on I-405, I-605, and SR-22 freeway ramps and mainline. For the reasons stated above, the Project would not have measurable impact to these State facilities, including ramps or mainline facilities. Refer to Response to Comment B-2. Specifically, the peak hour trips at the freeway ramps at I-405, I-605, and SR-22 are listed below and the Project would contribute less than 50 peak hour trips to these ramps, and industry standard recognizes that any contribution less than 50 peak hour trips does not cause a significant increase in delay.

- I-405/I-605 via Seal Beach Boulevard: 35 AM and 45 PM peak hour trips
- SR-22/I-405 via Valley View/Bolsa Chica: 25 AM and 42 PM peak hour trips

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B-4 The commenter states that the Project's Traffic Analysis (*Technical Appendix N1* of the Draft EIR) should include HCM intersection analysis along with current and projected capacities of local street, and state highways or freeways including ramps that might be impacted. As discussed previously, transportation analysis under CEQA is now based on VMT rather than impacts to automobile delay-LOS based on intersection analysis (traffic congestion).

The intersection analysis methodology complies with the traffic guidelines of the jurisdiction where the study area intersections are located. The study area intersections (see Table 1-1 of *Attachment G* of this Final EIR) are within the jurisdictions of Los Alamitos, Seal Beach, and Garden Grove; and not Caltrans. The cities of Los Alamitos, Seal Beach, and Garden Grove require Intersection Capacity Utilization (ICU) analysis and not HCM per their respective Traffic Study Guidelines. Because Caltrans does not have jurisdiction over study area intersections, HCM intersectional analysis is not required.

B-5 The commenter states that if the impact analysis leads to findings of significance on State facilities, to coordinate with Caltrans District 12 Local Development on development of a Traffic Mitigation Agreement or similar effort. This comment is noted. Please refer to responses to Comments B-2 through B-4 regarding Project's impacts on State facilities. No further response is required.

B-6 The commenter states that Caltrans encourages the design of Complete Streets that include high-quality pedestrian, bicycle, and transit facilities that are safe and comfortable for users of all ages and abilities. The Project has been designed to incorporate pedestrian improvements and tie into regional bicycle facilities. Frontage improvements would include sidewalk improvements, driveway modifications to accommodate site access, and landscaping improvements as required by City standards, which would improve the safety and comfort of pedestrian and bicycle crossings. As discussed in Section 3.0, *Project Description*, of the Draft EIR, non-motorized circulation would include pedestrian connectivity with existing sidewalks along Lampson Avenue, including an existing signalized pedestrian connection to the south at Rose Street and Lampson Avenue and pedestrian "paseo" connections with Arbor Park and the Arbor Dog Park to the north. The Project would provide pedestrian gates to be controlled by the Homeowners' Association to restrict residents from entering Arbor Park and Arbor Dog Park outside of hours specified by JTFB. The Project would also promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations (refer to Pages 3-4 and 3-5 of the Draft EIR). Refer also to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, related to Pedestrian and Bicycle Facilities. Refer also to Response to Comment B-7.

B-7 The commenter encourages the Project to look at opportunities to encourage multimodal transportation options, to include Complete Streets improvements in the Project, and/or to improve bicycle, pedestrian, and transit access and connectivity to nearby bikeway, sidewalk, and transit facilities. As discussed in Table 4.15-1, *Consistency with the General Plan Mobility and Circulation Element*, of the Draft EIR, the Project facilitates multimodal mobility. An off-

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site pedestrian circulation system would be available in proximity to the Project site with an interconnected paved sidewalk system with the roadway right-of-way separated from vehicular travel lanes by a landscaped parkway. There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. Additionally, there is a Class I bike/pedestrian path along Seal Beach Boulevard, north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project would maintain the existing Class II bike lane on Lampson Avenue along the Project site's frontage. Moreover, bike lane improvements are currently ongoing on Lampson Avenue between Basswood Street and Seal Beach Boulevard, which will connect to the existing Class I bike lane on Lampson Avenue (refer to Page 4.15-10 of the Draft EIR). Refer also to Response to Comment B-6.

B-8 The commenter encourages the use of transit among future residents, visitors, and workers of the Project to reduce congestion, Vehicle Miles Traveled and improve air quality. The commenter also encourages the provision of adequate wayfinding signage and related amenities to the transit stops within the Project vicinity. There is currently no transit service to the Project site or within a 0.25 mile radius. The nearest OCTA bus stop from the Project site is Route 123, approximately 1.2 miles at the intersection of Valley View Street and Lampson Avenue. As discussed in Section 4.15, *Transportation* of the Draft EIR, however, Mitigation Measure MM 4.15-1 includes implementing CAPCOA strategies such as coordination with OCTA to provide new or re-routing existing transit services to the site, as determined to be feasible by OCTA pursuant to OCTA's standards (refer to Page 4.15-19 of the Draft EIR). Additionally, regarding air quality impacts, as discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant (refer to Pages 4.2-24 and 4.2-25 of the Draft EIR).

B-9 The commenter states that there is an existing Class II bike lane on Lampson Avenue and recommends adding signage for drivers to watch for bicyclists and pedestrians near driveways on Lampson Avenue and green conflict zone paint on the Class II bike lane near driveways. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, related to sight distance and other safety measures implemented by the Project. As demonstrated, the Project would not result in a safety hazard. However, this comment will be taken under consideration; the City Engineer will evaluate the need for signage and/or green conflict zone paint during review of the Project's construction drawings. Thus, no further response is required.

B-10 The commenter requests that appropriate temporary detours are provided to maintain safe bicycle access to Lampson Avenue if there are encroachments to existing bike lanes during construction. As discussed in 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, during construction, the Project would result in roadway improvements along Lampson, including replacement of the existing median curb and construction of the two proposed driveways. Construction on Lampson will require an encroachment permit and approval from the City Engineer. Lane closures that may be required for median improvements would be temporary

DRAFT

and require a permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. Compliance with LAMC 12.08.200 would ensure safe crossing and access for all vehicles and pedestrians/bicyclists at all times (refer to Pages 4.8-21 of the Draft EIR).

B-11 The commenter requests to ensure that truck parking, ingress and egress, and staging will not interfere with vehicle parking, pedestrian paths, or bicycle lanes/bicycle parking. During construction all staging will occur on the Project site to ensure that there are no conflicts with vehicle parking, pedestrian paths, or bicycle lanes/parking. Refer also to Response to Comment B-10 above regarding temporary closures during construction. Operationally, since the proposed use is residential, a limited number of trucks would travel to the Project site (e.g. trash trucks, emergency vehicles, delivery vans). Figure 4.8-3, *Fire Master Plan*, demonstrated adequate turning radii for emergency vehicles to access the Project site. A Safety Evaluation was prepared for the Project (*Attachment H* of this Final EIR), which evaluated on-site vehicle circulation. The Safety Evaluation identifies the on-site circulation for the site, including various vehicle paths (front-loading garbage trucks, fire trucks, delivery trucks, etc.) for various internal drive aisles, which allow for two-way traffic. Access to and from the site will be accommodated via driveways on Lampson Avenue. The vehicle turning templates show acceptable turning movements for the various vehicles and trucks anticipated to access the site (see Attachment D of *Attachment H* of this Final EIR). Therefore, truck parking, ingress and egress, and construction staging would not interfere with vehicle parking, pedestrian paths, or bicycle lanes/bicycle parking.

B-12 The commenter requests that the Project establish freight Pick up and drop off times that do not coincide with peak commute hours to reduce passenger vehicle conflicts and congestion for freight. The Project does not involve freight operations as it is a residential project. As it relates to delivery trucks refer to Response to Comment B-11. There would be no conflicts between delivery trucks and passenger cars and congestion is not an impact evaluated under CEQA (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*). However, this comment is noted for the record.

B-13 The commenter provides concluding remarks, and the City acknowledges Julie Lugaro as the contact person for Caltrans. Thus, no further response is required.

DRAFT

COMMENT LETTER C

CITY OF GARDEN GROVE

May 29, 2024

City of Los Alamitos
Attn: Tom Oliver, Associate Planner
3191 Katella Avenue
Los Alamitos, CA 90720
toliver@cityoflosalamitos.org

RE: Notice of Availability of Draft Environmental Impact Report for the 4665 Lampson Avenue Project

Dear Tom,

Thank you for providing the Notice of Availability of Draft Environmental Impact Report for the 4665 Lampson Avenue Project. Department staff of the City of Garden Grove have reviewed the available documents. The following comments are provided for your consideration:

- Please see attached redlines, by the City of Garden Grove Public Works Department, Traffic Engineering Division, on the Traffic Analysis Report by Urban Crossroads, dated June 1, 2023.

C-1

If you have any questions, please contact me at (714) 741-5314 or chrisc@ggcity.org.

Sincerely,

Chris Chung
Senior Planner

Attachments: Redlines on the Traffic Analysis Report by Urban Crossroads, dated June 1, 2023

11222 Acacia Parkway • P.O.Box 3070 • Garden Grove, CA 92842
www.ci.garden-grove.ca.us

N1_TA Report - GG Engineering Comments 5 10 24.pdf Markup Summary

Callout (17)



Subject: Callout
Page Label: 13
Author: juann
Date: 5/10/2024 2:14:27 PM
Status:
Color:
Layer:
Space:

Why were the following intersections not studied?

11. Lampson/Manley
12. Lampson/Blackmer



Subject: Callout
Page Label: 14
Author: juann
Date: 5/9/2024 1:50:55 PM
Status:
Color:
Layer:
Space:

Lampson/Manley



Subject: Callout
Page Label: 14
Author: juann
Date: 5/9/2024 1:51:08 PM
Status:
Color:
Layer:
Space:

Lampson/Blackmer



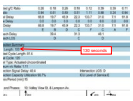
Subject: Callout
Page Label: 50
Author: juann
Date: 5/10/2024 3:03:29 PM
Status:
Color:
Layer:
Space:

elaborate on HCM and ICU methodology and why HCM is appropriate to use at Valley View/Lampson.



Subject: Callout
Page Label: 63
Author: juann
Date: 5/10/2024 3:13:47 PM
Status:
Color:
Layer:
Space:

Who provided timing sheet to you? AM/PM cycle length: 130 seconds.



Subject: Callout
Page Label: 64
Author: juann
Date: 5/10/2024 3:16:16 PM
Status:
Color:
Layer:
Space:

130 seconds

C-1 (CONT.)

DRAFT



Subject: Callout
Page Label: 50
Author: juann
Date: 5/10/2024 3:45:58 PM
Status:
Color:
Layer:
Space:

review comments in appendices, which I've attached at the end of this document and update values.



Subject: Callout
Page Label: 64
Author: juann
Date: 5/10/2024 3:32:46 PM
Status:
Color:
Layer:
Space:

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.



Subject: Callout
Page Label: 65
Author: juann
Date: 5/10/2024 3:41:12 PM
Status:
Color:
Layer:
Space:

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.



Subject: Callout
Page Label: 63
Author: juann
Date: 5/10/2024 3:39:02 PM
Status:
Color:
Layer:
Space:

review city's tia guidelines



Subject: Callout
Page Label: 66
Author: juann
Date: 5/10/2024 3:40:14 PM
Status:
Color:
Layer:
Space:

Who provided timing sheet to you? AM/PM cycle length: 130 seconds.

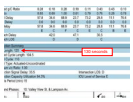


Subject: Callout
Page Label: 66
Author: juann
Date: 5/10/2024 3:40:18 PM
Status:
Color:
Layer:
Space:

review city's tia guidelines

C-1
(CONT.)

DRAFT



Subject: Callout
Page Label: 67
Author: juann
Date: 5/10/2024 3:41:45 PM
Status:
Color:
Layer:
Space:

130 seconds



Subject: Callout
Page Label: 67
Author: juann
Date: 5/10/2024 3:41:53 PM
Status:
Color:
Layer:
Space:

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.



Subject: Callout
Page Label: 68
Author: juann
Date: 5/10/2024 3:42:17 PM
Status:
Color:
Layer:
Space:

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.



Subject: Callout
Page Label: 50
Author: juann
Date: 5/10/2024 3:45:25 PM
Status:
Color:
Layer:
Space:

who provided the timing sheet?



Subject: Callout
Page Label: 50
Author: juann
Date: 5/13/2024 9:39:02 AM
Status:
Color:
Layer:
Space:

Perform left turn queuing analysis to determine if left turn pockets are adequate.

C-1
(CONT.)

Cloud+ (2)



Subject: Cloud+
Page Label: 63
Author: juann
Date: 5/10/2024 3:28:53 PM
Status:
Color:
Layer:
Space:

Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

DRAFT



Subject: Cloud+
Page Label: 66
Author: juann
Date: 5/10/2024 3:40:04 PM
Status:
Color:
Layer:
Space:

Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

Rectangle (2)



Subject: Rectangle
Page Label: 50
Author: juann
Date: 5/10/2024 3:29:14 PM
Status:
Color:
Layer:
Space:



Subject: Rectangle
Page Label: 50
Author: juann
Date: 5/10/2024 3:03:14 PM
Status:
Color:
Layer:
Space:

Text Box (5)



Subject: Text Box
Page Label: 63
Author: juann
Date: 5/10/2024 3:35:34 PM
Status:
Color:
Layer:
Space:

incorporate comments to All sheets!!!!



Subject: Text Box
Page Label: 64
Author: juann
Date: 5/10/2024 3:35:44 PM
Status:
Color:
Layer:
Space:

incorporate comments to All sheets!!!!



Subject: Text Box
Page Label: 65
Author: juann
Date: 5/10/2024 3:35:49 PM
Status:
Color:
Layer:
Space:

incorporate comments to All sheets!!!!

C-1 (CONT.)

DRAFT



Subject: Text Box
Page Label: 66
Author: juann
Date: 5/10/2024 3:40:09 PM
Status:
Color:
Layer:
Space:

Incorporate comments from Appendices 5.1



Subject: Text Box
Page Label: 67
Author: juann
Date: 5/10/2024 3:41:45 PM
Status:
Color:
Layer:
Space:

incorporate comments to All sheets!!!!

C-1
(CONT.)

DRAFT

URBAN | CROSSROADS

CITY OF GARDEN GROVE ENGINEERING COMMENTS 5 10 24

4665 LAMPSON AVENUE

TRAFFIC ANALYSIS

PREPARED BY: Charlene So, PE | cso@urbanxroads.com
Aric Evatt | aevatt@urbanxroads.com



Reference Number	Agency	Date
14501-07 TA Report	City of Los Alamitos	June 1, 2023

1.4 STUDY AREA

To ensure that this TA satisfies the City of Los Alamitos and City of Seal Beach's traffic study requirements, Urban Crossroads, Inc. prepared a Project traffic study scoping package for review by both agencies prior to the preparation of this report. This agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The agreement approved by both Cities is included in Appendix 1.1 of this TA.

The 10 study area intersections shown on Exhibit 1-3 and listed in Table 1-1 were selected for evaluation in this TA based on consultation with both agencies during the scoping process. The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The Orange County CMP became effective with the passage of Proposition 111 in 1990 and most recently updated in 2021. The Orange County Transportation Authority (OCTA) adopted the 2021 CMP for the County of Orange in November 2021. (5) There are no CMP intersections within the study area.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction	CMP?
1	Seal Beach Bl. & Lampson Av.	Seal Beach	No
2	Old Ranch Plaza & Lampson Av.	Seal Beach	No
3	Basswood St. & Lampson Av.	Seal Beach	No
4	Candleberry Av. & Lampson Av.	Seal Beach	No
5	Heather St. & Lampson Av.	Seal Beach/Los Alamitos	No
6	Driveway 1 & Lampson Av.	Seal Beach/Los Alamitos	No
7	Driveway 2 & Lampson Av.	Seal Beach/Los Alamitos	No
8	Rose St. & Lampson Av.	Seal Beach/Los Alamitos	No
9	Tulip St. & Lampson Av.	Seal Beach/Los Alamitos	No
10	Valley View St. & Lampson Av.	Garden Grove	No

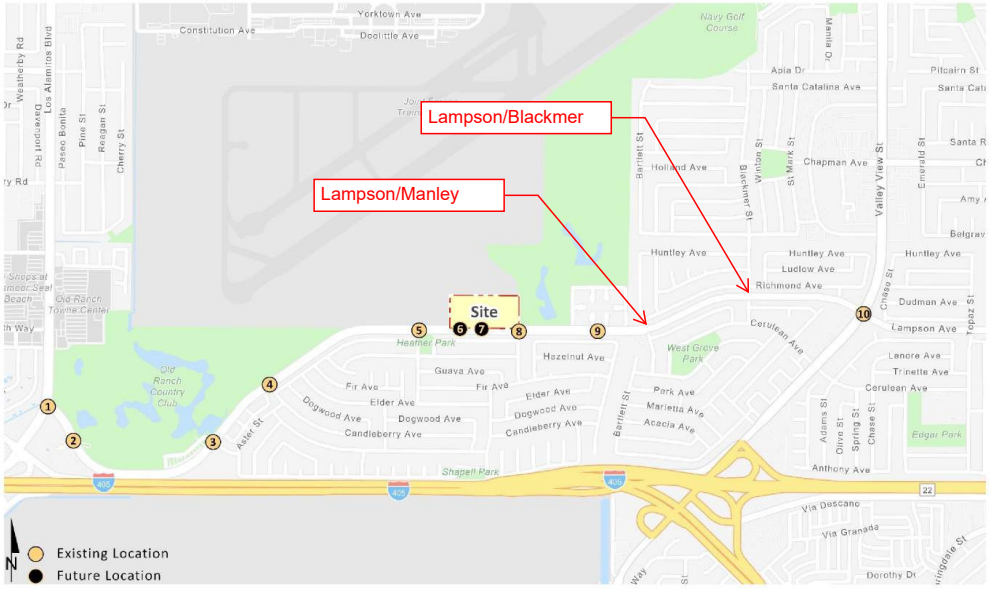
C-2

Why were the following intersections not studied?

11. Lampson/Manley
12. Lampson/Blackmer

URBAN CROSSROADS 4665 Lampson Avenue Traffic Analysis

EXHIBIT 1-3: STUDY AREA



14501-07 TA Report 6

C-2 (CONT.)

elaborate on HCM and ICU methodology and why HCM is appropriate to use at Valley View/Lampson.

Although the intersection of Valley View Street at Lampson Avenue is anticipated to operate at a deficient LOS based on the ICU methodology, a more detailed peak hour intersection operations assessment based on the HCM methodology indicates acceptable peak hour operations. As such, no intersection improvements have been recommended at the intersection of Valley View Street and Lampson Avenue. The intersection operations analysis worksheets for Opening Year Cumulative (2026) Without and With Project traffic conditions are included in Appendix 5.1 and Appendix 5.2 of this TA, respectively.

C-3

TABLE 5-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS

who provided the timing sheet?

#	Intersection	Traffic Control[2]	2026 Without Project Delay (secs.) or ICU (v/c)[1] AM	2026 Without Project Delay (secs.) or ICU (v/c)[1] PM	2026 Without Project Level of Service AM	2026 Without Project Level of Service PM	2026 With Project Delay (secs.) or ICU (v/c)[1] AM	2026 With Project Delay (secs.) or ICU (v/c)[1] PM	2026 With Project Level of Service AM	2026 With Project Level of Service PM
1	Seal Beach Bl. & Lampson Av.	TS	**0.92**	**0.95**	**E**	**E**	**0.93**	**0.96**	**E**	**E**
2	Old Ranch Plaza & Lampson Av.	TS	0.46	0.44	A	A	0.48	0.45	A	A
3	Basswood St. & Lampson Av.	TS	0.51	0.49	A	A	0.53	0.51	A	A
4	Candleberry Av. & Lampson Av.	TS	0.44	0.42	A	A	0.46	0.43	A	A
5	Heather St. & Lampson Av.	TS	0.38	0.42	A	A	0.39	0.44	A	A
6	Driveway 1 & Lampson Av.	**CSS**	Future Intersection				10.9	10.8	B	B
7	Driveway 2 & Lampson Av.	**CSS**	Future Intersection				14.8	15.6	B	C
8	Rose St. & Lampson Av.	TS	0.34	0.41	A	A	0.35	0.42	A	A
9	Tulip St. & Lampson Av.	TS	0.34	0.42	A	A	0.35	0.42	A	A
10	Valley View St. & Lampson Av.	TS	0.80	**0.90**	D	**E**	0.82	**0.92**	D	**E**
	HCM Analysis:		31.4	36.5	C	D	33.3	40.6	C	D

C-4

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

ICU is reported in volume-to-capacity (v/c). ICU analysis conducted for signalized intersections only.

[2] CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

review comments in appendices, which I've attached at the end of this document and update values.

C-5

5.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

All existing study area intersections are currently signalized. As such, no traffic signal warrant analysis has been conducted for Opening Year Cumulative (2026) Without Project traffic conditions. The intersection of Driveway 2 at Lampson Avenue is not anticipated to warrant a peak hour or planning-level (ADT) based warrant under Opening Year Cumulative (2026) With Project traffic conditions. The traffic signal warrant analysis worksheets for Opening Year Cumulative (2026) With Project traffic conditions are included in Appendix 5.3 of this TA.

Perform left turn queuing analysis to determine if left turn pockets are adequate.

C-6

Who provided timing sheet to you?
AM/PM cycle length: 130 seconds.

incorporate comments to All sheets!!!!

review city's tia guidelines

C-7

```
2026 NP PM                  Wed Feb 1, 2023 17:36:44                  Page 9-1
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #10 Valley View & Lampson
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):          0.903
Loss Time (sec):       10               Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        102               Level Of Service:                    E
*******************************************************************************
Approach:      North Bound       South Bound       East Bound       West Bound
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected         Protected       Prot+Permit      Prot+Permit
Rights:           Include           Include          Include          Include
Min. Green:     0    0    0      0    0    0      0    0    0      0    0    0
Y+R:          4.0  4.0  4.0    4.0  4.0  4.0    4.0  4.0  4.0    4.0  4.0  4.0
Lanes:        1  0  3  0  1     1  0  3  0  1     1  0  1  1  0     1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     185 1554   134   145 1688   202   211  200   108   169  208   101
Growth Adj:  1.08 1.08  1.08  1.08 1.08  1.08  1.08 1.08  1.08  1.08 1.08  1.08
Initial Bse:  200 1682   145   157 1827   219   228  216   117   183  225   109
Added Vol:     33   22     5     3   17    28    33    7    29     5   12     6
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  233 1704   150   160 1844   247   261  223   146   188  237   115
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   233 1704   150   160 1844   247   261  223   146   188  237   115
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  233 1704   150   160 1844   247   261  223   146   188  237   115
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  233 1704   150   160 1844   247   261  223   146   188  237   115
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 3.00  1.00  1.00 3.00  1.00  1.00 1.21  0.79  1.00 1.35  0.65
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1936  1264  1600 2153  1047
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15 0.36  0.09  0.10 0.38  0.15  0.16 0.12  0.12  0.12 0.11  0.11
Crit Moves:  ****       ****       ****       ****       ****       ****
*******************************************************************************
```

Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

C-8

```
Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to URBAN CROSSROADS, IRVINE
```

5.1-18

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

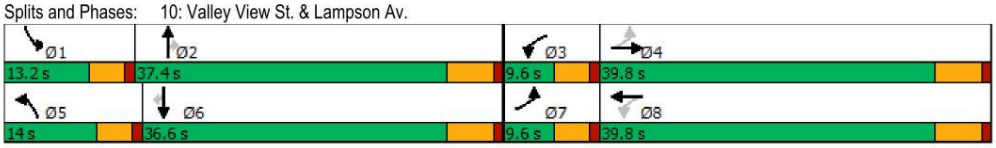
Timings
10: Valley View St. & Lampson Av. 06/01/2023

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	254	216	214	225	222	1704	161	172	1844	235
Future Volume (vph)	254	216	214	225	222	1704	161	172	1844	235
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	9.6	39.8	9.6	39.8	14.0	37.4	37.4	13.2	36.6	36.6
Total Split (%)	9.6%	39.8%	9.6%	39.8%	14.0%	37.4%	37.4%	13.2%	36.6%	36.6%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	21.1	14.8	21.1	14.8	9.5	32.0	32.0	8.7	31.2	31.2
Actuated g/C Ratio	0.26	0.18	0.26	0.18	0.12	0.39	0.39	0.11	0.38	0.38
v/c Ratio	0.94	0.51	0.80	0.51	1.11	0.88	0.24	0.94	0.98	0.36
Control Delay	66.8	19.7	45.9	22.3	133.7	31.0	7.1	91.8	42.8	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.8	19.7	45.9	22.3	133.7	31.0	7.1	91.8	42.8	11.3
LOS	E	B	D	C	F	C	A	F	D	B
Approach Delay		39.4		31.3		40.1			43.3	
Approach LOS		D		C		D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 81.6	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 40.4	Intersection LOS: D
Intersection Capacity Utilization 90.7%	ICU Level of Service E
Analysis Period (min) 15	

130 seconds

Splits and Phases: 10: Valley View St. & Lampson Av.



incorporate comments to All sheets!!!!

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

HCM 6th Signalized
10: Valley View St. & Lampson Av. 06/01/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	216	138	214	225	122	222	1704	161	172	1844	235
Future Volume (veh/h)	254	216	138	214	225	122	222	1704	161	172	1844	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	262	223	108	221	232	104	229	1757	127	177	1901	164
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	354	165	268	362	156	216	2073	635	197	2021	626
Arrive On Green	0.06	0.15	0.15	0.06	0.15	0.15	0.12	0.41	0.41	0.11	0.40	0.40
Sat Flow, veh/h	1781	2347	1095	1781	2401	1038	1781	5106	1564	1781	5106	1583
Grp Volume(v), veh/h	262	167	164	221	170	166	229	1757	127	177	1901	164
Grp Sat Flow(s),veh/h/ln	1781	1777	1665	1781	1777	1662	1781	1702	1564	1781	1702	1583
Q Serve(g_s), s	5.0	6.8	7.2	5.0	7.0	7.3	9.4	24.2	4.1	7.6	27.8	5.4
Cycle Q Clear(g_c), s	5.0	6.8	7.2	5.0	7.0	7.3	9.4	24.2	4.1	7.6	27.8	5.4
Prop In Lane	1.00		0.66	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	268	251	268	268	250	216	2073	635	197	2021	626
V/C Ratio(X)	0.98	0.62	0.65	0.82	0.63	0.66	1.06	0.85	0.20	0.90	0.94	0.26
Avail Cap(c_a), veh/h	266	778	730	268	778	728	216	2079	637	197	2027	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	30.9	31.0	30.8	30.9	31.1	34.1	20.9	14.9	34.1	22.6	15.8
Incr Delay (d2), s/veh	50.6	2.4	2.9	17.5	2.5	3.0	78.4	3.5	0.2	36.1	9.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	2.9	2.9	2.8	2.9	2.9	8.5	8.9	1.3	5.0	11.3	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.7	33.3	33.9	48.3	33.4	34.1	112.5	24.3	15.1	70.1	32.0	16.0
LnGrp LOS	F	C	C	D	C	C	F	C	B	E	C	B
Approach Vol, veh/h		593			557			2113			2242	
Approach Delay, s/veh		55.3			39.5			33.3			33.9	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	37.3	9.6	17.5	14.0	36.5	9.6	17.5
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	8.6	31.6	5.0	34.0	9.4	30.8	5.0	34.0
Max Q Clear Time (g_c+I1), s	9.6	26.2	7.0	9.2	11.4	29.8	7.0	9.3
Green Ext Time (p_c), s	0.0	4.4	0.0	1.7	0.0	0.9	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	36.5
HCM 6th LOS	D

incorporate comments to All sheets!!!!

C-8

Opening Year Cumulative (2026) Without Project - PM Peak Hour
Urban Crossroads, Inc.

Synchro 11 Report
Page 2

5.1-20

Incorporate comments from Appendices 5.1

Who provided timing sheet to you?
AM/PM cycle length: 130 seconds.

review city's tia guidelines

```
2026 WP AM                  Wed Feb 1, 2023 17:39:43
-------------------------------------------------------------------------------

                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #10 Valley View & Lampson
*******************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.816
Loss Time (sec):      10              Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        70              Level Of Service:                  D
*******************************************************************************
Approach:      North Bound       South Bound       East Bound       West Bound
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected         Protected       Prot+Permit      Prot+Permit
Rights:           Include           Include          Include          Include
Min. Green:     0    0    0      0    0    0      0    0    0      0    0    0
Y+R:          4.0  4.0  4.0    4.0  4.0  4.0    4.0  4.0  4.0    4.0  4.0  4.0
Lanes:        1  0  3  0  1     1  0  3  0  1     1  0  1  1  0     1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     115 1400  165   105 1529  151   150  234  126   184  184  178
Growth Adj:  1.08 1.08 1.08  1.08 1.08 1.08  1.08 1.08 1.08  1.08 1.08 1.08
Initial Bse:  124 1515  179   114 1655  163   162  253  136   199  199  193
Added Vol:     27   25    4     5   21   32    56   26   49     4    8    7
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:  151 1540  183   119 1676  195   218  279  185   203  207  200
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   151 1540  183   119 1676  195   218  279  185   203  207  200
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  151 1540  183   119 1676  195   218  279  185   203  207  200
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:  151 1540  183   119 1676  195   218  279  185   203  207  200
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 3.00  1.00  1.00 3.00  1.00  1.00 1.20  0.80  1.00 1.02  0.98
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1923  1277  1600 1629  1571
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.32  0.11  0.07 0.35  0.12  0.14 0.15  0.15  0.13 0.13  0.13
Crit Moves:  ****               ****               ****               ****
*******************************************************************************
```

Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to URBAN CROSSROADS, IRVINE

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

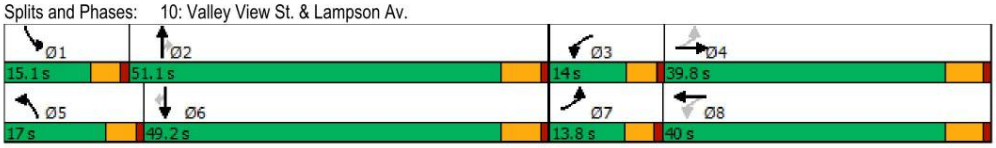
Timings
10: Valley View St. & Lampson Av. 06/01/2023

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	204	265	234	203	147	1540	187	124	1676	191
Future Volume (vph)	204	265	234	203	147	1540	187	124	1676	191
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases	4		8				2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	39.8	9.6	39.8	9.6	27.8	27.8	9.6	27.8	27.8
Total Split (s)	13.8	39.8	14.0	40.0	17.0	51.1	51.1	15.1	49.2	49.2
Total Split (%)	11.5%	33.2%	11.7%	33.3%	14.2%	42.6%	42.6%	12.6%	41.0%	41.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	28.9	18.4	29.3	18.6	12.0	45.4	45.4	10.3	43.7	43.7
Actuated g/C Ratio	0.28	0.18	0.28	0.18	0.11	0.43	0.43	0.10	0.42	0.42
v/c Ratio	0.85	0.69	1.00	0.61	0.79	0.76	0.28	0.78	0.86	0.29
Control Delay	57.8	34.6	88.9	23.7	73.2	28.8	11.1	76.6	33.7	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.8	34.6	88.9	23.7	73.2	28.8	11.1	76.6	33.7	12.0
LOS	E	C	F	C	E	C	B	E	C	B
Approach Delay		42.0		47.1		30.5			34.3	
Approach LOS		D		D		C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104.5	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

130 seconds

Splits and Phases: 10: Valley View St. & Lampson Av.



incorporate comments to All sheets!!!!

where is ideal flow? Lane capacities of 1700 per hour per lane for through and turn lanes shall be used per City of Garden Grove's TIA Guidelines.

HCM 6th Signalized In
10: Valley View St. & Lampson Av. 06/01/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	265	172	234	203	214	147	1540	187	124	1676	191
Future Volume (veh/h)	204	265	172	234	203	214	147	1540	187	124	1676	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	288	149	254	221	175	160	1674	140	135	1822	159
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	387	194	285	328	246	191	2207	673	165	2131	653
Arrive On Green	0.09	0.17	0.17	0.10	0.17	0.17	0.11	0.43	0.43	0.09	0.42	0.42
Sat Flow, veh/h	1781	2276	1143	1781	1907	1427	1781	5106	1558	1781	5106	1564
Grp Volume(v), veh/h	222	223	214	254	205	191	160	1674	140	135	1822	159
Grp Sat Flow(s),veh/h/ln	1781	1777	1642	1781	1777	1558	1781	1702	1558	1781	1702	1564
Q Serve(g_s), s	9.2	11.8	12.3	9.4	10.7	11.4	8.7	27.4	5.5	7.4	32.0	6.5
Cycle Q Clear(g_c), s	9.2	11.8	12.3	9.4	10.7	11.4	8.7	27.4	5.5	7.4	32.0	6.5
Prop In Lane	1.00		0.70	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	302	279	285	306	268	191	2207	673	165	2131	653
V/C Ratio(X)	0.76	0.74	0.77	0.89	0.67	0.71	0.84	0.76	0.21	0.82	0.85	0.24
Avail Cap(c_a), veh/h	294	611	564	285	614	539	223	2339	714	189	2241	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	39.0	39.2	34.7	38.3	38.6	43.3	23.7	17.5	44.1	26.1	18.7
Incr Delay (d2), s/veh	9.6	3.5	4.4	26.4	2.5	3.5	18.5	1.4	0.2	19.0	3.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	5.2	5.1	3.5	4.7	4.4	4.7	10.3	1.9	4.0	12.4	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	42.5	43.6	61.2	40.9	42.1	61.8	25.1	17.7	63.1	29.5	18.9
LnGrp LOS	D	D	D	E	D	D	E	C	B	E	C	B
Approach Vol, veh/h		659			650			1974			2116	
Approach Delay, s/veh		42.8			49.2			27.6			30.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	48.5	14.0	22.6	15.2	47.1	13.8	22.8
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	10.5	45.3	9.4	34.0	12.4	43.4	9.2	34.2
Max Q Clear Time (g_c+I1), s	9.4	29.4	11.4	14.3	10.7	34.0	11.2	13.4
Green Ext Time (p_c), s	0.0	10.3	0.0	2.3	0.0	7.3	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Opening Year Cumulative (2026) With Project - AM Peak Hour
Urban Crossroads, Inc.

Synchro 11 Report
Page 2

5.2-12

Responses to Comment C

City of Garden Grove, dated May 29, 2024.

C-1 The commenter provides redlines to the Project's Traffic Analysis (*Technical Appendix N1* of the Draft EIR). Pursuant to the commenter's request, the Project's Traffic Analysis has been revised and included as *Attachment G* to this Final EIR. Additionally, responses to each redline/comment bubble on the TA pages provided by the commenter are addressed below.

C-2 The commenter inquires why Lampson/Manley and Lampson/Blackmer were not studied. Both Manley and Blackmer are not identified as City General Plan roadways. However, both Manley and Blackmer are signalized intersections that provide access into existing residential neighborhoods to the north and south. Similar to the signalized intersections at Rose and Tulip, it is anticipated these intersections would also operate at acceptable LOS and would have similar affects to the intersections due to added eastbound and westbound through traffic from the Project, and therefore no further study of these intersections was required. Additionally, the Project scoping agreement was provided to the City of Garden Grove on August 24, 2022 requesting a review of the scoping agreement and applicable cumulative project information. The City did not identify these intersections for inclusion at the time of scoping, and for that reason as well these intersections were not included.

C-3 The commenter inquires why HCM methodology is appropriate to use at Valley View/Lampson. Pursuant to the commenter's request and the City of Garden Grove's traffic study guidelines, the HCM analysis for the intersection of Valley View and Lampson has been removed. Only ICU methodology has been utilized to evaluate the signalized intersection.

C-4 The commenter inquires about who provided the timing sheet and AM/PM cycle length of 130 seconds. The timing sheet was requested from each applicable agency at the time of scoping but was not responded to by Garden Grove. However, Pursuant to the commenter's request, the revised Traffic Analysis (*Attachment G* to this Final EIR) has been updated to reflect the 130-second cycle length denoted by City of Garden Grove staff for the intersection of Valley View and Lampson. This revision has been made to both peak hours for all study area intersections.

C-5 The commenter requests review of the comments made in the appendices and update values. Pursuant to the commenter's request, applicable cycle length, clearance time, and saturation flow rates have been updated as denoted, consistent with the City of Garden Grove's Guidelines. Consistent with the City's Guidelines the clearance or lost time has been updated to 5% of the cycle length which is rounded up to 7 seconds. The revised Traffic Analysis is included in *Attachment G* to this Final EIR.

C-6 The commenter requests to perform left turn queuing analysis to determine if left turn pockets are adequate at the intersection of Valley View/Lampson. Pursuant to the commenter's request, a queuing analysis has been performed for General Plan Buildout With Project traffic

DRAFT

conditions to verify the queuing needs for the left turn pockets and results are reported in Table 6-3 of the updated Traffic Analysis (see *Attachment G* to this Final EIR).

C-7 The commenter requests to review the City's TIA Guidelines regarding Minimum Green. Note that minimum green is not an applicable input parameter for the ICU methodology. However, consistent with the City's Guidelines the clearance or lost time has been updated to 5% of the cycle length which is rounded up to 7 seconds (see *Attachment G* to this Final EIR).

C-8 The commenter inquires about the ideal flow and that lane capacities of 1700 per hour per lane for through and turn lanes shall be used per the City of Garden Grove's TIA Guidelines. This comment is no longer applicable as the HCM based analysis for Valley View/Lampson has been removed. However, all of the ICU analysis for the intersection of Valley View/Lampson has been revised to assume 1700 vehicle per hour per lane per the City's Guidelines as noted in the comment.

DRAFT

COMMENT LETTER D

City of Seal Beach
CITY HALL 211 EIGHTH STREET
SEAL BEACH, CALIFORNIA 90740
(562)431-2527 • www.sealbeachca.gov

VIA U.S. MAIL AND E-MAIL

June 10, 2024

Tom Oliver, Associate Planner
City of Los Alamitos – Planning Department
3191 Katella Avenue
Los Alamitos CA 90720

SUBJECT: 4665 LAMPSON AVENUE PROJECT – DRAFT EIR
City of Seal Beach Comments

Dear Mr. Oliver:

Thank you for the opportunity to comment on the Draft Environmental Impact Report ("DEIR") as a Responsible Agency for the 4665 Lampson Avenue Project, dated April 2024. The Proposed Project ("Project") would demolish the existing site improvements and redevelop with 246 residential units, consisting of 55 single-family detached homes, 114 townhomes, and 77 affordable multi-family apartment homes. The Project site, while within the City of Los Alamitos, is situated on the City of Seal Beach ("Seal Beach") city limits where public access, infrastructure, and other services would likely be impacted. D-1

A series of comments follows, but in broad terms, we believe the DEIR should more thoroughly disclose the regulatory powers of the City of Seal Beach that apply to this Project, as well as impacts to the City of Seal Beach.

Section 1.0 INTRODUCTION

1. Section 1.6 (Responsible and Trustee Agencies) – The City of Seal Beach should be listed as a Responsible Agency as it has discretionary approval of the inter-jurisdictional sewer service agreement and other Project improvements. D-2

Section 3.0 PROJECT DESCRIPTION

1. Section 3.3.2 (Vehicle Access & Circulation) – Seal Beach did not request a traffic signal to be installed at the primary neighborhood, instead this was a traffic D-3

DRAFT

facilitation discussion topic that the Applicant considered. Please revise the text for accuracy.

We suggest the DEIR disclose that should the Applicant pursue a traffic signal, it must be applied for, approved, and permitted by Seal Beach. We further recommend mitigation measures be included to fund the capital and maintenance costs of the signal, as Seal Beach does not have identified revenue resources to assume these costs to serve the Project.

D-3 (CONT.)

2. Section 3.3.7 (Infrastructure Improvements – Water Infrastructure) – The document should disclose that the proposed Water Infrastructure is not in place and is contingent upon receiving a Seal Beach City Council-approved agreement with the proposed water purveyor.

D-4

3. Section 3.3.7 (Infrastructure Improvements – Sanitary Sewer Infrastructure) – The document should disclose that Seal Beach sanitary sewer service is contingent upon receiving a Seal Beach City Council-approved agreement for service outside the Seal Beach service area boundaries, and (as applicable) LAFCO approval.

   The DEIR assumes Seal Beach will approve an inter-jurisdictional sewer service agreement; however, discussion of alternatives should be provided should the agreement not be approved.

D-5

4. Section 3.3.7 (Infrastructure Improvements – Alternate Stormwater Drainage) – The document should disclose that the proposed alternative drains into Seal Beach right-of-way, which is contingent upon approval from the City of Seal Beach.

D-6

5. Section 3.4.3 (Parking Reduction Request) – The Project is proposing 102 on-site parking spaces less than the City of Los Alamitos' municipal code requires, although more than the minimum 441 required spaces, based on State Density Bonus (SB 1818). Please explain whether the provided parking will have any parking impacts on Seal Beach; and if there are impacts, how those impacts will be mitigated.

D-7

6. Table 3-6 (Project-Related Approvals/Permits) – Recommend expansion of the list to include approvals and permits from Seal Beach, including review and approvals for:

   a. SWPPP & Dewatering Plan
   b. Water Quality Management Plan
   c. Traffic Impact Study

D-8

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d. Approval of infrastructure plans directly/indirectly related to Seal Beach. D-8 (CONT.)

Section 4.0 ENVIRONMENTAL ANALYSIS

1. Table 4.0-1 – Old Ranch Country Club Development is proposed to have 167 multi-family housing units, 25,340 square feet of medical office, and a 109,015 square foot expansion to the existing clubhouse which will include a 150-room hotel. Please clarify if all proposed components are included in the cumulative impact modeling. D-9

Section 4.9 HYDROLOGY AND WATER QUALITY

1. Section 4.9.1 B. Site Hydrology - It is stated that per field observation, flows may overflow onto Lampson Avenue from the existing on-site concrete channel. Please disclose any documentation of overflows onto Lampson Avenue due to clogging of the outlet pipe. D-10

2. Section 4.9.1 B. Site Hydrology: DEIR states contributing 25-year storm event street flows are contained below the top of curb along Lampson Avenue. This is inconsistent with field observations of multiple instances where the curb has been overtopped during storm events. Please explain the discrepancy and revise analysis as appropriate. D-11

3. Section 4.9.6.A – DEIR mentions that a SWPPP would be prepared for construction-related activities. The SWPPP shall also be submitted to Seal Beach for concurrence. As groundwater would likely be encountered during construction, a separate dewatering plan shall be submitted to Seal Beach for review and approval prior to Los Alamitos grading permit issuance. D-12

4. Section 4.9.6.B - As drainage could potentially affect Seal Beach, Seal Beach approval and acceptance of the WQMP shall be required. Applicant shall be responsible for monitoring, maintaining and reporting to Seal Beach, as code or otherwise required. D-13

5. Threshold C - There are flooding issues along Lampson Avenue under existing conditions. This condition is not consistent with the listed Level of Significance Before Mitigation of "Less than Significant Impact". The DEIR should clarify the analysis and explain the basis for this conclusion. D-14

6. Threshold C.A.1 – The DEIR assumes Seal Beach approval of emergency overflow onto Lampson Avenue in certain unforeseen circumstances. This Preferred Route has not been approved by Seal Beach. D-15

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7. Clogged pipes should not take place provided that proper WQMP monitoring and maintenance are in place (see Comment #4, above), please explain why this scenario is discussed. D-16

8. The DEIR should analyze all potential drainage resulting from the site and address potential impacts. Please disclose any agreements where Seal Beach accepts Los Alamitos stormwater conveyance of any volume. D-17

9. Threshold C.A.2 – The DEIR provides an Alternate Storm Drain Facilities scenario. This scenario assumes drainage onto Lampson Avenue (Seal Beach jurisdiction), which would be contingent upon approvals from the City of Seal Beach. D-18

10. Other Storm Drain Facilities were considered; however, please substantiate the following: (1) the DEIR's conclusion that drainage to the north (JFTB/Arbor Park) is not allowable for use as detention, (2) Bolsa Chica Channel's capacity, and (3) the DEIR's conclusion of the inability to construct underground storm drain facility within the Lampson Avenue right-of-way. D-19

11. Sections 3-C-1 and 3-C-2 – Please disclose what thresholds were used to determine downstream hydrological impacts and how the determination of no impact was arrived at. D-20

12. Appendix I1 (Hydrology Study, Section 4.0) - If the northerly 10-foot proposed dedication is not included in the hydrology calculation, where will it be included? Please advise of the roles and responsibilities of this 10-foot dedication. D-21

13. Appendix I1 Preliminary Hydrology Report: Appendix C.1: The provided hydrograph calculations represent the unit hydrograph only. Please refer to the example problem under Section J.1.1 in the Orange County Hydrology Manual to complete the small-area runoff hydrograph calculation. D-22

Section 4.10 LAND USE PLANNING

1. Discussion should be expanded to include the City of Seal Beach within the regulatory framework, given the number of discretionary approvals from Seal Beach that are required to implement the Project. D-23

Section 4.14 RECREATION

1. Table 4.14-1 – The parks closest to the Project, and therefore likely to be most used by Project residents, are Seal Beach parks. Arbor Dog Park, Arbor Park D-24

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Fields, and Heather Park are currently operated and maintained by Seal Beach and should be included in the table. D-24 (CONT.)

2. Section 4.14.5 (Impact Analysis) – The closest parks to the Proposed Project site are owned and/or operated by Seal Beach. DEIR speaks to the Applicant paying in-lieu fees to the City of Los Alamitos; however, the impacts are largely on Seal Beach parks. Deterioration and maintenance impacts to Seal Beach are not addressed. D-25

3. Appendix M (Park Impact Analysis) – The Arbor Park usage assumption is understated compared to what was observed and documented in Appendix Q (Arbor Park Parking Study & Layout). Please explain how this would change the Park Impact Analysis findings. D-26

Section 4.15 TRANSPORTATION

1. Section 4.15.4 – As the Proposed Project takes access off Lampson Avenue (Seal Beach jurisdiction), the basis for determining significance should be based on Seal Beach's guidelines. D-27

2. Table 4.15-1, Policy 1.7 – DEIR speaks to fair share requirements to the City of Los Alamitos; however, the surrounding roadway network serving the proposed Project site is within Seal Beach jurisdiction. Please clarify how the fair share would be used to benefit the Project site's surrounding roadway network within the City of Seal Beach. D-28

3. Table 4.15-1, Policy 4.3 – Site access modifications to the Proposed Project site are within Seal Beach jurisdiction; therefore, improvements shall require compliance with Seal Beach requirements and Seal Beach approval. D-29

4. Special Considerations – Section states "vehicles would have the option of …. and/or driving a short distance to available parking off-site and walking to the park." Please clarify where the intended off-site parking is, and if this would impact Seal Beach parking supply; and discuss how those potential impacts would be mitigated. D-30

5. Special Consideration – Construction traffic impacts shall be confirmed with Seal Beach. A Seal Beach approved permit is required. D-31

6. Appendix N1 (Traffic Impact Analysis, Section 1.1) - Please clarify whether a traffic signal would be provided at the main Project site access. D-32

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7. Appendix N1 (Traffic Impact Analysis, Section 1.7) - Indicate that the queuing analysis conducted for the site driveway was for the unsignalized case. D-33

8. Appendix N1 (Traffic Impact Analysis, Section 3.3) - Title should be "City of Seal Beach" D-34

9. Appendix N1 (Traffic Impact Analysis, Exhibit 3-3) Show the location of the site on the map for context. D-35

10. Appendix N1 (Traffic Impact Analysis, Exhibit 3-4) Show the city boundaries to indicate Los Alamitos and Seal Beach. D-36

11. Appendix N1 (Traffic Impact Analysis, Exhibit 3-5) Show the location of the site on the map for context. D-37

12. Appendix N1 (Traffic Impact Analysis, Section 5.6) - Please show feasibility documentation of how recommended mitigation measure can be achieved within the geometric configuration without sacrificing westbound left-turn storage. D-38

13. Per City of Seal Beach Traffic Impact Study Guidelines, June 2020 (Guidelines) "intersections or roadway links having five or more reported accidents within the most recent 12-month period within significant influence of the project shall be analyzed and will require mitigation". No crash analysis was provided. D-39

14. Per Guidelines, "link analysis shall be performed on all sections of arterial highways and collector streets within the project area where the daily project traffic after distribution to the street system represents 1% or more of the total directional volume." No link analysis was performed. D-40

15. Appendix P (On-Site Parking Analysis, Local Project Precedents) - Consultant uses Los Alamitos Luxury Apartments parking requirements as a precedence for parking reduction from Code. Please explain how this reduction has impacted surrounding on/off street parking, if at all. D-41

16. Appendix Q (Arbor Park Parking Study) - The study references an AYSO peak parking demand of about 339 spaces. Does the Project include overflow provisions; and if so, explain those provisions. D-42

17. Appendix Q (Arbor Park Parking Study) - What would happen with the Caltrans park-and-ride? Are there requirements to provide a substitute location? D-43

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18. Appendix Q (Arbor Park Parking Study, Option 2) - Seal Beach requests a Condition of Approval requirement to work with the American Youth Soccer Organization (AYSO) and Seal Beach to address the remaining parking shortfall. D-44

19. Seal Beach requests that all mitigation measures identified in this letter be incorporated into a Mitigation Monitoring and Reporting Program (MMRP) and that all project design features that avoid or reduce impacts and all mitigation measures also be incorporated into the project Conditions of Approval. Further, the City reserves the right to provide comments on the MMRP following its release. D-45

Section 4.17 UTILITIES AND SERVICE SYSTEMS

1. Section 4.17.5 (Impact Analysis – Water Facilities) – The document should disclose that the proposed Water Infrastructure is not in place and is contingent upon receiving a Seal Beach City Council-approved agreement with the proposed water purveyor. D-46

2. Section 4.17.5 (Impact Analysis – Wastewater and Wastewater Treatment Facilities) – The document should disclose that Seal Beach sanitary sewer service is contingent upon receiving a Seal Beach City Council-approved agreement for service outside the Seal Beach service area boundaries, and (as applicable) LAFCO approval.

   The DEIR assumes Seal Beach will approve an inter-jurisdictional sewer service agreement; however, discussion of alternatives should be provided should the agreement not be approved. D-47

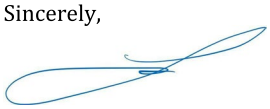
3. Section 4.17.5 (Impact Analysis – Stormwater Drainage Facilities) – The document should disclose that the proposed alternative drains into Seal Beach right-of-way, which is contingent upon approval from the City of Seal Beach. D-48

4. Section 4.17.5 (Impact Analysis) - It appears that GSWC will be expanding water facilities to serve the Proposed Project site; however, please confirm that the effort would be reviewed under a separate environmental assessment. D-49

Seal Beach looks forward to coordinating with the City of Los Alamitos in identifying and mitigating Project impacts. If you have questions regarding this letter, please contact me at ilee@sealbeachca.gov. D-50

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Sincerely,



Iris Lee
Director of Public Works

Cc: Jill Ingram, Seal Beach City Manager
Alexa Smittle, Director of Community Development
Kathryne Cho, City Engineer/Deputy PW Director

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Responses to Comment D

City of Seal Beach, dated June 10, 2024.

D-1 The commenter provides introductory remarks and summarizes the Project. The commenter states that the Draft EIR should more thoroughly disclose the regulatory powers of the City of Seal Beach that apply to this Project and impacts to the City of Seal Beach. The City acknowledges the City of Seal Beach's concerns related to its approval authority and impacts of the Project on Seal Beach services and infrastructure. Revisions to the Draft EIR have been made to address these concerns. Specific responses and revisions to the Draft EIR have been provided in responses to Comments D-2, D-4, D-5, and D-8, below.

D-2 The commenter states that the City of Seal Beach should be listed as a Responsible Agency as it has discretionary approval of the inter-jurisdictional sewer service agreement and other Project improvements. Please note that the City of Seal Beach was acknowledged as a responsible agency in the Draft EIR in Table 3-6, *Project-Related Approvals/Permits*. Pursuant to the commenter's request, the City of Seal Beach has also been added to the summary of responsible agencies in Section 1.0, *Introduction*, of the Draft EIR. Page 1-37 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

> For the Project, the <u>City of Seal Beach,</u> Orange County Airport Land Use Commission (ALUC), Regional Water Quality Control Board (RWQCB), Orange County Sanitation District (OCSD), Southern California Gas Company (SoCalGas), Southern California Edison (SCE), and the South Coast Air Quality Management District (SCAQMD) are identified as Responsible Agencies. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether identified in this EIR or not, as part of their decision-making processes in relation to the proposed Project.

D-3 The commenter states that the City of Seal Beach did not request a traffic signal to be installed at the primary neighborhood access and that the text be revised to reflect the change. Additionally, the commenter recommends that the proposed traffic signal should be applied for, approved, and permitted by the Seal Beach and mitigation measures be included to fund the capital and maintenance cost of the signal.

The City acknowledges that the City of Seal Beach did not request that a traffic signal be installed at the primary neighborhood entry. As demonstrated in Section 6.5 of the Traffic Analysis (*Attachment G* of this Final EIR), the traffic signal does not meet peak hour or planning level warrant criteria. As a result, the Project no longer proposes a traffic signal in this location. Additionally, refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for a detailed discussion of the traffic signal warrant analysis and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding the Project's safety impacts.

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Page 3-4 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

> Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project would implement stop controls for the southbound approach at all driveways on Lampson Avenue. The driveway for the apartment entry would be restricted to right-in/right-out only. Vehicular circulation would be unrestricted throughout the Project site. The primary neighborhood entry is not anticipated to meet a peak hour or planning level (daily volume) based traffic signal warrants. ~~However, per the request of the City of Seal Beach and in response to public comments during scoping, the Project will install a traffic signal at the primary neighborhood entry in coordination with both the City of Los Alamitos and City of Seal Beach~~.

D-4 The commenter states that the Draft EIR should disclose that the proposed water infrastructure is not in place and is contingent upon receiving a Seal Beach City Council-approved agreement with the proposed water purveyor.

Golden State Water Company (GSWC) is currently installing a public 12" water main from the intersection of Blackmer Street and Apia Drive to Lampson Avenue and Lunar Drive, approximately 600' east of the site, which provides adequate water services to support the development. As directed by GSWC, a New Business Application is required to request a main line extension on Lampson Avenue at Lunar Drive to the site, including in-tract public improvements. This would include the main line, water meters, and public fire hydrants to service the Project site. A separate encroachment permit from the City of Seal Beach and Agreement of Franchise Facilities between GSWC and the City of Seal Beach is required.
Pursuant to the commenter's request, Page 3-9 and Table 3-6 on Page 3-18 of the Draft EIR have been revised as shown below and in Section 4.0 of this Final EIR.

> Golden State Water Company would provide water service to the Project. Domestic water lines would be provided as shown in Figure 3-23, *Utility Plan*. In addition, the Project would include a 1,200 feet watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Project would include, at a minimum, an 8" watermain size for the extension. <u>The proposed water infrastructure would require an encroachment permit from the City of Seal Beach and Agreement of Franchise Facilities between GSWC and the City of Seal Beach.</u>

City of Seal Beach	• Issuance of Public Works Permit (encroachment permit) for infrastructure

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	improvements within the Lampson Ave. right-of-way. • Agreement of Franchise Facilities between GSWC and the City of Seal Beach • Agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach for Inter-Jurisdictional Wastewater Services. • Approval of stormwater discharge/conveyance. • Approval Water Quality Management Plan • Approval of infrastructure plans directly/indirectly related to Seal Beach

D-5 The commenter states that the Draft EIR should disclose that Seal Beach sanitary sewer service is contingent upon receiving a Seal Beach City Council-approved agreement for service outside the Seal Beach service area boundaries and LAFCO approval, if required. Additionally, the commenter states that the Draft EIR should include an alternative that addresses what would occur if Seal Beach does not approve an inter-jurisdictional sewer service agreement.

The Project site is located within Rossmoor/Los Alamitos Area Sewer District's (RLAASD) sewer service area boundaries. RLAASD does not, however, have sewer lines that connect to the Project site. As a result, since approximately January 1975, the City of Seal Beach has been providing sewer services to the Project site.

It is expected that the proposed agreement for Inter-Jurisdictional Wastewater Services (Wastewater Agreement) between the City of Seal Beach and RLAASD is exempt from review and/or approval by LAFCO pursuant to California Government Code §56133. This statute generally states that a city or district may provide new or extended services by contract or agreement outside its jurisdictional boundary only if it first requests and receives written approval from LAFCO in which the affected territory is located (Cal. Gov. Code §56133(a)). A subsection of this statute, §56133(e), however, provides limited exceptions to where LAFCO approval is not required for new or extended services. First, §56133(e)(1) states that the section does not apply to, "(1) Two or more public agencies where the public service to be provided is an alternative to, or substitute for, public services already being provided by an existing public service provider." (Cal. Gov. Code §56133(e)(1)). The Wastewater Agreement between the City of Seal Beach and RLAASD represents a straightforward substitution of one service provider (Seal Beach) for another (RLAASD), and no third party service provider will be displaced by the agreement. Second, §56133(e)(4) states that the section does not apply to, "(4) An extended service that a city or district was providing on or before January 1, 2001." (Cal. Gov. Code §56133(e)(4)). The City of Seal Beach began providing sewer service to the Project site on or about January 1975. Therefore, it is anticipated that the agreement will be exempt from review and approval by LAFCO. Nevertheless, the Project Applicant will follow all

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applicable and required LAFCO processes and procedures related to sanitary sewer service. Additionally, the Project Applicant would be required to pay connection or service fees to the City of Seal Beach to provide service.

The Project site is within the Rossmoor-Los Alamitos Area Sewer District service area, however there are limited to no feasible alternative sanitary sewer connection options within the surrounding area in the event the City of Seal Beach does not approve an inter-jurisdictional sewer service agreement[2]. Any other option would require prohibitively expensive construction, as well as difficult to resolve engineering issues related to crossing conflicts, elevations changes, and potential downstream capacity concerns because the existing site is not currently oriented to discharge to this area. Furthermore, the existing site (when the office use was previously occupied) discharged to the City of Seal Beach public sanitary sewer system and therefore the site is currently configured such that discharges to Seal Beach sanitary sewer service would be most efficient and logical.

Pursuant to the commenter's request, Page 3-9 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

> Although the Project site is in the City of Los Alamitos, sanitary sewer will be served by the City of Seal Beach via the Rossmoor-Los Alamitos Area Sewer District. The Rossmoor/Los Alamitos Sewer District would provide wastewater conveyance and treatment services to the Project. A lift station and force main is proposed at the southeast corner of the Project site (refer to Figure 3-23, *Utility Plan*). The Project would connect the force main to the existing 8-inch sanitary sewer line at the southeast corner of the site. All connections to existing sanitary sewer lines require approval by the City of Seal Beach and would be constructed in accordance with the City of Seal Beach standards. Additionally, an agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach would be required for Inter-Jurisdictional Wastewater Services.

D-6 The commenter states that the Draft EIR should disclose that the proposed alternate stormwater drainage would flow onto Seal Beach right-of-way and requires approval from the City of Seal Beach.

[2] *The City of Seal Beach has indicated that the inter-jurisdictional sewer service agreement requires Seal Beach City Council approval and therefore is considered a discretionary action. This EIR is intended to provide the environmental clearance for future discretionary and ministerial actions relating to this Project, including the inter-jurisdictional sewer service agreement.*

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The preferred treatment of stormwater runoff for the Project would flow to the existing 18" storm drain, located near the southwest corner of the site, that ultimately discharges to the existing JFTB drainage facilities consistent of at-grade depressed basins and hydraulically connected pipes. However, it is noted in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR and in the updated Hydrology Study (*Attachment E* of this Final EIR), that in the event the existing 18" pipe is clogged or the existing at-grade depressed basins reach capacity, stormwater runoff from the site overflows onto Lampson Avenue in the existing condition based on field survey topographic findings and photographic evidence. Therefore, a parkway drain is proposed on Lampson Avenue, near the southwest corner of the site, to provide proper emergency overflow, matching the historic drainage condition. Any proposed improvements and/or stormwater runoff tributary to Lampson Avenue is subject to the City of Seal Beach's review and approval.

Pursuant to the commenter's request, Page 3-10 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

> An alternate plan for stormwater conveyance is proposed in the event the preferred route (historical flow) across the JFTB, as described above, is not available. The alternate would include stormwater outflow onto Lampson Avenue within Seal Beach right-of-way, which would subsequently flow west to an existing stormwater catch basin approximately 2,200 feet west of the Project site. Stormwater outflow onto Lampson Avenue would require approval and/or an encroachment permit from the City of Seal Beach. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows to Lampson Avenue would resume. Under the Alternate Off-Site Storm Drain plan, stormwater will be detained and mitigated onsite such that Lampson Avenue meets OC Hydrology flooding standards. Approximately 32,300 cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates.

D-7 The commenter states that the Project is proposing 102 on-site parking spaces less than the City of Los Alamitos Municipal Code requirements. The commenter requests an analysis to determine whether provided parking will have any parking impacts on Seal Beach. A parking evaluation was included in the Draft EIR and a Parking Analysis was provided as *Technical Appendix P* of the Draft EIR. Refer also to Master Response 2.1.3, *Parking*, for a detailed discussion on parking impacts. As concluded, the Project's proposed parking supply is appropriate to serve the potential parking needs of the Project. As a result, Project residents

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would have adequate parking on-site and would not park on streets in the adjacent neighborhood in the City of Seal Beach.

D-8 The commenter recommends including the Stormwater Pollution Prevention Plan (SWPPP) & Dewatering Plan, Water Quality Management Plan, Traffic Impact Study, and approval of infrastructure plans directly/indirectly related to Seal Beach in the list of approvals and permits required from Seal Beach.

The City of Los Alamitos, as Lead Agency, is ultimately responsible for review and approval of the Project's Traffic Analysis and Water Quality Management Plan per the County of Orange MS4 Permit requirements. The City acknowledges that the City of Seal Beach, as a Responsible Agency, has review and approval authority for infrastructure plans directly and indirectly related to Seal Beach. However, the SWPPP and Dewatering Plan is a State-reviewed and permitted document, therefore the State Water Resources Control Board (SWRCB) is also noted as a Responsible Agency for the SWPPP.

Pursuant to the commenter's request, Page 3-8 of the Draft EIR has been revised as shown in Response to Comment D-4 and in Section 4.0 of this Final EIR.

D-9 The commenter asked for clarification as to whether all proposed components of the Old Ranch Country Club Development were included in the Project's cumulative analysis. The development capacity for the Old Ranch Country Club Development identified in the cumulative impact modeling was based on the City of Seal Beach's Housing Element Sites Inventory capacity identified for this site. To ensure the cumulative impact modeling is as accurate as possible, the modeling was updated, where appropriate, to include the additional development capacities identified by the commenter. Specifically, the Traffic Analysis (*Attachment G* to this Final EIR) has been updated to include all proposed components of the Old Ranch Country Club for cumulative traffic impact analysis related to congestion or automobile delay. Except with respect to projects specific to transportation improvements, the CEQA Guidelines specify that a project's effects on automobile delay shall not constitute a significant environmental impact. As such, the updated Traffic Analysis does not change the findings of the Draft EIR, since LOS is not a significant impact under CEQA.

With respect to noise impacts (off-site traffic) related to this update in the modeling, there was a slight cumulative increase from existing conditions of 71.6 CNEL dBA to General Plan Buildout conditions of 73.2 CNEL dBA along a portion of Lampson Avenue. Without the additional development capacity at Old Ranch Country Club, the General Plan Buildout conditions with Project were 72.8 CNEL dBA. As a result, the General Plan Buildout with Project, including building of Old Ranch Country Club results in a cumulative increase of 0.4 CNEL dBA. However, the Project's cumulative contribution to the General Plan Buildout condition, including with the inclusion of the additional development capacities at the Old Ranch Country Club is 0.2 dBA (see Segment #1, Table 8-9 in *Attachment F* to this Final EIR).

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Because the cumulative incremental noise level threshold is 1.5 dBA, the Project's cumulative contribution of 0.2 dBA is not a significant cumulatively considerable impact under CEQA. Therefore, adjusting the cumulative impact modeling to include this additional development capacity at Old Ranch Country Club does not result in a new significant environmental impact resulting from the Project or a substantial increase in the severity of an impact requiring recirculation of the draft EIR. The Project's Noise Impact Analysis has been updated accordingly and included as *Attachment F* to this Final EIR.

D-10 The commenter requests disclosure of any documentation of overflows onto Lampson Avenue due to clogging of the outlet pipe. Per field survey topographic findings and photographic evidence, existing stormwater runoff from the site ponds within the existing concrete channel and overflows on to Lampson Avenue near the southwest corner and through existing driveways along the property frontage. A Ponding Exhibit (*Attachment E* to this Final EIR) has been prepared for the existing conditions based on the tributary 100-year storm event which shows the water ponding based on the primary overflow elevation near the southwest corner of the site. Because water ponding currently exists even with the existing JFTB stormwater conveyance facilities, it can be reasonably assumed that the downstream, existing JFTB facilities are clogged.

D-11 The commenter requests clarification on the discrepancy related to the 25-year storm event street flows being contained below the top of curb along Lampson Avenue. A hydrologic analysis and street capacity analysis per Orange County Hydrology & Hydraulics Manuals were prepared for Lampson Avenue along the site frontage. Calculation results indicate that Lampson Avenue flooding does not occur along the Project site, but rather downstream at the sump condition near the Old Ranch Country Club. The hydrologic analysis and street capacity analysis for Lampson Avenue has been expanded downstream to determine the depth of flow (see *Attachment E* to this Final EIR). Two areas were analyzed; Section A-A is located near the southwest corner of the site and Section B-B at the existing low-point sump catch basin approximately 2,100 linear feet from the site near the Old Ranch Country Club. Both street capacity analysis indicate that the 100-year water surface elevation is held within the street and less than the existing top of curb elevations.

D-12 The commenter requests that the Project's SWPPP be submitted to City of Seal Beach for concurrence, and that a separate dewatering plan be submitted to the City of Seal Beach for review and approval prior to the City of Los Alamitos issuing grading permits. The Project would comply with state requirements related to the submittal of a SWPPP. The SWPPP and Dewatering Plan will be made available as referenced to the City of Seal Beach, however these are State-reviewed documents that will be processed, approved and permitted by the State Water Resources Control Board (SWRCB) as appropriate. Both documents shall be approved by the SWRCB prior to issuance of grading permit by the City of Los Alamitos.

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D-13 The commenter requests that the Project's Water Quality Management Plan (WQMP) require approval from the City of Seal Beach and the Project Applicant shall be responsible for monitoring, maintaining, and reporting to the City of Seal Beach. The Project's Water Quality Management Plan will be reviewed and approved by the City of Los Alamitos and Seal Beach, as may be required. If required, a maintenance covenant/agreement will be executed by the property owner for monitoring, maintenance, and operation of all privately installed water quality facilities per City of Los Alamitos code requirements and to the satisfaction of the City of Seal Beach. It should be noted that City of Los Alamitos is ultimately the responsible agency for review/ approval of the Water Quality Management Plan per the County of Orange MS4 Permit requirements. Refer to Response to Comment D-8.

D-14 The commenter states that flooding issues along Lampson Avenue under existing conditions is not consistent with the listed level of significance before mitigation of "Less than Significant Impact." The commenter requests clarification of the analysis under threshold c in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, and an explanation of the basis for the conclusion.

The Draft EIR documented the existing hydrological conditions in Section 4.9 of the Draft EIR. As stated, based on field observations from C&V, the existing concrete channel along the site's southerly property line currently ponds back to the existing driveway and overflows onto Lampson Avenue. Based on the existing topography of the site, in the event the outlet pipe was to become clogged, the existing overflows from the property would flow onto Lampson Avenue at the low point at the southwest corner of the site (refer to Page 4.9-1 of the Draft EIR). As required by CEQA, in determining whether the Project's impacts are significant, the Draft EIR evaluated the Project's impacts compared to existing environmental conditions. The analysis provided under Threshold c demonstrates that the Project has been designed (under two stormwater drainage facility options) to detain peak runoff flows on-site to ensure that increased flow rates do not exceed the existing condition flow rates. As such, downstream facilities would not be hydrologically impacted by the proposed Project. Impacts would be less than significant and no mitigation is required (refer to Pages 4.9-18 to 4.9-19).

Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, related to flooding impacts. Thus, no further response is required.

D-15 The commenter states that the preferred route for emergency overflow onto Lampson Avenue has not been approved by the City of Seal Beach. Emergency overflow in the existing condition is based on field survey topographic elevations and photographic evidence when stormwater runoff that cannot discharge through the existing 18" storm drain pipe to existing JFTB facilities will overflow on to Lampson Avenue. This is a historic condition. Refer to Ponding Exhibit (*Attachment E* to this Final EIR) prepared for the existing condition identifying the inundation area during the 100-year storm event in the existing condition. As stated in Response to Comment D-4, an encroachment permit may be required to implement the

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preferred drainage route. However, there are no required agreements to allow for drainage overflow onto Lampson Avenue, as this is a historic, existing drainage condition. Lampson Avenue is considered a public right-of-way and can accept stormwater runoff from adjacent sites. The existing topography identifies that stormwater runoff in the historic condition overflows onto Lampson Avenue near the southwest corner of the site.

D-16 The commenter states that clogged pipes should not take place provided that proper WQMP monitoring and maintenance are in place and requests explanation of why this scenario is discussed. Page 4.9-17 of the Draft EIR states that in the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will flow onto Lampson Avenue matching historical drainage patterns. Although proper maintenance would ensure that clogged pipes should not take place, this has occurred historically as observed and documented in the existing conditions (refer to Page 4.9-1 of the Draft EIR).

Appropriate maintenance and frequency information is part of the Project's Water Quality Management Plan and recorded maintenance covenant/agreement as required per the County of Orange. However, in the remote event that proposed water quality and/or drainage facilities fail, become clogged, and/or are not maintained properly, emergency overflow through the Project site is provided and incorporated into the grading/drainage design. This ensures that the proposed building finish floor elevations are set at minimum 1' higher than the 100-year water surface elevation for the tributary area and a safe vehicular path of travel is being maintained for emergency vehicles and proper maneuvering throughout the site. As part of the County of Orange's MS4 Permit requirements, the responsible reviewing agency, such as the City of Los Alamitos is obligated to conduct yearly inspections of installed water quality facilities and report to the County.

D-17 The commenter states that the Draft EIR should analyze all potential drainage resulting from the site and disclose any agreements where Seal Beach accepts Los Alamitos stormwater conveyance of any volume. Refer to Response to Comment D-14. The Draft EIR demonstrates that the Project has been designed (under two stormwater drainage facility options) to detain peak runoff flows on-site to ensure that increased flow rates do not exceed the existing condition flow rates. As such, downstream facilities would not be hydrologically impacted by the proposed Project. Impacts would be less than significant and no mitigation is required (refer to Pages 4.9-18 to 4.9-19).

The existing site generally flows in a north to south direction into an existing westerly flowing concrete channel along the site's southerly property line. The westerly flowing channel is collected via an offsite 18-inch corrugated metal pipe (CMP) that flows under the offsite driveway to Arbor Park and discharges into an offsite earthen channel on the west side of the driveway. Runoff flows within this earthen channel are then collected by an existing 24-inch CMP that flows westerly, discharges into a westerly flowing earthen channel within the JFTB, and then drains to the Old Ranch Country Club to the south. Runoff is ultimately conveyed

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downstream into the San Gabriel River. There is currently not an agreement in place that Seal Beach accept Los Alamitos stormwater conveyance of any volume. Additionally, there are no required agreements to allow for drainage overflow onto Lampson Avenue, as this is considered a historic, existing drainage condition. Lampson Avenue is considered a public right-of-way, therefore can accept stormwater runoff from adjacent sites. Based on the existing topography, stormwater runoff in the existing historic condition overflows onto Lampson Avenue near the southwest corner of the site.

D-18 The commenter states that the Alternate Storm Drain Facilities scenario would be contingent upon approval from the City of Seal Beach. Refer to Response to Comment D-6 for the revised language in the Draft EIR related to approval from City of Seal Beach. The Project Applicant will be required to seek approvals from Seal Beach, as applicable. As stated in Response to Comment D-4, an encroachment permit may be required to implement the preferred drainage route. There are no required agreements to allow for drainage overflow onto Lampson Avenue, as this is a historic, existing drainage condition. Lampson Avenue is considered a public right-of-way and can accept stormwater runoff from adjacent sites.

D-19 The commenter requests that the Draft EIR substantiate that drainage to the north is not allowable for use as detention, Bolsa Chica Channel's capacity, and the conclusion of the inability to construct an underground storm drain facility within the Lampson Avenue right-of-way.

Option #3 to outlet runoff to Arbor Park/ JFTB north of the site was evaluated, however based on topography and existing surface drainage facilities, stormwater runoff from Arbor Park drains south to the same downstream discharge location near the southwest corner of the site and Lampson Avenue. If JFTB does not allow for discharge at the southwest corner of the site, then JFTB is unlikely to allow a northerly discharge offsite. In addition, the existing site does not flow northerly to the Arbor Park/ JFTB area, as the site drains in the southwesterly direction. Therefore, directing stormwater runoff to the north would change the historic drainage pattern which can potentially cause downstream flooding because it would add additional flows to this area that do not currently occur.

Option #4 to outlet to the Golf Course, east of the site which conveys stormwater runoff to the Bolsa Chica Channel was evaluated, however similar to Option #3, the golf course is considered JFTB property, therefore requires JFTB approval for discharge and the site is not tributary to these existing facilities. Regardless of whether the Bolsa Chica Channel has capacity to accept stormwater runoff from the site, discharging to the Golf Course and subsequent Bolsa Chica Channel would change the historic drainage pattern which can potentially cause downstream flooding because it would add additional flows to this area that do not currently occur.

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Option #5 to construct a public storm drain system within Lampson Avenue that drains east to the Bolsa Chica Channel was evaluated and as with Option #4 the site does not historically drain to this facility, therefore a direct connection to the channel would change the historic drainage pattern which may potentially cause downstream flooding, since it would add additional flows to an area that do not currently occur within the channel or site. In addition, there are existing public facilities such as gas, water, sewer mains located within Lampson Avenue which will prevent a feasible gravity fed storm drain system from being installed.

D-20 The commenter requests disclosure of what threshold was used to determine downstream hydrological impacts and how the determination of no impact was arrived at. Per methods identified within the Orange County Hydrology Manual, the proposed increased peak flow/volume generated by the Project will be contained with an upstream onsite detention and pump system with a controlled outflow to match the existing historic overflow condition; therefore, no downstream impact is anticipated. The downstream junction structure will be equipped with a Connector Pipe Screen (CPS) device for full trash capture of the 1-yr, 1-hr peak flow rate sized for the entire site to ensure trash collection prior to overflow.

D-21 The commenter inquires whether the northerly 10-foot proposed dedication was included in the hydrology calculation and, if not, where will it be included. Additionally, the commenter inquires about the roles and responsibilities of the 10-foot dedication. The Project's Preliminary Hydrology Study (*Attachment E* of this Final EIR) has been revised providing additional information regarding the 10' wide dedication area along the northerly property line. To summarize those revisions, the 10' wide dedication area is outside the proposed residential development and will not be tributary to the Project site's proposed storm drain system. Existing conditions show that this area of the site currently drains in the northerly direction. Page 3-4 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

The Project Applicant proposes to dedicate or grant an easement for the northern 10 feet of property abutting Arbor Park and Arbor Dog Park to the City of Los Alamitos<u>, or other entity,</u> with authority over the two parks.

D-22 The commenter states that the provided hydrograph calculations from the Project's Preliminary Hydrology Report (*Technical Appendix I1* of the Draft EIR) represent the unit hydrograph only and refers to the example problem in the Orange County Hydrology Manual to complete the small-area runoff hydrograph calculation.

Pursuant to the commenter's request, the Small Unit Hydrograph and detention routing calculations for the onsite proposed condition have been updated as part of the revised Preliminary Hydrology Report (*Attachment E* of this Final EIR) which utilizes the requirements set forth in Orange County Hydrology Manual and confirms the required upstream detention and outflow mitigation discharge rate compared to the existing condition.

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Existing historic drainage patterns will be maintained without causing the potential increase of tributary flooding; therefore, impacts would be less than significant.

D-23 The commenter states that the discussion in Section 4.10, *Land Use and Planning*, of the Draft EIR, should be expanded to include the City of Seal Beach within the regulatory framework, given the number of discretionary approvals from Seal Beach that are required to implement the Project. The City acknowledges that the Project would need approval from the City of Seal Beach for certain off-site infrastructure improvements and agreements. Pursuant to the Commenter's request, Page 4.10-33 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

4. City of Seal Beach General Plan

Table 4.10-3, *Seal Beach General Plan Consistency Analysis*, provides an analysis of the Project's consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 4.10-3, the Project would not conflict with any of the applicable General Plan goals and policies. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the City of Los Alamitos General Plan and mitigation is not required.

Table 4.10-3 Seal Beach General Plan Consistency Analysis

General Plan Policy	**Consistency**
Circulation Element	
Objective: Provide a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use.	
Policy: Maintain existing pedestrian facilities and require new development to provide pedestrian walkways between developments, schools, and public facilities.	**No Conflict.** The Project would promote future residents of the Project to walk, bike, or ride the bus to and from developments, schools, and public facilities. Project frontage improvements such as sidewalk improvements, the existing bike lanes on Lampson Avenue adjacent to the Project site, and bike storage would promote residents and students to utilize these facilities. Therefore, the Project would not conflict with this policy.
Growth Management Element	

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General Plan Policy	Consistency
Goal 3: Cooperate with Neighboring Jurisdictions and the County of Orange and County of Los Angeles to Achieve Reduction in Regional Traffic Congestion.	
Policy 3.1 - The City shall participate in inter-jurisdictional planning forums within its established growth management areas as adopted by the Regional Advisory Planning Council and will continue to participate in forums with neighboring or affected jurisdictions to address transportation or other planning issues.	**No Conflict.** The City of Seal Beach is a responsible agency for the Project. Table 3-6, *Project-Related Approval/Permits*, lists all approvals and decisions required by the City of Seal Beach for the Project. Additionally, the City of Los Alamitos and City of Seal Beach have been in coordination throughout the planning process for this Project including the preparation of the Traffic Analysis. Therefore, the Project would not conflict with this policy.

D-24 The commenter states that Arbor Dog Park, Arbor Park Fields, and Heather Park which are currently operated and maintained by Seal Beach should be included in Table 4.14-1, *Existing Parks and Recreation Facilities*, of the Draft EIR. The purpose of Table 4.14-1 is to identify parks and recreational facilities that are located within the City of Los Alamitos and its sphere of influence and as presented in the City's General Plan. As such, Arbor Dog Park and Arbor Park Fields were identified in Table 4.14-1 of the Draft EIR (refer to Page 4.14-2 of the Draft EIR), because they are located in Los Alamitos, while Heather Park was not included in this table. Details on the City of Seal Beach Park system and parks closest to the Project site operated by Seal Beach, including Arbor Park, Arbor Dog Park, and Heather Park, are described on Pages 4.14-4 through 4.14-6 of the Draft EIR. Accordingly, no corrections or revisions to the Draft EIR are required.

D-25 The commenter states that the closest parks to the Project are owned and operated by the City of Seal Beach and that while the Draft EIR includes a discussion of the Project applicant paying in-lieu fees to the City of Los Alamitos, it does not address impact on the deterioration and maintenance on Seal Beach. Section 4.14, *Recreation*, of the Draft EIR analyzes the Project's impact on existing neighborhood and regional parks, including those closest to the Project site. The Draft EIR concluded that implementation of the Project would not result in significant impacts related to the physical deterioration of recreational facilities and impacts would be less than significant. (refer to Pages 4.14-9 and 4.14-10).

D-26 The commenter states that the Arbor Park usage assumption is understated in the Park Impact Analysis (*Technical Appendix M* of the Draft EIR) compared to what was observed and documented in the Arbor Park Parking Study and Layout (*Technical Appendix Q* of the Draft EIR).

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A direct comparison of the two reports mentioned by the commenter cannot be made because each report was prepared for a separate and distinct purpose and each analysis was based on conservative assumptions for the issue being addressed (i.e., impacts to parks and impacts of parking to AYSO events, respectively). The purpose of the Park Impact Analysis (*Technical Appendix M*) is to evaluate the potential impact of future Project residents' regular use of parks in close proximity to the Project site, including Arbor Park, Arbor Dog Park, and Heather Park. On the other hand, the purpose of the Arbor Park Parking Study and Layout (*Technical Appendix Q*) is to specifically address parking needs for AYSO 150 events and observed peak parking demand during AYSO events with all nine soccer fields in use concurrently.

Nevertheless, the Park Impact Analysis (*Technical Appendix M*) acknowledges the AYSO events. Specifically, Pages 2 and 3 of *Technical Appendix M* states:

> *Arbor Park is primarily a permitted park, which means groups/organizations/individuals must apply to the City of Seal Beach for approval for requested dates and times to utilize the park. Applicants provide information including, but not limited to, the type of activity and must follow the rules and regulations set forth by the City of Seal Beach. Arbor Park is primarily permitted to AYSO Region 159, serving the Los Alamitos, Rossmoor, and Seal Beach area. AYSO Region 159 was permitted to use Arbor Park for 1,052 hours in each calendar year 2022 and 2023. No other groups received permits. Typically, Arbor Park is permitted on Saturdays and weekday afternoons for AYSO Region 159 games and practices. Arbor Park's permitted use is comparable to other similar active parks in the City of Seal Beach system.*
>
> *Although Arbor Park is primarily a permitted park, the park is available and used by others outside of permitted times. Residents participate in allowable nonpermitted/passive uses such as informal/family sports activities (i.e., soccer, ultimate frisbee, playing catch with the football/baseball) and walking. In accordance with "Recreation Areas, Their Design and Equipment," a carrying capacity (referring to the number of visitors that can be accommodated in a park without unacceptable impacts to the quality of the visitor experience) can be calculated for a park utilizing the amenities, such as playgrounds, baseball fields, and open lawn areas present in the park. In general, a carrying capacity is not calculated for a community park that an agency can monitor for usage through a permitting process. However, for the purpose of this analysis, during non-permitted times, it is estimated at full capacity that 270 visitors can be accommodated at Arbor Park. Based upon City of Seal Beach staff monitoring and observations, Arbor Park is currently not at full capacity usage.*

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Therefore, the Park Impact Analysis (*Technical Appendix M*) identifies that Arbor Park is a permitted park and also identifies the number of AYSO games and practices in the 2022 and 2023 calendar years. The analysis calculates carrying capacity in accordance with "Recreation Areas, Their Design and Equipment,"[3] prepared for the National Recreation Association, and therefore, the analysis utilizes an appropriate industry standard and does not understate the usage of Arbor Park. Accordingly, no corrections or revisions to the Draft EIR are required.

D-27 The commenter states that as the Project takes access off Lampson Avenue, the basis for determining significance should be based on Seal Beach's guidelines. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, this traffic study has been prepared in accordance with the City of Los Alamitos' requirements (as the Lead Agency for the Project) and the City of Seal Beach's Transportation Analysis Guidelines (June 2020, referred to as City Guidelines) as the study area intersections are located within the City of Seal Beach. The recommendations for off-site roadway improvements within the jurisdiction of the City of Seal Beach were made in compliance with Seal Beach Guidelines. As stated previously, the CEQA Guidelines specify that a project's effects on automobile delay shall not constitute a significant environmental impact.

D-28 The commenter requests clarification on how the fair share requirements would be used to benefit the Project's site's surrounding roadway network within the City of Seal Beach. As stated in the Traffic Analysis (*Attachment G* of this Final EIR), transportation improvements are funded through a combination of improvements constructed by the Project or fair share contributions. When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. The Project's fair share contribution to Seal Beach Boulevard and Lampson Avenue is 3.8% in the AM peak hour and 5.1% in the PM peak hour (see Table 7-1 of *Attachment G* of this Final EIR). As stated previously, the CEQA Guidelines specify that a project's effects on automobile delay shall not constitute a significant environmental impact. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

D-29 The commenter states that site access modifications to the Project site are within Seal Beach jurisdiction and improvements shall require approval and compliance with Seal Beach. The City acknowledges and agrees with the commenter. Table 3-6, *Project-Related Approvals/Permits*, of the Draft EIR acknowledges that the Project would require an

[3] *"Recreation Areas, Their Design and Equipment" – second edition, George D. Butler, The Ronald Press Company, New York, copyright 1958, by National Recreation Association Incorporated, pg. 96*

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encroachment permit for infrastructure improvements within the Lampson Avenue right-of-way.

D-30 The commenter requests clarification on where the intended off-site parking is with respect to AYSO events and whether it would impact Seal Beach's parking supply.

Parking shortfalls relative to parking demand during AYSO Saturday games are not considered a significant environmental impact under CEQA. As discussed in the Draft EIR, there is a potential for inadequate parking during AYSO Saturday games as it currently operates (see Pages 4.2-25 and 4.2-26). If there is inadequate parking, visitors to the AYSO games would have the option of dropping off players or parking off-site. It is expected that any off-site parking would occur in available parking spaces and within walking distance (0.25 to 0.5 mile radius) of Arbor Park.

D-31 The commenter states that construction traffic impacts shall be confirmed with Seal Beach and an approval permit from Seal Beach is required. The City acknowledges that the Project would require an encroachment permit for infrastructure improvements, including construction, within the Lampson Avenue right-of-way. Refer to Response to Comment D-29.

D-32 The commenter requests for clarification on whether a traffic signal would be provided at the main Project site access. As evaluated and determined in the Project's Traffic Analysis (see *Attachment G* of this Final EIR), the primary neighborhood entry is not anticipated to meet a peak hour or planning level (daily volume) based traffic signal warrants. Therefore, the Project does not propose installation of a traffic signal. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*.

D-33 The commenter requests that Traffic Analysis indicate that the queuing analysis conducted for the site driveway was for the unsignalized case. As provided in the updated Traffic Analysis (*Attachment G* of this Final EIR), both Project driveways on Lampson Avenue were evaluated assuming cross-street stop-controlled intersections for the purposes of the queuing assessment.

D-34 The comment requests that the title in Section 3.3 of the Project's Traffic Analysis (*Technical Appendix N1* of the Draft EIR) to be revised to the City of Seal Beach. Pursuant to the commenter's request, the Project's Traffic Analysis has been updated accordingly and included as *Attachment G* to this Final EIR.

D-35 The commenter requests Exhibit 3-3 of the Traffic Analysis to show the location of the Project site for context. Pursuant to the commenter's request, the Project's Traffic Analysis has been updated accordingly and included as *Attachment G* to this Final EIR.

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D-36 The commenter requests that Exhibit 3-4 of the Traffic Analysis show city boundaries to indicate Los Alamitos and Seal Beach. Pursuant to the commenter's request, the Project's Traffic Analysis has been updated accordingly and included as *Attachment G* to this Final EIR.

D-37 The commenter requests Exhibit 3-5 of the Traffic Analysis to show the location of the Project site for context. Pursuant to the commenter's request, the Project's Traffic Analysis has been updated accordingly and included as *Attachment G* to this Final EIR.

D-38 The commenter requests feasibility documentation of how the recommended mitigation measure can be achieved within the geometric configuration without sacrificing westbound left-turn storage.

Pursuant to the commenter's request, the Traffic Analysis has been revised to include a queuing analysis to demonstrate the feasibility of the recommended improvement at Seal Beach Boulevard and Lampson Avenue. Additionally, a queuing analysis was performed at the intersection of Valley View Street and Lampson Avenue. The updated Traffic Analysis is included in *Attachment G* to this Final EIR. The queuing analysis was conducted for General Plan Buildout Without and With Project traffic conditions since these analysis scenarios have the highest traffic volumes and would result in the most conservative analysis (see Table 6-4 of *Attachment G*) As shown, there are no queuing issues in the turn lanes anticipated at Seal Beach Boulevard and Lampson Avenue. The intersection of Valley View Street and Lampson Avenue is anticipated to have the same queuing issues under both Without and With Project traffic conditions where the addition of Project traffic would not add more than one vehicle length to any of the deficient turning movements (approximately 25-feet). Therefore, the recommended improvement at Seal Beach Boulevard and Lampson Avenue is feasible and the Project's fair share contribution would be 5.1% (see Table 7-1 of the Traffic Analysis in *Attachment G*). As stated previously, the CEQA Guidelines specify that a project's effects on automobile delay shall not constitute a significant environmental impact; therefore, the recommended improvement is not mitigation measure.

D-39 The commenter states the City of Seal Beach Traffic Impact Study Guidelines state that intersections or roadway links with more than five or more reported accidents within the most recent 12-month period within significant influence of the project shall be analyzed and will require mitigation. Further, the commenter states that no crash analysis was provided in the Draft EIR. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H, Safety Evaluation*. Thus, no further response is required.

D-40 The commenter states that no link analysis was provided pursuant to the City of Seal Beach Traffic Impact Study Guidelines. As discussed previously, transportation impacts under CEQA is now based on VMT rather than automobile delay- LOS (traffic congestion). However, the LOS analysis was prepared pursuant to the City of Los Alamitos and Seal Beach Transportation Guidelines.

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The following roadway segments, in boldface, were evaluated. since the Project would represent 1% or more of the total direction volume under General Plan Buildout traffic conditions:

#	Roadway	Segment Limits	Project	2045 WP	Project %
1	Seal Beach Bl.	North of Lampson Av.	308	48,860	0.6%
2	**Seal Beach Bl.**	**South of Lampson Av.**	**538**	**47,018**	**1.1%**
3	**Lampson Av.**	**Seal Beach Bl. to Old Ranch Plaza**	**846**	**23,220**	**3.6%**
4	**Lampson Av.**	**Old Ranch Plaza to Basswood St.**	**846**	**20,854**	**4.1%**
5	**Lampson Av.**	**Basswood St. to Candleberry Av.**	**846**	**16,825**	**5.0%**
6	**Lampson Av.**	**Candleberry Av. to Heather St.**	**846**	**15,012**	**5.6%**
7	**Lampson Av.**	**Heather St. to Rose St.**	**846**	**15,287**	**5.5%**
8	**Lampson Av.**	**Rose St. to Tulip St.**	**692**	**15,686**	**4.4%**
9	**Lampson Av.**	**Tulip St. to Valley View St.**	**692**	**16,878**	**4.1%**
10	**Lampson Av.**	**East of Valley View St.**	**230**	**12,915**	**1.8%**
11	Valley View St.	North of Lampson Av.	154	50,882	0.3%
12	Valley View St.	North of Lampson Av.	308	49,969	0.6%

The roadway segment analysis indicates that all study area roadway segments would operate at an acceptable LOS under all analysis scenarios. As such, no roadway segment widening is recommended.

D-41 The commenter requests clarification on how the reduction in parking from the Los Alamitos Luxury Apartment project impacts surrounding on/off street parking.

The discussion of the Los Alamitos Luxury Apartment project in the Parking Analysis (*Technical Appendix P* of the Draft EIR) is presented to demonstrate a precedent for a reduction in parking standards in the City of Los Alamitos, which is a jurisdiction that has a high parking standard in comparison to neighboring Seal Beach parking requirements. The analysis demonstrates that the Project would provide adequate parking for future residents and visitors of the Project and therefore, would not require any off-site parking. Refer to Response to Comment D-7 and Master Response 2.1.3, *Parking*, for a discussion of parking impacts.

D-42 The commenter inquires whether there will be overflow provisions during AYSO peak parking demand. The Arbor Park Parking Study and Layout (*Technical Appendix Q* of the Draft EIR) considers options for parking overflow that would be voluntarily provided by the Project if there is a parking shortage. For non-CEQA informational purposes, Walker Consulting found that any parking shortages at AYSO events could be eliminated in their entirety if AYSO spread out its soccer events and eliminated the large number of overlapping games. Refer to Response to Comment D-30 and Master Response 2.1.3, *Parking*, for a discussion of parking impacts. Thus, no further response is required.

D-43 The commenter inquires about the Caltrans park-and-ride and whether there are requirements for a substitute location. The park-and-ride that previously occupied the Project site has not

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been in operation for the past 18 months and when in operation had limited usage. There are no requirements or proposal to provide a substitute park-and-ride location.

D-44 The commenter requests a condition of approval requirement to work with the American Youth Soccer Organization (AYSO) and Seal Beach to address the remaining parking shortfall. Parking shortfalls relative to parking demand during AYSO Saturday games are not considered a significant environmental impact under CEQA; therefore, the City has no legal authority under CEQA to impose a condition to this effect. However, the Project Applicant has agreed to coordinate with the City of Seal Beach and AYSO to help coordinate usage of Arbor Park, as needed.

D-45 The commenter requests that all mitigation measures identified in this letter be incorporated into a Mitigation Monitoring and Reporting Program (MMRP) and that all project design features that avoid or reduce impacts and mitigation measures also be incorporated into the Project's conditions of approval. Additionally, the commenter states the City of Seal Beach reserves the right to provide comments on the MMRP following its release. The City acknowledges that all mitigation measures identified in the Draft EIR will be incorporated into the MMRP and that project design features that reduce environmental impacts will be incorporated as conditions of approval. The MMRP will identify all Project Design Features and Mitigation Measures incorporated into the Project and is incorporated as *Attachment O* of this Final EIR. Pursuant to CEQA Guidelines Section 15088, the Final EIR will be distributed to the City of Seal Beach a minimum of 10-days prior to the City's hearing on the Project.

D-46 The commenter states that the Draft EIR should disclose that the proposed water infrastructure is not in place and is contingent upon receiving a Seal Beach City Council-approved agreement with the proposed water purveyor. This comment is duplicative of Comment D-4; refer to Response to Comment D-4.

D-47 The commenter states that the Draft EIR should disclose that Seal Beach sanitary sewer service is contingent upon receiving a Seal Beach City Council-approved agreement for service outside the Seal Beach service area boundaries and discussion of alternatives should be provided should the agreement not be approved. This comment is duplicative of Comment D-5; refer to Response to Comment D-5.

D-48 The commenter states that the Draft EIR should disclose the proposed alternative drains into Seal Beach right-of-way, which is contingent upon approval from the City of Seal Beach. This comment is duplicative of Comment D-6; refer to Response to Comment D-6.

D-49 The commenter requests confirmation of whether Golden State Water Company (GSWC) will be expanding water facilities to serve the Project site under a separate environmental assessment. GSWC has indicated that it has adequate water supply to serve the Project site (see *Attachment K, Will-Serve Letters*). The expansion of water infrastructure is identified as part

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of the Project and analyzed in the Draft EIR. As described in Section 3.0, *Project Description*, of the Draft EIR, GSWC would provide water service to the Project. Domestic water lines would be provided as shown in Figure 3-23, *Utility Plan*, of the Draft EIR, and include a 1,200 feet watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Draft EIR analyzed impacts associated with the connection to GSWC infrastructure and the extension of the 1,200 foot off-site watermain. Potential impacts related to installation of the off-site water main are addressed under construction-related impacts throughout the Draft EIR, and no significant impacts have been identified. Therefore, a separate environmental assessment is not required or anticipated to provide water service to the Project.

D-50 The commenter makes concluding remarks and the City acknowledges Iris Lee as the contact person for the City of Seal Beach. Thus, no further response is required.

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Comment Letter E

Department of Toxic Substances Control

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SENT VIA ELECTRONIC MAIL

June 5, 2024

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RE: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE 4665 LAMPSON RESIDENTIAL PROJECT DATED APRIL 24, 2024, STATE CLEARINGHOUSE NUMBER 2022090476

Dear Tom Oliver,

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report (DEIR) for the 4665 Lampson Residential Project (Project). The Project would demolish the existing office building and surface parking lot on the 12.3-acre property and redevelop the Project site with 246 residential units consisting of a variety of different product types. These housing types include 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes. After reviewing the project, DTSC recommends and requests consideration of the following comments: E-1

1. Based on the Limited Phase II Environmental Site Assessment (ESA), there was no evidence of a significant release of potential chemicals of E-2

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concern to the subsurface in the area investigated, which included in the diesel above ground storage tank (AST), elevator equipment room, and parking lot. Although low levels of total petroleum hydrocarbons (TPHd), lead and select organochlorine pesticides (OCPs) were detected in Site soils, the concentrations were well below residential screening levels, and thus, are de minimis in nature and do not warrant further investigation or mitigation.

Also, the Phase II ESA states: "Although the detected concentrations of arsenic found at the Site exceed the residential screening level, no levels are less than the DTSC upper bound background concentration of 12 mg/kg. Therefore, the on-site detections of arsenic are de minimis in nature and do not warrant further investigation or mitigation. Based on the results of the assessment activities detailed herein, the potential chemicals of concern detected in soil in the areas assessed (e.g., diesel AST, elevator equipment room, parking lot release area, and Site wide historical agricultural use) are not indicative of a significant subsurface chemical release has occurred. The detected concentrations found during this investigation are considered to be de minimis in nature for the proposed residential redevelopment, and it is EFI Global's opinion that no further assessment is warranted at this time with respect to the RECs (recognized environmental conditions) identified."

Since potential chemicals of concerns were found in the Phase II ESA and the detected concentrations of arsenic found at the site exceed the residential screening level and remain in excess of DTSC's upper bound background concentration of 12 mg/kg, DTSC recommends that all constituent concentrations meet screening levels in accordance with DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual. If the constituent concentrations do not meet screening levels in accordance with DTSC guidance, the following comments are also recommended:

E-2
(CONT.)

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2. The City of Los Alamitos enter into DTSC's Standard Voluntary Agreement (SVA) program or seek oversight with your Certified Local Agency - Orange County Health Care Agency - so a proper evaluation of the Project is completed. If entering into an SVA with DTSC, the FLUXX portal link is provided and the page also has a link to the Fluxx User Guide that can help you navigate the system. You will need to create a new profile and once in the system, click "Start a Request for Lead Agency Oversight Application." DTSC recommends that once the SVA is signed, a Preliminary Endangerment Assessment Report (PEA Report) be submitted for DTSC review. The PEA Report shall summarize all existing data and provide an evaluation of the possible risk to current and future users of the site. If you have any questions about the application portal, please contact the DTSC Brownfield Coordinator Gregory Shaffer or contact the Application Portal Inbox. E-3

3. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's Preliminary Endagngerment Assessment (PEA) Guidance Manual. E-4

4. All imported soil and fill material should be tested to ensure any contaminants of concern are within DTSC's and U.S. Environmental Protection Agency (USEPA) Regional Screen Levels (RSLs) for the intended land use. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material meets screening levels outlined in the PEA for the intended land use. E-5

DRAFT

The soil sampling should include analysis based on the source of the fill and knowledge of the prior land use. Additional information can be found by visiting DTSC's Human and Ecological Risk Office (HERO) webpage.

E-5 (CONT.)

DTSC appreciates the opportunity to comment on the DEIR for the Project. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions or would like any clarification on DTSC's comments, please respond to this letter or via email for additional guidance.

E-6

Sincerely,

Tamara Purvis

Tamara Purvis
Associate Environmental Planner
HWMP-Permitting Division – CEQA Unit
Department of Toxic Substances Control
Tamara.Purvis@dtsc.ca.gov

DRAFT

cc: (via email)

Governor's Office of Planning and
Research State Clearinghouse
State.Clearinghouse@opr.ca.gov

Dave Kereazis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Scott Wiley
Associate Governmental Program Analyst
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Scott.Wiley@dtsc.ca.gov

DRAFT

Responses to Comment E

Department of Toxic Substances Control (DTSC), dated June 5, 2024.

E-1 The commenter provides introductory remarks and summarizes the Project. Responses to comments are provided in responses to Comments E-1 to E-6, below; thus, no further response is required.

E-2 The commenter summarizes results from the Phase II Environmental Site Assessment (ESA; *Technical Appendix H2* of the Draft EIR), which stated that there was no evidence of a significant release of potential chemicals of concern to the subsurface in the area investigated. Although there were low levels of total petroleum hydrocarbon, lead and select organochlorine pesticides detected in the soil, the concentrations were well below residential screening levels, and thus do not warrant further investigation. The commenter recommends that all constituent concentrations meet screening levels in accordance with DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual since the detected arsenic remains in excess of DTSC's upper bound background concentration of 12 mg/kg.

As to the comment regarding arsenic concentrations, this comment references text in the original Phase II ESA that included a typographical error. The Phase II ESA (see Section 4.0 and *Attachment C1* to this Final EIR) has been updated to correct this typographical error and to more accurately reflect the fact that the detected arsenic concentrations found at the Project site are all *below the upper bound concentration of 12 mg/kg*, and thus, they are trace or background concentrations that do not warrant further investigation or mitigation. The corrected Phase II ESA now reads: "Although the detected concentrations of arsenic found at the site exceed the residential screening level, all levels are less than the DTSC upper bound background concentration of 12 mg/kg."

E-3 The commenter provides information on procedures related to DTSC's Standard Voluntary Agreement (SVA) program and PEA Report. Refer to Response to Comment E-2 related to the constituent concentrations meeting screening levels in accordance with DTSC guidance. Due to the change made in the Phase II ESA (see Section 4.0 and *Attachment C1* to this Final EIR), all constituent concentrations are lower than the screening levels. As such, the commenter's recommendation to enter into DTSC's Standard Voluntary Agreement program or seek oversight with the Certified Local Agency – Orange County Health Care Agency is not required.

E-4 The commenter states that lead-based paints (LBP) or products, mercury, asbestos containing materials (ACM), and polychlorinated biphenyl (PCB) caulk surveys should be conducted if there are buildings or structures that will be demolished. Additionally, removal, demolition, and disposal should be conducted in compliance with California environmental regulations and policies. As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, the use of asbestos-containing materials (ACM, a known carcinogen) and lead-based paint (LBP)

DRAFT

(a known toxic), both of which are considered hazardous materials, was a common building construction method prior to 1978 and may be present in the existing building. All proposed demolition activities would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of PCBs, ACMs and LBP. Additionally, the Project is required to comply with South Coast AQMD Rule 1403 (Asbestos Emissions) and Title 17 of the CCR, Division 1, Chapter 8: Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards applies. Compliance with the above regulatory requirements would ensure that removal of ACMs or LBPs would not result in a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant (refer to Page 4.8-16 of the Draft EIR).

Moreover, EFI prepared a Phase II ESA for the Project site dated September 22, 2022 based on a geological survey and soil sampling conducted on August 16, 2022. Select soil samples were collected and analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), TPH as oil (TPHo), volatile organic compounds (VOCs), PCBs, organochlorine pesticides (OCPs), arsenic, and lead (Pb). Analytical results for PCBs indicated concentrations were not detected above the laboratory reporting limits in any of the soil samples analyzed (refer to Page 4.8-5 of the Draft EIR). However, caulk containing PCBs were used in buildings in the 1950s through the 1970s and may be present in the existing building. Therefore, the Project would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of PCBs including Title 40, Code of Federal Regulations, Part 761.

There is also a potential for mercury containing products at the existing buildings. When a mercury-containing product breaks and the mercury is released, the exposed mercury can evaporate and become an invisible, odorless toxic vapor. Mercury-containing products exhibit hazardous characteristics as described in the California Code of Regulations, Title 22, chapter 11 and are classified as a type of hazardous waste called “universal waste.” Universal wastes are hazardous wastes that pose a lower immediate risk to people and the environment when handled properly. Due to this lower risk, universal wastes can be handled and transported under more relaxed rules compared to other hazardous wastes.[4] The Project would be required to comply with all applicable federal, State, and local hazardous materials regulations including California Health and Safety Code Section 25214.8.16 to prevent mercury releases.

DRAFT

[4] *https://dtsc.ca.gov/toxics-in-products/mercury-waste/*

Pursuant to the commenter's request, Page 4.8-16 of the Draft EIR has been revised as shown in Section 4.0 of this Final EIR to include the above discussion regarding the potential of PCBs and mercury.

E-5 The commenter states that all imported soil and fill material should be tested to ensure any contaminants of concern are within DTSC's and U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for the intended land use. As stated in Section 3.0, *Project Description*, of the Draft EIR, approximately 6,280 cubic yards of soil import would be required. As a condition of approval, prior to importation onsite, the Project Applicant shall submit evidence to the Planning Department that all imported fill materials have been tested and meet the regulatory screening levels. Thus, no further response is required.

E-6 The commenter provides concluding remarks. The City acknowledges Tamara Purvis as the contact person for DTSC for the Project. Thus, no further response is required.

DRAFT

COMMENT LETTER F

AFFILIATED AGENCIES

Orange County Transit District

Local Transportation Authority

Service Authority for Freeway Emergencies

Consolidated Transportation Service Agency

Congestion Management Agency

June 5, 2024

Mr. Tom Oliver
City of Los Alamitos
Planning Department
3191 Katella Ave
Los Alamitos, CA 90720

Via email: toliver@cityofolosalamitos.org

Subject: Notice of Availability (NOA) of a Draft Environmental Impact Report – 4665 Lampson Avenue Project

Dear Mr. Oliver:

The Orange County Transportation Authority (OCTA) appreciates the opportunity to review and comment on the 4665 Lampson Avenue Project. The following comments are provided for you:

- On page 2-11, Section 2.5.9 (Transportation), please remove any reference of the project area being served by OCTA Routes 42 and 123. Neither route has stops within 0.5 miles the project area, the OCTA transit accessibility standard. F-1
- On page 4.10-27, Policy 4.7 (Transit stops), please note that the nearest OCTA bus stop from the project site is 1.2 miles for Route 123 (located at the intersection of Valley View Street and Lampson Avenue) and 1.6 miles for Route 42 (located at the intersection of Seal Beach Boulevard and Lampson Avenue). Please revise the document to reflect the correct distances. F-2
- On page 4.15-1, Section B (Existing Transit Services), please remove any mention of the project site being served by OCTA bus routes. OCTA considers properties within a 0.5-mile radius of a bus stop to be served by that stop/route. The nearest OCTA routes (42, 56, 123) have stops that are between 1.2 and 1.6 miles from the project site, which is greater than the 0.5-mile OCTA transit accessibility standard. Therefore, the project site is not served by these routes. F-3
- On page 4.15-13, in the table, Policy 4.7 (Transit stops), the nearest stop for Route 123 is 1.2 miles away from the project site, and the nearest stop for Route 42 is 1.6 miles away from the project site. Please revise to reflect the correct distances. F-4

We also have the following comment for Appendix N1 (Traffic Analysis): F-5

Orange County Transportation Authority
550 South Main Street / P.O Box 14184 / Orange / California 92863-1584 / (714) 560-OCTA (6282)

DRAFT

Mr. Tom Oliver
June 5, 2014
Page 2

- On page 23, Section 3.4 (Transit Service), please remove any reference of the project area being served by OCTA Routes 42 and 123. Neither route has stops within 0.5 miles of the project area, the OCTA transit accessibility standard.

F-5 (CONT.)

We encourage open communication with OCTA on any matters discussed herein. Should you have any comments or questions, please contact me at (714) 560-5907 or at dphu@octa.net.

F-6

Sincerely,

Dan Phu
Manager, Environmental Programs

DP:tc

DRAFT

Orange County Transportation Authority
550 South Main Street / P.O Box 14184 / Orange / California 92863-1584 / (714) 560-OCTA (6282)

Responses to Comment F

Orange County Transporation Authority (OCTA), dated June 5, 2024.

F-1 The commenter requests that the Draft EIR remove any reference of the Project area being served by OCTA Routes 42 and 123 and that neither route has stops within 0.5 miles the project area, the OCTA transit accessibility standard. Pursuant to the commenter's request, Page 2-11 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

~~The Project site is currently served by~~ Orange County Transit Authority (OCTA) ~~with~~ currently provides bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). ~~The Project site is served by OCTA bus routes 42 and 123.~~ The nearest OCTA bus stops to the Project site are Route 123, located at the intersection of Valley View Street and Lampson Avenue (approximately 1.2 miles from the Project site) and Route 42, located at the intersection of Seal Beach Boulevard and Lampson Avenue (approximately 1.6 miles from the Project site).

F-2 The commenter provides the distance to the nearest OCTA bus stops and requests revisions to the Draft EIR to reflect the correct distances. Pursuant to the commenter's request, Page 4.10-27 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

Policy 4.7 **Transit stops.** Improve and maintain safe, clean, comfortable, well-lit, and rider friendly transit stops that are well marked and visible to motorists.	**Not Applicable.** The nearest OCTA Route 123 bus stop from the Project site is approximately 1.2~~1.6~~ miles walking distance at the intersection of Valley View Street and Lampson~~Champman~~ Avenue. The nearest OCTA Route 42 bus stop from the Project site is approximately 1.6~~3.5~~ miles walking distance at the intersection of Seal Beach Boulevard and Lampson Avenue.~~Katella Avenue and Los Alamitos Boulevard~~ Therefore, this policy is not applicable to the Project.

F-3 The commenter requests to removal of any mention of the Project site being served by OCTA bus routes. Pursuant to the commenter's request, Page 4.15-1 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

As shown in Figure 4.15-1, *Existing Transit Routes*, ~~the Project site is currently served by the~~ Orange County Transportation Authority (OCTA) ~~with~~ currently provides bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). OCTA route 42 runs along Seal Beach Boulevard and serves Seal Beach to Orange with an

DRAFT

existing stop provided at the intersection of Seal Beach Boulevard and Lampson Avenue ~~Katella Avenue and Los Alamitos Boulevard~~. The existing stop is approximately 1.6~~3.5~~ miles ~~walking distance~~ from the Project site. Bus service frequency is approximately 20-minute intervals during the peak commute hours and 40 minutes during other times of the day during a typical weekday. OCTA Route 123 serves the city of Anaheim to city of Huntington Beach via Malvern Avenue, Valley View Street, and Bolsa Chica. There are existing stops along Valley View Street with an existing stop at Chapman Avenue. The nearest OCTA Route 123 existing stop is located approximately 1.2~~1.6~~ miles ~~walking distance~~ from the Project site to the intersection of Lampson~~Champman~~ Avenue and Valley View Street. Bus service frequency is approximately 60-minute intervals on a typical weekday for OCTA Route 123.

F-4 The commenter requests revisions to the Draft EIR to reflect the correct distances of the Project site's proximity to the nearest bus stops. Pursuant to the commenter's request, Page 4.15-13 of the Draft EIR has been revised as shown below and in Section 4.0 of this Final EIR.

Policy 4.7 **Transit stops.** Improve and maintain safe, clean, comfortable, well-lit, and rider friendly transit stops that are well marked and visible to motorists.	**Not Applicable.** The nearest OCTA Route 123 bus stop from the Project site is approximately 1.2~~1.6~~ miles walking distance at the intersection of Valley View Street and Lampson~~Champman~~ Avenue. The nearest OCTA Route 42 bus stop from the Project site is approximately 1.6~~3.5~~ miles walking distance at the intersection of Seal Beach Boulevard and Lampson Avenue.~~Katella Avenue and Los Alamitos Boulevard~~ Therefore, this policy is not applicable to the Project.

F-5 The commenter requests removal of any reference of the Project area being served by OCTA in the Project's Traffic Analysis (*Technical Appendix N1* of the Draft EIR). Pursuant to the commenter's request, the Project's Traffic Analysis has been updated accordingly and revisions have been included in Section 4.0 and *Attachment G* to this Final EIR.

F-6 The commenter provides concluding remarks The City acknowledges Dan Phu as the contact person for OCTA. Thus, no further response is required.

DRAFT

Comment Letter 1

From: Alexandria A
To: Tom Oliver
Subject: DEIR comments
Date: Friday, May 24, 2024 8:06:16 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tankwh@gmail.com

I strongly approve this project site to build more housing on Lampson. Selfish NIMBYs who want to protect their property values at the expense of limiting housing availability for millenials and gen z are absolutely disgusting and are parasitic to our community. There is a culture of fear mongering and hatred of "poor people" who will move into losal and the boomers who live here use that to stop necessary development and modernization for our community.

Boomers dont get to ruin the future of young people. Millenials are the first generation who are poorer than their parents. Boomers have already ruined so much - the environment, the economy, and now housing. Boomers have lived lavish and excessive lives.

Build housing and let young people have a chance at living a good life!!!

1-1

Responses to Comment 1

Alexandria, A., dated May 24, 2024.

1-1 The commenter expresses approval of the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 2

From: Lelisa Balderama
To: toliver@cityoflosalamitos.org
Subject: Lampson Project
Date: Sunday, May 19, 2024 2:25:47 PM

Hello,

Please convey to those who are making the decisions:

Of the items listed regarding concerns and comments about this project, this is the one that caught my most attention:

2-1

"7. This area is a lovely and relatively quiet community where most households are families where we feel safe and it's not congested by traffic, pollution or too much housing squeezed into a small area.

2-2

This project causes a HUGE loss to the hundreds of families calling College Park East and the surrounding area “home”. **Only a win for the developer."**

Please listen to the COMMUNITY, not the developer.

Thank you.

2-3

Kindly,
Lelisa

Rossmoor resident

Responses to Comment 2

Balderama, Lelisa, dated May 19, 2024.

2-1 The commenter requests that comments and concerns about the Project be conveyed to the decision maker. No further response to this comment is required.

2-2 The commenter expresses concerns with traffic congestion, pollution, and the Project's proposed density. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

2-3 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 3

From: Lelisa Balderama
To: Tom Oliver
Subject: Re: Lampson Project...edited message...there was an error on previous message...I meant "OPPOSE the project" not "proposed" Thank You!
Date: Tuesday, April 30, 2024 11:20:27 AM
Attachments: image004.png
image003.png
image002.png

Hello Mr. Oliver,

" T**wo State Agencies (CalTrans Division of Aeronautics and the California Airport Land Use Commission)**

**issued written findings that "Lampson" location was not suitable for residential development.
due to public safety and health risks as a result of
activities at the Joint Forces Training Base
that borders Lampson Park Place.
The State Agencies' warnings have been omitted from
the Draft Environmental Impact Report**

prepared by Lampson Consultants."

3-1

Given this information I greatly oppose the project. Not to mention the increased traffic and pollution this project will bring into our neighborhoods.

Sincerely,

Lelisa

(Rossmoor Resident)

3-2

On Tuesday, April 30, 2024 at 07:52:43 AM PDT, Tom Oliver <toliver@cityoflosalamitos.org> wrote:

Thanks for your response, Lelisa. I will forward your response to the Environmental Impact Report consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

From: Lelisa Balderama <lelisa_b@yahoo.com>
Sent: Monday, April 29, 2024 5:34 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Lampson Project

Hello Mr. Oliver,

I was emailed the following information:

" T**wo State Agencies (CalTrans Division of Aeronautics and the California Airport Land Use Commission)**
issued written findings that "Lampson" location was not suitable for residential development.
due to public safety and health risks as a result of activities at the Joint Forces Training Base that borders Lampson Park Place.
The State Agencies' warnings have been omitted from the Draft Environmental Impact Report prepared by Lampson Consultants."

3-3

Given this information I greatly proposed the project. Not to mention the increased traffic and pollution this project will bring into our neighborhoods.

Sincerely,
Lelisa
(Rossmoor Resident)

3-4

DRAFT

Responses to Comment 3

Balderama, Lelisa, dated April 30, 2024.

3-1 The commenter expresses concerns related to ALUC and Caltrans Division of Aeronautics findings related to the Project site. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

3-2 The commenter opposes the Project based on the ALUC and Caltrans Division of Aeronautics findings, increased traffic and pollution. The City acknowledges the commenter's concerns and will be forwarded to decision makers.

Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to the Project, and impacts would be less than significant (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

3-3 The commenter expresses concerns with ALUC and Caltrans Division of Aeronautics findings as to the Project site. This comment is duplicative of Comment 3-1; refer to Response to Comment 3-1 and refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

3-4 The commenter opposes the Project due to increased traffic and pollution. This comment is duplicative of Comment 3-2; refer to Response to Comment 3-2.

DRAFT

Comment Letter 4

May 13, 2024

Tom Oliver, Associate Planner
City of Los Alamitos
Planning Department
3191 Katella Avenue
Los Alamitos, CA 90720

Mr. Oliver,

I have been a resident of Seal Beach for 38 years. I live in College Park East (CPE) which is the neighborhood right across the street from the proposed Lampson Park Place development. I strongly oppose the development of this project. There is a shortage of housing in California but growth should not negatively impact the quality of life of current residents. If this plan is approved, the quality of life for the residents in my neighborhood and the surrounding neighborhoods, will forever change for the worse. These are some of the specific areas of concern I have: 4-1

#1 TRAFFIC

Your *Notice of Availability of a Draft Environmental Impact Report* states "impacts would remain significant and unavoidable." The residents of CPE, Parkewood-Los Alamitos, West Garden Grove and anyone else who must travel on Lampson Avenue is already well aware of the traffic problems we currently face. The additional traffic from Lampson Park Place, and possibly the Old Ranch Golf Course project, will create massive traffic delays and more accidents. The stretch of Lampson Avenue between Heather Street and Candleberry Avenue is called "Dead Man's Curve" due to the numerous accidents, some with fatalities, that have occurred there. Very recently, a driver lost control and flipped her car at Lampson and Rose Street. The intersection at Lampson and Manley, just east of your proposed development, has also been the scene of accidents, some resulting in death. Lampson Avenue is the only way to get anywhere because the JFTB is to the north and the Naval Weapons Station is to the south! 4-2

Currently, cars on Lampson waiting to turn north onto Seal Beach Boulevard during peak hours are sometimes backed up all the way to Basswood Avenue. Cars

DRAFT

heading east on Lampson from Seal Beach Boulevard also experience traffic. When there are large events with many cars arriving at the Old Ranch Golf Course at the same time, the left turn lane into that facility cannot accommodate all the cars and they back up and impede the smooth flow of traffic. Cars traveling in the left lane must suddenly stop or quickly change lanes to avoid collisions. This creates very hazardous situations. Similarly, drivers turning left into the Lampson Park Place neighborhood could face similar issues.

The addition of another light between Heather and Rose Streets will also affect the flow of traffic. The homes in CPE that back up to Lampson at that signal will be subjected to noise and light pollution which they currently do not experience and certainly never expected to when they purchased their homes.

4-2 (CONT.)

#2 – HYDROLOGY REPORT

The Hydrology report states that your representatives did converse with City of Seal Beach staff so you should be aware of the major flooding issues CPE experiences from Heather Street all the way to the very west end of the tract. This problem has existed since the neighborhood's inception due to improper grading by the developer. Over the years, and even more so during these most recent storms in January and February of this year, flooding has caused significant distress and damage to property. Many cars were flooded and sustained electrical damage for a total loss. The flood waters went into garages and even into homes. Some sunken living rooms were substantially flooded and residents had to worry about mold and how to thoroughly dry the walls. People could not even leave their homes. Some residents with large trucks had to rescue people who could not get home because their cars stalled in the deep waters. One such truck owner helped a mother whose car stalled on Ironwood when driving her children home from school. He pulled the children out of her car windows, secured them in his truck, and drove over the curb and onto the grass to deliver them safely to their front door. The storm drain at Elder and Ironwood had no grate and the water was so deep that it formed a vortex which could have easily swept a child away!

4-3

According to the 2008 and 2019 studies done for the City of Seal Beach by AKM Consulting Engineers, they stated that in addition to the inadequate drainage capabilities in CPE which hinder our storm water runoff from making it over to the Old Ranch Golf Course, when the lake has reached its capacity, the storm water

DRAFT

flows back into our neighborhood creating an even bigger problem. Your Hydrology report states that the stormwater from your project will also flow through the JFTB to the Old Ranch Country Club. If the Golf Course cannot currently accommodate the stormwater from CPE, how will it be able to take even more from your proposed development? Or will your project's runoff make it to the golf course first, causing even less water from CPE making it onto the golf course? That would create an even more treacherous situation with deeper flood waters on our affected streets.

Your report further states that if the JFTB does not allow stormwater flows from your project to outlet to their property, then the alternate design is to outlet the flows onto Lampson Avenue near Heather Street. Your report even states that the outlet pipe could clog and create emergency overflow. In a heavy storm, the runoff could be so deep on Lampson that it rises above the curb and floods the backyards of the homes on Ironwood and even further exacerbates the flooding on Ironwood. As you are aware, the City of Seal Beach currently has no timeline to install any capital improvements to alleviate the flooding in CPE.

4-3 (CONT.)

#3 – SANITARY SEWER ANALYSIS

The City of Seal Beach is in the process of proposing a Water/Sewer rate increase. The original proposal was for a 140% increase over the next five years. During the presentation, Staff stated that the increase was necessary as many of the pipes in the city are over 100 years old and others may have significant deterioration. Many residents complained of the huge rate increase and the process is currently on hold.

Your Sanitary Sewer Analysis concludes that the proposed depth of flow from your project will not impact the existing surrounding sanitary sewer systems. It further states that all three sewer mains at the monitored locations will have d/D levels under 0.5. It states that the manhole on Elder, MH-A25, has an existing d/D of 0.3958 and at the completion of the project will have d/D of 0.441 which is still under 0.5. This would be a 10.24% increase which could be significant. I live two houses away from MH A-25 on Elder Avenue. Years ago, the sewer truck would come regularly to clear the pipe in that manhole.

4-4

DRAFT

During the recent storms in January and February, 2024, we witnessed bubbles coming out of the manholes on Elder Street and Ironwood Avenue. Research shows that excessive rain can cause a catastrophe. The pressure from a blockage in the sewer line, amplified by the sudden influx of water, can cause sewer lines to crack and even burst! The increase of sewage from your development added to our already deteriorating pipes could cause very serious and unpleasant problems which would directly affect our section of the neighborhood.

4-4 (CONT.)

OTHER ISSUES

My final comments are in regards to the **Airport Land Use Compatibility Assessment** and the **Noise Study** stating that the proposed project is deemed within the noise limits and will not be susceptible to aircraft accidents. Speaking from experience, the noise from the various aircraft at the JFTB can be extremely loud at times. Helicopter training drills involve takeoffs and landings which involve circling around in a pattern repeatedly for the entire day. When the huge C-5 takes off from the base, we can hear the powerful engine revving up and the noise is so loud that it causes our windows to rattle and house to shake as it slowly makes its ascent over our houses. In the summer, many of the aircraft that participate in the Huntington Beach Air Show take off and land at the JFTB. Yes, it is exciting to see the jets but many people and animals are in distress during those four days. Even if your prospective buyers are fully informed before buying a home in your development, they will be shocked at just how loud and how much activity they will be exposed to and your city will receive complaints.

4-5

Thank you for taking my comments into consideration.

Susan Barembaum
4273 Elder Avenue
Seal Beach
College Park East
susanbarembaum@yahoo.com

DRAFT

Responses to Comment 4

Barembaum, Susan, dated May 13, 2024.

4-1 The commenter expresses general opposition to the Project. The commenter acknowledges the need for housing in California but states that growth should not negatively impact the quality of life of current residents. The commenter expresses concerns related to specific environmental issues related to traffic, hydrology, sanitary sewer, airport compatibility and noise addressed in Response to Comments 4-2 through 4-5, below. Please note that "quality of life" is not considered an impact under CEQA. However, comments related to quality of life are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

4-2 The commenter expresses concerns with traffic stating that transportation impacts would remain significant and unavoidable, and the project would create massive traffic delays and more accidents. The commenter provides an example of an accident that occurred at Lampson and Rose Street and provides examples of congestion in the area. The commenter also states that the addition of the proposed traffic signal will affect the flow of traffic and will subject residents to noise and light pollution. Please refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns related to congestion, and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, related to accidents and safety. The Project no longer proposes installation of a traffic signal. A Safety Evaluation was prepared to confirm that the Project would have no safety impacts on public roadways and Project access points (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H* of this Final EIR). The Safety Evaluation further confirms the analysis and determination in the Transportation Section (Section 4.15) of the Draft EIR that the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature.

4-3 The commenter expresses concerns with existing flooding issues in the area and provides examples of recent flooding events. The commenter references 2008 and 2029 studies done for the City of Seal Beach by AKM Consulting Engineers, which confirms inadequate drainage within the residential area of College Park East (CPE). The commenter expresses concern that both of the Project's storm drainage alternates will exacerbate existing flooding conditions, considering also that the City of Seal Beach currently has no timeline to install capital improvements to alleviate flooding in CPE. Please refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns. Per Master Response 2.1.4, flooding will not be an issue because the Project's storm drainage infrastructure would adequately detain 100-year flows, discharge detained flows at rate that do not exceed existing flows, and the Project's finish floor elevations would be at least 1 foot above the water surface elevation.

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4-4 The commenter states the City of Seal Beach's process of proposing a Water/Sewer rate increase due to the age of existing sewer pipes is currently on hold due to residents' complaints. The commenter also summarizes the results of the Project's Sanitary Sewer Analysis (*Technical Appendix O* of the Draft EIR) and expresses concern with regular sewer maintenance, the amount of increase to Manhole A-25 on Elder Avenue as well as the effect of flooding on sewer facilities. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, related to sanitary sewer impacts. Per Master Response 2.1.4, wastewater volumes produced by the proposed development would not significantly impact or exceed the existing sewer capacity in the public system, and that the existing sewer system has adequate capacity for the proposed development.

4-5 The commenter expresses concerns with the ALUC assessment and noise study regarding noise impacts from the JFTB. The commenter provides examples of her experience with extremely loud noise from takeoffs and landings at JFTB. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

DRAFT

Comment Letter 5

From: Maria Beaini
To: Tom Oliver
Subject: Written Comment from Los Alamitos Resident
Date: Monday, April 29, 2024 6:59:47 PM

Attention Tom Oliver-

As a resident and owner of the property in the beautiful city of Los Alamitos it is disheartening to hear about your site development

The negative effects of traffic, noise, and pollution will be hazardous to our community. 5-1

Please do not develop your proposed community of 246 residential units. Your development will add about one thousand vehicles on our two lane street of Lampson which will be devastating for current residents.

We will have a community polluted with vehicles and traffic jams resulting in loss of property values. 5-2

Thank you for your time,
Maria Beaini
Los Alamitos Home owner

Responses to Comment 5

Beaini, Maria, dated April 19, 2024.

5-1 The commenter expresses opposition to the Project and states that traffic, noise, and pollution will be hazardous to the community. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

DRAFT

Comment Letter 6

Comments on Draft Environmental Impact Report for the 4665 Lampson Avenue Project

James Biery <jamesbiery@yahoo.com>
Mon 6/10/2024 12:48 PM

To:Tom Oliver <Toliver@cityoflosalamitos.org>
Cc:James Biery <jamesbiery@yahoo.com>

1. The project is adjacent to Arbor Park is owned by the US Army and overseen by the Army as well as the Joint Forces Training Base(JRTB) Installation Commander. Any modifications and access to the Arbor Park site must be approved by them. This includes taking down or moving fencing and adding a 10 foot addition as proposed in the Draft EIR. The BASE has not approved this change and may not approve it.
This information must be included in the EIR documents. In addition, there must be documentation of approval of changes to the site by the referenced parties. 6-1
2. The city of Seal Beach has a lease for the current Arbor Park site which also must be included and referenced in the documents and related studies. 6-2
3. Arbor Park operates only as permitted by the Army and the Base on a dawn to dusk basis. This should be included in the report.
4. Gate modifications, fence changes, and direct access from the proposed development into the Arbor Park have not been approved by the Army and the Base. The City of Seal Beach or Los Alamitos or the Developer can not make these changes under the current lease to Seal Beach. 6-3
5, The buildings at 4665 are currently supplied with domestic water and sewer by the City of Seal Beach. There is a proposal to change the water supplier for the project to Golden State Water. It is not clear who will supply water for Arbor Park. This should be clarified and described fully as well as the impacts from construction of new water mains. Seal Beach would continue to provide sewer service in Lampson Avenue. The City of Seal Beach uses water use to calculate sewer charges. The water use information will be need to transferred to Seal Beach to determine sewer charges.. 6-4
6. The storm drainage from the property as described in the report will drain into several areas including underground on-site storage, connection into a ditch which runs into the JFTB and then into the Old Ranch Property, and also Lampson Avenue. The impact and capacity of the ditch and the Old Ranch Property is not described. The overflow of water from Lampson Avenue into Heather Street is also not described or analyzed. Heather Street then feeds into Ironwood Avenue which is subject to constant overflow already. This project drainage will impact College Park East. This was not analyzed. 6-5
7. A new traffic signal is now proposed on Lampson Avenue, but is now supposed to be 600 feet west of Rose. This should be verified and plans updated. In addition, the impact of this signal and the adding of this signal to the City of Seal Beach network must be described and analyzed. 6-6

DRAFT

Responses to Comment 6

Biery, James, dated June 10, 2024.

6-1 The commenter states that the United States Army must approve any modifications and access to Arbor Park and has not approved this change. Project Applicant proposes to dedicate or grant an easement for the northern 10 feet of property abutting Arbor Park and Arbor Dog Park to the City of Los Alamitos with authority over the two parks. The City acknowledges that any improvements to Arbor Park, owned by JFTB, would require JFTB approval, which is not guaranteed. Because the Project does not include any improvements to Arbor Park, the Draft EIR analysis does not assume any improvements to Arbor Park as a result of the dedication.

6-2 The commenter states that the City of Seal Beach has a lease for the current Arbor Park and must be included and referenced in the EIR documents and related studies. The commenter also states that Arbor Park operates only as permitted by the Army and JFTB on a dawn to dusk basis and should be included in the report. The Draft EIR states that Arbor Park and Dog Park are currently leased by the City of Seal Beach from the JFTB for its residents, although the two parks are within the jurisdiction of Los Alamitos (see Page 4.14-4 of the Draft EIR). Arbor Park operations are discussed on Pages 4.14-4 and 4.14-5 of the Draft EIR.

6-3 The commenter states that gate modifications, fence changes, direct access from the Project site into Arbor Park have not been approved by the Army and the Base. The commenter states that the City of Seal Beach, Los Alamitos, or the Project cannot make the proposed changes under the current lease to Seal Beach. The Project is not proposing any gate/fencing improvements on JFTB property and on-site improvements do not require JFTB approval.

6-4 The commenter states that the Project site is currently supplied with domestic water and sewer from the City of Seal Beach. The commenter states that there is a proposal to change the water supplier to Golden State Water Company (GSWC) and inquires who will supply water for Arbor Park. The commenter states that the water supplier for Arbor Park should be clarified and described fully as well as impacts from construction of new water mains. The commenter states that water use will need to be provided to Seal Beach to determine sewer fees.

As stated in Section 4.17, *Utilities and Service Systems,* of the Draft EIR, GSWC provides potable water to the Project site. The Project site will be served by GWSC and infrastructure improvements have been analyzed in the Draft EIR (see the water supply will-serve letter provided as *Attachment K* of this Final EIR). Arbor Park is not part of the Project; therefore, there will be no changes to the water supply for the park as a result of the Project. Sewer service to the Project site would be provided by the City of Seal Beach, and the Project Applicant will be required to pay any applicable sewer connection fees.

6-5 The commenter states that the impact and capacity of the ditch that runs into the JFTB and Old Ranch property and overflow of water from Lampson Avenue into Heather Street is not described or analyzed. The commenter states that Project drainage impacts to College Park

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East were not analyzed. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for a detail discussion on the Project's proposed storm drain routes and impacts.

6-6 The commenter states that the proposed traffic signal should be verified and the plans should be updated along with an analysis of the proposed traffic signal impacts to the City of Seal Beach network. The Project no longer proposes installation of a traffic signal. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*.

DRAFT

Comment Letter 7

We need more housing

Rose Boland <roseboland7@gmail.com>

Thu 6/6/2024 6:17 PM

To:Tom Oliver <Toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender roseboland7@gmail.com

Mr. Oliver

I am a long-term (51-year) Rossmoor homeowner and I am fully in favor of the plan to build multiple new housing units on Lampson Avenue. The Joint Forces air base is already surrounded by housing on all sides. The argument that it would be unsafe to build more housing on Lampson because of the noise and possibility of aircraft accidents has no merit because thousands of people have been living in close proximity to the base for years and years without being adversely affected. Furthermore, I do not believe another environmental impact report is needed. I suspect that a lot of people opposed to new housing at this location fear an influx of low income and minority buyers. Yet if the public does not have the will to permit projects such as the Lampson development, we will never adequately address the problem of a lack of affordable housing in this part of Orange County.

7-1

John Boland

DRAFT

Responses to Comment 7

Boland, Rose, dated June 06, 2024.

7-1 The commenter expresses approval of the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 8

From: Barbara Boyer
To: Tom Oliver
Subject: Lampson Project
Date: Monday, May 20, 2024 6:54:19 AM

Mr. Oliver,

From my position as a resident that lives off of Lampson I oppose the project that is proposed in our community. The density proposed per acre is too high. The neighboring Parkview neighborhood is far less dense than what is being proposed and that should be taken into consideration when building.

The impact of the traffic and safety to this area is such a concern for me. We have seen fatalities and serious accidents living in College Park East. Lampson, Safety needs to be addressed for the families that drive in our area everyday. This proposal of a minimum of 500 vehicles added to Lampson is unreasonable for this community. I drive here everyday and there are concerns as it is now with visibility and bends in the road. When I think of the stress this will put on our Emergency Response and daily commute it does not make sense.

I am in disagreement with the proposal of this site.

Barbara Boyer

8-1

Responses to Comment 8

Boyer, Barbara, dated May 20, 2024.

8-1 The commenter opposes the Project and states the proposed density is too high. The commenter also expresses concerns with traffic, safety, and emergency response. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

For reference, the Project is consistent with the City's General Plan and zoning designations for the site, including allowable density. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns. Refer to Master Response 2.1.7, *Emergency Vehicle Access*, and 2.1.8, *Public Safety* for emergency response concerns.

DRAFT

Comment Letter 9

EIR comments Lampson Place Project

Daniel Brandt <dbrandt660@gmail.com>
Mon 6/10/2024 4:38 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

Good afternoon,

I am writing to you as a resident of the City of Seal Beach, who is concerned about the proposed project at 4665 Lampson Ave. My name is Daniel Brandt and I have lived at 3761 Oleander Street for the past 6 years. Our neighborhood in the Seal Beach subdivision is referred to as College Park East (CPE). This neighborhood is a quiet suburb of single family residences. My wife and I moved to CPE from Long Beach to get away from the busy city life and enjoy a neighborhood which is safe for my children to grow up in. We feel safe allowing my young children to ride their bikes in the street and play in our small, but quaint parks. 9-1

I have identified many potential negative impacts on the communities surrounding the proposed development at 4665 Lampson Ave. I will address those potential negative environmental impacts and require and answer to each of the following concerns:

I have reviewed the EIR. The glaring fact was that there was not enough parking for the density of the project. I was also concerned that with the increased number of vehicles that will be on Lampson Ave. has been a dangerous street and has been the scene of many serious/deadly traffic collisions. 9-2

I understand that Lampson Ave. is technically considered a "commercial corridor," but the reality is that this area is a residential area, surrounded by two golf courses. First, there is no street parking on Lampson Ave. Second, Lampson Ave. is a two-lane highway, with many curves and only one sidewalk. Lastly, the area of the proposal is not walkable or safe for bicyclists (little to non-existent bike lanes). Furthermore, Lampson Ave. is already overused and underdeveloped to handle additional vehicles.

According to the EIR, there will be a traffic signal installed on Lampson Ave. between Heather Ave. and Rose. This would be 3 traffic signals in a very short distance. I believe the insulation of another traffic signal will add additional noise for acceleration of engines, braking noise and light pollution to the residents living on Lampson Ave. between Heather And Rose. I would request a light and noise study regarding the impact on the residents with the insulation of a traffic signal. 9-3

Traffic 9-4

I believe there will be approximately 500 plus vehicles that will be utilized by residents of the project, based on the potential occupancy levels, which I will describe later in this email. I will specifically address the potential impacts the additional vehicles will have on Lampson Ave.

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1) Lampson Ave. is a two-lane east/west asphalt street with a posted speed limit of 45 MPH. Between Seal Beach Blvd. and Valley View Ave. on Lampson Ave. there are six curves, which decreases visibility and braking reaction times for drivers approaching intersections on Lampson Ave. In the past, there have been many traffic collisions on Lampson Ave. between Seal Beach Blvd. and Valley View St. Many of these collisions have occurred at intersections with drivers making U-turns from westbound Lampson Ave. to eastbound Lampson Ave. In addition to the curves in the roadway, there are raised center medians with large trees and boulders, which also decreases visibility of drivers. Due to these trees and boulders, vehicles traveling eastbound Lampson Ave. approaching Candleberry Ave. and Heather Dr. have reduced visibility of vehicles traveling westbound on Lampson Ave. Based on the fact that vehicles exiting the project must make right turns out of the project, vehicles will be forced to make U-turns at either Basswood St., Candleberry Ave., and Heather Dr. if the drivers wants to travel to Valley View St. They will likely make U-turns at the three aforementioned intersections to drive towards Valley View St. Based on the speed limit of 45 MPH on Lampson Ave., the curves on the roadway, the reduced visibility from the boulders and trees in the center medians, I believe the added vehicles will be a safety hazard and will result in additional traffic collisions. I am requesting technical studies on the braking reaction times for vehicles traveling eastbound Lampson Ave. at the intersections of Basswood St., Candleberry Ave. and Heather Dr. I would like the study to address any additional traffic control signals devices or modifications needed to the existing devices.

9-4 (CONT.)

2) During the morning hours, traffic becomes heavily congested for vehicles traveling westbound Lampson Ave. at the intersection of Seal Beach Blvd. In this area, there are two dedicated left turn lanes and one dedicated right turn lane for vehicular traffic intending to turn northbound or southbound Seal Beach Blvd. Just north of Lampson Ave. at Seal Beach Blvd. is the 405 Freeway. With the additional traffic intending on traveling to the 405 freeway, I am concerned about the two-left turn lanes on Lampson Ave. at Seal Beach Blvd. will not have the capacity to handle the additional vehicles. There will be additional congestion in the two dedicated left turn lanes for vehicles traveling to the 405 Freeway.

9-5

Also, many of the residents of the development will have young kids, who will attend schools in the Los Alamitos Unified School District. The schools are located in the cities of either Rossmoor, Los Alamitos, or Seal Beach. In order to transport their children, they will need to travel westbound on Lampson Ave. towards Seal Beach Blvd. The new residents will increase the traffic congestion during the morning hours. Based on the fact that only one elementary school is located south of Lampson Ave. and the fact that the other five elementary schools, two middle schools, and one high school are located north of Lampson Ave., drivers will most likely travel northbound on Seal Beach Blvd. from Lampson Ave. The already congested one dedicated right turn lane westbound Lampson Ave. at Seal Beach Blvd. will become increasingly congested. I believe a second dedicated right turn lane should be added to handle the additional vehicles making right turns onto northbound Seal Beach Blvd. I am requesting a technical study on the phasing of the traffic control devices at Lampson Ave. and Seal Beach Blvd. and whether a right turn lane should be added.

9-6

Lastly, the vehicles stopped in the westbound lanes of Lampson Ave. in the right turn lane at Seal Beach Blvd. frequently back up to the intersection Lampson Ave. and Old Ranch Plaza. This

9-7

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additional traffic would impact the intersection of Lampson Ave. and Old Ranch Plaza. I am requesting a technical traffic times study of the traffic control devices at the intersection of Old Ranch Plaza and Lampson Ave. and would like to know what changes or modifications to these traffic control devices would be.

9-7 (CONT.)

3) In the morning and afternoon hours, traffic from southbound Seal Beach Blvd. to eastbound Lampson Ave. is often congested. There are two dedicated left turn lanes at this location. I am concerned that traffic will be backed up to St. Cloud Dr. and cause a safety issue for those at the intersection of Seal Beach Blvd. and St. Cloud Dr. I do not believe the two dedicated left turn lanes are sufficient for the influx of vehicles wanting to make a left turn onto eastbound Lampson Ave. in the mornings and afternoons. I am requesting a study of the traffic control devices at southbound Seal Beach Blvd. at Lampson Ave. and additional lanes or modifications to the traffic control devices. I believe the two-way left turn lanes need to be lengthened to handle the additional vehicles making left turns.

9-8

4) Lampson Ave. is a two-lane highway in each direction between Seal Beach Blvd. and Valley View Dr. The marked bicycle lanes have a width of a few feet to non-existent in some locations. I am concerned that the additional traffic from the development will be a safety hazard for bicycles traveling on Lampson Ave. in the bicycle lane. I do not believe that the bicycle lanes are safe to use and should not be considered as a transportation source for new residents at the proposed development.

9-9

5) Lampson Ave. only has a narrow sidewalk on the south side of the street on Lampson Ave. between Seal Beach Blvd. and Tulip Dr., with the exception of a sidewalk on the north side in front of the proposed development. I am concerned about pedestrians crossing Lampson Ave. to walk to Heather Park in Seal Beach. The development does not have a planned park and Arbor Park does not have any play structures. It is likely that residents will use Heather Park as their primary recreational activity location. In addition, California's “jaywalking” law will change in January of 2023 and allow for people to cross any street, as long as they safely cross, without impeding vehicular traffic. I believe this will lead pedestrians crossing from the development to cross Lampson Ave. outside of the crosswalk. I am concerned that with the decreased visibility of drivers traveling eastbound Lampson Ave. due to the curves in the roadway, as well as the boulders and trees in the center medians, there will be an increase in pedestrian injuries /fatalities. I am requesting a study on the impact of foot traffic on Lampson Ave. due to the development. I also would like a sidewalk added to the north side of Lampson Ave. between Seal Beach Blvd. and Tulip Dr.

9-10

6) Valley View St. is a major arterial highway, which intersects with Lampson Ave. and this intersection is located east of the development. The eastbound Lanes of Lampson Ave. already become congested at the intersection. Eastbound Lampson Ave. at Valley View St. consist of two dedicated straight lanes for eastbound traffic and one dedicated left turn lane for vehicle traveling northbound Valley View St. Based on the additional added vehicle of the development, I am requesting a technical study on the traffic signal time and where additional traffic signal devices need to be added or modified. Also,

9-11

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based on the additional traffic will add congestion to the number two lane of eastbound Lampson Ave. at Valley View St. Vehicle intending on traveling southbound Valley View St. in order to drive to the 405 Freeway / 22 Freeway will be slowed. I am requesting a dedicated right turn lane be added in this area for vehicles making a right turn from Lampson Ave. to southbound Valley View Dr.

9-11 (CONT.)

7) Vehicles leaving the project intending to travel to Valley View St. will take the quickest route possible. Many vehicles traveling eastbound Lampson Ave. towards Valley View St. currently make a right turn onto Blackmer St. and to cut through the residential neighborhood to reach Valley View St. The vehicles will exit on Cerulean Ave. or Tiffany Ave. (Garden Grove) to Valley View Dr. in order to bypass traffic congestion on eastbound Lampson Ave. at Valley View Dr. I believe the additional vehicles from the development will impact the safety of the following street in Garden Grove: Blackmer St., Trinette Ave., Cerulean Ave. Tunstall St., St. Mark St., and Tiffany Ave. Based on the additional vehicle cut through traffic, I am requesting a technical traffic study on the aforementioned streets in Garden Grove.

9-12

Parking

In addition to traffic issues, below I have broken down the potential occupancy of the apartment development, as well as the cluster/townhomes development.

9-13

Apartment Occupancy

	Quantity	Occupancy	Minimum	Maximum
77 total units				
(1) bedrooms	36	1-3 people	36	108
(2) bedrooms	20	2-5people	40	100
(3) bedrooms	21	3-7people	63	147
Total:	77		139	355

Possible registered occupants range is 139-355 residents in only 77 apartment units.

Lack of parking:

- 98 parking spots for between 139-355 residents.
- 30 assigned garages and 68 open parking spaces (first come, first serve)

Conclusion: The lack of parking will lead to residents and guests parking in CPE and surrounding communities. There is no parking on Lampson Ave.

Cluster and Town Homes Occupancy

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Cluster Homes
55 total units/ 220 total bedrooms
Townhomes
114 units / 321 bedrooms

Lack of parking:

- 54 driveways
- 90 open parking spaces
- 338 garage spaces

Conclusion: There is no street parking in the proposed neighborhood and garages many times are not used for parking. Enforcement of using garages would have to be carried out by the planned HOA for the cluster and townhouse communities. HOA's are ineffective in enforcing people to keep their garages open for parking. Many of the vehicles will be parking in CPE and surrounding communities. The lack of parking will not impact the City of Los Alamitos, but will impact residents of Seal Beach (CPE).

I believe that based on the number of occupants in these developments and the limited amount of planned parking, there will be approximately 250 plus vehicles parked on CPE streets on a daily/nightly basis. This lack of parking will increase vehicular traffic on the streets of CPE. I would like a comprehensive study on the potential occupancy of both developments and how many vehicles would be associated with the residents. The additional vehicles parking in the streets nightly will have an impact on roadways in CPE. I would like a technical study of how the extra vehicular traffic from the development will cause wear and tear of the streets within CPE and Lampson Ave.

9-13 (CONT.)

Parks

The proposed development only has a 14,000 open area for recreational activities. There are no play structures proposed except for a "tot lot" in the apartment building Arbor Park has open fields and a dog park, but no play equipment. Without a park being built in the community, Heather Park across the street from the development will be heavily impacted. Heather Park is the most used park in CPE. The additional residents in the proposed development will primarily utilize Heather Park, making an aging and overused park more crowded. Due to the lack of parking in the development, many of those vehicles will take up the street parking surrounding Heather Park, restricting access to Heather Park by CPE residents.

Parking spaces at Arbor Park will also be used by residents and guests of the development rather than visitors of Arbor Park and the dog park.

I am requesting a technical study on the impact of parking at Arbor Park, which will be impacted by the development and restrict park use.

9-14

Public Service

The development is located in the City of Los Alamitos, which is located far away from the Los Alamitos Police Department. The distance from the Los Alamitos Police Department will decrease response time for the residents in the proposed development. In addition, the Los

9-15

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Alamitos Police Department (LAPD) and the Seal Beach Police Department (SBPD) utilize the same radio frequency and respond to each other's calls for service. I believe that the Seal Beach Police Department will be utilized to respond to priority calls to the development in Los Alamitos and decrease the service level to Seal Beach residents. I am requesting a technical study of the impact the development will have on the SBPD services being deployed to the development to assist LAPD.

9-15 (CONT.)

Residents of the development will be parking on CPE streets in the daytime and overnight hours due to the lack of parking in the development. SBPD will have increased calls for service from residents regarding illegally parked vehicles. These increased service call volumes will decrease the capacity of SBPD to respond to priority calls in the City of Seal Beach. I would like a technical study on whether additional police officers will need to be hired by the Seal Beach Police Department.

9-16

The Orange County Fire Department (OCFA) services many cities in Orange County, including Los Alamitos, Rossmoor and Seal Beach. The closest OCFA station is at Seal Beach Blvd. and Beverly Manor (Station 48). This station primarily services Leisure World, which is a large senior community, which places a high demand on this fire station. With the addition of approximately 800 residents in the development, the services from OCFA will be strained and residents of CPE and the surrounding communities will be impacted. In addition, response time to Leisure World and their elderly population will be decreased because of the reallocation of service calls to the development. The next closest OCFA fire station is in Los Alamitos, which primarily services Los Alamitos and Rossmoor. I am requesting a technical study on the impact of the additional residents and the response times of the OCFA to the proposed developments resident's and residents of CPE and Leisure World.

9-17

Road impacts from heavy equipment

The City of Seal Beach prohibits trucks with a gross vehicle weight over 6,000 pounds from traveling on Lampson Ave., with limited exceptions. This prohibition is due to the damage heavy vehicles can do to the roadway. I would like this weight limit to be enforced during the demolition and construction of the proposed development. I would like a comprehensive study of how the developer would manage the demolition, removal of debris, and transportation of construction equipment and materials. This study should include the impact of the heavy equipment and loads will have to the integrity of Lampson Ave.

9-18

Construction Noise and road closure

The backyards of the homes on Ironwood Ave. directly across from the development will be severely impacted by construction noise and excess debris (dirt). The cinder block walls along Lampson Ave between the sidewalk and their residents are short and need to be reconstructed to decrease the impact of construction noise. The residents between 4509 Ironwood Ave. and 4701 Ironwood Ave. will be impacted and need to have their cinder block walls rebuild higher. I am also requesting a technical study on the construction decibel noise levels and the impact on the Ironwood Ave. resident's health. What will be in place to monitor the decibel levels during construction?

9-19

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Due to the road closures during the construction there will be an increase in cut through traffic in the CPE neighborhood. Lampson is only a two lane highway situated between to major arterial highways (Valley View St. and Seal Beach Blvd.). If there is construction and lane closures on Lampson Ave. vehicles cut through CPE and Garden Grove to reach Valley View St. or Seal Beach Blvd.This cut through traffic will decrease the safety of CPE and Garden Grove residents. I would like a study on cut through traffic in CPE and Garden Grove from construction on Lampson Ave.

9-19 (CONT.)

Aesthetics

The front of the development directly off of Lampson Ave. will be two-stories high. Then all of the other residences will be three stories high. The affordable apartment building will be 3 stories high facing Lampson Ave. Based on the high of the construction and the low cinderblock walls of residents on Ironwood Ave. there will be several impacts to their environment.

One impact will be on the glare from the sun, which is overhead to the south in the afternoon. This will cause a bright glare from the reflection off the windows of the two and three story building of the development into the residents located between 4509 Ironwood Ave. and 4701 Ironwood Ave. I am requesting a technical study of the impact of the angle of the sun and the potential glare from the developments residents and the Ironwood Ave. residents.

Secondly, the height of the two and three-story construction of the development and the short cinder block walls will lead to a lack of privacy for the Ironwood Ave. residents. I am requesting a visual simulation from the residents between 4509 Ironwood Ave. and 4701 Ironwood Ave.

9-20

Rodents

During large construction project rodents are dispersed into nearby residential neighborhoods. What are the plans to control and abate the influx of rodents in the Los Alamitos (Parkewood), CPE, and Garden Grove neighborhoods? Rodent displacement occurs during the excavation portion of the development, construction phase, and at the completion of the construction. I am requesting a comprehensive study on the rodent population in the development and the impacts to the surrounding communities.

9-21

Wildlife

The Joint Forces Training Base (JFTB) is home to a large coyote and rabbit population. I am concerned about the development's impact on their ecosystem and I am requesting a technical study on the construction of the development and the impacts to the coyote and rabbit population on JFTB, which is located adjacent to the development.

Thank you for listening to my concerns regarding this development and I look forward to answers to my issues and concerns, including the studies to lessen the impacts of this development.

9-22

DRAFT

Responses to Comment 9

Brandt, Daniel, dated June 10, 2024.

9-1 The commenter provides introductory remarks as a resident of Seal Beach and expresses the concerns which are responded to below.

9-2 The commenter expresses concerns with insufficient parking and increased number of vehicles. The commenter states that Lampson Avenue is a dangerous street and there have been many traffic collisions. The commenter also states that there is no street parking on Lampson, it is not walkable or safe for bicyclists, and it is already overused and underdeveloped to handle additional vehicles.

The City acknowledges that there is no street parking on Lampson. However, there are sidewalks and Class II (on-street, striped) bicycle lanes on Lampson. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic/congestions concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for vehicle and pedestrian safety concerns.

9-3 The commenter states that with the installation of the traffic signal at Lampson Ave. there would be 3 signals in short proximity and it would add additional noise due to the acceleration of engines, braking noise and light pollution to residents living on Lampson Ave. between Heather and Rose. The commenter requests a light noise study regarding the impact to residents due to the installation of the signal.

The Project no longer proposes installation of a traffic signal. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*. Additionally, lighting from car headlights would be temporary and be shielded from the existing residential use on Lampson through existing landscaping and walls within the private residences' backyard.

9-4 The commenter expresses concerns with safety and traffic on Lampson and estimates that the Project would generate 500 vehicles. The commenter states that Lampson is unsafe due to poor visibility and drivers making U-turns and requests a study to address additional traffic control signal devices or modifications.

The Project is estimated to generate 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147 PM peak hour trips (Draft EIR, p. 3-17). Existing trees and boulders in the medians within Lampson Avenue are existing conditions, and the Project will not place any additional trees, boulders, or other objects within the median resulting in any further decrease in visibility. Moreover, the Project will not exacerbate any existing visibility concerns because Lampson Avenue has sufficient capacity to accommodate the additional trips generated by the Project. As discussed in Section 3.0, *Project Description*, of the Draft EIR, according to the City of Seal Beach General Plan, Lampson Avenue is a divided roadway with a raised median and designed to accommodate a maximum of 37,500 daily vehicle trips. At General Plan

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Buildout with the Project, these two segments comprising this portion of Lampson Avenue would carry between 15,350 and 15,750 daily trips (see *Technical Appendix N1* of the Draft EIR and *Attachment G* of the Final EIR). Therefore, the Project's anticipated generation of 1,658 daily trips is well within the capacity of Lampson Avenue even at General Plan Buildout (refer to Page 3-17 of the Draft EIR). Finally, CEQA requires an evaluation of the Project's potential impacts on the environment, and not the impacts of environmental conditions on the Project. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic/congestions concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for vehicle and pedestrian safety concerns.

9-5 The commenter states that vehicles traveling westbound on Lampson Ave. at the intersection of Seal Beach Blvd. during the morning hours is heavily congested. The commenter is concerned about two left turn lanes on Lampson Ave. at Seal Beach will not have capacity to handle additional vehicles. And there will be additional congestion at the two dedicated left turns for vehicles traveling to the 405 Freeway. The updated Traffic Analysis (*Attachment G* of this Final EIR) identifies the Project's contribution to a level of service deficiency at Seal Beach Boulevard and Lampson Avenue. The recommended improvement is to restripe the number 2 westbound left as a shared left-right turn lane, which will improve the level of service at this intersection (see Table 6-3 of *Attachment G* of this Final EIR). The Project Applicant would be required to pay fair share fees towards this improvement. The Project's contribution to the level of service deficiency at this intersection is 5.1% and therefore negligible. In any event, a project's effects on an intersection or roadway segment level of service is not considered a CEQA impact, and as such, the Project's contribution to a level of service deficiency at this intersection would not constitute a new or substantially more severe impact under CEQA.

9-6 The commenter states that the Project would generate students who would attend schools in either Rossmoor, Los Alamitos, or Seal Beach. The commenter states that residents will need to travel westbound on Lampson Ave. towards Seal Beach and will likely turn northbound on Seal Beach Blvd. from Lampson Ave. The commenter states that Lampson and Seal Beach Blvd. are already congested and believes that a second dedicated right turn lane should be added to handle the additional vehicles. The commentator requests a study on the phasing of traffic control devices for nearby intersections. Refer to Response to Comment 9-5 for the recommended improvement to the intersection of Seal Beach Boulevard and Lampson Avenue.

9-7 The commenter expresses concerns with traffic congestion at Lampson Avenue and Old Ranch Plaza and requests a study on the traffic control devices at Lampson Avenue and Old Ranch Plaza. The commenter states that the two-way left turns need to be lengthened to handle the additional vehicles. The Project's Traffic Analysis (*Attachment G* of this Final EIR) analyzed the intersection of Old Ranch Plaza and Lampson Avenue and determined that this intersection operates at an acceptable level of service under with and without Project conditions under all scenarios.

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9-8 The commenter states that traffic from southbound Seal Beach to eastbound Lampson Ave. is often congested. The commenter is concerned that traffic will back up to Saint Cloud Drive and cause a safety issue for those at the intersection of Seal Beach Blvd. and Saint Cloud Drive. The commenter does not believe the two dedicated left turn lanes are sufficient for the influx of vehicles wanting to make a left turn to eastbound Lampson Ave. in the in the morning and afternoon and request a study of traffic control devices at southbound Seal Beach Blvd. at Lampson Ave. Refer to Response to Comment 9-5 for the analysis and recommended improvement to the intersection of Seal Beach Boulevard and Lampson Avenue

9-9 The commenter states that additional traffic from the development will be a safety hazard for bicycles traveling on Lampson Ave. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue,* for pedestrian/bicycle safety concerns.

9-10 The commenter expresses concerns with pedestrian crossing Lampson Avenue to walk to Heather Park, the lack of onsite park amenities, decreased visibility for drivers and pedestrian safety and requests impact on foot traffic on Lampson Avenue. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities,* for impacts to existing parks. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

9-11 The commenter expresses concerns with traffic and requests a study on the traffic signal time and a dedicated right turn lane from Lampson Avenue to southbound Valley View Drive. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* for traffic concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding the traffic signal.

9-12 The commenter expresses concerns with traffic and requests a traffic study on streets in Garden Grove. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* and Response to Comment C-2 for a discussion on the selection of studied intersections.

9-13 The commenter expresses concerns with parking and requests study on road impacts from extra traffic. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

9-14 The commenter expresses concerns with parking and impacts to Arbor Park and Heather Park. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities,* for impacts to existing parks.

9-15 The commenter expresses concerns with public service and requests study on Seal Beach Police Department (SBPD) and response times. The Project site is located within the City of Los Alamitos; therefore, it will be served by LAPD, which was also acknowledged by SBPD (see *Technical Appendix L* of the Draft EIR). Refer to Master Response 2.1.8, *Public Safety,* for emergency response concerns. SBPD stated that it will not be expanding service capacity

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as a result of the Project because the Project is located within the City of Los Alamitos. However, SBPD has a mutual aid agreement with LAPD and can assist with public services in the event of an emergency, if needed.

9-16 The commenter states that SBPD will experience an increase in calls from services due to illegal parked vehicles from the Project and requests a study on whether additional police officers will be needed. Refer to Master Response 2.1.3, *Parking*, for parking concerns. The commenter assumes that residents of the Project will be parking on streets within the CPE neighborhood. The Project includes 577 parking spaces, which is in exceedance of the City of Seal Beach's parking standards (by 84 spaces). Based on parking requirements specific to the City of Seal Beach, the Project would comply with Seal Beach parking requirements. Residents are not expected to park anywhere other than in the parking spaces located on the Project site.

9-17 The commenter expresses concern with the decrease in response time to Leisure World that is currently served by the closest OCFA station from the Project site, Station 48, and requests a study to analyze the impacts of response times to the Project, residents of College Park East and Leisure World. As discussed in Section 4.13, *Public Services*, of the Draft EIR, considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Per correspondence with the OCFA, there are currently no deficiencies in fire protection service provided to the Project site. OCFA has not indicated the need for a new fire station or expansion of existing facilities due to the Project. The Secured Fire Protection Agreement would ensure that response times and service ratios are met due to the implementation of the Project and no new fire station facilities would be required (refer to Page 4.13-9 of the Draft EIR)

9-18 The commenter states the City of Seal Beach's weight requirements for trucks traveling on Lampson Avenue and requests this be enforced during demolition and construction of the proposed development. The commenter also requests a study analyzing the management of demolition, removal of debris, and transportation of construction equipment and materials. The Project would be required to comply with all applicable local regulations related to vehicle weight limits. If the Project requires the use of an oversize vehicle in excess of the eight, width, height or length permitted by the Vehicle Code, a permit shall be obtained from the City of Seal Beach in accordance with the City of Seal Beach Municipal Code 8.10.135, *Movement of Oversize Vehicles.*

9-19 The commenter expresses concerns with construction noise and road closure, specifically the homes located between 4509 and 4701 Ironwood Avenue. As discussed in Section 4.11, *Noise*, of the Draft EIR, the construction noise analysis shows that noise impacts at the nearest receiver locations will be less than the daytime 80 dBA L_{eq} significance threshold during Project construction activities. Because the highest construction related noise level is 63.31 dBA L_{eq} at the nearest sensitive receiver (Location R3 at the existing noise sensitive residence at 4625 Ironwood Avenue, approximately 82 feet south of the Project site), the noise impacts due to

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Project construction noise are considered less than significant and no mitigation is required (refer to Pages 4.11-23 through 4.11-24 of the Draft EIR). Therefore, noise monitoring during construction is not needed or required.

During construction, the Project would result in roadway improvements along Lampson, including replacement of the existing median curb and construction of the two proposed driveways. Construction on Lampson will require an encroachment permit and approval from the City Engineer. Lane closures that may be required for median improvements would be temporary and require a permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. Compliance with LAMC 12.08.200 would ensure safe crossing and access for all vehicle and pedestrians at all times. Pursuant to LAMC 12.08.200, a construction management plan would be prepared to identify construction activity, notification of construction activity, and to ensure that construction activity would not re-route/detour commuter or other pass-through or cut-through traffic through local residential streets.

9-20 The commenter expresses concerns with aesthetics and glare and requests a visual simulation of the Project site. Refer to Figure 4.1-2 and 4.1-3 for visual renderings (refer to Pages 4.1-11 through 4.1-12 of the Draft EIR). As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, buildout of the Project would change the existing visual character of the site from a two-story, 88,000 sf commercial office building to a two- to three-story residential development consisting of 246 units. The Project would be attractive and of quality design and visually compatible with the existing residential and park uses in the Project site's vicinity. Additionally, the Project would be compliant with the zoning development standards and City requirements pertaining to scenic quality. Accordingly, the Project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant (refer to Page 4.1-18 of the Draft EIR).

As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, the Project would redevelop the Project site with residential uses which would produce artificial light. The Project would be required to adhere to the light and glare requirements as set forth in t LAMC (Chapter 8.48 - Lighting Performance Standards and Section 17.24.040 Light and Glare). Chapter 8.48 addresses the visual impacts of exterior lighting on adjacent property owners and neighborhoods. The chapter outlines guidelines for the design, scale, location, and illumination level of lighting fixtures. The guidelines aim to reduce light trespass and prevent glare. Section 17.24.040 would require shielding of light sources to reduce impacts on surrounding land uses. The City would confirm compliance with applicable lighting requirements during future review of building permit applications/plans. Mandatory compliance with LAMC Chapter 8.48 and Section 17.24.040 would ensure that the Project would not introduce any permanent design features that would adversely affect day or nighttime views in the area (refer to Page 4.1-19 of the Draft EIR).

Moreover, a shade and shadow study was conducted for the Project (*Attachment I* of this Final EIR). The study provides 3 shade and shadow conditions (9 AM, 11AM, 3PM) for winter

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solstice (December) and summer solstice (June) periods. The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months. In the Northern Hemisphere, the longest day and shortest night of the year occur on the Summer Solstice (on June 21 or 22), marking the beginning of summer. The shortest day and longest night of the year occur on the Winter Solstice (December 21 or 22), marking the beginning of winter. The measurement of shadow lengths that occur at the winter and summer solstices therefore represent the most extreme shadow patterns that occur throughout the year. As shown, during the summer period, the shade and shadow would mostly be confined to the Project site without spillover to adjacent properties. During the winter period, shade and shadow would spillover in the northwestern direction during 9AM and in the northeastern direction during 11 AM. However, the shade and shadow footprint would be minimal and would occur on roadway to the east and parking lot to the north. Therefore, the Project would not result in a significant change in the shade or shadow footprint to nearby properties, and this analysis confirms that the Project will not result in any impacts related to shade or shadow footprint to nearby properties.

9-21 The commenter expresses concerns with rodents. The Project site is located in a highly urbanized area and is surrounded by open spaces to the north, east, and west. If rodents were encountered during construction activities, rodents would travel to the nearby open spaces area instead of traveling south across Lampson Avenue to the existing residential communities. Additionally, as discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the Project site is not located within or part of a wildlife movement corridor. Therefore, the Project would not substantially interfere with an established migratory wildlife corridor. (refer to Page 4.3-33 through 4.3-34 of the Draft EIR). However, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

9-22 The commenter expresses concerns with wildlife and impacts to coyote and rabbit population at JFTB. While coyotes and rabbits are common species that may currently inhabit the Project site, as discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the Project site does not include any species listed as special-status animals under either the federal Endangered Species Act or California Endangered Species Act. Also as discussed in Section 4.3, *Biological Resources*, of the Draft EIR, no special-status plants were detected on the Project site. However, the Project does provide limited suitable habitat for nesting birds and common raptor species. Construction activities have the potential to adversely impact nesting birds and raptors and roosting bats. Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting birds, nesting raptors, and bat roosts prior to site disturbance. If nesting birds or raptors are present on the Project site, mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance (refer to Pages 4.3-29 through 4.3-39 of the Draft EIR).

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Comment Letter 10

From: Valerie B
To: toliver@cityoflosalamitos.org
Subject: Lampson Project Concerns
Date: Monday, May 20, 2024 10:34:45 PM

Dear Tom Oliver,

We live in College Park East in Seal Beach and I want to express my concern regarding the Lampson Project.
This project will affect CPE the most yet we are not considered in any of the planning.
Our concern is multifold and none of the issues have really been addressed: 10-1

1. CPE already does not have enough parking, especially on street sweeping days its hard enough without the addition of these 246 units, which easily means additional 500 vehicles not counting visitors/company. 10-2

2. Vehicle access into that site is dangerous, just pulling into dog park/AYSO field is hard with the speed of traffic and divider, adding 500 cars to that daily will be a mess and will cause traffic back up across all of Lampson. 10-3

3. There is no playground/play area/park for the new residents so all of them will be impacting CPE parks/play areas which already need repair.
Without the play area, the kids will be dangerously crossing Lampson via walking or biking to access Heather Park. 10-4

4. Vehicle miles travel will be significantly increased on Lampson, Seal Beach Blvd, and Valley View.
The current **Park and Ride** lot that supports car pooling and van pooling will be eliminated increasing vehicle miles traveled further. Project should providing a **Telework Center** in the project to mitigate travel impacts. 10-5

5. California law requires **solar panels** on new housing and **zero emission electric vehicle charging stations**. Neither are mentioned in the draft plan. 10-6

6. This area is a lovely and relatively quiet community where most households are families where we feel safe and its not congested by traffic, pollution or too much housing squeezed into a small area. This project causes a HUGE loss to the hundred of families calling College Park East and the surrounding area "home". **Only a win for the developer.** 10-7

7. Lampson Avenue is not only used by the over 1,700 households in College Park East, but those who live nearby in Rossmoor and Los Al and Garden Grove who go shopping, drop/pick up kids at school and bypass the freeway. Lampson is only a two lane street with constant use and at times extremely congested. By adding one 246 units and potentially 500 additional car trips daily, Lampson will be a nightmare. There are already accidents on Lampson all the time, often affecting the homeowners on both sides of the neighborhoods. 10-8

8. **I am also requesting a study on the impact of foot traffic on Lampson** due to the development.
I would also like a **sidewalk added** to the north side of Lampson between Seal Beach Blvd and Tulip Drive. 10-9

I am concerned that with the **decreased visibilit**y of drivers traveling eastbound on Lampson due to curves in the roadway, as well as the boulders and trees in the center divider, there will be an i**ncrease in pedestrian injuries and fatalities.**

10-10

- Valerie Burstein
4224 Ironwood Ave.
Seal Beach, CA 90740

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Responses to Comment 10

Burstein, Valerie, dated May 20, 2024.

10-1 The commenter expresses concerns with the Project's impact on College Park East which are addressed below.

10-2 The commenter states that CPE currently has insufficient parking. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

10-3 The commenter states that vehicle access onto the Project site is dangerous and the additional traffic will cause backup along Lampson. The Project initially proposed to install a traffic signal at the primary neighborhood to alleviate neighborhood concerns related to safety. Subsequent public comments received on the Draft EIR during the 45-day public review period expressed concern with installing a traffic signal and after further traffic signal warrant and safety analyses, it was determined that the proposed traffic signal is not warranted (see *Attachment G* of this Final EIR). Therefore, the Project no longer proposes a traffic signal at this entryway. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

10-4 The commenter states that there is no playground, play area or park for the new residents, so they will be impacting CPE parks and kids will dangerously cross Lampson Avenue to get to Heather Park. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for impacts to existing parks. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

10-5 The commenter expresses concerns with VMT, states that the elimination of the current Park and Ride Lot will further increase VMT, and recommends the Project provide a Telework Center. The existing Park-n-Ride that previously occupied the Project site has not been in operation for the past 18 months and when in operation had limited usage. As discussed in 4.15, *Transportation*, of the Draft EIR, the Project would result in significant VMT impacts with the implementation of Mitigation Measure MM 4.15-1. Mitigation Measure MM 4.15-1 includes implementing CAPCOA strategies such as installing broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission (refer to Page 4.15-19 of the Draft EIR).

10-6 The commenter states that California law requires solar panels on new housing and zero emission electric vehicle charging stations which are not mentioned in the Draft EIR. Contrary to the commenter's assertions, as part of the Project's Project Design Features (PDFs), the Project will include solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually (PDF GHG-1) and the Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards

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Code, Section A4.106.8.2.1 (PDF GHG-4) (refer to Page 4.5-6 to 4.5-7 of the Draft EIR) Thus, no revision to the Draft EIR is required.

10-7 The commenter expresses concerns with traffic congestion, pollution, and the proposed density and states that it will be a loss of CPE residents. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

10-8 The commenter expresses concerns with traffic congestion and accidents on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns.

10-9 The commenter requests a study on impact of foot traffic on Lampson Avenue and requests a sidewalk on the north side of Lampson Avenue between Seal Beach Boulevard and Tulip Drive.

A Safety Evaluation was prepared to confirm that the Project would have no safety impacts on public roadways and Project access points (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H* of this Final EIR). The Safety Evaluation further confirms the analysis and determination in the Transportation Section (Section 4.15) of the Draft EIR that the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for a summary of the Safety Evaluation and issues relating to pedestrian safety. Regarding the request for an additional sidewalk on Lampson Avenue between Seal Beach Boulevard and Tulip Drive, the Project would include improvements to sidewalks along the Project's frontage on Lampson Avenue; areas beyond the Project site's frontage is not part of the Project boundary or a requirement of the Project Applicant. However, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

10-10 The commenter expresses concerns with safety due to decreased visibility of drivers traveling eastbound on Lampson due to curves in the roadway. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

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Comment Letter 11

Response to the DEIR

campbellpe@aol.com <campbellpe@aol.com>
Mon 6/10/2024 3:37 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

1 attachments (23 KB)
Response to EIR 6-10-24.docx;

Good Afternoon Tom --

Attached are my comments to the DEIR.
I am also posting them below, so use which ever is easiest to retrieve and read if you have any questions, please don't hesitate to call or contact me.
Thank you so much.

Patty Campbell
4433 Ironwood Ave
Seal Beach
562-716-7587

11-1

Parking

My first area of concern is the insufficient parking for this project. Let's look at some numbers from this document. The DEIR stated there will be an average of 4 people per housing unit (246 units x 4 = 984). However, they also project 647 residents.

So, which is it?

State requirement (density bonus) is 440 parking spaces.

The Project provides 577 spaces.

If they go to the senior component instead of families, parking goes to 594 spaces.

The City of Los Alamitos required 679 spaces, which is smart – makes for happier residents and neighbors.

11-2

The State is trying to pack as many people as possible into housing and they don't much care about parking; it is also trying to push people into using public transportation to lessen the need for vehicles. However, there is **no** public transportation on Lampson, only on Seal Beach Blvd and on Valley View Street. The nearest bus stop per the DEIR is 3.5 miles walking distance -- 3.5 miles is not exactly what one would call reasonable walking distance. Given the lack of public transportation, the only way to access the Project site will be by car, so you can expect every person who can drive, to have a car. This increases parking demand. For example, a one bedroom apartment will have 1.5 parking spaces. If a couple rent such an apartment and each has a car, *how do they park their two cars into 1.5 spaces?*

11-3

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In addition, there is the parking demand from AYSO which now uses the existing parking lot. When the Project is completed, that parking lot will cease to exist and excess AYSO parking will try to use College Park East as will overflow parking from the Project itself. *If nothing else, the developer needs to provide adequate parking for his Project.*

When the document refers to "available parking off-site," they are referring to the streets of College Park East for both AYSO and Project overflow parking. CPE is not a parking lot for that excessive traffic and we do not want nor like the intrusion into our neighborhood. It will interfere with our ability to park in front of our homes and the *safety* of our streets. Whenever there is an accident on Lampson between Candleberry and Heather, Lampson gets blocked off at those two intersections and traffic is routed down Ironwood – too many cars going too fast in this residential neighborhood where the speed limit is 25 mph. That's how we know there is an accident: huge increase in traffic in front of my home.

11-4

Page 4.10-21

Policy 4.11 states they will monitor multifamily parking requirements. Once the project is completed, there will be no opportunities to adjust or increase parking, *so what good is "monitoring" the parking facilities?*

In addition, *there is no plan for guest parking at the Project site and there needs to be*.

The shortages of parking will be dumped on the residents of College Park East and that is not right. The Project needs to provide adequately for its own parking needs.

11-5

Hydrology and Storm Water Runoff

2.5.7: Hydrology: "Water runoff: flows within an earthen channel and then collected by an existing 24" CMP that flows westerly, discharge into a westerly flowing earthen channel within the JFTB and then drains to the Old Ranch Country Club to the south. "

How will it do that? There are no underground culverts or drainage pipes to Old Ranch along Lampson Ave on the north side. The south side of Lampson is the City of Seal Beach and there are no underground drainage pipes behind our homes.

Will this runoff from the Project interfere with the runoff from CPE?

11-6

Storm water runoff will never make it to Old Ranch by going down Lampson: the center divider can contain the water until the center divider ends at the cutout for Heather St; then the water will simply run downhill down Heather St (water always seeks the lowest level) and go onto both Ironwood and Hazelnut Avenues heading toward Guava and eventually Candleberry; there already is significant flooding in that area; don't impact it any more.

11-7

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Preliminary Hydrology Report, 3.0, p. 2: "Storm water runoff ultimately gets discharged into the San Gabriel River." No it does not, it ends up on Old Ranch Golf Club in the lakes.

11-7 (CONT.)

Hydrology & water quality: see 4.9-21

Ground water runoff: "connecting to storm drain at Guava found to be infeasible due to too conflicts with existing utilities in the ground: water, sewer and gas 34"main (the main line from San Diego to Santa Barbara – So Cal Gas Co employee told us that if that line blows, it will take out a square mile).

"Storm water will run into a biofiltration device or a catch basin or a detention system for water quality treatment." Really? If that doesn't work, and there is too much water, it will run down Lampson Ave -- more likely scenario. As stated above, the center divider can contain it, but only until it reaches Heather Street and then it will go down Heather to both Ironwood and Hazelnut Avenues, exacerbating an already existing significant flooding problem for the residents of CPE.

11-8

The existing storm drains in CPE are not adequate for the volumes of rain we have received these past two years. So far the water has risen into one home and it has come up to the garage doors of others. If you add runoff from this project, it will be much worse. That is not fair to the residents who are already impacted from storm water runoff.

In addition, we do not want storm water runoff from the Project contaminating the City of Seal Beach's well on the north side of Lampson near the curve, aka, Dead Man's Curve.

11-9

Utilities and Service Systems (4.17)

The city of Los Alamitos cannot provide any services for this project except water (Golden State Water Company). They plan to tie in to all services for the City of Seal Beach.

11-10

Airport Land Use Commission

The ALUC found this project to be inconsistent; *if the land was suitable for housing, they would have put houses there in 1970, but it wasn't then and it isn't now*. The air base is still there and the planes and helicopters are still flying. Matter of fact, the base now houses all branches of the services and is the Emergency Disaster Support area for all of southern CA, so it has more importance today than back in 1970.

11-11

"On September 21, 2023, the ALUC voted to require the City to submit all discretionary actions related to Housing Element Site 6 (4665 Lampson Avenue, Site 7 (Laurel Park) and Site 10 (5030-5084 Katella)" to the ALUC for review until such time as the General Pan is revised or the city overrules the ALUC determination. See p. 4.10-9. ***That statement is not correct.*** *The*

11-12

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ALUC voted to only require actions related to the Lampson project and not the others to come before the ALUC for review.

A notice will be required on all sales documents to alert the residents of the presence of the base and of airport noise. *Such a notice needs to run with the land*, not just first-time buyers, but all subsequent buyers need to be notified and sign off on it that they have read it and are aware of the presence of the Joint Forces Training Base and of the noise issues.

11-12 (CONT.)

Arbor Park and Arbor Dog Park

DEIR, 4.14 Recreation: Arbor Park and Arbor Dog Park are not under the jurisdiction of the City of Los Alamitos, but under the jurisdiction of the City of Seal Beach. The City of Seal Beach has a lease with the Army Corps of Engineers for the land for those two parks – not the City of Los Alamitos; Arbor Park & Arbor Dog Park have never been under the jurisdiction of the city of Los Alamitos, so to list them as City of Los Alamitos parks **is not correct.** The City of Seal Beach developed those two parks and maintains them. Mr. Frank Laszlo, a former four-term councilmember from CPE, negotiated with the Army Corps of Engineers and the Base personnel for Arbor Park to be leased by and for the City of Seal Beach.

11-13

Arbor Park Boundary and the addition of 10 feet for parking

Addendum Arbor Park Layout: diagrams state the "existing north fence (along the Project northern boundary), adjacent to Arbor Park, "to be removed." They want this 10 feet dedicated to the City of Los Alamitos. The City of Seal Beach has the lease on Arbor Park and Arbor Dog Park. Dedicate that 10' to the City of Los Alamitos has complications that will render it not feasible. *That fence is the southern boundary of the Joint Forces Training Base and cannot arbitrarily or capriciously be removed without express permission from the Army Corps of Engineers and the Base Commander.* It is pragmatic of the developer to give up 10 feet of space for additional park and Project parking but it requires express permission of the Base Commander and Army Corps of Engineers. *However, if they wish to deed that 10' to the US Army and not the City of Los Alamitos, that might be feasible*. This 10' would go a long way to help AYSO parking. Alternately, that 10' could also be completely separate and available to both AYSO and the Project, with the existing boundary fence kept intact or in place. It would also require an entrance from the park end of the driveway into Arbor Park, near the field.

11-14

Outdoor living space: The project would be short of meeting the common area requirement by 33,040 sf due to requests from the City of Los Al regarding the dedication of the northerly10-ft strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 1,000 sf of property to the City. If this area is dedicated to the City, then the project will be unable to meet the common area requirement because compliance with this requirement would physically preclude construction of the project at the densities allowed and with the concessions proposed. As stated above, deeding that 10' of property to the Base, ie, Army Corps of Engineers might be more feasible to accomplish the goal of providing more parking.

11-15

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The document (Arbor Park Parking Study and Layout) goes on to say, "the project will provide multiple pedestrian connections with Arbor Park/Arbor Dog Park to the north." That requires the permission of the base commander and the Army Corps of Engineers to do that. It is the Base that has stated that the park will close at sunset and open at sunrise, and that therefore there will be no overnight parking.

The Pass-thru gates: *will they be removed?* They were installed by AYSO and the SWRL folks. If the parking lot is removed, that gate will no longer be necessary and will be removed by Base personnel.

11-16

Heather Park

Proposed parks within the Project are small with defined uses; kids will cross Lampson to use Heather Park. 1. crossing Lampson is *dangerous*, even with the traffic light; 2. they need to provide more park space for their own children and 3. not impact Heather Park. Our parks are well used by CPE kids and families; take care of the needs of your own residents. Don't see our park as your solution to inadequate park space.

11-17

Traffic Safety

Where are their school bus stops? Inside the project (can't pick up kids on Lampson Avenue) or at Heather Park?

Sidewalks stop at each end of the property, so people will not be able to walk on the north side of Lampson past the end of the property line; they will have to use the south side, and the area from Heather to Candleberry contains what has become called Dead Man's curve due to the many frequent accidents along that stretch of roadway – vehicles crash into the wall on the south side of the street making walking dicey at best. You really don't see any walkers from Heather to Candleberry along Lampson. The area is very contained: once you start walking it, there is no way out – you have to walk to the end of either Heather or Candleberry. It's just you, the block wall and oncoming traffic. This is a dangerous stretch of roadway for vehicles, let alone pedestrians.

11-18

U-turns on Lampson at Heather. Vehicles exiting either Arbor Park or Arbor Dog Park must make a right turn onto Lampson due to the presence of the center divider. Consequently, many of those drivers make a U-turn at Heather Street. If I am at the light at Heather, trying to turn right, and there is someone on Lampson *appearing* to turn left, if they have a dog in the car, it's a safe bet they are coming from the dog park and will be making a U-turn right in front of me. This situation has caused many incidents at that intersection for CPE folks trying to turn right at Heather Street. *It is unsafe*.

11-19

Public Service Correspondence: "response time for the Los Alamitos PD to the project site: priority 1: less than 5 minutes." Even with sirens blaring and running all stop lights, it will take more than 5 min. In the morning, from my house (4433 Ironwood) to Katella & Los Al Blvd, it takes a good 20 minutes and that is on a good day. Given traffic and distance, that is just the way

11-20

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it is. SBPD will end up servicing those calls as traffic is not as bad from SBPD to Lampson as it is from LAPD to Lampson.

11-20 (CONT.)

Project Alternative: instead of family housing, senior housing.
Instead of 77 family units, there should be 77 senior units; this alternative would provide 594 parking spaces, an increase of 20 spaces – placing parking in the north west corner of the project which is where it is the noisiest. A win-win: that helps solve two issues (noise and more parking). In addition, there would be less demand on parks (seniors are more likely not to have children who would use parks) – that puts less stress on the park within the Project and also on Heather Park. In addition, while many seniors work these days, there would most likely be less demand at peak travel times in the morning and late afternoons. Senior's parking needs would also be less than those of townhome and single-family home residents. But still more than 1.5 parking spaces per unit. We are well aware of the parking demands on the western side of The Shops at Rossmoor along Montecito. Those condos were originally built for seniors with one parking space per unit. Now that they have families there, the parking is not sufficient and they park on Montecito and in Rossmoor, much to the chagrin of the residents of Rossmoor who often find cars partially blocking their driveways. The management of the Shops at Rossmoor has told the residents to not park in back of the condos. It is not a pleasant situation and one to avoid in this Project.

11-21

Moon Trees 4.1
Aesthetics - threshold b: yes. Plan calls for removal of all trees – three of those trees are redwoods and we have reason to believe they are Moon Trees. In 1971, Apollo 14 took a canister full of seeds to the moon. That cannister contained seeds from many plants including 5 tree varieties, one of which was redwoods. Upon return, these seeds were planted all over the country. Most if not all of the redwood seedlings died as they were not in their native habitat. Redwoods are not native to this area, so they had to be planted. Fish and Game controlled where these seedlings were planted and Fish and Game was located at that building, so it is conceivable they planted them; those trees are approximately 50+ years old which fits in with the age of those seedlings and should not be cut down. One tree does not look as if it is doing well, but the other two are fine. Originally there were 5 trees, but 2 of them died and now the third appears to be on its way out, but the two that are doing well, should be kept.

11-22

Question about Townhomes. The kitchens will be on the second floor. No one wants to carry groceries up a flight of stairs. *Do they have dumbwaiters?*

11-23

End of comments.

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Date: June 10, 2024

To: Mr. Tom Oliver, Planning Department, City of Los Alamitos

From: Patty Campbell, College Park East

Subject: Comments on the DEIR for the Lampson Project

Parking
My first area of concern is the insufficient parking for this project. Let's look at some numbers from this document. The DEIR stated there will be an average of 4 people per housing unit (246 units x 4 = 984). However, they also project 647 residents.
So, which is it?
State requirement (density bonus) is 440 parking spaces.
The Project provides 577 spaces.
If they go to the senior component instead of families, parking goes to 594 spaces.
The City of Los Alamitos required 679 spaces, which is smart – makes for happier residents and neighbors.

The State is trying to pack as many people as possible into housing and they don't much care about parking; it is also trying to push people into using public transportation to lessen the need for vehicles. However, there is **no** public transportation on Lampson, only on Seal Beach Blvd and on Valley View Street. The nearest bus stop per the DEIR is 3.5 miles walking distance -- 3.5 miles is not exactly what one would call reasonable walking distance. Given the lack of public transportation, the only way to access the Project site will be by car, so you can expect every person who can drive, to have a car. This increases parking demand. For example, a one bedroom apartment will have 1.5 parking spaces. If a couple rent such an apartment and each has a car, *how do they park their two cars into 1.5 spaces?*

In addition, there is the parking demand from AYSO which now uses the existing parking lot. When the Project is completed, that parking lot will cease to exist and excess AYSO parking will try to use College Park East as will overflow parking from the Project itself. *If nothing else, the developer needs to provide adequate parking for his Project.*

When the document refers to "available parking off-site," they are referring to the streets of College Park East for both AYSO and Project overflow parking. CPE is not a parking lot for that excessive traffic and we do not want nor like the intrusion into our neighborhood. It will interfere with our ability to park in front of our homes and the *safety* of our streets. Whenever there is an accident on Lampson between Candleberry and Heather, Lampson gets blocked off at those two intersections and traffic is routed down Ironwood – too many cars going too fast in this residential neighborhood where the speed limit is 25 mph. That's how we know there is an accident: huge increase in traffic in front of my home.

Page 4.10-21

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Policy 4.11 states they will monitor multifamily parking requirements. Once the project is completed, there will be no opportunities to adjust or increase parking, *so what good is "monitoring" the parking facilities?*

In addition, *there is no plan for guest parking at the Project site and there needs to be*.

The shortages of parking will be dumped on the residents of College Park East and that is not right. The Project needs to provide adequately for its own parking needs.

Hydrology and Storm Water Runoff
2.5.7: Hydrology: "Water runoff: flows within an earthen channel and then collected by an existing 24" CMP that flows westerly, discharge into a westerly flowing earthen channel within the JFTB and then drains to the Old Ranch Country Club to the south. "
How will it do that? There are no underground culverts or drainage pipes to Old Ranch along Lampson Ave on the north side. The south side of Lampson is the City of Seal Beach and there are no underground drainage pipes behind our homes.
Will this runoff from the Project interfere with the runoff from CPE?

Storm water runoff will never make it to Old Ranch by going down Lampson: the center divider can contain the water until the center divider ends at the cutout for Heather St; then the water will simply run downhill down Heather St (water always seeks the lowest level) and go onto both Ironwood and Hazelnut Avenues heading toward Guava and eventually Candleberry; there already is significant flooding in that area; don't impact it any more.

Preliminary Hydrology Report, 3.0, p. 2: "Storm water runoff ultimately gets discharged into the San Gabriel River." No it does not, it ends up on Old Ranch Golf Club in the lakes.

<u>Hydrology & water quality: see 4.9-21</u>
Ground water runoff: "connecting to storm drain at Guava found to be infeasible due to too conflicts with existing utilities in the ground: water, sewer and gas 34"main (the main line from San Diego to Santa Barbara – So Cal Gas Co employee told us that if that line blows, it will take out a square mile).
"Storm water will run into a biofiltration device or a catch basin or a detention system for water quality treatment." Really? If that doesn't work, and there is too much water, it will run down Lampson Ave -- more likely scenario. As stated above, the center divider can contain it, but only until it reaches Heather Street and then it will go down Heather to both Ironwood and Hazelnut Avenues, exacerbating an already existing significant flooding problem for the residents of CPE.

The existing storm drains in CPE are not adequate for the volumes of rain we have received these past two years. So far the water has risen into one home and it has come up to the garage doors of others. If you add runoff from this project, it will be much worse. That is not fair to the residents who are already impacted from storm water runoff.

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In addition, we do not want storm water runoff from the Project contaminating the City of Seal Beach's well on the north side of Lampson near the curve, aka, Dead Man's Curve.

Utilities and Service Systems (4.17)
The city of Los Alamitos cannot provide any services for this project except water (Golden State Water Company). They plan to tie in to all services for the City of Seal Beach.

Airport Land Use Commission
The ALUC found this project to be inconsistent; *if the land was suitable for housing, they would have put houses there in 1970, but it wasn't then and it isn't now*. The air base is still there and the planes and helicopters are still flying. Matter of fact, the base now houses all branches of the services and is the Emergency Disaster Support area for all of southern CA, so it has more importance today than back in 1970.

"On September 21, 2023, the ALUC voted to require the City to submit all discretionary actions related to Housing Element Site 6 (4665 Lampson Avenue, Site 7 (Laurel Park) and Site 10 (5030-5084 Katella)" to the ALUC for review until such time as the General Pan is revised or the city overrules the ALUC determination. See p. 4.10-9. ***That statement is not correct.*** *The ALUC voted to only require actions related to the Lampson project and not the others to come before the ALUC for review*.

A notice will be required on all sales documents to alert the residents of the presence of the base and of airport noise. *Such a notice needs to run with the land*, not just first-time buyers, but all subsequent buyers need to be notified and sign off on it that they have read it and are aware of the presence of the Joint Forces Training Base and of the noise issues.

Arbor Park and Arbor Dog Park
DEIR, 4.14 Recreation: Arbor Park and Arbor Dog Park are not under the jurisdiction of the City of Los Alamitos, but under the jurisdiction of the City of Seal Beach. The City of Seal Beach has a lease with the Army Corps of Engineers for the land for those two parks – not the City of Los Alamitos; Arbor Park & Arbor Dog Park have never been under the jurisdiction of the city of Los Alamitos, so to list them as City of Los Alamitos parks **is not correct.** The City of Seal Beach developed those two parks and maintains them. Mr. Frank Laszlo, a former four-term councilmember from CPE, negotiated with the Army Corps of Engineers and the Base personnel for Arbor Park to be leased by and for the City of Seal Beach.

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Question about Townhomes. The kitchens will be on the second floor. No one wants to carry groceries up a flight of stairs. *Do they have dumbwaiters?*

End of comments.

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Responses to Comment 11

Campbell, Patty, dated June 10, 2024.

11-1 The commenter provides comments to the Draft EIR which are addressed below.

11-2 The commenter states that the Draft EIR states there will be 4 people per housing unit (984 residents) and also states there is an estimated 647 residents. The commenter also expresses concerns with insufficient parking.

The commenter does not indicate where in the Draft EIR it is stated that there would be 4 people per housing unit. For purposes of evaluating Project impacts related to population and housing, the Draft EIR projects there would be approximately 647 new residents based on an average household size of 2.63, consistent with the housing household size reported in the City's 2021–2029 Housing Element (Refer to Draft EIR page 4.12-9). Refer to Master Response 2.1.3, *Parking*, for parking concerns.

11-3 The commenter states that there is no public transportation on Lampson Avenue and the nearest bus stop is 3.5 miles walking distance. The commenter states that this will increase the demand for parking and expresses concerns with inadequate parking. Although there is no transit service along Lampson Avenue, an OCTA bus stop for Route 123 is located approximately 1.2 miles at the intersection of Valley View Street and Lampson Avenue. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

11-4 The commenter expresses concerns with parking demand from AYSO states that overflow parking from AYSO will be at CPE. The commenter states that overflow parking at CPE will interfere with the CPE residents' ability to park and impact the safety of their streets. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

11-5 The commenter states that the City General Plan Policy 4.11 to monitor multifamily parking requirements is not useful because once a project is developed there is no opportunity to adjust or increase parking. The commenter also expresses concerns with guest parking and adequate parking needs. The City's Policy pursuant to the General Plan is to monitor the parking requirements to reduce the impact of parking requirements on multifamily development and establish strategies as appropriate. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

11-6 The commenter requests an explanation on how runoff will flow from JFTB to Old Ranch Country Club to the south, if there are no underground drainage pipes to Old Ranch along the Lampson. Additionally, the commenter asks whether runoff would interfere with CPE runoff.

Drainage from the Project site currently flows to Old Ranch Country Club. As stated in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the existing site generally flows in a north to south direction into an existing westerly flowing concrete channel along the site's southerly

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property line. The westerly flowing channel is collected via an offsite 18-inch corrugated metal pipe (CMP) that flows under the offsite driveway to Arbor Park and discharges into an offsite earthen channel on the west side of the driveway. Runoff flows within this earthen channel are then collected by an existing 24-inch CMP that flows westerly, discharges into a westerly flowing earthen channel within the JFTB, and then drains to the Old Ranch Country Club to the south (Draft EIR, p. 4.9-1). Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology impacts.

11-7 The commenter expresses concerns with storm water runoff onto nearby streets and Old Ranch Golf Club and states there is significant flooding in the area. The commenter states that the Draft EIR is incorrect in stating that stormwater runoff is ultimately discharged into the San Gabriel River; and instead states that it ends up in the lakes of Old Ranch Golf Club.

Refer to Response to Comment 11-6 and Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns. On a regional basis, stormwater drainage in the City is ultimately conveyed to the San Gabriel River.

11-8 The commenter states that if the water quality detention system does not work and there is too much water then it will flow to Lampson down Heather to Ironwood and Hazelnut Avenues, exacerbating flooding in CPE. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

11-9 The commenter states that the existing storm drains in CPE are not adequate for the amount of rain received in the last two years and states there is a potential that stormwater runoff from the Project could contaminate the City of Seal Beach's well on the north side of Lampson.

Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns. The Project has been designed to ensure that Project peak flows do not exceed existing flows based on a conservative 100-year storm event (a rainfall event that statistically has the same 1% chance of occurring).

As stated in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project site conditions do not support infiltration and the Project site is not within and is not a part of a recharge facility for the Orange County Groundwater Basin. Implementation of the Project would not result in substantial adverse effects to local groundwater supplies. Further, the Project has been designed to incorporate best management practices to address the pollutants of concern from residential development. Therefore, the Project would have a beneficial impact on water quality.

11-10 The commenter provides a general statement that the City of Los Alamitos cannot provide any utility services for the Project except for water (Golden State Water Company) and the Project plans to tie in all utility services for the City of Seal Beach. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues

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concerning the environmental analysis provided in the Draft EIR and no further response is required.

11-11 The commenter states that ALUC found the Project inconsistent. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

11-12 The commenter states that the statement made on Page 4.10-9 on the Draft EIR is incorrect and that ALUC voted to only require actions related to the Project site and not Housing Element Sites 7 (Laurel Park) and 10 (5030-5084 Katella) to come before the ALUC for review. The commenter is incorrect about the conclusion of the ALUC meeting on September 21, 2023. According to the meeting minutes of the ALUC Meeting on September 21, 2023, Commissioner Murphy moved to approve Option #2, and a second by Commissioner Sustarsic, Commission voted 5-0 in favor of Option #2. Option #2 required the City to submit the actions listed in Option #1, limited to Site 6 at 4655 Lampson Avenue; Site 7 Laurel Park APN 241-241 -35; and Site l0 located at 5030- 5084 Katella[5]. Therefore, the Draft EIR's statement is accurate and no revisions to the Draft EIR are required.

The commenter also states that a notice is required on all sales documents to alert residents of the presence of the JFTB and of airport noise. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, related to buyer's awareness.

11-13 The commenter states that listing Arbor Park and Arbor Dog Park under the jurisdiction of Los Alamitos is incorrect and the City of Seal Beach developed the two parks and maintains them. The commenter is mistaken on the language in the Draft EIR when stating the two parks are within the jurisdiction of Los Alamitos. As discussed in Section 4.14, *Recreation*, of the Draft EIR, the Arbor Dog Park and Fields are currently leased by the City of Seal Beach from the JFTB for its residents, although the two parks are within the jurisdiction of Los Alamitos (refer to Page 4.14-4 of the Draft EIR). The use of the language for jurisdiction in this case meant that the parks are located within the City of Los Alamitos. However, the Draft EIR acknowledges that the parks are owned by JFTB and operated by the City of Seal Beach.

11-14 The commenter states that the 10 feet of parking would be dedicated to the City of Los Alamitos and would have complications that render it infeasible. The 10 feet dedication requires permission from JFTB. The ownership of the 10 feet dedication will be granted to the appropriate municipality governing the site at that time and is not an environmental issue analyzed under CEQA; however, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action

[5]*https://files.ocair.com/media/2024-01/ALUC%20Meeting%20Minutes%2009.21.2023_web.pdf?VersionId=Dc8GuySf9k7xwiPQexQBKGVScqtIfcfG*

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being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

11-15 The commenter states that the Project is short of meeting the common area requirement by 33,040 sf if the 10 foot strip of land is dedicated to the City, the Project will not meet the common area requirement. The commenter is correct that the Project Applicant is seeking a waiver pursuant the State's Density Bonus Law for reduced common area requirement. The commenter states that deeding the 10 feet of property to the JFTB is more feasible to accomplish the goal of providing more parking. Refer to Response to Comment 11-14 above for the dedication of the 10-foot strip of land on the Project site.

11-16 The commenter states that providing the proposed pedestrian connections with Arbor Park/Arbor Dog Park requires permission from JFTB and inquires if the pass-thru gates will be removed. The proposed pedestrian connections will be self-locking to match the current operational hours of the parks. The exact configuration and implementation of the proposed pedestrian connections are speculative at this time and are not an environmental issue analyzed under CEQA; however, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

11-17 The commenter expresses concerns with street crossing on Lampson, provision of park space, and impacts to Heather Park. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities* for impacts to existing parks.

11-18 The commenter inquires about the location school bus stops and expresses concerns with traffic safety on Lampson Avenue. There are no school bus stops anticipated at the Project site or along Lampson Avenue. This is currently an existing school bus stop at Heather Park which serves the following schools: McGaugh Elementary, Weaver Elementary, McAuliffe Middle, and Los Alamitos HS. Children from the Project would have access to the existing school bus stop. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer also to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

11-19 The commenter expresses safety concerns with U-turns on Lampson Avenue at Heather Street. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson* Avenue, for pedestrian safety concerns.

11-20 The commenter states that SBPD will end up servicing police calls instead of Los Alamitos Police Department (LAPD) due to traffic levels. The Project site is located within the City of Los Alamitos; therefore, it will be served by LAPD. Additionally, as discussed in Section 4.13, *Public Services*, of the Draft EIR, Los Alamitos Police Department has indicated that this

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increase would not adversely impact Los Alamitos Police Department's existing resources. The existing resources would be adequate to meet the additional demands generated by the Project. Responses times and service ratios would be met and would not require the construction of new facilities (refer to Page 4.13-10 of the Draft EIR). However, SBPD has a mutual aid agreement with LAPD and can assist with public services in the event of an emergency, if needed.

11-21 The commenter advocates for the Senior Housing Alternatives for its ability to alleviate noise, parking, park, and traffic issues. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

11-22 The commenter states that three of the trees on the Project site are redwoods and believed to be Moon Trees. In response to this comment, T&B Planning, Inc. retained LSA to conduct research to determine if the redwood trees located at the southwest corner of the property at 4665 Lampson Avenue are Moon Trees (see *Attachment N* of this Final EIR).

Research found no evidence that the redwood trees at 4665 Lampson Avenue are Moon Trees. Neither the National Aeronautics and Space Administration (NASA) nor the United States Forest Service (USFS) has found any record of the Apollo 14 Moon Trees being planted in Orange County. CDFW was not part of the 1970s Moon Tree program and was not responsible for distributing Moon Tree seedlings. CDFW staff thinks it unlikely they would have been allowed to plant trees at the Lampson Avenue location since they only leased the building. Additionally, it appears the CDFW lease was several decades after the mid-1970s timeframe when the trees would most likely have been planted and therefore the commentor's speculation that "it is conceivable [CDFW] planted them" is unlikely to be accurate. Moreover, according to City records, there are no Moon Trees in Los Alamitos. In addition, none of the other sources that responded to requests for information could confirm that the redwood trees at 4665 Lampson Avenue are Moon Trees or even that any Moon Trees were planted in Orange County.

11-23 The commenter inquires whether there are dumbwaiters so residents do not have to carry grocery to a second story. There are no dumbwaiters proposed at this time. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

COMMENT LETTER 12

Steven B. Chesser
4764 Candleberry Avenue
Seal Beach, CA 90740
sbbk@mail.com

May 18, 2024

Tom Oliver, Associate Planner
City of Los Alamitos Planning Department
3191 Katella Avenue
Los Alamitos, CA 90720

Dear Mr. Oliver,

I am writing to express my opposition to the Lampson Park Place Project. I also wish to point out the inadequacy of the Draft Environmental Impact Report (DEIR).

The report states that the Proposed Project ("the project") is on land in the City of Los Alamitos but fails to acknowledge that virtually **all the negative impacts fall on the City of Seal Beach**; specifically, the existing housing development known as College Park East (CPE). My family and I have lived in CPE since 2002.

12-1

These impacts include vastly increased traffic on Lampson Avenue; the only access to and from the project is on Lampson Avenue. Lampson Avenue already has experienced numerous fatal and near fatal accidents over the years due to speeding, running red lights, illegal U-turns and driving while impaired. This situation can only get worse with the addition of 246 housing units and nearly 600 vehicles entering and leaving the project. The density of the project, 20 units per acre, is far in excess of what exists in surrounding neighborhoods. The Notice of Availability for the DEIR even concedes that Transportation impacts, even after mitigation measures "**would remain significant and unavoidable**".

There is a high probability of spillover parking into CPE, as the project **by design** has fewer than the recommended number of parking spaces.

12-2

The project refers to FAA approval of the project based on the narrow interpretation of building height and obstruction to air navigation, but **completely ignores the potential of airplane accidents and the attendant danger of residential encroachment**. The Airport Land Use Commission has advised that the residential development adjacent to the Joint Forces Training Base (JFTB) is **incompatible** with public health and safety.

The report also ignored the National Commission on Military Aviation Safety report, which released its findings to Congress on December 1, 2020. From the report's

12-3

introduction: "More than 6,000 U.S. noncombat military aviation mishaps occurred between 2013 and 2018. These mishaps occurred during training or routine operations. They claimed the lives of 198 servicemembers and civilians and cost the nation more than $9.41 billion in damages, including 157 destroyed aircraft." The report is highly relevant to the project which directly abuts a military aviation facility, the JFTB.

I request the DEIR be modified to reflect the **true** impacts of the project. I believe once these are known and understood, the project will need to be scaled back to something more compatible with the surrounding neighborhoods and the capacity of the existing roads and infrastructure.

12-3
(CONT.)

Thank you for considering my views.

Sincerely,

Steven B. Chesser

Responses to Comment 12

Chesser, Steven, dated May 18, 2024.

12-1 The commenter expresses opposition to the Project and states that the Draft EIR fails to acknowledge all impacts that fall on the City of Seal Beach, specifically College Park East. The Draft EIR analyzes the environmental impacts of the Project, including potential impacts that occur across jurisdictional boundaries. Additionally, the City of Seal Beach is acknowledged as a Responsible Agency for the Project (see Table 3-6, of the Draft EIR).

12-2 The commenter expresses concerns with increased traffic, access, traffic accidents, density, significant and unavoidable transportation impacts, and parking. The commenter does not provide specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

Explanation of potential impacts related to increased traffic, traffic accidents, significant and unavoidable transportation impacts, and parking are provided in Master Response 2.1.1, *Transportation and Traffic Congestion*, Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and Master Response 2.1.3, *Parking*. The Project is consistent with the City's General Plan and zoning designations for the site, including allowable density. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site.

12-3 The commenter states that the Draft EIR completely ignores the potential of airplane accidents and attendant danger of residential encroachment near JFTB and states that ALUC has advised the residential development is incompatible with public health and safety. The commenter states the Draft EIR ignored the National Commission on Military Aviation Safety Report, released on December 1, 2020 and states that it is relevant to the Project site. The commenter requests the Draft EIR be modified to reflect the true impacts of the Project.

Contrary to the commenter's assertion, the Draft EIR included an analysis of safety hazards of JFTB on the Project (see Section 4.8, Hazards and Hazardous Materials, of the Draft EIR). The National Commission on Military Aviation Safety is a report on military aviation nationwide and does not provide safety information or accident data specific to JFTB. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

DRAFT

Comment Letter 13

draft EIR for 4665 Lampson

Donna Chinn <donna.chinn@gmail.com>
Mon 6/10/2024 3:15 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

Please forgive me if this is already included in the draft, but I did not find the results of a traffic flow study. As you are probably aware, the neighborhood of College Park East in Seal Beach has many concerns about the additional traffic that the proposed development would bring. Would there be a left turning lane for eastbound cars at the development entrance? It would seem that there would be a big back up of traffic, especially during the morning and evening rush periods. 13-1

We are also concerned about the number of additional cars overall. Even though it appears that the proposal has the legally required number of parking spaces, I believe that more spaces would be called for. College Park East does not have the capacity for potential overflow parking. 13-2

Lastly, the proposed project would replace areas that are presently covered with vegetation. Removal of mature trees, and grass, to a lesser extent, is definitely a negative impact to the environment. It would destroy habitat for local birds and other wildlife and reduce carbon mitigating capacity. 13-3

Sincerely,
Donna Chinn
College Park East, Seal Beach

DRAFT

Responses to Comment 13

Chinn, Donna, dated June 10, 2024.

13-1 The commenter inquires about the results of a traffic flow study. The commenter asks whether there would be a left turn lane for eastbound cars at the development entrance and whether it would cause a backup of traffic during the morning and evening peak hours. The Project proposes a cross-street stop-controlled intersection at the primary neighborhood entry, which will allow for full access, including left turns for eastbound vehicles. A queuing analysis was performed at the Project driveways to determine whether there is adequate storage length during the AM and PM peak hours. The analysis demonstrates that there is adequate storage at both driveways to accommodate peak hour queues (see Section 1.7, Queuing Analysis, of *Attachment G* of this Final EIR). Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

13-2 The commenter expresses concerns about the increased number of vehicles and inadequate parking. The commenter states that College Park East does not have the capacity for potential overflow parking. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

13-3 The commenter expresses concerns with removal of mature trees and grass as it would destroy habitat for local birds and other wildlife and also reduce carbon mitigating capacity. The Project would result in the removal of existing trees. As discussed in Section 3.0, *Project Description*, of the Draft EIR, a variety of trees, shrubs, accent plants, and ground cover are proposed along the perimeter of the Project site, in common areas, recreational amenities, open space areas, and parking areas. Landscaping will feature drought-tolerant plant materials. A total of 441 trees, including 51 36" box focal trees, 190 15-gallon trees, 5 10x10'specimen canopy trees, and 195 24/36" box trees, would be planted throughout the Project site (refer to Page 3-7 of the Draft EIR).

As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, no special-status plants were detected on the Project site. However, the Project does provide limited suitable habitat for nesting birds and common raptor species. Construction activities have the potential to adversely impact nesting birds and raptors and roosting bats. Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting birds, nesting raptors, and bat roosts prior to site disturbance. If nesting birds or raptors are present on the Project site, mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance (refer to Pages 4.3-29 through 4.3-39 of the Draft EIR).

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Comment Letter 14

Lampson Project Opposition

vitachircord@gmail.com <vitachircord@gmail.com>
Sun 5/12/2024 4:11 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender vitachircord@gmail.com

Dear Mr. Oliver,
I'm writing to state my opposition to the Lampson development project. 14-1

Sincerely,

Vita Chirco
Seal Beach resident

DRAFT

Responses to Comment 14

Chirco, Vita, dated May 12, 2024.

14-1 The commenter expresses opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 15

From: markjuliac@gmail.com
To: Tom Oliver
Subject: LAMPSON HOUSING
Date: Sunday, April 28, 2024 7:21:48 PM

Dear Mr. Oliver:

As a homeowner at CPE, I would like to voice my concern regarding Lampson not suitable for more residential development. 15-1

Back on Dec 22 2019, a car crashed through the block wall facing Lampson into my property in the middle of the night, missing the pool by a few feet. I was thankful that the car didn't plunge into the pool. Police Officer Kieth Phan came the next day and filed a police report. It took me six trips to the police station and over a year including filing at small claim court to get the driver's insurance to pay for repairing the wall. Building more houses on Lampson would definitely worsen public safety and I hope the city would put a brake in the Lampson project. 15-2

Should you have any questions, please do not hesitate to contact me.

Mark & Julia Chow.
4357 Ironwood, Seal Beach, CA 90740

Responses to Comment 15

Chow, Mark and Julia, dated April 28, 2024.

15-1 The commenter expresses concerns with the Project which are responded below.

15-2 The commenter provides a car accident history onto their property from Lampson Avenue and expresses concerns with public safety. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* for traffic concerns. Refer to Master Response 2.1.8, *Public Safety*.

DRAFT

COMMENT LETTER 16

Churchill Law Office
3092 Blume Drive
Los Alamitos, CA. 90720

Email: churchillca@me.com Telephone: 562-644-3802

June 9, 2024

Tom Oliver
Planning Department
City of Los Alamitos
3191 Katella Ave
Los Alamitos, CA 90720

Hand Delivered 6/10/24

Regarding 4665 Lampson Ave,
Draft Environmental Impact Report Dated April 24, 2024

Mr. Oliver,

In response to the Notice seeking Comments to the Draft Environmental Report for 4665 Lampson. Ave, I am enclosing the following:

1. Comments to **Air Quality Impact Analysis** by Urban Crossroads dated May 5, 2023;

2. Comments to **Phase 1 Environmental Site Assessment Report by EFI Global** dated January 18, 2023, and copy of **FINAL Phase I Environmental Site Assessment Report to GSA** Southwest Regional Laboratory for 4665 Lampson Avenue, Los Alamitos, California 90720; Contract No. GS-00F-168CA/Award No. GS-10F-0076K prepared by Tetra Tech Inc, dated May 2016;

3. Comments on **Airport Land Use Assessmen**t by Nick Johnson dated October 2, 2023 addressed to Nicole Morse at T&B Planning and August 14, 2023 letter to Chet Simmons from Johnson Aviation Consulting;

4. Comments on **Noise Impact Analysis** prepared by Urban Crossroads buy Bill Maddux dated April 22, 2024;

5. Comments to **Biological Technical Report** by Glenn Lukas dated April 1, 2024;

6. Comments to **Phase I Cultural Resources Stud**y by BFSA Environmental Services by BFSA Environmental Services dated April 7, 2023;

7. Comments on **Fire Service Questionnaire** - Orange County Fire Authority dated March 18, 2024 by Tamara Rivers Management Analyst.

8. Comments on **Seal Beach Police Department Questionnaire** signed by Michael Ezroj on November 16, 2023;

9. Comments on **Traffic Analysis by Urban Crossroads** dated September 2022.
Please confirm timely receipt to my email.

16-1

Thank you,
Carol Churchill

Enclosures

RECEIVED
CITY OF LOS ALAMITOS
2024 JUN 10 AM 9:04

Exhibit 1

Comments to Air Quality Impact Analysis by Urban Crossroads dated May 5, 2023

The executive summary states that development projects must comply with laws put in place by federal, state and local regulatory agencies. "Any operation or activity that might cause the emission of smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution which can cause damage to human health, vegetation or other forms of property, or ca cause excessive soiling on any other parcel shall conform to the requirements of the South Coast Air Quality Management District.

SCAQMD Rule 402 states that a person shall not discharge for any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or that endanger….health or safety..of such person or public….

SCAQMD Rule 403 states in part that the rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent or reduce fugitive dust emissions. The rule applies to human-made conditions capable of generating fugitive dust and applies to earth moving and grading activities.

16-2

The Site Plan Exhibit 1-B is not consistent throughout all of the DEIR Reports.

16-3

Grading as a Source of Fugitive Dust Emissions.

The Air Quality Analysis identifies grading as a source of generating fugitive dust particles on the site during construction.

The Air Quality analysis identifies the following pollutants: Carbon Monoxide, Oxides of Nitrogen, Particulate Matter, Volatile Organic Compounds, Reactive Organic Gasses, Lead, and Odors.

The Air Quality Analysis fails to address the pollutants identified in the January 18, 2023 Phase I Site Assessment Report by EFI Global which reports on a Phase II Site Assessment that also identified Asbestos, Lead and. More significantly levels of Arsenic at 42 times the screening level of .11mg/kg.

The omission of these pollutants in its Air Quality Analysis, given the acknowledge grading of 12 acres of land for residential development, places the public's health and safety at significant risk based on SCAQMD Rules 402 and 403.

16-4

Carbon Monoxide. The operation of the Joint Forces Training Base adjacent to the site is a source for the burning of fuel which is cumulative to the burning of fuel for the grading and construction process. The Analysis failed to take the burning of significant qualities of fuel at the military airport base into consideration in determining the extent of Carbon Monoxide produced during construction.

Oxides of Nitrogen. The operation of the Joint Forces Training Base adjacent to the site is a source for burning of fuel which is cumulative to the burning of fuel for the grading and construction process.

16-5

Ozone - The production of internal combustion engines synthesize into a Ozone. he operation of the Joint Forces Training Base adjacent to the site is a source for burning of fuel which is cumulative to the burning of fuel for the grading and construction process.

16-5 (CONT.)

Particulate Matter comes from road dust, windblown dust, and construction. Ambient fine particulates increase mortality rates, respiratory infections and asthma attacks. The sources identified are fuel combustion, motor vehicles, and equipment.

16-6

The Air Quality Analysis omits to include two of the three particulates located on the property to be graded: arsenic and asbestos in its particulate matter analysis.

As stated above, the **EFI Global report** dated January 18, 2023, include a Phase II Environment Site Assessment including boring samples that identified Lead, Arsenic and Asbestos fibers.

The report states:

Arsenic was detected in all four soil samples analyzed at a maximum concentration of 4.64 mg/kg.

The residential screening level for arsenic is 0.11.

And this screening Leven was exceed in all of the four samples analyzed.

The **EFI GLOBAL report** concludes these levels are below background concentrations **at CALIFORNIA AIR FORCE BASES..**

16-7

The project site is NOT an Air Force Base. The project is adjacent to an Air Force Base which would suggest that pollutants from the operation of the Base have been deposited beyond the JFTB's BORDER where the residential properties are planned to be constructed. The concentration of arsenic on the site IS 42 TIMES higher than residential screening levels.

Grading the site will **release particulate matter containing lead and arsenic** that will endanger the public health given the extent of the contamination.

Cumulative public safety impacts will occur when the soil is graded due to the additional pollution consisting of lead and asbestos that will be released during demolition of buildings and grading of a 12 acre site that abuts the flight path of the JFTB.

Grading will create particulates that can run untreated into the **storm drain running to the ocean untreated, the sewer system, and into well water belonging to the City of Seal Beach.**

16-8

The site will require extensive mitigation measures to remediate the concentration of arsenic for public safety and health before grading can occur.

Those measures must be identified in the final EIR with the South Coast Air Quality Management District, the City of Seal Beach, and the County of Orange approving the grading plan.

16-9

- 2 -

Exhibit 2

Comments to Phase 1 Environmental Site Assessment Report by EFI GLOBAL dated January 18, 2023.

The report states that **EFI GLOBAL** ***conducted only "visual" observations of the site and structures.*** *The consultant states that its services did* ***NOT*** *include "evaluating compliance of past or future owners with applicable local, provincial and federal government laws and regulations. The Consultant concludes that:*

"IT SHOULD BE NOTED THAT COMPOUNDS OR MATERIALS OTHER THAN THOSE DESCRIBED COULD BE PRESENT IN THE SITE ENVIRONMENT."

Section 3.5.3 entitled Commonly Known or Reasonably Ascertainable Information asked the Use if it is aware of any commonly known information in the community about the subject property with retard to recognized environmental conditions. The User informed the Consultant that user was not aware of any information....

The Consultant's Report is deficient because the property owner/user failed to comply with Section 1.4 entitled User Responsibilities" and deliver to Consultant ***the following public record*** *provided User in connection with the auction conducted by the GSA for the sale of the property to User:*

16-10

FINAL Phase I Environmental Site Assessment Report
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California 90720
Contract No. GS-00F-168CA/Award No. GS-10F-0076K

Prepared For:
United States General Services Administration
Office of Real Property Utilization and Disposal (9PZ)
50 United Nations Plaza – 4th Floor North
San Francisco, California 94102

Prepared By:
Tetra Tech, Inc.
45610 Woodland Road, Suite 400
Sterling, VA 20166
May 2016
Tetra Tech Project No: 103G3995003.001

The Final Phase I Environmental Assessment Report dated May 2016 *contains significantly data including the following:*

16-11

The Site was identified three times in the Hazardous Materials Generator (HAZNET) database. In 2000, the Site was identified as generating asbestos containing waste with disposal in a landfill.

Page 1 of 3

In 2003, the Site was identified as a generator of off-specification, aged or surplus organics with a disposal method identified as transfer station.

In 2010, the Site was identified as generating ages or surplus organics with a disposal method identified as other treatment. In 2012, the Site was identified as generating a hazardous waste with a disposal method of storage, bulking, and/or transfer off site with no treatment or recovery.

16-11 (CONT.)

A copy of the full report (435 pages) is transmitted by email to the City of Los Alamitos, the City of Seal Beach, and by USPS to Consultant.

++++++++++++++++

The Consultant reports under section entitled ***User Provided Documents*** *that the owner did* ***NOT*** *provide Consultant any information* ***either verbally or in writing*** *(i.e. title report) regarding environmental clean up liens or activity or use limitations encumbering the subject property.*

EFi Global recommended a Phase II Environmental Site Assessment. The scope of the work included a geophysical survey and soil sampling of 11 borings on August 16 2022.

The Phase II Environmental Assessment soil samples revealed measurable levels of ***arsenic was detected in all 4 samples and the screening Level was exceeded; as well as lead.*** *The consultant pointed out that screening levels at Air Force Bases are significantly higher than for RESIDENTIAL USE.* ***The concentration found in the soil was 4.65 mg/kg, which is 42 TIMES the level allowed for residential use, identified by Consultant at 0.11 mg/kg***

16-12

Given the intended use of the property for "residential" use *and outdoor recreation by residents in the soil, and the high water table underlying the property, liquefaction reported in the Hydrology and Geotechnical Reports, and the location of a ground water well belonging to the City of Seal Beach Department of Water, there is a risk to public safety and the need to assure* ***ground water supplies and storm drains are not contaminated by run off, and air borne contaminates are not released during construction.***

Additional chemical analysis of the soil for ***other hazardous materials*** *that may become* ***wind borne during construction should be conducted, mitigation measures identified,*** *and the results shared with the City of Seal Beach and City of Los Alamitos and any other governmental agency entitled to those results, before the EIR is approved.*

16-13

Page 2 of 3

The 12 acre site will be graded to provide building pads to address flooding on the site, will create dust and wind borne contaminates such as lead, arsenic and asbestos, necessitates ***rigid ongoing monitoring*** *and reporting to the City of Seal Beach and City of Los Alamitos.*

Consultant identified ***asbestos*** *within the building to be removed that requires special precautions to prevent contamination of the site. Mitigation measure includes asbestos Operaton and Maintenance Plan in addition to asbestos abatement PRIOR TO any renovation/ demolition that would disturb the building materials.*

Lead based paint*, possible* ***radon concentrations.*** Mitigation measures include construction personnel be properly trained in lead related construction.

16-14

Additional Testing is required for TPHd - diesel in soil sample, ***evidence of flooding and storm drain run off*** *that could carry untreated contaminants into the ocean, all must to be addressed by the Consultant in terms of mitigations measures before and during construction to protect the water supply, prevent air pollution, and protect the public's safety.*

16-15

Exhibit 3

DEIR Comment on Airport Land Use Assessment

The Report consists of 88 pages from Nick Johnson, a consulting firm of Johnson Aviation Inc dated October 2, 2023. It was directed to Nicole Morse of T&B Planning. T&B Planning is listed as a consultant for both the City of Los Alamitos and the User of the Property Lampson LLC, one of the partners being Matthew Waken. Mathew Waken employed former City of Los Alamitos staff member Les Johnson, who was employed by T&B Planning, to be his "agent" before the City of Los Alamitos Planning Department. The Senior Planner in Los Alamitos is Tom Oliver, who was supervised by Les Johnson during Johnson's employment in Los Alamitos. T&B Planning as a conflict of interest in that it is financially obligated to both the City of Los Alamitos and the owner of the Property for which it is preparing the DEIR. 16-16

Nick Johnson's resume is attached. It reflects that he has no experience in evaluating the operation of a Military Airport. The consultant lacks the knowledge and expertise to express an opinion on whether the Airport Land Use Plan for the Joint Forces Training Base Los Alamitos is inconsistent with findings by the Airport Land Use Commission and the California Department of Transportation-Division of Aeronautics. Both State Agencies found that the Housing Element Update included three properties adjoining the JFTB that presented a risk to the public's health and safety due to noise and crash hazards. 16-17

Nick Johnson failed to provide the CIty's Consultant, T&B Planning, the City of Los Alamitos City Council and Planning Commission, and the Airport Land Use Commissions with evidence that contradicted findings by the National Commission on Military Safety (2020) **" Report to the President and the Congress of the United States".** 16-18

The Executive Summary of the Report reads:

The National Commission on Military Aviation Safety asked thousands of pilots and maintainers this question during visits to military flight lines. Across the country, certain answers were consistently repeated, regardless of Service, rank, or airframe: **insufficient flight hours, decreasing proficiency levels, inadequate training programs, excessive administrative duties, inconsistent funding, risky maintenance practices, and a relentless operations tempo.**

The Commission also independently assessed this same question. The Commission **reviewed thousands of mishap reports**, consulted volumes of secondary research, and conducted **data analysis** to determine **why mishap rates have increased**. The Commission also utilized its resident knowledge and experience: two retired four-star military aviators; a former member of the National Transportation Safety Board and Director of Safety and Survivability for the Navy; a former Secretary of the Army who had previously served as Acting Secretary of the Air Force and as a member of Congress; an engineer turned CEO for major aircraft manufacturers; a White House Deputy Chief of Staff for Operations who served four presidents; and a former Navy helicopter pilot who oversaw Air Force One and Marine One while director of the White House Military Office.

This report shares **critical perspectives from the flight line and addresses the safety concerns that so many aviators and maintainers candidly share**d. This report also covers broader topics in the Commission's statutory charter, such as aviation mishap

Page 1 of 6 6/09/24

rates, unexplained physiological episodes, and aviation maintenance delays. The complete list of the Commission's recommendations is provided in Appendix B.

During its study, the Commission realized that many aviation safety issues are uniquely interconnected and require collaborative, cross-cutting solutions. For example, increasing spare parts inventories does little good if there are not enough experienced maintainers to install them. Fixing one issue may require fixing several related issues, and all solutions must be crafted to work in concert. In this report, the Commission took special care to balance competing and sometimes conflicting priorities, and its recommendations are proposed with an understanding of the importance of harmonization.

Our findings and recommendations focus on four areas where Congress and the Department of Defense can take immediate steps to reduce aviation mishaps: Pilots should fly; maintainers should maintain; data can save lives; and funding should be consistent.

Aircrews and Maintainers

The Commission found that aviation and maintenance experience, the key to doing a job safely and efficiently, is declining. Newly trained pilots and maintainers are reporting to operational units without basic skills. Flight hours are being replaced with simulator hours, yet the simulators are often outdated, out of service, or unavailable. Aircrews and maintainers are saddled with additional nonaviation duties that are more valued than their primary duties for purposes of promotion. Furthermore, on top of their experience gaps, some aircrews are experiencing physiological episodes when an aircraft's environmental systems fail to meet the needs of the pilot.

16-18 (CONT.)

This report addresses these issues in detail. Two chapters address the shortcomings in initial training, follow-on training, and personnel management of aircrews and maintainers. One chapter examines the effects of a relentless pace on military aviation for both machine and personnel. Another chapter discusses the human-machine interface and recommends changes in the acquisition process to better meet the needs of the pilot during aircraft design and modification.

"Additional Duties. . . We have an instructor pilot trying to get a forklift license."
—USAF Junior Officer

However, while addressed in separate chapters, these are compounding problems. A reduction in flight hours for new pilot training adds to the requirements for operational units. These units, already overtasked from a high operations tempo, must then conduct training to develop basic skills for new personnel. This stagnates the units' ability to conduct high-level training. In other words, junior pilots and maintainers are starting their careers a lap behind, and then never catching up, all while their units buckle under the additional stress of getting them up to speed. This, in turn, leads to further costs. By being overworked, overstressed, and overloaded with additional duties unrelated to aviation, the morale and readiness of aircrews and maintainers erode. Experienced aircrews and maintainers leave the Services and are replaced by personnel with no expertise. The average level of experience falls, and the cycle repeats.

To address these issues, the Commission recommends a multipronged approach. As outlined in the report, the Services must improve the training of new pilots and maintainers to broaden their experience and limit the burden on operational units. Additionally, the Services must increase the retention of experienced aircrews and

maintainers through better personnel management, increased bonuses, and better schooling opportunities. The Services, having invested years and millions of dollars in initial, on-the-job, and advanced training, must focus the careers of aviation professionals on their aviation duties. Furthermore, to increase safety and readiness, the Services must ensure that aircraft are designed to match the needs of the aircrew who fly them. Without such complementary solutions, the U.S. military could be left with the worst of all worlds: increased costs, decreased readiness, and eroded safety margins.

Data Deficiencies and the Need for a Joint Safety Council

During its study, the Commission identified numerous data deficiencies in military aviation. Due to poor data collection and analysis, the Services and the Department of Defense are missing out on valuable opportunities to reduce risk, prevent mishaps, and optimize human performance. This is repeatedly referenced in the report. For example, one chapter explains how the Department lacks sufficient data collection methods and analysis capabilities to reduce risks and improve safety, while the Services lack standardized procedures and consistent processes in their mishap reporting. Another chapter examines how improved pilot monitoring could help identify, understand, and reduce unexplained physiological episodes. Additional chapters discuss the need for improved data collection to measure training efficacy for pilots and maintainers.

In studying these issues, the Commission reviewed the current practices of commercial aviation, which has successfully used data analytics to identify and reduce safety risk. While certain commercial practices are limited in their applicability to military aviation, the Commission identified policies and practices that offer opportunities to reduce risk and improve safety. For example, compared to the commercial sector, the Commission determined that the Department of Defense is not properly organized to conduct data analytics, coordinate aviation safety activities, develop safety standards or data collection requirements, or review the Services' implementation of aviation safety programs.

The Commission recommends creating a Joint Safety Council. Reporting to the Deputy Secretary of Defense, the council would be responsible for establishing military aviation safety standards, collecting and analyzing safety data, and developing safety priorities. Led by safety officials from the Services, the council would have the necessary expertise and authority to monitor and coordinate aviation safety programs across the Department. This recommendation is further outlined in Chapter 4, and a legislative proposal is contained in Appendix H.

Consistent and Predictable Resourcing

The question of the next mishap was not hard to answer at one Marine base, where a junior Marine told the Commission that his unit was reusing expendable $5 filters on aircraft. The unit, he explained, still had missions to do even if there was no money to purchase new filters. This was one of the egregious examples the Commission found, and it was a direct result of funding suddenly being withdrawn to meet other priorities. Inconsistent funding, and the tolerance it fosters for maintenance shortcuts, were the likely causes of the next mishap at this unit.

"We are doing 12-hour days, five days a week, and hardly flying." —F-22 Pilot

"Guys are going to take risks they don't even know is a risk." —Marine Supervisor

16-18
(CONT.)

A lack of consistent funding is especially pernicious to military aviation safety. Flying, like surgery and other highly technical professions, is a perishable skill that needs routine practice to maintain proficiency. When a unit's funding is restored in the last part of a fiscal year, it simply cannot make up for lost training and deferred maintenance. Late funding, no matter the amount, cannot reverse the impact of months of insufficient flying hours, missing parts, and deferred maintenance. Timing is everything.

By far the greatest and most preventable source of unpredictable funding is Congress's use of continuing resolutions. The Department of Defense has begun the fiscal year with a continuing resolution for 13 of the past 18 fiscal years. As continuing resolutions have become more common, their average duration has also increased. There is near universal agreement that continuing resolutions significantly degrade readiness, waste money, and put the lives of Servicemembers at unnecessary risk.

The Commission concurs and heard examples from every Service of how inconsistent funding degrades virtually every aspect of military aviation. However, empirical research on the impact of continuing resolutions is lacking. Therefore, while the Commission first recommends that the Department of Defense and Congress resource military aviation in a consistent and predictable manner, the Commission also recommends that Congress require a comprehensive, data-driven analysis of continuing resolutions' impact on military aviation.

Conclusion

In line with the Commission's statutory charter, this report provides a comprehensive review of military aviation safety. The issues outlined above remain illustrative, not exhaustive. Overall, this report addresses numerous topics related to military aviation, including mishap rates, safety data, unexplained physiological effects, sustainment management systems, funding, operations tempo, training, and talent management. Each of these topics warrants careful review and attention, particularly due to the stakes involved.

During the Commission's six-year study period, aviation mishaps cost the U.S. military 198 lives, 157 aircraft, and well over $9 billion in damages. To reduce these unacceptable costs, the Commission stresses that systemic problems require integrated solutions that prioritize safety. The cost of doing anything else is simply too high.

Website: https://www.globalsecurity.org/military/library/report/2020/ncmas_final_report_20201201.pdf

16-18 (CONT.)

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Financial Conflict of Interest. Nick Johnson's expertise lies in commercial airports, not military air bases which negates the value of his conclusions. The consultant's opinions are biased due to a financial conflict of interest. Nick Johnson was employed by the Lampson purchasers to secure a report from the FAA, and was

16-19

subsequently hired by the City's DEIR Consultant T&B Planning. Nick Johnson failed to disclose his financial interest between himself and the developer publicly as it related to the preparation of is Report.

16-19 (CONT.)

Cumulate Noise Impact Ignored. The consultant's also failed to consider the cumulate impact on public safety and welfare of noise generated from Traffic along Lampson Ave, in addition to the noise generated from the operation of the JFTB.

The Noise Report prepared by Bill Maddox of Urban Crossroads dated April 22, 2024, included A Noise Impact Analysis at 4 test sites. Using the Maximum dBa measurement at each of the 4 test sites, it is clear that the use of soundproofing mitigation measures on the windows does not reduce the sound dBa levels to that which is the Standard set by the City of Los Alamitos, 45dBa in the interior of the residential units.

Nick Johnson's use of sound contours to conclude that sound was below the threshold failed to recognize that those contours are not static barriers over which sound cannot travel. Noise consists of vibrations that do not travel in a straight line. The sound waves expand like a ripple of water. The Lampson projects places house along the JFTB border with no evidence of a SOUND WALL around the entire project site, property except along the border of Lampson Road. Even that sound wall appears to eliminate the Emergency Vehicle Access Gate form Lampson, placing the residents in jeopardy in the event of a major emergency: fire or earthquake.

16-20

Additional Mitigation Measure to protect the public safety from crash risks and hearing loss should be imposed in a written Development Agreement that include:

1. Written Disclosure in all sales/leasing/rental materials that the State Airport Land Use Commission-Joint Forces Training Base Los Alamitos California, and California Department of Transportation-Division of Aeronautic, and the National Commission on Military Safety (2020) " Report to the President and the Congress of the United States", made findings that operations the Joint Forces Training Base may place the public's health and safety due to excessive noise causing **hearing loss and/or crash related injuries and property damage.**

These warnings should be included in deeds so the warning "runs with the land" to subsequent purchasers since the noise impact from the JFTB are not only reasonably expected to be operated indefinitely but news report from the JFTB state that the use of the base will be expanded.

16-21

2. Require construction of residential units to include "sound cancelling insulation" in the walls and ceilings in addition to sound attenuation windows and doors.

16-22

3. Install sound monitoring sites within the Lampson Project and required the owner/seller/lessor to pay for all mitigation costs associated with decibel readings above the CIty's standard of 45 dBa from the date of sale sale of the unit to the original purchaser. 16-23

Internal Inconsistency of DEIR Reports.

The sound wall barrier along Lampson appears to remove the "Emergency Vehicle Access Point on the east corner of the property at Lampson, which conflicts with the DER Traffic Report. The DEIR Reports are internally inconsistent with multiple Site Plan versions utilized by consultants. ALL of the DEIR Site Plans should be identical. 16-24

Crash Safety Risks Ignored

Nick Johnson's conclusion in his Letter to the City Of Los Alamitos dated August 14, 2023, lacks credibility because the consultant has no experience in safety on Military Airport Bases.

The Consultant did not utilize the **National Commission on Military Safety (2020) " Report to the President and the Congress of the United States"** to evaluate the safety of the project that borders a Military Airport Base.

The resume of the consultant attached to the August 14, 2023 letter demonstrates his complete of lack of knowledge and experience in the operation of a military airport and the attendant safety risks involved in that operation. His opinion lack gravitas. 16-25

The failure to the City's DEIR consultant, T&B Planning, to recognize this lack of competency places the public at substantial safety risks.g

Mitigation measures should include the employment of a consultant with expertise in the operation of a military airport, and identification of mitigation measures to protect the health and safety of occupants of the housing projects.

The mitigation measures should include adequate set backs from the JFTB boundary; submission of a final site plan to the Orange County Fire Authority and Los Alamitos and Seal Beach Police Departments establishing adequate ingress and egress for emergency vehicles along Lampson Ave and throughout the project site. Mitigation may also include reducing the height of the 3 story buildings closer to the JFTB boundaries where take off and landing occur and where the risk of crashes is higher. 16-26

Exhibit 4

Comments on Noise Impact Analysis dated April 22, 2024

On site traffic noice analysis starts with the false premise that "on-site exterior and interior nose impacts are from traffic related noise levels".

Both the State Airport Land Use Commission and the California Department of Transportation Division of Aeronautics issued findings that noice levels from the operation of the Joint Forces Training Base (JFTB) Orange County have significant noise levels that negatively impact the health and welfare of the public. 16-27

The Noise Impact Analysis states that the City of Los Alamitos requires a 45 dBA CNEL internal noise level.

Remediation measure consist of windows that close and produce a noise reduction of 20.3 dBa on first floors and 26.3 dB on second floors adjacent to Lampson. Installation of a "noise wall" along Lampson is designed to reduce "traffic" noise and has no impact on noice from aircraft, maintenance, operations of the JFTB. 16-28

The Noice Impact Analysis conducted limited Noise Level Tests on 4 sites. Those sites were identified as Arbor Dog Park, 4701 Ironwood, 5001 Lunar Drive and Lampson at Old Ranch Country Club.

The "averaging" of sound and vibrations over the day to obtain a lower than maximum sound impact, fails to protect the public from harmful cumulative noises generated from both traffic and the operation of the military airport.

Site 1 - Arbor Dog Park (north of project) measured a 69.7 dBa daytime and a 52.7 dBa night reading 16-29

Site 2 - 5001 Lunar Drive (east of project along Lampson) measured a 76.9 dBa daytime and a 66.2 dBa night reading

Site 3 - 4701 Ironwood Ave (south of project along Lampson) measured 83.7 dBa daytime and 76.6 dBa night reading

Site 4 Lampson at Old Ranch Country Club- west of project measured 69 dBa daytime and 68.7 dBa night reading.

Even applying the mitigation measures proposed (sealed windows, sound barrier along Lampson) does not reduce the interior reading by a sufficient amount to meet City standards for interior sound of 45 dBA. 16-30

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Additional mitigation measures should be required:

1. Disclosure in all sales/leasing materials that the State Airport Land Use Commission and California Department of Transportation-Division of Aeronautic made findings that due to operational noise from the JBTB, the public may be susceptible to health and safety risks associated with excessive noise causing hearing loss and/or crash related injuries and property damage. These warnings should be included in deeds so the warning "runs with the land" to subsequent purchasers since the noise impact from the JFTB are not only reasonably expected to be operated indefinitely but news report from the JFTB state that the use of the base will be expanded. 16-30 (CONT.)

2. Install sound cancelling insulation in the walls and ceilings of all housing units in addition to sound attenuation windows and doors. 16-31

3. Install sound monitoring sites within the project and required the owner to pay for all mitigation costs associated with decibel readings above 45dBa from the sale of the unit to the original purchaser. 16-32

4. The sound wall barrier along Lampson appears to remove the "Emergency Vehicle Access Point on the east corner of the property at Lampson, which conflicts with the DER Traffic Report. The DEIR Reports are internally inconsistent with multiple Site Plan versions utilized by consultants. ALL of the DEIR Site Plans should be identical. 16-33

Exhibits 5 to 8

Comments to Biological Technical Report by Glenn Lukas, Assoc.

The location of two defined sensitive species, the **Cooper's Hawk and Winterling Merlin**, suggest a mitigation measure to prevent destruction of nests between February1 and September 15 consisting of having a biologist conduct a nesting survey three days before grading, disking, and demolition. The nests be cordoned off until the nests are empty. This mitigation measure should be included in a written Development Agreement. 16-34

Comments to Phase I Cultural Resources Study by BFSA Environmental Services

The consultant concludes that there is a limited potential that archaeological deposit are present. It is recommended that as a Condition of Approval the Permit required an archaeologist be retained to conduct periodic spot checks of related ground disturbance activities.

The recommendation for mitigation consists of 4 spot checks: initial ground exposure; 50% of ground disturbance, 80% of ground disturbance, and any other time determined by geologist. If any historic or archaeological resources are encountered, the construction should stop within 50 feet of the find and be assessed for importance.. Excavated finds shall be curated before insurance of an occupancy permit. If human remains are found, a special procedure shall be followed consistent with CEQA Section 15064.5(e). 16-35

Fire Service Questionnaire - Orange County Fire Authority

COMMENT: There does not seem to be a "report" from the Orange County Fire Authority. Instead there is a Questionnaire.

The OCFA states that any increase in population can potentially increase workload. All projects are cumulative and OCFA uses a **fair share** approach to mitigate fire service response impacts and facility/equipment needs.

The OCFA states that the **sources for funding** OCFA are property taxes and charges for services. 16-36

Comment: The Mitigation recommended is a written Condition of Approval is for the Developer to enter into a **written Fire Protection Agreement** with the Orange County Fire Authority which determines the **fair share of funding** for capital improvements necessary to provide adequate fire protection. These **additional property fee assessments** should include the additional costs will be added to the **Homeowners Association Fee** and paid to the OCFA annually by purchasers. This will mitigate the negative financial impact on existing property owners for increased population caused by the project.

The CIty of Los Alamitos should be a party to the HOA Covenants, Conditions and Restrictions, to enforcement the payment of adequate HOA fees to cover the costs of Fire Protection finding, enforceable through a "lien"imposed on delinquent homeowner title, recoverable upon sale of the property or creditor enforcement, thus preventing the City from having to carry the burden of unpaid assessments. 16-37

There is no Site Plan Exhibit identify the access roads for emergency vehicles in the questionnaire. The boundaries lines in Exhibit 1-4 of the Traffic Analysis do NOT show fire equipment can navigate **around ALL sides of the buildings** within the project boundaries. This is a significant safety hazard if a "wall" will surround the project on all sides, or if landscaping prevents a vehicle from driving around the perimeter of each structure. Setbacks 16-38

on the North, East and West sides of the Project may need to be increased and hardscape installed for vehicles and fire hydrants. Exhibit 3-1 "Existing Number of …Lanes" shows that the **"Emergency Vehicle Access"** identified on Exhibit 1-2 **DOES NOT Exist** at Driveway 8. This is **a major inconsistency that affects public safety.**

16-38 (CONT.)

Additional conditions of approval should include review by the OCFA of construction documents including SITE PLANS to confirm applicable fire safety codes and regulations are implemented.

16-39

The **June 2022 Traffic Report does not contain a current Site Plan** that shows the entrances and exit from the projects site. The Report needs to be amended to include the final design plan including the **width of interior street**s, **turning radius,** location of **fire hydrants**, restricted parking curbs and signs and adequate set backs between building and adjacent property line**s to allow fire trust sufficient space to maneuver around ALL sides of the building.** This is relevant to the boundaries along the JFTB. The Site Plan should verify first responders are not trapped within the Project by walls or too narrow set backs in the event of a major emergency such as collapsing buildings in an earthquake, or a plane crash along the JFTB borders.

16-40

City of Seal Beach Police Department Questionnaire.

Comment: Respondent Seal Beach Police Department states SBPD has concerned about the **cumulative impact of multiple projects** along Lampson relative to traffic flow and safety which should be reviewed and mitigation measures proposed.

The Seal Beach Police Department states that SBPD has concerns about **parking impacts to College Park East and users of Arbor Park** who use the Lampson office site for parking. Existing resource (personnel) levels may not be adequate to manage traffic safety concerns on Lampson. The EIR should carefully consider these issues and mitigate measure for traffic enforcement, road maintenance, signalization, and parking restrictions.

16-41

A traffic mitigation plan by the County of Orange, Seal Beach and Los Alamitos should should be considered on Lampson Ave. Respondent states that Seal Beach has no funding for traffic remediation for the Los Alamitos Project. **A traffic signal should be considered at this time.**

16-42

Additional concerns to be addressed in the Final EIR Mitigation measures, and raised by the SBPD, are parking for residents, guest and park users. The only additional parking overflow feeds into Seal Beach College Park East, placing the burden on SBPD for enforcement. Overflow parking in College Park East becomes is a **foreseeable** public safety hazard due to pedestrians crossing a street with a history of accidents and fatalities and the lack of a traffic signal.

16-43

Exhibit 9

DEIR Traffic Analysis - Urban Crossroads - September 2022

Notwithstanding the Comments by the Seal Beach Police Department, the CrossRoads **does NOT provide mitigation measures indicated are required for public safety reasons.**

CrossRoads report dated September 2022 states that only two improvement are contemplated. Summary of Findings, Section 1.1.

1, No stoplight is contemplated. The report states: **If and when** Driveway 2 meets the appropriate warrants, a traffic signal should be installed at this location and should be coordinated along with the other traffic signals on Lampson.

2. Frontage improvements will be limited to sidewalks, driveway modifications needed to accommodate site access and landscaping.

There is no recognitions or response to the **public safety concerns expressed by Seal Beach Police Department in the Questionnaire submitted by the SBPD.** The failure to mitigate safety concerns transfer the costs of enforcement to the City of Seal Beach and imposes safety risks that can be mitigated by a **traffic study and mitigation plan**. 16-44

The County of Orange should be consulted and be the lead agency in coordinating safety plans to prevent the Lampson property owner from avoiding its financial responsibility for public safety improvements. 16-45

The Cross Roads Traffic Analysis failed to take into consider the **cumulative impacts** of multiple projects along Lampson, including **Old Ranch Country Club in Seal Beach** which will add additional traffic impacts to an existing road that has a documented history of excessive accidents and fatalities. 16-46

The Traffic Analysis does not recognize the **"7 foot tall sound wall"** proposed in the **DEIR Noise Report** to be located along Lampson w**hich wall would block the "emergency vehicle access" entry** on the Consultants Exhibit 1-2 Preliminary Site Plan. 16-47

There is no consistent use of dated Site Plan through out the DEIR. The DEIR Reports have various dates that are not uniform in terms of Site Plans, **and there appears to be NO overall review of all DEIR Reports for internal inconsistencies. For Example:** The Planning Department in Seal Beach signed the Traffic Study Agreement (June 1, 2023) **BEFORE the Police Department completed the Police Services Questionnaire** in November 2023. This demonstrates that the Police Department's **safety concern**s were NOT provided to Urban Crossroad in connection with the preparation of the consultants Summary of Findings in June of 2023. This makes the Approved Traffic Analysis Scoping Agreement deficient in terms of public safety concerns. 16-48

Responses to Comment 16

Churchill, Carol, dated June 09, 2024.

16-1 The commenter provides introductory remarks and a summary of the comments on the Draft EIR's technical reports made in the body of the letter. Refer to Response to Comment 16-1 through 16-48 for responses to these comments. No further response is required. Attachments provided as part of this Comment 16 are included in *Attachment A* of this Final EIR.

16-2 The commenter summarizes the regulatory requirements under the executive summary section of the Project's Air Quality Impact Analysis (*Technical Appendix B1* to this EIR) related to South Coast AQMD Rules 402 and 403. The City acknowledges that these rules apply to the Project. This comment does not raise any issues regarding the environmental analysis provided in the Draft EIR and no further response is required.

16-3 The commenter states that Exhibit 1-B, Site Plan, in the Project's Air Quality Analysis is not consistent throughout all technical studies. All technical reports show consistent and accurate site plans relevant to the particular environmental topic being addressed. However, the Vehicle Miles Traveled (VMT) analysis (*Technical Appendix N2* of the Draft EIR) included a preliminary site plan, which has been updated and included as *Attachment B* to this Final EIR pursuant to the commenter's request.

16-4 The commenter asserts that the Air Quality Impact Analysis failed to address the pollutants identified in the Phase I ESA (*Technical Appendix H1* of the Draft EIR) which includes asbestos, lead, and arsenic.

The Air Quality Impact Analysis (*Technical Appendix B1* of the Draft EIR) provides an analysis of air quality impacts consistent with South Coast AQMD methodology. Section 3.2 of the Air Quality Impact Analysis (*Technical Appendix B1* of the Draft EIR) explains that the criteria used to determine the significance of potential Project-related air quality impacts are taken from the CEQA Guidelines (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would: 1) Conflict with or obstruct implementation of the applicable air quality plan; 2) Result in a ***cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment [emphasis added***] under an applicable federal or state ambient air quality standard; 3) Expose sensitive receptors to substantial pollutant concentrations; 4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

South Coast AQMD has developed regional significance thresholds for criteria pollutants that are regulated by federal and state laws through the development of human health based and/or environmentally based criteria for setting permissible levels. In May 2022, the California Air Pollution Control Officers Associated (CAPCOA) in conjunction with other California air districts, including South Coast AQMD, released the latest version of California Emissions Estimator Model (CalEEMod) version 2022.1. The purpose of this model is to calculate

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construction-source and operational-source criteria pollutants (VOCs, NOx, SOx, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Based on the analysis presented in Section 4.2, *Air Quality*, of the Draft EIR and the Air Quality Impact Analysis, the Project's air quality impacts were determined to be less than significant. No changes in the Draft EIR are required.

The Phase II Environmental Site Assessment (ESA; *Technical Appendix H2* of the Draft EIR), determined that there was no evidence of a significant release of potential chemicals of concern to the subsurface in the area investigated, including lead and arsenic. With respect to arsenic concentrations, the original Phase II ESA included a typographical error. The Phase II ESA (see Section 4.0 and *Attachment C1* to this Final EIR) has been updated to correct this typographical error and to more accurately reflect the fact that the detected arsenic concentrations found at the Project site are all below the upper bound concentration of 12 mg/kg, and thus, they are trace or background concentrations that do not warrant further investigation or mitigation. The corrected Phase II ESA now reads: "Although the detected concentrations of arsenic found at the site exceed the residential screening level, all levels are less than the DTSC upper bound background concentration of 12 mg/kg."

Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR identifies the potential for encountering asbestos-containing materials (ACMs) and lead based paint (LBP) during demolition activities. The use of ACM (a known carcinogen) and LBP (a known toxic), both of which are considered hazardous materials, was a common building construction method prior to 1978 and may be present in the existing building. All proposed demolition activities would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of PCBs, ACMs and LBP.

Additionally, the Project is required to comply with South Coast AQMD Rule 1403 (Asbestos Emissions) and Title 17 of the CCR, Division 1, Chapter 8: Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards applies. South Coast AQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Assuming that ACMs are present in the existing structure located on-site, then Rule 1403 requires notification of the South Coast AQMD prior to commencing any demolition activities. Rule 1403 also sets forth specific procedures for the removal of asbestos and requires that an on-site representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of ACM. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing, and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with ACMs. Because future development on the Project site would be required to comply with AQMD Rule 1403 during demolition activities, impacts due to ACMs would be less than significant.

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Title 17, CCR, Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, defines and regulates lead-based paint. Any detectable amount of lead is regulated. During the demolition of the existing structure, there is a potential for exposing construction workers to health hazards associated with lead. The Project would be required to comply with Title 17, CCR, Division 1, Chapter 8, which includes requirements such as employer-provided training, air monitoring, protective clothing, respirators, and handwashing facilities. Mandatory compliance with these requirements would ensure that construction workers and the public are not exposed to significant LBP health hazards or upset during demolition and/or during transport of demolition waste to an appropriate disposal facility and would ensure that impacts related to LBP remain less than significant. Compliance with the above regulatory requirements would ensure that removal of ACMs or LBPs would result in a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant. Therefore, no mitigation measures are required and no revisions to the Draft EIR are required.

16-5 The commenter asserts that the Air Quality Impact Analysis failed to take into account of burning of significant qualities of fuel at JFTB into consideration in determining the extent of Carbon Monoxide, Nitrogen Oxides, and Ozone produced during construction.

The purpose of the Project's construction analysis is to determine whether Project-generated emissions would result in a *cumulatively considerable* net increase of any criteria pollutant in the South Coast Air Basin. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, according to South Coast AQMD, projects that exceed its project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. Conversely, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant. As shown in Table 4.2-5, *Overall Construction Emission Summary*, of the Draft EIR, construction activities associated with the Project would not exceed South Coast AQMD thresholds for any criteria pollutants, including carbon monoxide, nitrogen oxides, and ozone. Therefore, impacts associated with Project-related construction emissions would be less than cumulatively considerable (refer to Page 4.2-30 of the Draft EIR). Thus, the Air Quality Impact Analysis adequately analyzes cumulative impacts that would result from construction activity.

16-6 The commenter states general information about particulate matter. This comment does not raise any issues regarding the environmental analysis provided in the Draft EIR and thus no further response is required.

16-7 The commenter restates the previous comments made related to the Air Quality Impact Analysis not including asbestos, lead, and arsenic into its analysis. The commenter states that arsenic at the site is 42 times higher than the screening levels and grading of the site will release particulate matter containing lead and arsenic that will danger the public health given the extent of contamination. Although the Project site is not a California Air Force Base, EFI Global's report was informed by the fact that the Project site is adjacent to a base installation (the JFTB) in order to evaluate background arsenic levels. The comments here regarding potential health

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risk impacts related to air quality and contamination are fully addressed in Response to Comment 16-4. Comments related to arsenic are also addressed in Response to Comment 16-12. No further response is required.

16-8 The commenter states that grading will create particulates that can run untreated into the storm drain running to the ocean, sewer system, and well water in the City of Seal Beach untreated. Construction-related water quality impacts were evaluated in Section 4.6, *Geology and Soils*, and Section 4.8, *Hydrology and Water Quality*. As stated, the Project will be required to implement a Stormwater Pollution Prevention Plan (SWPPP) for construction-related activities. The SWPPP will specify the Best Management Practices (BMPs) that the Project Applicant will be required to implement during construction activities to ensure that waterborne pollution – including erosion/sedimentation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. In addition, the Project would be required to implement erosion and dust control measures pursuant to South Coast AQMD Rule 403 to minimize water- and windborne erosion. Mandatory compliance with the SWPPP and the erosion control and dust control measures would reduce, prevent, or minimize soil erosion from Project-related construction activities. Therefore, impacts related to substantial soil erosion or the loss of topsoil would be less than significant and no mitigation is required. Additionally, pursuant to the LAMC Chapter 8.44, the Project Applicant would be required to implement a Water Quality Management Plan (WQMP) to demonstrate compliance with the City's NPDES municipal stormwater permit, and to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters. Therefore, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during long term operation and impacts would be less than significant.

16-9 The commenter states that the site will require extensive mitigation to remediate the concentration of arsenic for public safety and health before grading can occur. Refer to Response to Comment 16-4 regarding the significance of arsenic levels found on the Project site. A typographical error has been corrected. Detected arsenic concentrations found at the Project site were all below the upper bound concentration of 12 mg/kg, and thus, they constitute trace or background concentrations that do not warrant further investigation or mitigation, including remediation.

16-10 The commenter cites select text on limitations on liability in the Project's Phase I ESA (*Technical Appendix H1* of the Draft EIR) ["It should be noted that compounds or materials other than those described could be present in the site environment."]. Additionally, the commenter asserts that the Project's Phase I ESA is deficient because the property owner/user failed to provide a past Phase I ESA that was conducted by Tetra Tech, Inc. (Tetra Tech; included in *Attachment C1* of the Final EIR) in 2016.

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Section 1.2 of the Phase I ESA report states that the report has been prepared in accordance with generally accepted environmental methodologies referred to in ASTM E1527-13 and E1527-21 and contains all of the limitations inherent in these methodologies (Refer to Pages 12 and 13 of the Phase I ESA). Language related to limitations on liability and exceptions are commonly found in Phase I ESAs and do not represent a deficiency of the analysis. Moreover, if any other contaminants are discovered during construction that were not identified in the ESA, construction contractors would be required to comply with all applicable federal, State, and local laws and regulations, including but not limited requirements imposed by the Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC), and the Santa Ana Regional Water Quality Control Board (RWQCB).

EFI reviewed the above-referenced 2016 Tetra Tech report and found that no recognized environmental conditions (RECs) or recommendations for additional investigation were noted (see *Attachment C2* to this Final EIR). The findings of the above-referenced Tetra Tech report do not alter the results of EFI's Phase I ESA, dated January 18, 2023. Additionally, a Phase II ESA (*Technical Appendix H2* of the Draft EIR) was conducted for the Project which included further geological survey and soil sampling of the Project site.

16-11 The commenter states findings from the 2016 Tetra Tech report related to previous listings of the Project site that contends that they were not provided to the ESA consultant. As discussed in the Project's Phase I ESA (*Technical Appendix H1* of the Draft EIR), the Project's listings in HAZNET in 2000 for generating asbestos containing waste with disposal in landfill, in 2003 as a generator of off-specification aged or surplus organics with a disposal method as transfer station, in 2010 as generating ages/surplus organics identified as other treatment, in 2012 as a generator of hazardous waste with a disposal method of storage, bulking, and/or transfer offsite with no treatment or recovery were all listed within the tables under Section 5.1, Subject Property. Therefore, all previous listings related to the Project site were adequately identified in the Project's Phase I ESA.

16-12 The commenter states the findings related to arsenic in the Phase II ESA and expresses concern with ground water, storm drain runoff, and air borne contaminants during construction. For clarification, the arsenic screening levels were not compared to an Air Force Base land use scenario. EFI recognizes that the arsenic detected in near-surface soils exceeds the Department of Toxic Substances Control (DTSC) screening level (SL) for residential use. It is well documented and accepted by regulatory agencies, including the DTSC, that background or trace concentrations of naturally occurring arsenic in soil throughout the state of California often exceeds the DTSC-SL value of 0.11 milligrams per kilogram (mg/kg). As described in the Phase II, as a result of this analysis, an upper bound background concentration of 12.7 mg/kg can be used as an initial screening level for arsenic concentrations, which has been further proven by the following studies. A statistical analysis was performed at 14 Air Force installations in California to evaluate background levels of arsenic. The result of the analysis detected that an upper bound background concentration of 12.7 mg/kg can be used as an initial screening level for arsenic concentrations.

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Furthermore, in a study titled *Determination of a Southern California Regional Background Arsenic Concentration in Soil* (Chernoff, et al., 2008), which was prepared by DTSC staff, the authors concluded, "A Probability Plot and statistical analysis of a large data set from school sites in Los Angeles County gave an upper-bound arsenic concentration of 12 mg/kg. A Probability Plot for school sites from 5 counties in Southern California also gave an upper-bound background arsenic concentration of 12 mg/kg." The study concluded, "This finding suggests that 12 mg/kg [may be] a useful screening number for evaluating arsenic as a chemical of potential concern."

Based on the aforementioned studies, which included both Air Force Base installations and school sites in California, 12 mg/kg is a useful screening number for evaluating arsenic as a chemical of potential concern. All arsenic concentrations in the soil samples analyzed at the Project site were detected at concentrations less than the upper-bound arsenic concentration of 12 mg/kg, and therefore, is not considered a significant environmental concern that would warrant further investigation or mitigation or result in an unacceptable health risk to future occupants.

16-13 The commenter states that additional chemical analysis for other hazardous materials that may become wind borne during construction should be conducted. The commenter does not identify specific materials of concern. The potential for hazardous materials on the Project site were fully analyzed in the Phase I and II ESAs (*Technical Appendix H1and H2* of the Draft EIR). Additionally, as discussed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, with mandatory compliance with applicable hazardous materials regulations, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase (refer to Pages 4.8-16 and 4.8-17 of the Draft EIR) Thus, no additional analysis is required.

16-14 The commenter expresses concern with asbestos, lead, arsenic, and radon. EFI notes that lead and arsenic were not detected at concentrations that would pose an unacceptable health risk to future site occupants, the surrounding community or underlying groundwater. Furthermore, construction Best Management Practices (BMPs) will be employed as a part of the proposed Project to mitigate fugitive dust. Prior to any future demolition or site improvements, the existing structures will undergo routine abatement for asbestos and lead, which will be performed by a properly licensed contractor. Furthermore, such activities will be performed following South Coast Air Quality Management District requirements for the removal and disposal of any suspect asbestos containing material or lead-based paint. Therefore, ongoing monitoring and reporting is not warranted. Refer to Response to Comment 16-4.

As noted in the Phase I ESA, based on research by the USEPA, the average radon concentrations for Orange County are less than 2.0 picocuries per liter (pCi/L), which is below the 4.0 pCi/L action level set by the USEPA. Furthermore, the Radon Potential Zone Map for Orange County, California, dated 2015 notes that the subject property and surrounding area are located in an area of "Low Potential for Indoor Radon Levels Above Four PicoCuries per

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Liter"[6]. Therefore, radon is not an environmental concern for the proposed future development, and further investigation or mitigation is not warranted.

The Project will result in the demolition of the currently existing vacant office building in order to allow for project construction, and thus radon testing associated with the existing office building would not result in any relevant results as to the project. Even after demolition of the building, as a general rule it is not industry standard to test a vacant lot for radon and receive accurate results representative of what future construction conditions may be and given that the Project site is located within a low potential area for radon, no testing of radon after construction would be required.

16-15 The commenter states additional testing for TPHd is required to protect the water supply, prevent air pollution, and protect the public's safety. Based on the results of the Phase II ESA, the concentrations of TPH-d detected in site soils does not warrant further investigation. Furthermore, the concentrations do not pose an unacceptable health risk to site occupants, the environment, water supply, or groundwater. Thus, no additional testing for TPHd is required. Refer also to Response to Comment 16-8 related to the SWPPP and BMPs that the Project will implement to protect water quality.

16-16 The commenter states that T&B Planning, Inc. has a conflict of interest in that it is financially obligated to both the City of Los Alamitos and the owner of the Property. The Draft EIR was prepared in accordance with CEQA and the CEQA Guidelines, which allow a lead agency to either prepare an EIR directly with its own staff or accept a draft prepared by a consultant retained by an applicant. (CEQA Guidelines Section 15084(3).) Additionally, CEQA Guidelines Section 15084 states that "before using a draft prepared by another person, the Lead Agency shall subject the draft to the agency's own review and analysis and must reflect the independent judgment of the Lead Agency. The Lead Agency is responsible for the adequacy and objectivity of the draft EIR."

Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. As documented in the Draft EIR, the EIR represents the independent judgment of the City of Los Alamitos (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from construction and operation of the proposed 4665 Lampson Avenue Project refer to Pages S-1, 1-1, and 1-4 of the Draft EIR). The City staff and the City's environmental consultants conducted peer review of the Draft EIR prior to release of the Draft EIR for public review. The City conducted

[6] *https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_232-Radon-Map.pdf*

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independent review, evaluated, and exercised judgment over the documents and the issues raised and addressed prior to their release for public review. Therefore, the Draft EIR for the Project is prepared adequately in accordance with the CEQA Guidelines and no revisions to the Draft EIR are required.

This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

16-17 The commenter states that Nick Johnson, the preparer of the Project's Airport Land Use Assessment (*Technical Appendix J1* of the Draft EIR), has no experience in evaluating the operation of a Military Airport and lacks knowledge and expertise to express an opinion on whether the Airport Land Use Plan for the JFTB is inconsistent with findings by ALUC and Caltrans. Contrary to the commenter's assertions, Nick Johnson has several years of experience with military airports including the land use compatibility plan for the joint use Colorado Springs Airport and Peterson Space Force Base, March Air Reserve Base, Marine Corps Air Station Miramar, and Naval Air Station North Island (see *Attachment D* of this Final EIR).

16-18 The commenter states that Nick Johnson failed to provide the findings from a report by the National Commission on Military Safety in 2020. The commenter goes on to quote portions of text from the executive summary of the report. The report provides a comprehensive review of military aviation safety.

The Draft EIR included an analysis of safety hazards of JFTB on the Project (see Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR). The National Commission on Military Aviation Safety is a report on military aviation nationwide and does not provide safety information or accident data specific to JFTB. Refer to Master Response 2.1.7, *Proximity to the Los Alamitos Joint Force Training Base (JFTB).*

16-19 The commenter restates that the consultant's opinion is biased due to a financial conflict of interest. Refer to Responses to Comments 16-16 and 16-17.

16-20 The commenter states that cumulative noise impacts were not considered and that the mitigation measures on windows would not reduce the interior noise impacts at four test sites.

The commenter may be conflating the operational noise analysis conducted to analyze noise impacts at the four nearest receiver locations with the on-site aircraft noise impacts. The commenter states that the noise measurement at the four nearest receiver locations would exceed the 45dBA standards for interior noise level standards. As discussed in Table 4.11-4, *Summary of Noise Significance Criteria*, the significance of threshold for operational noise analysis is 55 dbA during daytime and 50 dBA during nighttime. The interior noise level standard of 45 dBA is for onsite aircraft noise impacts. The commenter's remark that mitigation measures on windows would not reduce the noise impacts at four test sites were based on applying the results from the operational noise analysis to the on-site aircraft noise threshold.

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Nevertheless, the Project cumulative noise impacts were fully addressed in Section 4.11, *Noise*, of the Draft EIR, under Subsection 4.11.8, *Cumulative Impact Analysis* (refer to Pages 4.11-34 through 4.11-36). Refer to Master Response 2.1.7, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, for airport noise impacts.

Additionally, the commenter states that the proposed sound wall appears to eliminate the emergency access on Lampson Avenue. As shown in Figure 3-38, *Wall and Fence Plan*, of the Draft EIR, the proposed wall would not eliminate emergency access on Lampson Avenue. Exhibit ES-A of the Project's Noise Impact Analysis (*Technical Appendix K* of the Draft EIR) has been updated accordingly and included as *Attachment F* to this Final EIR.

16-21 The commenter requests additional mitigation measures to be imposed in a Development Agreement that include written disclosure for all sales/leasing/rental materials to include the findings of the findings from a report by the National Commission on Military Safety in 2020. Refer to Response to Comment 16-18 related to the findings of this report. As stated in *Technical Appendix J1*, of the Draft EIR, the ALUC mandates compliance with the State's real estate disclosure provisions requiring buyer and renter notification for new residential land uses within an airport influence area (even if these state laws were to be revised or rescinded). The ALUC also requires that signs providing these disclosures and notices be "prominently posted" in real estate sales offices and within the new development depicting overflight areas and helicopter traffic patterns. Please note that a development agreement is not being proposed as part of the Project entitlements. The requested mitigation measures would not clearly lessen any environmental impacts of the Project because requirements for notifications such as these are already required, and therefore does not constitute significant new information pursuant to the CEQA Guidelines.

16-22 The commenter requests that additional mitigation measures be imposed in a Development Agreement to require construction of residential units to include sound cancelling insulation in the walls and ceilings. Refer to Master Response 2.1.7, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, for airport noise impacts. Project Design Feature PDF N-2 specifies architectural upgrades that are incorporated into the Project design to ensure the Project meets the State and City interior noise standards. Please note that a development agreement is not being proposed as part of the Project entitlements. Thus, no additional mitigation measures are required. The requested mitigation measures would not clearly lessen any environmental impacts of the Project because noise impacts were evaluated and determined to be less than significant with incorporation of PDF N-2, and therefore does not constitute significant new information pursuant to the CEQA Guidelines.

16-23 The commenter requests additional mitigation measures to be imposed in a Development Agreement to install sound monitoring sites with the Project and require the owner/seller/lessor to pay for all mitigation costs associated with decibel readings above the City's standard of 45 dBA from the date of sale of the unit to the original purchaser. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, for airport noise impacts.

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The City's interior noise standards will be enforced as outlined Los Alamitos Municipal Code Section 7.20, Noise. The Municipal Code establishes noise regulations and enforcement mechanisms to control unnecessary, excessive, and annoying sounds emanating from all properties and land uses in the City. No further mitigation is needed. The requested mitigation measures would not clearly lessen any environmental impacts of the Project because noise impacts were evaluated and determined to be less than significant, and therefore does not constitute significant new information pursuant to the CEQA Guidelines.

16-24 The commenter states that Exhibit ES-A, *Noise Control Measure Summary*, in the Project's Noise Impact Analysis appears to remove the emergency access on Lampson Avenue and that the site plan is not consistent throughout all technical studies. Pursuant to the commenter's request, the Project's Noise Impact Analysis has been updated accordingly and included as *Attachment F* to this Final EIR.

16-25 The commenter restates previous comments made about Nick Johnson's expertise and the findings of from a report by the National Commission on Military Safety in 2020 and requests mitigation measure for the employment of a consultant with expertise in the operation of a military airport. Refer to Responses to Comments 16-17 and 16-18 related to Nick Johnson's experience and the findings of the 2020 report.

16-26 The commenter states that mitigation measures should include adequate setbacks from JFTB boundary, submission of a final site plan to OCFA, Los Alamitos and Seal Beach Police Departments to establish adequate ingress and egress for emergency vehicles, and reduction in building height for buildings closer to the boundary of JFTB. As discussed in Section 4.8, *Hazards and Hazards Materials*, of the Draft EIR, the FAA issued Determinations of No Hazard to Air Navigation (*Technical Appendix J2*) after its aeronautical study of the proposed Project revealed that the structures would not exceed obstruction standards and would not be a hazard to air on January 26, 2022 (refer to Page 4.8-18 of the Draft EIR). Additionally, the Project's Fire Master Plan is being reviewed by OCFA as part of the Project's entitlement process. Thus, the City determines no additional mitigation measures are required. Los Alamitos and Seal Beach Police Department were both contacted during the preparation of the Draft EIR and were provided with a copy of the site plan. Responses from both agencies are found in *Technical Appendix L* of the Draft EIR. The requested mitigation measures would not clearly lessen any environmental impacts of the Project because safety hazards with the Project proximity to the Los Alamitos JFTB were evaluated and determined to be less than significant, and therefore does not constitute significant new information pursuant to the CEQA Guidelines.

16-27 The commenter states that the onsite traffic noise analysis starts with the false premise that onsite exterior and interior noise impacts are from traffic related noise levels and that both ALUC and Caltrans Division of Aeronautics issued findings that noise levels from JFTB have significant noise levels that negatively impact the health and welfare of the public. The commenter is conflating two separate issues: Section 7, On-site Traffic Noise Impact, in the

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Noise Impact Analysis (*Technical Analysis K* of the Draft EIR), which is to determine the noise exposure levels that would result from adjacent traffic noise sources in the Project study area, and Section 12, Onsite Aircraft Noise Impacts. Noise from aircraft is discussed under Section 12, Onsite Aircraft Noise Impacts, of the Noise Impact Analysis. Refer also to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, for airport noise impacts.

16-28 The commenter cites to the Noise Impact Analysis related to the City of Los Alamitos 45 dBA CNEL interior noise level criteria and installation of windows and soundwall. The commenter also states that the installation of the noise wall has no impact on noise from aircraft, maintenance, operations of JFTB. The commenter is correct that the noise wall is not intended to reduce noise levels from aircraft operations. Refer also to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, for airport noise impacts.

16-29 The commenter states the four noise measurement locations that Urban Crossroads, Inc. recorded under existing noise conditions and the measurement daytime and nighttime reading. The noise measurements provided by the commenter are incorrect and higher than those in the Draft EIR and Noise Impact Analysis. As discussed in Section 4.11, *Noise*, of the Draft EIR,

- Location L1, represents the noise levels located approximately 10 feet north of the Project site near Arbor Dog Park at 4665 Lampson Avenue. The noise level measurements collected show an average daytime noise level calculated to be 49.9 dBA Leq and an average nighttime noise level calculated to be 42.4 dBA Leq at location L1.

- Location L2 represents the noise levels located approximately 845 feet east of the Project site near single-family residence at 5001 Lunar Drive. The noise level measurements collected show an average daytime noise level calculated to be 60.8 dBA Leq and an average nighttime noise level calculated to be 52.4 dBA Leq at location L2.

- Location L3 represents the noise levels located approximately 540 feet southwest of the Project site near single-family residence at 4701 Ironwood Avenue. The noise level measurements collected show an average daytime noise level calculated to be 68.7 dBA Leq and an average nighttime noise level calculated to be 60.7 dBA Leq at location L3.

- Location L4 represents the noise levels located approximately 5,486 feet west of the Project site near Old Ranch Country Club Golf Course at 3901 Lampson Avenue. The noise level measurements collected show an average daytime noise level calculated to be 56.5 dBA Leq and an average nighttime noise level calculated to be 55.1 dBA Leq at location L4 (refer to Page 4.11-4 pf the Draft EIR).

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16-30 The commenter incorrectly asserts that the Project does not meet the interior noise standards of 45 dBA. The commenter requests that additional mitigation measures be required to include written disclosure for all sales/leasing/rental materials to include the findings from a report by the National Commission on Military Safety in 2020. Refer to Response to Comment 16-18 related to the findings of this report. Refer also to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, related to buyer awareness. The Project Applicant will make all required airport disclosures in accordance with State and federal laws. As discussed in Section 4.10, *Land Use and Planning*, of the Draft EIR, the ALUC mandates the provision of the State's real estate disclosure regarding buyer and renter notification for new residential land uses within an airport influence area even if these state laws were to be revised or rescinded. The ALUC also requires that signs providing these disclosures and notices be "prominently posted" in real estate sales offices and within the new development depicting overflight areas and helicopter traffic patterns. Buyer awareness is required as part of the City's approval process for the Project. The buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location (refer to Page 4.10-18 of the Draft EIR). The requested mitigation measures would not clearly lessen any environmental impacts of the Project because requirements for notifications such as these are already required for the Project, and therefore does not constitute significant new information pursuant to the CEQA Guidelines.

16-31 The commenter requests additional mitigation measures to require construction of residential units to include sound cancelling insulation in the walls and ceilings. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, for airport noise impacts. Refer to Response to Comment 16-22 related to architectural updates. The requested mitigation measures would not clearly lessen any environmental impacts of the Project because noise impacts were evaluated and determined to be less than significant with incorporation of PDF N-2, and therefore does not constitute significant new information pursuant to the CEQA Guidelines.

16-32 The commenter requests additional mitigation measures to require the installation of sound monitoring sites within the Project and require the owner/seller/lessor to pay for all mitigation costs associated with decibel readings above the City's standard of 45 dBA from the date of sale of the unit to the original purchaser. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, for airport noise impacts. Refer to Response to Comment 16-23. The requested mitigation measures would not clearly lessen any environmental impacts of the Project because noise impacts were evaluated and determined to be less than significant, and therefore does not constitute significant new information pursuant to the CEQA Guidelines.

16-33 The commenter states that Exhibit ES-A, *Noise Control Measure Summary*, in the Project's Noise Impact Analysis appears to remove the emergency access on Lampson Avenue and that

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the site plan is not consistent throughout all technical studies. Refer to Response to Comments 16-3, 16-24 and 16-26.

16-34 The commenter states that the mitigation measure to prevent destruction of nests and that nests be cordoned off until nests are empty should be included in a written Development Agreement. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, Mitigation Measure MM 4.3-1 includes measures for establishing appropriate avoidance buffers around the nest (based on the species detected), and the buffer areas shall be avoided until the nests are no longer occupied. Moreover, as discussed in Section S.0, *Executive Summary*, of the Draft EIR, State law requires the preparation of a mitigation monitoring and reporting program (MMRP) to ensure that measures that would avoid or lessen significant environmental effects of the project are implemented after project approval. The mitigation measures identified in this EIR have been described in sufficient detail to provide the necessary information to identify the party or parties responsible for carrying out the mitigation, when the mitigation will be implemented, and why the mitigation has been required. An MMRP would be adopted by the City at the time that the Project is considered for approval (refer to Page S-5 of the Draft EIR). The requested mitigation measures would not clearly lessen any environmental impacts of the Project because a Development Agreement is unnecessary to address any such impacts in light of the CEQA requirement that an MMRP be prepared and approved to ensure the existing mitigation measures identified in the Biological Resources section of the Draft EIR are implemented. As such, the commenter's recommendation that this mitigation measure be included does not constitute significant new information pursuant to the CEQA Guidelines. Please note that a development agreement is not being proposed as part of the Project entitlements.

16-35 The commenter recommends a condition of approval for an archaeologist to be retained to conduct periodic spot checks related to ground disturbance activities and includes details of the recommended mitigation measure. The commenter's requested mitigation is already provided under Mitigation Measures MM 4.4-1 and MM 4.4-2 in the Draft EIR, which requires an archaeologist to conduct periodic spot checks during construction, among other things. Thus, the City determines that no additional mitigation measures are required.

16-36 The commenter first states that a questionnaire was prepared instead of a report by OCFA, summarizes OCFA responses to the questionnaire provided in *Technical Appendix L*, of the Draft EIR, and recommends a mitigation for a condition of approval for the Developer to enter into a written Fire Protection Agreement with OCFA to determine the fair share funding necessary to provide adequate fire protection. The commenter states that these fees should be included to the Homeowners Association (HOA) Fee to be paid to OCFA annually.

In accordance with OCFA Guideline B-09, Fire Master Plans for Commercial & Residential Development, Firesafe Planning Solutions prepared a Fire Master Plan for the Project (see Figure 4.8-3, *Fire Master Plan*, in the Draft EIR). The Fire Master Plan demonstrates the Project's compliance with the California Fire and Building Codes and other regulations governing water availability for firefighting and emergency access to the Project site, including

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but not limited to fire access and roadway design, fire lane identification, and access to structures. A report prepared by OCFA for the Project is typically not a requirement during OCFA's review process of the Project's plans; however, OCFA is responsible for reviewing and approving the Project's site plan and Fire Master Plan. As discussed in Section 4.13, *Public Services*, of the Draft EIR, the Project Applicant is required to enter into a Secured Fire Protection Agreement to provide for fair-share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel as a condition of approval (refer to Page 4.13-9 of the Draft EIR). Any fees associated with the Secured Fire Protection Agreement would be paid by the Project Applicant prior to construction and not by the future HOA. Thus, the City determines no additional mitigation measures are required.

16-37 The commenter states that the City of Los Alamitos should be a part of HOA Covenants, Conditions and Restrictions, to enforce the payment of adequate HOA fees to cover the cost of Fire Protection funding. Refer to Response to Comment 16-36 related to the Secured Fire Projection Agreement. Payment of fair-share funding and timing would be agreed upon with OCFA; these fees would not be paid through the HOA.

16-38 The commenter states that there is no site plan exhibit that identified the access roads for emergency vehicles in the questionnaire, Exhibit 1-4 of the Traffic Analysis does not show fire equipment can navigate around all sides of the buildings, and Exhibit 3-1 does not show the emergency access at Driveway 8. The commenter is incorrect in all three assertions made for the following reasons. When conducting public service correspondence with OCFA, a cover letter describing the Project, the Project location maps, and Site Plan was provided along with the questionnaire. As discussed in the Traffic Analysis, Exhibit 1-4 depicts driveway intersection recommendations needed to accommodate site access and maintain acceptable peak hour operations for the proposed Project. The purpose of Exhibit 1-4 is not to depict fire equipment access. Figure 4.8-3, *Fire Master Plan*, of the Draft EIR demonstrates the Project's compliance with the California Fire and Building Codes and other regulations regarding emergency access to the Project site, including but not limited to fire access and roadway design, fire lane identification, and access to structures. Moreover, as discussed in the Traffic Analysis, Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls. Exhibit 3-1 does not include the proposed conditions of the Project site and is intended to depict the existing circulation network.

16-39 The commenter recommends additional conditions of approval including review by OCFA of construction documents including the site plans to confirm applicable fire safety codes and regulations are implemented. As discussed in Section 4.13, *Public Services*, of the Draft EIR, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirements based upon the tenant type, building size, and building type (refer to Page 4.13-9 of the Draft EIR).

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16-40 The commenter states that the Traffic Analysis does not contain a current site plan and that the report needs to be revised to include width of interior streets, turning radius, location of fire hydrants, restricted parking curbs and signs and adequate setbacks. Note that Project's Traffic Analysis has been updated and included as *Attachment G* to this Final EIR. The commenter's request for a plan that shows the width of interior streets, turning radius, location of fire hydrants, restricted parking curbs and signs and adequate setbacks are shown in the Figure 4.8-3, *Fire Master Plan*, of the Draft EIR.

16-41 The commenter restates the Seal Beach Police Department's concern on parking impacts to College Park East and Arbor Park and existing resource may not be adequate to manage traffic and safety concerns on Lampson Avenue. The commenter states that the Draft EIR should carefully consider these issues and mitigation measures for traffic enforcement, road maintenance, signalization, and parking restrictions. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, 2.1.2, *Roadway Safety on Lampson Avenue*, 2.1.3, *Parking*, and 2.1.8, *Public Safety*. SBPD stated that it will not be expanding service capacity as a result of the Project because the Project is located within the City of Los Alamitos. However, SBPD has a mutual aid agreement with LAPD and can assist with public services in the event of an emergency, if needed.

16-42 The commenter states that a traffic mitigation plan and traffic signal should be considered. Impacts to automobile delay-based LOS is no longer a CEQA topic pursuant to SB 743. A Traffic Analysis was prepared for non-CEQA purposes and included as *Technical Appendix N1* of the Draft EIR. An updated Traffic Analysis was prepared and included as *Attachment G* of this Final EIR. The Traffic Analysis considered the Project's contribution to intersection deficiencies, if any, as well as a traffic signal. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion* and 2.1.2, *Roadway Safety on Lampson Avenue*.

16-43 The commenter expresses concern with overflow parking to College Park East leading to public safety hazard due to pedestrian crossing and lack of traffic signal. The commenter also states that parking overflow would place a burden on SBPD for enforcement. SBPD stated that it will not be expanding service capacity as a result of the Project because the Project is located within the City of Los Alamitos. However, SBPD has a mutual aid agreement with LAPD and can assist with public services in the event of an emergency, if needed. The Project would install a high visibility crosswalk at the primary neighborhood entry. A Safety Evaluation was prepared to evaluate the Project's safety impact on public roadways and Project access points, including the design of the proposed high visibility crosswalk (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H* of this Final EIR). The Safety Evaluation identifies the on-site circulation for the site, including various vehicle paths (front-loading garbage trucks, fire trucks, delivery trucks, etc.) for various internal drive aisles, which allow for two-way traffic. Access to and from the site will be accommodated via driveways on Lampson Avenue. The vehicle turning templates show acceptable turning movements for the various vehicles and trucks anticipated to access the site (see Attachment D of *Attachment H* of this Final EIR). Table 1 of the Safety Evaluation provides a summary of the types of

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collisions by intersection for eight intersections. The existing crash rates for the study area intersections are lower than the statewide average crash rates as determined by the 2021 Crash Report. A Project would have the potential to create an increase in collision rate if it introduced a geometric design feature that did not meet safety standards or incompatible uses (e.g. farm equipment). Implementation of Project improvements (within the public right-of-way) per Los Alamitos and Seal Beach standards ensures all that sight distance requirements, pedestrian crossing requirements, and street design requirements are met. Additionally, the Project vehicle mix is consistent with the adjacent land uses, including the residential neighborhood to the south. As demonstrated, the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature. Refer also to Master Responses 2.1.3, *Parking*, and 2.1.2, *Roadway Safety on Lampson Avenue*.

16-44 The commenter states that Urban Crossroads, Inc. did not provide mitigation measures required to address the public safety concerns expressed by the Seal Beach Police Department. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*. As analyzed in Section 4.13, *Public Services*, of the Draft EIR, the Project would not result in a significant impact to police protection services, including SBPD. Therefore, no mitigation is required.

16-45 The commenter states that the County of Orange should be consulted and be the lead agency in coordinating safety plans to prevent the Lampson property owner from avoiding its financial responsibility for public safety improvements. Refer to Master Response 2.1.8, *Public* Safety, for the Project's potential public safety impacts. For CEQA purposes, the lead agency for the proposed Project is the City of Los Alamitos. The City of Seal Beach is a responsible agency for the proposed Project because the Project site requires approvals from the City of Seal Beach for certain infrastructure improvements. Enforcement of the Project's conditions of approval and mitigation measures will occur through the City of Los Alamitos. The County of Orange does not have jurisdiction over the proposed Project.

16-46 The commenter states that the Traffic Analysis failed to consider the cumulative impacts of multiple projects along Lampson, including Old Ranch Country Club in Seal Beach. Refer to Response to Comment D-9 regarding the analysis of the proposed Project's cumulative traffic impacts.

16-47 The commenter states that the Traffic Analysis does not recognize the proposed 7-foot soundwall that would block the emergency vehicle access entry. As shown in Figure 3-38, *Wall and Fence Plan*, the proposed wall would not eliminate emergency access on Lampson Avenue. Refer to Response to Comments 16-3 and 16-24.

16-48 The commenter states that there is no consistent use of the site plan throughout the Draft EIR and that the public safety concerns from the Seal Beach Police Department were not included in the Project's Traffic Analysis. All technical reports show the correct site plan, with the exception that the site plan in the VMT Report was updated (*Attachment B* of this Final EIR). This does not result in a change to any of the findings of the VMT analysis.

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A Safety Evaluation was prepared to confirm that the proposed Project would have no safety impacts on public roadways and Project access points after taking into consideration the Project's implementation of the proposed high visibility crosswalk (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H* of this Final EIR). The Safety Evaluation further confirms the analysis and determination in the Transportation Section (Section 4.15) of the Draft EIR that the proposed Project would not result in a safety impact or substantially increase hazards due to a geometric design feature. Refer to Response to Comments 16-3 and 16-24 regarding the Project's site plan.

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Comment Letter 17

From: Carol Churchill
To: Jordan Nefulda; Shelley Hasselbrink; Trisha Murphy; Emily Hibard; Tanya Doby; Tom Oliver; Chet Simmons
Subject: DEIR Comments on Lampson Project
Date: Monday, May 20, 2024 7:08:40 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender churchillca@me.com

Attachment available until Jun 19, 2024

To Tom Oliver, Planning Department, City of Los Alamitos May 20, 2024

Click to Download
Comment Letters 4 Sets Los Alamitos.zip
67 MB

17-1

The attached "Lampson Comment emails" are intended to be a partial response the Request for Comments to the Notice of Availability of Draft Environmental Impact Report (DEIR) and the Notice of Preparation of DEIR for the Lampson Project, Los Alamitos, California.

The Lampson Comment emails are public records produced by the City Clerk of the City of Los Alamitos pursuant to a Public Records Request. The Comments address the potential significant effects generated by the proposed project in relation to the following Environmental Analysis Check List Categories: biological resources, cultural resources, geology and soil, transportation and tribal cultural resources.

Please acknowledge receipt of the 4 SETS of Comments, and your ability to open the Attachment containing
Set 1 - 108 pages
Set 2 - 96 pages
Set 3 - 65 pages
Set 4 - 71 pages

17-2

In the absence of a response, written copies of the Comments will be delivered to Tom Oliver in the Planning Department prior to June 10, 2024

Respectfully
Carol Churchill
On Behalf of
Protect Our Community
Los Alamitos-Rossmoor-Seal Beach

Responses to Comment 17

Churchill, Carol, dated May 20, 2024.

17-1 The commenter provides a set of comment letters as a partial response to the NOA for the Draft EIR. The commenter notes that the comment letters are public records produced by the City Clerk pursuant to a Public Records Request and addresses the potential significant effects related to biological resources cultural resources, geology and soil, transportation, and tribal cultural resources. The Draft EIR analyzed the above-mentioned environmental topics in Sections 4.3, 4.4, 4.6, 4.15, and 4.16, respectively.

17-2 The commenter requests receipt of the four sets of comment letters, which contain comment letters received on the Notice of Preparation (NOP) of the Draft EIR. These comment letters were incorporated as *Technical Appendix A* in the Draft EIR and are provided in *Attachment A* of this Final EIR (refer to this attachment for comment numbering). Written responses to NOP comments are not required but are used to inform the scope of the Draft EIR. However, because the commenter included all the NOP comments as part of this comment letter, responses to the four sets of comment letters are provided below. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. However, NOP comments provided during the scoping process were taken into consideration during the preparation of the Draft EIR (see Table 1-1, of the Draft EIR).

17-3 The commenter inquires about access to the open space/park for the low-income housing area. As shown in Figure 3-22, *Site Plan*, of Section 3.0, *Project Description*, of the Draft EIR, there are two open space areas with the affordable housing units portion of the site: a tot lot park area and young adult zone (refer to Page 3-7 of the Draft EIR).

17-4 The commenter inquires about Project parking and increased traffic on Lampson Avenue with the Project and the Interstate 405 (I-405) expansion. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, and 2.1.3, *Parking*.

17-5 The commenter requests trees to be studied in the Draft EIR. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, on April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of its Urban Forest Program. This plan addresses City parkway trees. There are currently no parkway trees along the Project's frontage. The Project would not result in an impact to the City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur and mitigation is not required (refer to Page 4.3-34 of the Draft EIR). See also Response to Comment 17-6.

17-6 The commenter inquires about tree removal during Project construction. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the Project requires removal of existing

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ornamental trees (refer to Page 4.3-33of the Draft EIR). Impacts would be less than significant, as explained in the Draft EIR.

17-7 The commenter expresses concerns about the need for trees in the community, lack of open space, removal of trees, automobile pollution, and requests for only one entry whether the primary apartment entryway is proposed. As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, the Project site does contain a number of ornamental trees onsite that will be removed and replaced. As shown in Figure 3- 18, *Landscape Plan*, a total of 441 trees would be planted throughout the Project site (refer to Page 4.1-10 of the Draft EIR). Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for the discussion of the open space. See also Response to Comment 17-6 regarding air quality.

Moreover, as discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project which includes mobile emissions sources would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR). The commenter' suggestion for one entry way is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-8 The commenter expresses concerns regarding impacts to AYSO operations and states that the Project would eliminate kids ability to play soccer. The Project would not eliminate kids ability to play soccer in connection with AYSO events. As discussed in Section 3.0, *Project Description*, of the Draft EIR, AYSO uses the abutting Arbor Park (north of Project) on weeknights and weekends for soccer practice and games, utilizing the existing paved parking lot on the Project site for overflow parking, particularly on weekends. To allow for additional parking at Arbor Park and Arbor Dog Park, located adjacent to the north boundary of the Project site, the Project Applicant proposes to dedicate or grant an easement for the northern 10 feet of property abutting Arbor Park and Arbor Dog Park to the City of Los Alamitos or jurisdiction with authority over the two parks. This dedication or grant of easement would support the use of this area for parking after construction of the Project by allowing an approximate capacity of 154 to 200 parking spaces to serve the parks, depending on the ultimate configuration (refer to Page 3-4 of the Draft EIR). Additionally, the Project Applicant has agreed to coordinate with the City of Seal Beach and AYSO, as needed, with respect to parking for Arbor Park and Arbor Dog Park. Refer to Master Response 2.1.3, *Parking*.

17-9 The commenter opposes the Project due to traffic issues and removal of AYSO operations. Project. Refer to Response to Comment D-30, 17-8, and Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic and 2.1.3, *Parking*, and regarding AYSO operations.

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17-10 The commenter expresses concerns regarding overflow parking to Arbor Park and College Park East and the lack of signal control from the Project. Refer to Master Response 2.1.3, *Parking*, for a detailed discussion on the proposed Project's potential parking impacts. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the primary neighborhood entry is not anticipated to meet a peak hour or planning level (daily volume) that would warrant a traffic signal. Therefore, the Project no longer proposes installation of a traffic signal. A Safety Evaluation was prepared to confirm that the Project would have no safety impacts on public roadways (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H* of this Final EIR). The Safety Evaluation further confirms the analysis and determination in the Transportation Section (Section 4.15) of the Draft EIR that the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature.

17-11 The commenter expresses concerns regarding provision of open space/park space for residents of the proposed Project. The commenter requests that the Draft EIR include a listing of existing parks within a ½ mile of the Project and an evaluation of Project impacts to recreational facilities. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*. Pursuant to the commenter's request, Section 4.14, *Recreation*, of the Draft EIR includes a listing of existing parks within a ½ mile of the Project and an evaluation of Project impacts to recreational facilities.

17-12 The commenter requests that the Draft EIR include an evaluation of noise impacts at Arbor Park during weekends to the proposed Project. The commenter requests the noise study to include all hours of the day on Saturdays when whistles, loud voices, cheering, and other noises are made. CEQA does not require an analysis of the impact of existing environmental conditions on a proposed Project. Therefore, an evaluation of activities at Arbor Park and related noise impacts to the future residents of the Project were not evaluated. Noise impacts associated with the Project were evaluated in Section 4.11, *Noise*, of the Draft EIR.

17-13 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-14 The commenter expresses concerns with parking and open space for the Project. Refer to Master Response 2.1.3, *Parking*, for parking impacts and 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities*, for recreation impacts.

17-15 The commenter opposes the Project due to congestion on Lampson Avenue and parking. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.3, *Parking*, for parking concerns.

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17-16 The commenter opposes the Project due to existing conditions of parks and limited green space in the Project area. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for recreation impacts.

17-17 The commenter recommends the Draft EIR focus on biological resources due to the Project's adjacency to both the JFTB Los Alamitos and Arbor Park. The commenter requests significant impacts analysis to several species of protected birds known to utilize the immediate surrounding area of the Project. Pursuant to the commenter's request, Section 4.3, *Biological Resources*, of the Draft EIR discuss impacts to biological resources including protected bird species. Thus, no further response is required.

17-18 The commenter requests analysis on Swainson's Hawk, White-tailed Kite, Northern Harrier, and Vermilion Flycatcher. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the above-mentioned species were analyzed. Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting birds, nesting raptors, and bat roosts prior to site disturbance. If nesting birds or raptors are present on the Project site, mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance (refer to Pages 4.3-37 through 4.3-39 of the Draft EIR).

17-19 The commenter recommends a thorough and extensive literature review of the above-mentioned sensitive species and to investigate rigorous nesting bird protection measures as well as possible compensatory mitigation for direct and indirect loss of foraging habitat both on- and offsite as a result of the Project. The commenter also recommends analysis of impacts to Peregrine Falcon, Horned Lark, Swainson's Hawks, or others, including non-avian species. A Project-specific biological technical report was prepared for the Draft EIR (included as *Technical Appendix C1* of the Draft EIR), which included a thorough and extensive literature review, general biological surveys, habitat assessments, and focused bat surveys. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, peregrine falcon was not detected on the site and foraging potential is very limited and nesting sites are absent (refer to Page 4.13-17 of the Draft EIR). Additionally, the California horned lark was not detected onsite during all surveys and not expected to nest onsite due to proximity of large trees adjacent to the open field (refer to Page 4.13-17 of the Draft EIR). The Swainson's hawk would not be expected to nest onsite due to the lack of solitary trees and level of nearby human disturbance such as development and traffic, but would be expected to forage opportunistically onsite, but primarily over large open fields, including open areas within the JFTB, Seal Beach Naval Weapons Station, Old Ranch Country Club and the Navy golf course (refer to Page 4.13-18 of the Draft EIR). Moreover, implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting birds, nesting raptors, and bat roosts prior to site disturbance. If nesting birds or raptors are present on the Project site, the identified mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance (refer to Pages 4.3-37 through 4.3-39 of the Draft EIR).

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17-20 The commenter expresses concerns with the Project due to limited green space existing residents would have access to, traffic and parking impacts on Lampson Avenue, and lack of a signal control. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, 2.1.3, Parking, for parking impacts, and 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities*, for recreation impacts. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for traffic signal concerns.

17-21 The commenter expresses concerns with the Project due to the insufficient number of planned parking spaces. The commenter also expresses concerns with the proposed low-income housing. Refer to Master Response 2.1.3, *Parking* for parking concerns. The commenter's concern on low-income housing is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-22 The commenter expresses concerns with parking during AYSO operation and traffic impacts on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, 2.1.3, *Parking*, for parking concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns.

17-23 The commenter expresses concerns with the Project and requests the Draft EIR include the environmental issues that are discussed below in Responses to Comment 17-24 to 17-28.

17-24 The commenter requests consideration of wildlife, endangered habitats, plants, nesting birds, noise from pets, rodents, and inquires about the California Natural Diversity Database. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, wildlife, special-status vegetation communities, special-status species, nesting birds, and indirect impacts to biological resources were analyzed (refer to Pages 4.3-29 through 4.3-31 of the Draft EIR).

17-25 The commenter inquires about whether the City has reviewed the CDFW's CEQA Review website. This comment is acknowledged and no further response is required. As discussed in Section 1.0, *Introduction*, of the Draft EIR, the Draft EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.). Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the City has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA; (2) review and consider information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the City's independent judgement; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why

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mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the Project that outweigh its unavoidable adverse effects (CEQA Guidelines Section 15090 through 15093) (refer to Page 1-3 of the Draft EIR).

17-26 The commenter requests consideration of water issues due to drought conditions. As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, there would be sufficient water supplies available to serve the Project and impacts would be less than significant (refer to Pages 4.17-15 through 4.17-17 of the Draft EIR).

17-27 The commenter requests consideration of traffic impacts on Lampson Avenue and emergency access. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns.

17-28 The commenter requests consideration of sanitation, trucks, and landfills and requests involvement in the Project noticing. As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, solid waste from the City is transported to Frank R. Bowerman Sanitary Landfill in the City of Irvine and the Olinda Alpha Sanitary Landfill near the City of Brea. The two landfills have a combined permitted disposal capacity of 19,500 tons per day. The Project's estimated solid waste generation represents approximately 0.0077 % of the two landfill's capacity and therefore, would not contribute significantly to both of the landfill's daily capacity. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, impacts would be less than significant and no mitigation is required (refer to Pages 4.17-19 through 4.17-20 of the Draft EIR). Additionally, as discussed above, the NOA was mailed to responsible agencies, local government agencies, and interested parties that received the NOP, to individuals who had previously requested the NOA or EIR, and to all individuals who provided NOP comments on April 24, 2024.

17-29 The commenter expresses general opposition to the Project due to inadequate Project parking and using Seal Beach Homeowners' parking spaces. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

17-30 The commenter states that the Project would bring a significant increase in traffic and traffic hazards to Lampson Avenue such as making U-turns at Heather. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for sight distance.

17-31 The commenter states that inadequate public facilities will cause Project residents to use Seal Beach's public facilities, specifically College Park East's parks. As discussed in Section 4.14, *Recreation*, of the Draft EIR, the Project would result in an increase in residents; however, the

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Project is not anticipated to increase the use of the existing parks such that a significant impact would result. Accordingly, implementation of the Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility could occur or be accelerated. Impacts would be less than significant (refer to Pages 4.14-8 through 4.14-10 of the Draft EIR). Refer also to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*.

17-32 The commenter states that the Project will put a strain on the Los Alamitos Unified School District System. As discussed in Section 4.13, *Public Services*, of the Draft EIR, based on current enrollment, there is a deficiency of 45 students at the K-5 grade level at Project buildout. However, the District currently has open enrollment which allows students to attend schools other than the school assigned based upon their area of residence. As shown in Table 4.13-5, there are four other K-5 elementary schools within a 2.5 mile radius of the Project site with a total excess capacity of 62 students and enough excess capacity to serve the Project generated 51 K-5 students. It should be noted that the projected student population is conservative because it represents a snapshot in time. It is unlikely that all students generated by the Project would occur at Project buildout but rather would fluctuate over the life of the Project. Moreover, the Project would be required to pay development impact fees to LAUSD in compliance with SB 50 for the construction of new schools, which provides full and complete mitigation to school facilities. Development impact fees currently charged by LAUSD for residential uses are $5.17 per sf, and the Project Applicant will pay the applicable fees at the time building permits. Although project buildout would result in an increase of 135 students, the availability of schools in the area and the payment of impact fees in compliance with SB 50 would address any potential impacts. Therefore, based on the preceding, impacts from implementation of the Project on school services would be less than significant. No mitigation is required (refer to Pages 4.13-10 through 4.13-12 of the Draft EIR).

17-33 The commenter states that the change in the use of the land from a state office building to housing will necessitate major utility infrastructure changes. The commenter states that the construction work needed for these changes will cause major disruptions to Lampson Avenue and College Park East residents for many months. Section 3.3.7, *Infrastructure Improvements*, of the Draft EIR, discusses the Project's proposed utility infrastructure improvements. As discussed in 4.17, *Utilities and Service Systems*, of the Draft EIR, the construction of the Project's infrastructure improvements necessary to serve the Project would not result in any significant physical effects on the environment. Impacts would be less-than significant and no mitigation is required (refer to Page 4.17-13 of the Draft EIR). Additionally, as discussed in Section 4.8, *Hazards and Hazardous Materials*, construction on Lampson Avenue will require an encroachment permit and approval from the City Engineer Lane closures that may be required for median improvements would be temporary and require a permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. Compliance with LAMC 12.08.200 would ensure safe crossing and access for all vehicle and pedestrians at all times (refer to Page 4.8-21 of the Draft EIR).

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17-34 The commenter states that the Project will put a strain on water supply and would cause air pollution. As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, there would be sufficient water supplies available to serve the Project and impacts would be less than significant (refer to Pages 4.17-15 through 4.17-17 of the Draft EIR). As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

17-35 The commenter expresses opposition to the Project and states that the Project will bring hundreds of vehicles onto Lampson avenue creating more pollution, impacting wildlife, and causing traffic and safety issues. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR). As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, impacts to biological resources were determined to be less than significant with mitigation (refer to Pages 4.3-37 through 4.3-39 of the Draft EIR). Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

17-36 The commenter states that the Project residents will utilize nearest cities for all their needs and recreation causing excessive noise, pollution, traffic congestion, and wear and tear on facilities/equipment. Refer to Response to Comment 17-34 for pollution concerns. As discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not exceed significance thresholds for construction noise levels, operational noise levels, or off-site traffic noise levels. As such, the Project would not generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant (refer to Pages 4.11-23 through 4.11-29 of the Draft EIR). Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. As discussed in Section 4.14, *Recreation*, of the Draft EIR, the Project would result in an increase in residents; however, the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated. Accordingly, impacts would be less than significant (refer to Pages 4.14-8 through 4.14-10 of the Draft EIR).

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17-37 The commenter recommends adding a traffic light, reducing apartments to two stories, and adding a playground and asks to consider the added noise, lights, traffic, pollution, and overcrowding of the Project. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for traffic signal concerns. The Draft EIR evaluated Project impacts related to noise, lighting, transportation, and air quality. Refer also to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*.

17-38 The commenter expresses gratitude regarding the number of concerns for the Project. This comment is acknowledged and no further response is required.

17-39 The commenter requests the Draft EIR address safety issues for pedestrians and parking for Arbor Park. As discussed in Section 3.0, *Project Description*, of the Draft EIR, non-motorized circulation would include pedestrian connectivity with existing sidewalks along Lampson Avenue, including an existing signalized pedestrian connection to the south at Rose Street and Lampson Avenue and pedestrian "paseo" connections with Arbor Park and the Arbor Dog Park to the north. The Project would provide pedestrian gates to be controlled by the Homeowners' Association to restrict residents from entering Arbor Park and Arbor Dog Park outside of hours specified by JTFB. The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the 440 parking spaces that would be required pursuant to the State's Density Bonus Law. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

17-40 The commenter requests that noise impacts are addressed in the Draft EIR. As discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not exceed significance thresholds for construction noise levels, operational noise levels, and off-site traffic noise levels. As such, the Project would not generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant (refer to Pages 4.11-23 through 4.11-29 of the Draft EIR).

17-41 The commenter states that the loss of Arbor Park would be a huge detriment due to parking access. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Additionally, the Project would be confined to the Project site with the exception of infrastructure improvements and would not remove Arbor Park as a recreational facility for the community. AYSO will be able to continue to use Arbor Park for soccer games upon Project development.

17-42 The commenter inquires about traffic flow on Lampson, use of existing facilities in the area, noise and pollution from construction, and public services be addressed in the Draft EIR. The Draft EIR includes analysis on traffic, recreation, noise, air quality, and public services in Sections 4.15, 4.14, 4.11, 4.2, and 4.13, respectively.

17-43 The commenter provides an introduction about being a nearby resident and expresses opposition to the Project. This comment is noted for the record and will be forwarded to the

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decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. NOP comments provided during the scoping process were taken into consideration during the preparation of the Draft EIR. Thus, no further response is required.

17-44 The commenter expresses concerns with traffic impacts on Lampson Avenue, cross streets and freeway exits and requests traffic, wildlife and safety impacts be conducted. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. A traffic analysis and biological resources report was conducted for the Project (Refer to *Technical Appendix N1 and C1*, of the Draft EIR respectively). Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns and Response to Comments B-2 and B-3 for impacts on the freeway system.

17-45 The commenter expresses concerns with the Project and notes being a resident that utilizes Arbor Park and Arbor Dog Park. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-46 The commenter expresses concerns with traffic on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

17-47 The commenter expresses concerns with recreational impacts and parking. Refer to Master Response 2.1.3, *Parking*, for parking concerns. As discussed in Section 4.14, *Recreation*, of the Draft EIR, the Project would result in an increase in residents; however, the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated. Impacts would be less than significant (refer to Pages 4.14-8 through 4.14-10 of the Draft EIR).

17-48 The commenter expresses concerns about the removal of green space and greenhouse gas emissions. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the Project would provide a total of 67,480 square feet (sf) or 1.55 acres of open space in the Project site, including 16,508 sf of usable common open space, 51,320 sf of private open space (homeowner maintained). The 51,320 sf of private open space includes 4,620 sf of multi-family private deck, 5,181 sf of townhomes private deck, and 41,519 sf of private open space (homeowner maintained) (refer to Page 3-7 of the Draft EIR). As discussed in Section 4.7, *Greenhouse Gas Emissions*, of the Draft EIR, construction and operation of the Project would generate a 2,757.11 $MTCO_2e$/yr; the Project would not exceed the significance threshold of 3,000 $MTCO_2e$/yr. Thus, impacts would be less than significant and no mitigation is required (refer to Pages 4.7-26 through 4.7-27 of the Draft EIR).

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17-49 The commenter expresses concerns with air quality and health impacts to local residents. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

17-50 The commenter concludes the comment letter and expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-51 The commenter expresses concerns with the Project's public noticing not extending to Garden Grove. The mailing list radius complied with the City of Los Alamitos distance requirements and was expanded to 1,000 feet to include every house within College Park East and Parkwood regardless of distance. Additionally, public notice was published in the Event News Enterprise; the notice of availability and Draft EIR were made available for review, on the City's web site. Therefore, the City met and exceeded its legal requirement for noticing. No further response is required.

17-52 The commenter raises concerns with the amount of on-site parking for the Project and the potential for the College Park East neighborhood or the Arbor Park parking lot to be used for overflow parking. The commenter also expresses concerns regarding lack of signal control planned for traffic in and out of the development and traffic safety on Lampson. Refer to Master Response 2.1.3, *Parking*, for parking concerns. A condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for traffic signal concerns and concerns regarding roadway safety.

17-53 The commenter notes that College Park East has less park acreage than other Seal Beach neighborhoods, states that the Project does not show park space, requests that the Draft EIR include a listing of existing parks within a half-mile radius of the Project and requests an evaluation of whether the development should include park space to avoid further impacts to nearby parks. Refer to Response to Comment 17-11.

17-54 The commenter requests that the Draft EIR evaluate weekend noise levels at Arbor Park due to soccer games and dogs at the dog park. The commenter recommends proposing mitigation measures to avoid future complaints from residents of the Project. Refer to Response to Comment 17-12.

17-55 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to

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any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-56 The commenter expresses gratitude for being included in the NOP of the Draft EIR, provides a summary of the Project Description as described in the NOP and notes that Caltrans is a responsible agency on the Project. This comment is acknowledged and no further response is required.

17-57 The commenter recommends the Project consider the design of Complete Streets that include high-quality pedestrian, bicycle, and transit facilities that are safe and comfortable for all users; encourages the Project to look at opportunities to include Complete Streets improvements; consider including long-term bicycle parking facilities for the multi-family apartment units; ensure appropriate temporary detours to maintain safe bicycle access on Lampson Avenue during construction; and coordinate with Caltrans System Planning Unit regarding the existing Park and Ride facility agreement. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the Project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations. Along the Project frontage, Lampson Avenue is developed to its ultimate General Plan roadway classification. Frontage improvements would include median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards (refer to Page 3-4 of the Draft EIR). Additionally, at the time of preparation of this Final EIR, the Park-n-Ride that previously occupied the Project site has not been in operation for the past 18 months and when in operation had limited usage. There are no requirements or proposal to provide a substitute park-and-ride location.

17-58 The commenter requests submittal of all traffic related documents for Caltrans review. The commenter requests that data used in the Traffic Impact Analysis be no more than two years old and be based on Southern California Association of Governments Regional Transportation Plan Model; and recommends using the Highway Capacity Manual methodology for traffic analyses. The Traffic Analysis (*Technical Appendix N1* of the Draft EIR) was provided to Caltrans for review during the 45-day public review period for the Draft EIR. The Traffic Analysis was prepared in accordance with the City of Los Alamitos' requirements, as required by CEQA. Refer also to Response to Comment B-1 through B-13.

17-59 The commenter recommends the Project ensure that truck parking, ingress and egress, and staging will not interfere with vehicle parking, pedestrian paths, or bicycle lanes/parking; establish freight pick up and drop off times that do not coincide with peak commute hours to reduce passenger vehicle conflicts and congestion for freight; consider amazon lockers or an equivalent shared drop off location depending on number of packages for residential package delivery; and work with local partners and community representatives to mitigate truck traffic routing onto residential streets or conflicting with other road users. Refer to Response to

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Comment B-11 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding truck parking and freight pick up. As demonstrated, the Project would not result in any vehicle conflicts on-site as proposed; however, installation of an Amazon locker may be considered by the Project proponent following occupancy of the Project.

17-60 The commenter attaches a list of comments for the Project which are responded to below and expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-61 The commenter expresses concerns with traffic and traffic safety on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* for traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue,* for roadway safety concerns.

17-62 The commenter states that the Project will affect the neighborhood of College Park East and that the low-income housing has the potential to bring increased crime to the neighborhood and decrease existing home values. As discussed in Section 4.13, *Public Services*, of the Draft EIR, implementation of the Project would generally result in an increase in calls for service (not solely related to the fact that the site will include low-income housing); however, Los Alamitos Police Department has indicated that this increase would not adversely impact Los Alamitos Police Department's existing resources. The existing resources would be adequate to meet the additional demands generated by the Project. The Los Alamitos Police Department has not indicated the need for a new police station or expansion of existing facilities due to the Project. Responses times and service ratios would be met and would not require the construction of new facilities. Because the Project does not include or require construction of new police facilities and does not generate a need for additional facilities, increases in demands for police protection resulting from implementation of the Project impacts would be less than significant (refer to Page 4.13-10 of the Draft EIR). Additionally, home values are not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-63 The commenter expresses concerns with minimal parking at the Project site and how it will impact neighboring streets. Refer to Master Response 2.1.3, *Parking,* for parking concerns. A condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes.

17-64 The commenter expresses concerns with an increase in the need for police presence and expresses general opposition to the Project. Refer to Response to Comment 17-62.

17-65 The commenter expresses concerns with the aesthetics of the development. As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, buildout of the Project would change the existing visual character of the site from a two-story, 88,000 sf commercial office building to a two- to three-story residential development consisting of 246 units. The Project would be visually

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compatible with the existing residential and park uses in the Project site's vicinity. Additionally, the Project would be compliant with the zoning development standards and City requirements pertaining to scenic quality. Accordingly, the Project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant (refer to Page 4.1-18 of the Draft EIR).

17-66 The commenter expresses concerns with air quality from the increased traffic on Lampson and during construction. As discussed in Section 4.2, *Air Quality*, Project-related activities would not exceed the applicable South Coast AQMD regional thresholds of significance during construction and operation. As such, Project-related emissions would not violate South Coast AQMD air quality standards or contribute to the non-attainment of ozone standards in the SCAB, and impacts would be less than significant (refer to Pages 4.2-23 through 4.2-26 of the Draft EIR).

17-67 The commenter expresses concerns with construction noise and road closures on Lampson Avenue. Refer to Response to Comment 17-40 for noise impacts. As discussed in Section 4.15, *Transportation*, of the Draft EIR, during construction, frontage improvements including median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements would be constructed in accordance with City standards. Lane closures that may be required for median improvements would be temporary and require a permit and compliance with Los Alamitos Municipal Code (LAMC) 12.08.200, Safety precautions–Obstruction of traffic. This would ensure safe crossing and access for all vehicles and pedestrians at all times. (refer to Pages 4.15-16 through 4.15-17 of the Draft EIR).

17-68 The commenter expresses concerns with fire, police, and medical responses due to increased traffic. The commenter also expresses concern that more accidents will occur due to increased traffic. As discussed in Section 4.13, *Public Services*, of the Draft EIR, considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Per correspondence with the OCFA, there are currently no deficiencies in fire protection service provided to the Project site. OCFA has not indicated the need for a new fire station or expansion of existing facilities due to the Project. The Secured Fire Protection Agreement would ensure that responses times and service ratios are met due to the implementation of the Project and no new fire station facilities would be required (refer to Page 4.13-9 of the Draft EIR). Refer to Response to Comment 17-62 for police protection services. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for roadway safety concerns.

17-69 The commenter expresses concerns with greenhouse gas emissions due to construction and increased traffic. Refer to Response to Comment 17-48 for greenhouse gas emissions.

17-70 The commenter expresses concerns with safety hazards due to speeding and increased traffic and hazardous vehicle emissions. Refer to Master Response 2.1.2, *Roadway Safety on Lampson*

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Avenue, for pedestrian safety concerns. Refer to Response to Comment 17-48 and 17-66 for vehicle emissions. As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, during construction, the Project would result in roadway improvements along Lampson, including replacement of the existing median curb and construction of the two proposed driveways. Construction on Lampson will require an encroachment permit and approval from the City Engineer Lane closures that may be required for median improvements would be temporary and require a permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. Compliance with LAMC 12.08.200 would ensure safe crossing and access for all vehicle and pedestrians at all times (refer to Page 4.8-21 of the Draft EIR).

17-71 The commenter expresses concerns with land use and planning and opines that the Project is an inconsistent use given its adjacency to the active military airfield. As discussed in Section 4.10, *Land Use and Planning*, of the Draft EIR, the Project would not conflict with JFTB AELUP's safety, height, noise, or aircraft overflight criteria, and impacts would be less than significant. Table 4.10-2, *General Plan Consistency Analysis*, provides an analysis of the Project's consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 4.10-2, the Project would not conflict with any of the applicable General Plan goals and policies. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the City of Los Alamitos General Plan and mitigation is not required (refer to Pages 4.10-14 through 4.10-32 of the Draft EIR).

17-72 The commenter expresses concerns with noise pollution on Lampson Avenue and added vehicles on the I-405 from residents exiting onto Lampson Avenue. Refer to Response to Comment 17-36.

17-73 The commenter expresses concerns with increased population and housing and its impact on parking spaces and uses of existing parks. As discussed in Section 4.12, *Population and Housing*, of the Draft EIR, the Project would not result in substantial unplanned growth in the area because: 1) the Project is within the growth projections of the City's General Plan, 2) the planned housing is a requirement of State Housing Law and in response to an existing unmet need for housing, 3) the Project is consistent with the existing General Plan land use and zoning designations, and 4) the Project improves the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Therefore, implementation of the Project would not result in substantial unplanned population growth, and impacts would be less than significant (refer to Pages 4.12-8 through 4.12-10 of the Draft EIR). Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Response to Comment 17-11 for impacts to existing recreational facilities.

17-74 The commenter expresses concerns with the increase in traffic and lack of available parking in the College Park East neighborhood and recommends that parking permits be implemented. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns

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and 2.1.3, *Parking*, for parking concerns. Refer to Response to Comment 17-73 for population impacts.

17-75 The commenter expresses concerns with the strain on Seal Beach public services from the new development due to traffic accidents, pedestrian related issues, traffic issues. As discussed in Section 4.13, *Public Services*, of the Draft EIR, fire protection services for the Project site is currently provided by the Orange County Fire Authority (OCFA) and police protection service is provided by the Los Alamitos Police Department (refer to Page 4.13-1 and 4.13-2 of the Draft EIR). Refer also to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for roadway safety concerns and 2.1.6, *Public Safety*, for concerns related to public services.

17-76 The commenter expresses concerns with the increased use of parks and the increased need for maintenance of park equipment. Refer to Response to Comment 17-11 for impacts to existing parks.

17-77 The commenter expresses concerns with road impacts from heavy equipment usage. The Project would be required to comply with all applicable local regulations related to vehicle weight limits. If the Project requires the use of an oversize vehicle in excess of the eight, width, height or length permitted by the Vehicle Code, a permit shall be obtained from the City of Seal Beach in accordance with the City of Seal Beach Municipal Code 8.10.135, *Movement of Oversize Vehicles*. Additionally, the Project Applicant would be required to pay development impact or connection fees, as applicable or required, to the City of Seal Beach, as agreed upon, prior to Project approval for future infrastructure improvements.

17-78 The commenter expresses concerns with rodents due to more trash and litter caused by additional residents. The Project site plan incorporates necessary trash enclosures protect against rodent populations onsite. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-79 The commenter expresses concerns with overcrowded schools/libraries. As discussed in Section 4.13, *Public Services*, of the Draft EIR, the Project would be required to pay development impact fees to LAUSD under SB 50 for the construction of new schools, which provides full and complete mitigation to school facilities. Development impact fees currently charged by LAUSD for residential uses are $5.17 per sf. Although project buildout would result in an increase of 135 students, the availability of schools in the area and the payment of impact fees in compliance with SB 50 would address any potential impacts. Impacts from implementation of the Project on school services would be less than significant (refer to Pages 4.13-10 through 4.13-12 of the Draft EIR).

Project buildout would increase population onsite by an estimated 647 residents, thus increasing demand for other public facilities, such as library services. Increased demands are

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expected to most affect the library facilities closest to the Project site – that is the Los Alamitos-Rossmoor Library. According to the administrative manager of the OCPL, it is anticipated that the increase in residents may impact service. With the current renovations previously underway at the library, however, OCPL does not expect Project buildout to require construction of new or expanded physical library facilities, the construction of which could cause a substantial adverse impact. Although future Project residents would be mainly served by the Los Alamitos-Rossmoor Library, they would have access to all libraries within OCPL's system. Therefore, impacts to library services would be less than significant and no mitigation is required (refer to Page 4.13-12 of the Draft EIR).

17-80 The commenter expresses concerns with traffic safety on Lampson Avenue, Seal Beach Boulevard and Valley View, and cut through traffic. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion,* for traffic concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns. Refer to Response to Comment 9-19 for cut through traffic.

17-81 The commenter expresses concerns with the added burden to utilities and service system infrastructure. Refer to Section 4.17, *Utilities and Service Systems*, of the Draft EIR, which evaluates this issue and concludes there would be sufficient water supplies, wastewater treatment facility capacity, and landfill capacity available to serve the Project and impacts would be less than significant (refer to Page 4.17-15 to 4.17-20 of the Draft EIR).

17-82 The commenter expresses concerns with aesthetic views of the Project site and expresses general opposition to the Project. Refer to Response to Comment 17-65 for aesthetics.

17-83 The commenter expresses concerns with insufficient parking, increased foot traffic, unsafe street crossings, and increased crime. Refer to Master Response 2.1.3, *Parking*, for parking concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns. Refer to Response to Comment 17-70 for street crossing and Response to Comment 17-62 for police protection.

17-84 The commenter expresses concerns with the proposed open space of the Project and the burden to existing recreational facilities. Refer to Response to Comment 17-11 for impacts to existing recreational facilities and Response to Comment 17-14 for the Project's proposed open space area. Additionally, refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*.

17-85 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

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17-86 The commenter expresses concerns with safety impacts and traffic congestion due to increased traffic. Refer to Response to Comment 17-70 for street crossing concerns. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns.

17-87 The commenter expresses concerns with insufficient parking. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

17-88 The commenter expresses concerns with Project residents utilizing Seal Beach City resources, parks and amenities. Refer to Response to Comment 17-11 for impacts to existing recreational facilities.

17-89 The commenter expresses concerns with construction vehicles during Project construction and the current signage restricting trucks over 3 tons from using the street. Refer to Response to Comment 17-77.

17-90 The commenter expresses concerns with traffic on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

17-91 The commenter expresses concerns with impacts to Arbor Park and inquires about an evaluation of existing parks and proposed parks. Refer to Response to Comment 17-11 for impacts to existing recreational facilities and Response to Comment 17-14 for the Project's proposed open space area. Additionally, refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities.*

17-92 The commenter expresses concerns with impacts to Arbor Park and parking and recommends the new development include a play area for residents to offset demand. Refer to Response to Comment 17-11 for impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area. Additionally, refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities.* Refer to Master Response 2.1.3, *Parking*, for parking concerns.

17-93 The commenter recommends the Draft EIR consider noise levels coming from the park and from parking for residents. The commenter recommends that the residential units provide sufficient sound barriers or building materials to reduce noise levels. The commenter encourages the City to add improvements to soccer fields. Refer to Response to Comment 17-12 for noise concerns. As discussed in Section 4.14, *Recreation*, of the Draft EIR, per the City's park dedication requirements under Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees) of the City of Los Alamitos Municipal Code, all new residential development is required either to dedicate parkland or pay park facilities impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population (refer to Page 4.14-11 of the Draft EIR). Additionally, the commenter's request for the City to invest in more soccer fields is noted for

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the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-94 The commenter expresses general opposition to the Project and expresses concerns with additional vehicles and traffic congestions on Lampson Avenue along with impacts to wildlife and residences, and safety issues. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns. Refer to Response to Comments 17-18, 17-19, and 17-35 for impacts to wildlife.

17-95 The commenter expresses concerns with overcrowding, excessive noise, pollution, traffic, parking, and wear and tear to existing public facilities. The commenter recommends adding a traffic light and reducing the apartment density. Refer to Response to Comment 17-36 for impacts related to noise, pollution, traffic, and wear and tear to existing public facilities and Response to Comment 17-37 for impacts related to overcrowding above. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for traffic signal concerns. Refer to Response to Comment 17-71 for land use consistency.

17-96 The commenter expresses general opposition to the Project due to safety concerns from traffic, insufficient parking, lack of community spaces, aesthetics, noise, and impacts to existing recreational facilities. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, 2.1.3, *Parking* for parking concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns. Refer to Response to Comment 17-65 for aesthetic concerns and Response to Comment 17-12 for noise concerns. Refer to Response to Comment 17-11 for impacts to existing recreational facilities and Response to Comment 17-14 for the Project's proposed open space area.

17-97 The commenter expresses concerns with safety and traffic on Lampson Avenue. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

17-98 The commenter expresses concerns with insufficient parking which will led to increase foot traffic and unsafe street crossings. Refer to Master Response 1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns and 2.1.3, *Parking*, for parking concerns.

17-99 The commenter expresses concerns with impacts to existing parks and proposed open space. Refer to Response to Comment 17-11 for impacts to existing recreational facilities and Response to Comment 17-14 for the Project's proposed open space area.

17-100 The commenter expresses concerns with construction noise and visual impacts from the Project and request a taller sound and privacy wall. Refer to Response to Comment 17-65 for aesthetic concerns. Refer to Response to Comment 17-36 for construction noise. The commenter's

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request for a higher wall is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-101 The commenter expresses concerns with impacts to Arbor Park and expresses general opposition to the Project. Refer to Response to Comment 17-11 for impacts to existing recreational facilities and 2.1.3, *Parking,* for parking concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-102 The commenter expresses concerns with the Project due to impacts to College Park East, including parks and parking. Refer to Response to Comment 17-11 for impacts to existing recreational facilities. Refer to Master Response 2.1.3, *Parking,* for parking concerns.

17-103 The commenter expresses concerns with increased traffic on Lampson Avenue and risk with heavy construction vehicles. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* for traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue,* for roadway safety concerns. Refer to Response to Comment 17-77 regarding construction vehicle concerns.

17-104 The commenter expresses concerns with noise and pollution. Refer to Response to Comment 17-12 for noise concerns and Response to Comment 17-34 for pollution concerns.

17-105 The commenter expresses concerns with impacts to existing parks and states that no parks are planned for the new development. Refer to Response to Comment 17-11 for impacts to existing recreational facilities. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities,* for concerns regarding the Project's planned open space.

17-106 The commenter expresses concerns with insufficient parking. Refer to Master Response 2.1.3, *Parking,* for parking concerns.

17-107 The commenter expresses general opposition to the Project and concerns due to lack of resources. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-108 The commenter expresses concerns with impacts to school services. Refer to Response to Comment 17-79 for responses regarding school services.

17-109 The commenter expresses concerns with police and fire protection services. Refer to Response to Comment 17-62 for responses regarding police protection services and Response to Comment 17-68 for responses regarding fire protection services.

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17-110 The commenter expresses concerns with impacts to existing parks and proposed open space. Refer to Response to Comment 17-11 for impacts to existing recreational facilities and Response to Comment 17-14 for responses regarding the Project's proposed open space area.

17-111 The commenter expresses concerns with medical services and how the Project would impact the Los Alamitos hospital. The Project buildout would increase the population onsite by an estimated 647 residents, a small percentage of which are expected to need hospital services at any given time. This growth was anticipated in the Los Alamitos Housing Element Update. There are six medical facilities and hospitals within a 5 mile radius of the Project site. Therefore, it is not expected that the Project would impact the Alamitos Medical Center in such a way that it would require the construction of new or expanded medical facilities. Emergency medical services would be provided by OCFA. Per correspondence with the OCFA, there are currently no deficiencies in fire protection service provided to the Project site. OCFA has not indicated the need for a new fire station or expansion of existing facilities due to the Project. The Project applicant must enter into the Secured Fire Protection Agreement which would ensure that responses times and service ratios are met due to the implementation of the Project and no new fire station facilities would be required (refer to Page 4.13-9 of the Draft EIR).

17-112 The commenter expresses concerns with the insufficient amount of youth camps, summer camps, and summer school activities available, and the increase in taxes. The commenter also expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-113 The commenter expresses concerns with light pollution, sound pollution above roadway standards, vibrations, increased traffic, loss of park space, and unsafe road conditions. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.3, *Parking* regarding parking concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns. As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, the Project would redevelop the Project site with residential uses which would produce artificial light. The Project would be required to adhere to the light and glare requirements as set forth in the LAMC (Chapter 8.48 - Lighting Performance Standards and Section 17.24.040 Light and Glare). Chapter 8.48 addresses the visual impacts of exterior lighting on adjacent property owners and neighborhoods. The chapter outlines guidelines for the design, scale, location, and illumination level of lighting fixtures. The guidelines aim to reduce light trespass and prevent glare. Section 17.24.040 would require shielding of light sources to reduce impacts on surrounding land uses including sensitive receptors in College Park East. The City would confirm compliance with all applicable lighting requirements during future review of building permit applications/plans. Mandatory compliance with LAMC Chapter 8.48 and Section 17.24.040 would ensure that the Project would not introduce any permanent design features that would adversely affect day or nighttime views in the area (refer

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to Page 4.1-19 of the Draft EIR). Refer also to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for impacts related to the loss of park space.

As discussed in Section 4.11, *Noise*, of the Draft EIR, based on the significance criteria for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to Project-related traffic noise level increases and off-site traffic related noise impacts would less than significant. No mitigation is required. The Project's construction and operational activities would not exceed vibration thresholds at all nearest receiver locations. As such, the Project would not generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant (refer to Pages 4.11-25 through 4.11-30 of the Draft EIR).

17-114 The commenter expresses concerns regarding the height of the buildings, and with light and sound from the proposed apartment buildings, particularly during nighttime hours. Refer to Response to Comment 17-65 for aesthetic concerns and to Response to Comment 17-113 above for light and sound concerns. As discussed in Section 4.11, *Noise*, of the Draft EIR, the operational noise analysis evaluates the potential daytime and nighttime activities at the Project site. Both daytime and nighttime Project operational noise levels at nearby sensitive receptor locations would be less than significant (refer to Pages 4.11-24 through 4.11-25 of the Draft EIR).

17-115 The commenter expresses concerns with additional cars on Lampson Avenue and noise and vibration impacts. Refer to Response to Comment 17-113 above.

17-116 The commenter expresses concerns with parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-117 The commenter expresses concerns with traffic and safety concerns on Lampson Avenue, including U-turns at Heather Street. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

17-118 The commenter expresses concerns with the proposed density and use of existing recreational facilities. Refer to Response to Comment 17-71 regarding land use consistency. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. As discussed in Section 4.12, *Population and Housing*, of the Draft EIR, The Project site is identified within the City's Housing Element as a housing element site with an estimate of 246 units. Development of the Project with a total of 246 units would be consistent with the City's 2021–2029 Housing Element (refer to Page 4.12-9 of the Draft EIR).

17-119 The commenter expresses concerns with impacts to AYSO operation and parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

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17-120 The commenter recommends denial of the Project. This comment is noted for the record and will be forwarded to the decision makers for required review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-121 This comment letter references a peer review memorandum of the Project's Preliminary Water Quality Management Plan conducted by the City's consultants. This comment is addressed in Response to Comment 17-122.

17-122 The comments pertain to the Project's Water Quality Management Plan and were made by the City's consultants. These comments were addressed and incorporated into an updated WQMP which was included as *Technical Appendix I2* of the Draft EIR.

17-123 The commenter expresses concerns with impacts to Heather Park and opines that the park cannot handle additional children. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-124 The commenter expresses concerns with increased traffic on Lampson Avenue and safety concerns for the bike lane. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

17-125 The commenter expresses concerns with insufficient parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-126 The commenter expresses concerns with impacts to AYSO operation and parking. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

17-127 The commenter expresses concerns with safety on Lampson Avenue. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

17-128 The commenter expresses concerns with the proposed open space and utilization of existing parks. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-129 This comment letter pertains to removal of a "Stop Lampson Project" sign on the property. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

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17-130 The commenter asserts that the Project Applicant's focus was to keep the Project unknown to the public and expresses concerns with increased traffic and safety issues in the surrounding neighborhoods. As discussed previously, in compliance with Section 15201 of the State CEQA Guidelines, the City has taken steps to provide opportunities for public participation in the environmental review process. The mailing list radius for noticing complied with the City of Los Alamitos distance requirements and was expanded to 1,000 feet to include every house within College Park East and Parkwood regardless of distance. Additionally, public notice was published in the Event News Enterprise; the notice of availability and Draft EIR were made available for review, on the City's web site. Therefore, the City met and exceeded its legal requirement for noticing. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* for traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for roadway safety concerns.

17-131 The commenter expresses concerns with the zoning and proposed density. Refer to Response to Comment 17-71 regarding land use consistency.

17-132 The commenter expresses concerns with limited accessibility into and out of the Project and how that impacts emergency access during fire hazards or police access. As discussed in Section 4.13, *Public Services*, access to and around structures would meet OCFA and CFC requirements. Figure 4.8-3, *Fire Master Plan*, of the Draft EIR demonstrates compliance with all codes and other regulations governing water availability for firefighting and emergency access to the Project site and structures. Compliance with OCFA requirements would ensure adequate provision of resources such as access, water mains, fire flows, and fire hydrants (refer to Page 4.13-9 of the Draft EIR).

17-133 The commenter expresses concerns with traffic and safety issues on Lampson Avenue and the lack of a stop light. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns.

17-134 The commenter expresses concerns with traffic accidents due to increased traffic on Lampson Avenue. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

17-135 The commenter expresses concerns with access through Lampson Avenue and safety concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

17-136 The commenter expresses concerns with safety and traffic on Lampson Avenue. Refer to Master Response Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

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17-137 The commenter expresses concerns with insufficient parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-138 The commenter expresses concerns with impacts to AYSO operation based on parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-139 The commenter expresses concerns with the proposed density and safe access around the Project site. Refer to Response to Comment 17-71 regarding land use consistency and Response to Comment 17-132 regarding safe access.

17-140 The commenter expresses concerns with the lack of "no U-turn" signage and lack of a traffic signal. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns including U-turns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns.

17-141 The commenter expresses concerns with insufficient parking and recommends adding a parking garage or decreasing the proposed units. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-142 The commenter recommends requiring a public park. Refer to Response to Comment 17-11regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-143 The commenter recommends keeping some of the land commercial and adding small restaurants. A commercial alternative at the Project site was considered but rejected as a "No Project" alternative. It is unlikely that the existing office building would resume operation since commercial uses would be inconsistent with the General Plan designation and zoning. Refer to Response to Comment 17-71 for land use consistency.

17-144 This comment letter is an informational email from AYSO Region 159 to notify the public about the Project. The commenter expresses concerns with parking, lack of a traffic signal proposed, impacts to existing recreation facilities, and noise impacts to residents from AYSO usage of Arbor Park. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding the lack of a traffic signal, 2.1.3, *Parking*, regarding parking concerns, and 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to existing recreational facilities. CEQA does not require an analysis of the impact of environmental conditions on a proposed Project. Therefore, an evaluation of activities at Arbor Park and related noises to the future residents of the Project were not evaluated.

17-145 The commenter expresses concerns with parking, traffic, and pollution and expresses general opposition to the Project. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-34 regarding pollution concerns.

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17-146 The commenter expresses concerns with noise pollution, overcrowding of Heather Park, traffic safety, and negative impacts to AYSO operation. Refer to Response to Comment 17-36 and 17-37 above regarding noise pollution, impacts to existing recreational facilities, traffic safety, and AYSO operation concerns.

17-147 The commenter expresses concerns with the Project due to sound pollution impacting Ironwood Avenue from added traffic. Refer to Response to Comment 17-113 above regarding off-site traffic noise impacts.

17-148 The commenter expresses concerns with increased traffic and safety issues for pedestrians and cyclists on Lampson Avenue. The commenter provides links to several news articles referencing accidents that have occurred on Lampson. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian and cyclist safety concerns.

17-149 The commenter expresses concerns with aesthetics, specifically daytime glare, nighttime illumination, and existing visual characteristics. Refer to Response to Comment 17-113 regarding light and glare concerns. Refer to Response to Comment 17-65 regarding consistency with zoning development standards.

17-150 The commenter expresses concerns with existing property values. Property value is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. Thus, no further response is required.

17-151 The commenter expresses concerns with air quality, specifically increased carbon monoxide emissions, particulate matter, and greenhouse gas emissions. Refer to Response to Comment 17-35 regarding air quality impacts concerns and Response to Comment 17-48 regarding greenhouse gas emissions concerns.

17-152 The commenter expresses concerns with biological impacts, specifically impacts to wildlife, birds, and trees. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, on April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of its Urban Forest Program. This plan addresses City parkway trees. There are currently no parkway trees along the Project's frontage. The Project would not result in an impact to the City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur and mitigation is not required (refer to Page 4.3-34 of the Draft EIR).

17-153 The commenter expresses concerns with geology and soils, drainage impacts, and runoff concerns, including soccer field conditions. As discussed in Section 4.6, *Geology and Soils*, of the Draft EIR, Mitigation Measure MM 4.6-1 would ensure that that the Project's design professionals and construction contractors implement the recommendations of the Project's

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Geotechnical Investigation (*Technical Appendix F1* of the Draft EIR), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking liquefaction hazards, soil settlement and expansion. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels (refer to Page 4.6-16 of the Draft EIR).

As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite (refer to Pages 4.9-22 through 4.9-23 of the Draft EIR). Project runoff would flow to the southwest corner (refer to Pages 4.9-18 through 4.9-20 of the Draft EIR) and would not impact the soccer fields.

17-154 The commenter expresses concerns with impacts to public services, specifically fire protection, police protection, libraries and parks. As discussed in Section 4.13, *Public Services*, of the Draft EIR, implementation of the Project would result in an increased requirement for public services. However, considering the existing resources available, the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Impacts are less than significant (refer to Pages 4.13-8 through 4.13-12 of the Draft EIR). Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Refer also to Response to Comment in 17-62 regarding impacts to the police protection services.

17-155 The commenter recommends disapproval of the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-156 The commenter states that the parking lot on Lampson at West Ed has a Caltrans park and ride and is concerned that the new development is missing the park and ride. The Commenter also states that the parking lot used to support Arbor Park and is concerned that the parking lot is not being kept for the community park. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. As of the time of preparation of this Final EIR, the Park-n-Ride that previously occupied the Project site has not been in operation for the past 18 months and when in operation had limited usage. There are no requirements or proposal to provide a substitute park-and-ride location.

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17-157 The commenter expresses concerns that the Project will overpopulate the Lampson/College Park East area and cause overflow parking in their neighborhood, along with increasing traffic. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.3, *Parking*, regarding parking concerns.

17-158 The commenter expresses concerns with impacts to wildlife, including nesting red-tailed hawks, and asserts that measures must be taken to ensure endangered species and nesting birds are not disturbed. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds.

17-159 The commenter expresses concerns with impacts to wildlife, specifically relocation of species. The commenter asserts that the City include specific details of how wildlife would be affected by the plan and include a no kill requirement for those animals relocating themselves into local neighborhoods. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds and corresponding mitigation measures. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the Project site is not located within or part of a wildlife movement corridor. The site is located within the Pacific flyway; however, given the small area of the site, lack of native habitats and levels of disturbance, there is no potential for significant impacts to the Pacific flyaway. The Project site is developed and is adjacent to developed areas that do not contribute to wildlife movement. Therefore, the Project would not substantially interfere with an established migratory wildlife corridor (refer to Page 4.3-33 through 4.3-34 of the Draft EIR).

17-160 The commenter expresses concerns with the origination of the water supply and loss of wetlands for migratory animals. Refer to Response to Comment 17-26 regarding water supply. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the Project would not result in a substantial adverse effect on state or federally protected wetlands during both construction and operational activities. No impact would occur and mitigation is not required. The Project would be required to comply with existing laws including but not limited to the Migratory Bird Treaty Act (MBTA) and California Department of Fish and Game Code Sections 3505, 3503.5, and 3800. Therefore, no impact would occur, and mitigation is not required with respect to wetland impacts (refer to Pages 4.3-32 through 4.3-34 of the Draft EIR).

17-161 The commenter expresses concerns with the Project site in close proximity to the military base and decrease in property values. The commenter also expresses concerns regarding an increase in crime and questions where additional resources for code enforcement will come from. The commenter also expresses concerns with traffic issues on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns and Response to Comment 17-62 related to the potential increase in crime. The Project Applicant will be required to pay Development Impact fees that will be used for future public service improvements. Property value is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their

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review and consideration prior to any action being taken on the Project. Thus, no further response is required.

17-162 The commenter expresses concerns with increased traffic and safety concerns on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue,* regarding safety concerns.

17-163 The commenter expresses concerns that Arbor Park will be shut down because of noise complaints by new residents of the Project. The commenter also expresses concern that with no proposed open space as part of the Project, children will have to cross Lampson to utilize Heather Park. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for a detailed discussion on the Project's proposed open space. There is no evidence to support the statement that Arbor Park would be shut down due to noise complaints by new residents of the Project; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. Thus, no further response is required

17-164 The commenter expresses concerns with parking, connection to Arbor Park, and proposes a playground. Refer to Master Response 2.1.3, *Parking* regarding parking concerns and Response to Comment 17-14 regarding proposed open space. As discussed in Section 3.0, *Project Description*, of the Draft EIR, non-motorized circulation would include pedestrian connectivity with existing sidewalks along Lampson Avenue, including an existing signalized pedestrian connection to the south at Rose Street and Lampson Avenue and pedestrian "paseo" connections with Arbor Park and the Arbor Dog Park to the north. The Project would provide pedestrian gates to be controlled by the Homeowners' Association to restrict residents from entering Arbor Park and Arbor Dog Park outside of hours specified by JTFB (refer to Page 3-5 of the Draft EIR).

17-165 The commenter expresses concerns with increased traffic and safety issues on Lampson Avenue. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-166 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-167 The commenter expresses concerns with increased traffic on Lampson Avenue, Seal Beach Boulevard and Valley View Boulevard, inadequate parking, and safety concerns. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and 2.1.3,

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Parking, regarding parking concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns.

17-168 The commenter expresses concerns with increase in population, increased traffic and safety of only one thoroughfare. Refer to Response to Comment 17-73 regarding population growth and Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns. As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, the Project site is not located within a very fire hazard severity zone and City's General Plan identifies very little risk of wildland fire hazards due to the urban nature of Los Alamitos, Rossmoor, and the surrounding communities. The City currently does not have any designated evacuation routes, however, the EOP recognizes that during a major evacuation event, all major roadways would be available for evacuation purposes. Implementation of the Project would not result in changes to the existing roadways that would impair or physically interfere with the EOP or evacuation routes (refer to Page 4.8-21 of the Draft EIR).

17-169 The commenter expresses concerns with lack of parking spaces causing future residents to park in College Park East. The commenter is also concerned about pedestrian safety as they cross Lampson. Refer to Master Response 2.1.3, *Parking* regarding parking concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns.

17-170 The commenter expresses concerns with an increase in car accidents and expresses general opposition to the Project. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-171 The commenter provides an introduction and expresses general concerns regarding the Project which are responded to below.

17-172 The commenter expresses concerns about the lack of parking spaces and the use of parking garage for storage. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns A condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes.

17-173 The commenter expresses concerns with traffic, accidents and speeding. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

17-174 The commenter expresses concerns with noise and air pollution during construction. The commenter also expresses concern for impacts to wildlife in the strawberry fields to the west of the Project. Refer to Response to Comment 17-40 regarding noise impacts and Response to Comment 17-35 regarding air pollution. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, wildlife, special-status vegetation communities, special-status species, nesting

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birds, and indirect impacts to biological resources were analyzed (Refer to Pages 4.3-29 through 4.3-31 of the Draft EIR).

17-175 The commenter expresses concerns with increased traffic and suggests scaling the project down or not building it altogether. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns.

17-176 The commenter requests environmental studies be prepared on traffic safety, parking, population, and recreation. The commenter expresses concerns about the proposed building heights, lack of parking, lack of traffic signals, and lack of recreation space. The commenter also expresses concern regarding the increase in traffic and pedestrians and the resulting safety issues. A Traffic Analysis, Onsite Parking Analysis, and Parks Impact Analysis were prepared for the Project and are included as *Technical Appendix N1, P, and M*, to the Draft EIR, respectively. Refer to Response to Comment 17-73 regarding concerns regarding population growth; Response to Comment 17-65 regarding aesthetic concerns; Response to Comment 17-11 regarding impacts to existing recreational facilities; Response to Comment 17-14 regarding the Project's proposed open space area. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns and 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding recreation space concerns.

17-177 The commenter requests a restriction in the number of units proposed, the building of a recreation space, increase parking to accommodate residents and their guests, and recommends that a traffic signal be installed so that residents do not make U-turns at Heather Avenue and Rose Avenue. The Project proposes to develop up to only 246 residential units. Refer to Response to Comment 17-14 for the Project's proposed open space area. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for traffic signal concerns. Refer to Master Response 2.1.3, *Parking*, for parking concerns and 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities,* for recreation space concerns.

17-178 The commenter expresses concerns with impacts to Heather Park and opines that the park cannot handle additional children. Refer to Response to Comment 17-123 for impacts to Heather Park and capacity.

17-179 This comment letter pertains to discussion items for a meeting between the City and City consultants. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-180 The commenter expresses concerns with access into Arbor Park from the Project site through the proposed pedestrian connections. The approval of the proposed pedestrian connections are speculative and not reasonably foreseeable at this time and for that reason are not further

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evaluated in the Draft EIR; however, these comments are noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-181 The commenter expresses concerns with parking in Arbor Park and sufficient parking for the Project. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-182 The commenter expresses concerns with traffic flow at the left turn lane at the main entrance and congestion on Lampson. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-183 The commenter expresses concerns with lack of Project parking, and the use of parking garage for storage, and its impacts to parking at Arbor and Heather Park. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. A condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes.

17-184 The commenter expresses concerns with impacts to Heather Park facilities, the impact on tennis courts and safety issues regarding pedestrians crossing Lampson to get to the park. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area. Refer to Master Comment 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-185 The commenter expresses concerns with traffic safety on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-186 The commenter expresses concerns with safety issues for children at the bus stop at Heather Park, runoff and flooding, utilities and impacts to service, police response and the density of the Project. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite (refer to Pages 4.9-22 through 4.9-23 of the Draft EIR). Refer to Response to Comment 17-81 regarding impacts to utilities and services systems. Refer to Response to Comment 17-62 regarding police protection.

17-187 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment

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letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-188 The commenter expresses concerns with construction noise; road closures; fire and police response; increased traffic on Lampson; parking; increased population; traffic safety; utilities and service systems; impacts on local shopping and services; safety of children; impacts on local parks and public services, and AYSO at Arbor Park. Refer to Response to Comment 17-36 regarding construction noise. Refer to Response to Comment 17-62 regarding police protection services, Response to Comment 17-67 regarding road closures, and Response to Comment 17-68 regarding fire protection services. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-73 regarding population growth. Refer to Response to Comment 17-81 regarding impacts to utilities and services systems. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities.

17-189 The commenter expresses concerns with traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and Response to Comment D-9 for cumulative traffic impacts.

17-190 The commenter expresses concerns with population growth, overflow parking, and increased traffic and safety impacts to Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns; 2.1.3, *Parking*, f regarding parking concerns; and 2.1.2 *Roadway Safety on Lampson Avenue*, regarding safety concerns. Refer to Response to Comment 17-73 regarding population growth.

17-191 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-192 The commenter expresses concerns with traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-193 The commenter expresses concerns with impacts to existing parks, parking and sports programs. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-194 The commenter expresses concerns with residents of the Project parking in College Park East and the need for traffic lights to handle congestion. Refer to Master Response 2.1.3, *Parking* regarding parking concerns and 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns.

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17-195 The commenter expresses concerns with increased crime due to increased parking in College Park East. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Refer to Response to Comment 17-62 regarding police protection.

17-196 The commenter expresses concerns with air quality due to increased traffic and noise pollution. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant (refer to Pages 4.2-24 and 4.2-25 of the Draft EIR). Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns. Refer to Response to Comment 17-40 regarding noise impacts.

17-197 The commenter expresses concerns with the use of existing parks and wait times for their amenities. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities.

17-198 The commenter expresses concerns with police response services. Refer to Response to Comment 17-62 regarding police protection.

17-199 The commenter expresses concerns with impacts to school services and safety concerns for children crossing on Lampson Avenue. Refer to Response to Comment 17-79 regarding impacts to school services and Response to Comment 17-70 regarding safe crossing. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-200 The commenter expresses concerns with traffic congestion, pollution and safety concerns on Lampson. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* for traffic concerns. Refer to Response to Comment 17-34 for pollution concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns

17-200 The commenter expresses concerns with traffic congestion, pollution and safety concerns on Lampson. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns. Refer to Response to Comment 17-34 regarding pollution concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns

17-201 The commenter expresses concerns with increased traffic, pollution, noise, parking, street crossing, and safety near the JFTB. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns, Response to Comment 17-34 regarding pollution concerns, Response to Comment 17-40 regarding noise impacts, Master Response 2.1.3, *Parking,* regarding parking concerns, Response to Comment 17-70 regarding safe crossing, Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB),* for concerns related to safety from the military base.

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17-202 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-203 The commenter expresses concerns with noise from additional traffic, safety on Lampson Avenue, and air quality impacts. Refer to Response to Comment 17-113 regarding off-site traffic noise impacts. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-66 regarding air quality impacts.

17-204 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-205 The commenter expresses concerns with construction noise, cumulative noise, dust, dirt and rodents. Refer to Response to Comment 17-40 regarding noise impacts. As discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations during both construction and operation (refer to Page 4.11-34 of the Draft EIR). Refer also to Response to Comment D-9 for cumulative offsite traffic noise impacts. Refer to Response to Comment 9-21 regarding the potential for rodents and small animals to move into CPE. As discussed in Section 4.6, *Geology and Soils*, the Project would be required to implement erosion and dust control measures pursuant to South Coast AQMD Rule 403 to minimize water- and windborne erosion. Mandatory compliance with the SWPPP and the erosion control and dust control measures would reduce, prevent, or minimize soil erosion from Project-related construction activities (refer to Page 4.6-10 of the Draft EIR). Moreover, as discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to the Project, and impacts would be less than significant (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

17-206 The commenter expresses concerns with increased traffic and safety concerns due to additional traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns.

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17-207 The commenter expresses concerns with traffic noise and accidents. Refer to Response to Comment 17-113 regarding off-site traffic noise impacts. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-208 The commenter expresses concerns with dense neighborhoods, increased traffic, safety, noise, and air pollution. Refer to Response to Comment 17-73 regarding population growth. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-34 regarding pollution concerns. Refer to Response to Comment 17-40 regarding noise impacts.

17-209 The commenter expresses general opposition to the Project and expresses concerns with the proposed density. Refer to Response to Comment 17-71 regarding land use consistency. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-210 The commenter expresses concerns with increased traffic, U-turn at Heather Park and associated safety concerns, parking, and use of existing parks. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities.

17-211 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-212 The commenter expresses general opposition and requests an unbiased review/full assessment of the Project. As discussed in Section 1.0, *Introduction*, of the Draft EIR, the Draft EIR is an informational document that represents the independent judgement of the City of Los Alamitos, acting as the Lead Agency pursuant to the CEQA, and evaluates the physical environmental effects that could result from construction and operation of the proposed Project. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-213 The commenter expresses concerns with increased traffic, air quality, and noise pollution. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-40 regarding noise impacts.

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17-214 The commenter expresses concerns with limited parking, lack of parks/recreation area, impacts to school services, impacts to emergency service providers, construction equipment impacts to Lampson, construction noise, impacts on animals, aesthetics, water supply, and water quality during construction. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area. Refer to Response to Comment 17-79 regarding impacts to school services. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Refer to Response to Comment 17-77 regarding construction equipment. Refer to Response to Comment 17-36 regarding construction noise. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds. Refer to Response to Comment 17-65 regarding aesthetic concerns. Refer to Response to Comment 17-26 regarding water supply.

As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction or long-term operation. Impacts would be less than significant and no mitigation is required (refer to Pages 4.9-14 through 4.9-16 of the Draft EIR).

17-215 The commenter requests consideration of the above-mentioned concerns in the Draft EIR. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-216 The commenter expresses concerns related to infrastructure to support the Project, impacts to public services, and water supply. The commenter recommends a park instead of the Project. Refer to Response to Comment 17-81 regarding utilities concerns. Refer to Response to Comment 17-154 regarding impacts to public services. Refer to Response to Comment 17-26 regarding water supply. Refer to Response to Comment 17-14 regarding the Project's proposed open space area. The commenters recommendation for a park is acknowledged and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-217 The commenter expresses concerns with insufficient parking spaces, traffic congestion, loss of parking for sporting events at Arbor Park, accidents and safety. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns; 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and 2.1.3, *Parking*, regarding parking concerns.

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17-218 The commenter expresses general opposition to the Project and concerns with traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-219 The commenter expresses concerns with traffic on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-220 The commenter expresses concerns with impacts to school services. Refer to Response to Comment 17-79 regarding impacts to school services.

17-221 The commenter expresses concerns with emergency access and evacuation. Refer to Response to Comment 17-132 for emergency access and 17-168 for evacuation.

17-222 The commenter expresses concerns with additional traffic on Lampson Avenue and impact of construction trucks on the roadway. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Maintenance and repair concerns regarding the "wear and tear" of streets would be addressed by the agencies with jurisdiction over those roadways to the extent the Project construction results in any damage to streets or roadways. Refer to Response to Comment 17-77 regarding heavy construction equipment.

17-223 The commenter expresses concerns with emergency and evacuation routes. As discussed in Section 3.0, *Project Description*, of the Draft EIR, vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site (full access driveway). Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site (refer to Page 3-4 of the Draft EIR). Refer to Response to Comment 17-132 regarding emergency access. As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, the City currently does not have any designated evacuation routes, however, the EOP recognizes that during a major evacuation event, all major roadways would be available for evacuation purposes. Implementation of the Project would not result in changes to the existing roadways that would impair or physically interfere with the EOP or evacuation routes (refer to Page 4.8-21 of the Draft EIR).

17-224 The commenter expresses concerns with aesthetics of the proposed apartments. Refer to Response to Comment 17-65 regarding aesthetic concerns.

17-225 The commenter expresses concerns with impacts to existing parks and proposed open space. The commenter recommends the Project be reduced/modified. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area. Additionally, refer to Master Response 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities*.

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17-226 The commenter expresses concerns with inadequate parking, traffic congestion, impacts to emergency response, air quality, noise pollution, and impacts to school services. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-79 regarding impacts to school services.

17-227 The commenter inquires about the Project timeline and proposed means of entry for the Project site. For purposes of analysis in the Draft EIR, construction is assumed to occur over a period of approximately 39.5 months. The estimated Project construction schedule, organized by construction stage, is summarized in Table 3-4, *Estimated Construction Schedule* of the Draft EIR. The Project is anticipated to be partially operational in early 2025 with some buildings being fully constructed by that time (refer to Pages 3-4 through 3-14 of the Draft EIR). As discussed in Section 3.0, *Project Description*, of the Draft EIR, vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site.

17-228 The commenter expresses concerns with traffic on Lampson Avenue, Seal Beach Boulevard, and Valley View. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-229 The commenter expresses concerns with traffic congestion and safety, GHG emissions, hazardous materials, air quality, and noise pollution. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns. Refer to Response to Comment 17-48 regarding greenhouse gas emissions. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-40 regarding noise impacts.

As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, the Project site does not contain any hazards, nor is the Project site affected by any off-site hazards. During Project construction and operation, mandatory compliance with federal, State, and local regulations would ensure that the proposed Project would not create a significant hazard to the environment due to routine transport, use, disposal, or upset of hazardous materials. Impacts would be less than significant (refer to Pages 4.8-15 through 4.8-17 of the Draft EIR).

17-230 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment

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letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-231 The commenter expresses concerns with existing views of the mountains, trees, and wildlife, excessive noise, bright lights, traffic, pollution, and overcrowding. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-113 regarding light pollution. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-34 regarding pollution concerns. Refer to Response to Comment 17-73 for population growth.

As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, the Project development would block the partial and distant views of the San Gabriel Mountains from Lampson Avenue along the project frontage. However, redevelopment of the Project site would not result in a substantial adverse effect on a scenic vista, because background views of the San Gabriel Mountains are distant and limited due to existing development and landscaping and the Project site is not considered to be part of a designated scenic vista. Therefore, impacts would be less than significant (refer to Pages 4.1-8 through 4.1-10 of the Draft EIR).

17-232 The commenter expresses concerns with traffic, noise, pollution, overcrowding, safety and quality of life for people and animals. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-34 regarding pollution concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-233 The commenter expresses concerns with noise from traffic impacting residents, pets and wildlife. Refer to Response to Comment 17-113 regarding off-site traffic noise impacts. Section 4.11, *Noise*, of the Draft EIR, analyzed the Project's construction and operational related noise impacts and found impacts to be less than significant. Under Public Resources Code Section 21085, social noise generated by project occupants and their guests is not considered a significant environmental impact of residential projects on humans for CEQA purposes.

17-234 The commenter expresses concerns with noise from school buses, children and the safety of children crossing the street in the absence of a bus stop. Refer to Response to Comment 17-113 regarding off-site traffic noise impacts. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

17-235 The commenter expresses concerns with noise impacts to wildlife and safety of wildlife crossing Lampson Avenue. The commenter also expresses concern that noise from the Project will impact residents with special needs and those sensitive to sound and requests that a study be completed to determine impacts on these residents.

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As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other offsite areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasive species, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites. The Project site is not surrounded by or adjacent to natural open space; rather, adjacent facilities include Arbor Dog park, Arbor Park and the Navy Golf Course which are recreational facilities subject to regular human uses and associated disturbances, including noise. The Project is not expected to result in indirect effects to biological resources as the Project site is predominantly developed with existing outdoor lighting in place and the proposed Project would incorporate measures to minimize indirect light spillover into the adjacent areas including Arbor Park, Navy Golf Course, and JFTB (refer to Page 4.3-31 of the Draft EIR).

As indicated in Section 4.1, *Noise*, of the Draft EIR, some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than commercial or industrial developments and related activities (refer to Page 4.11-3 of the Draft EIR). This section analyzed noise level impacts at nearby sensitive receiver locations, as required by CEQA, and impacts were found to be less than significant.

17-236 The commenter expresses concerns with noise from existing noise sources (e.g. fighter jets, military vehicles, police helicopters training, and traffic on Lampson) and the Project's heavy equipment for construction and its cumulative effect on residents. Refer to Response to Comment 17-36 regarding construction noise.

17-237 The commenter expresses concerns with AYSO operation and overflow parking into surrounding neighborhoods adding increased noise and air pollution to College Park East. The commenter also expresses concern regarding additional pollution from increased vehicles, health impacts negative affects to aesthetics, and how added air pollution may affect property values and requests studies to address these concerns.

A parking study (*Technical Appendix Q* of the Draft EIR) has been conducted for the Project to evaluate the parking need at Arbor Park and Arbor Dog Park, including AYSO Region 159 uses. Refer to Master Response 2.1.3, *Parking*, for the results of the parking study and overflow

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parking. Additionally, as discussed in Section 4.2, *Air Quality*, of the Draft EIR, the increase in vehicle trips associated with the Project would not result in significant air quality impacts or health affects to nearby sensitive receptors, including residents at College Park East (refer to Page 4.2-27 through 4.2-29 of the Draft EIR).

Regarding AYSO overflow parking, if there were not adequate parking spaces for an AYSO soccer game event, vehicles would have the option of dropping off players/visitors at the park and/or driving a short distance to available parking off-site and walking to the park. These scenarios would not result in the addition of new vehicle trips attributable to the Project. Additionally, any change in vehicle trip distance would be negligible, as it would only occur on Saturdays during soccer season. Because these vehicles are arriving at certain appointed times to watch or participate in these events, they are not expected to circle the parking lot to wait until a parking space became available. As such, vehicles unable to find adequate parking would not result in any significant traffic impacts related to congestion at the site or air quality impacts related to emissions (refer to Page 4.2-25 of the Draft EIR). Property value is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. Thus, no further response is required regarding property values.

17-238 The commenter expresses concerns about insufficient parking available and indirect noise impacts from people parking and talking in the neighborhood. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Indirect social noise impacts are not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project

17-239 The commenter expresses concerns about Project lighting and how it will impact drivers, residents and wildlife. The commenter requests 3-D renderings of how the Project will appear from the College Park East backyards from Heather to Rose Streets and requests a daytime and nighttime [lighting] model for all residents adjacent to Lampson Avenue in College Park East between these streets. Refer to Response to Comment 17-113 regarding lighting impacts and 17-2135 for indirect impacts such as lighting to wildlife. Additionally, visual rendering of the Project on Lampson Avenue is shown in Figure 4.1-2 and 4.1-3 of the Draft EIR. For purposes of evaluating aesthetic impacts under CEQA, views from public vantage points, not private views (e.g. from the backyards of residents), are required to be evaluated.

17-240 The commenter expresses concerns about Project lighting affecting wildlife and requests a shade study. The commenter questions whether solar panels will be included to help with the energy crisis. Refer to Response to Comment 17-235 related to indirect impacts to biological resources. Additionally, the Project will include solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually as a Project Design Feature (PDF GHG-1). Moreover, pursuant to the commenter's request, a shade and shadow study was conducted for the Project (*Attachment I* of this Final EIR). The study provides 3 shade and shadow conditions (9 AM,

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11AM, 3PM) for winter solstice (December) and summer solstice (June) periods. The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months. In the Northern Hemisphere, the longest day and shortest night of the year occur on the Summer Solstice (on June 21 or 22), marking the beginning of summer. The shortest day and longest night of the year occur on the Winter Solstice (December 21 or 22), marking the beginning of winter. The measurement of shadow lengths that occur at the winter and summer solstices therefore represent the most extreme shadow patterns that occur throughout the year. As shown, during the summer period, the shade and shadow would mostly be confined to the Project site without spillover to adjacent properties. During the winter period, shade and shadow would spillover in the northwestern direction during 9AM and in the northeastern direction during 11 AM. However, the shade and shadow footprint would be minimal and would occur on roadway to the east and parking lot to the north. Therefore, the Project would not result in a significant change in the shade or shadow footprint to nearby properties and open space, and this analysis confirms that the Project will not result in any impacts related to shade or shadow to nearby properties and open space.

17-241 The commenter expresses concerns with the lack of a traffic light, safety and congestion. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns and Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic congestion concerns.

17-242 The commenter expresses concerns with pollution and dust from construction and vehicles and their impact to residents and wildlife. The commenter questions how many trees will be cut down. The commenter requests that a study be completed to determine how this added pollution will impact neighboring communities.

As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the Project requires removal of existing ornamental trees (refer to Page 4.3-33 of the Draft EIR). As shown in Figure 3- 18, *Landscape Plan*, a total of 441 trees would be planted throughout the Project site to replace the existing trees onsite. Impacts to wildlife were also addressed in Section 4.3, *Biological Resources*, of the Draft EIR, and determined to be less than significant with mitigation measures incorporated.

An air quality impact analysis was conducted and included as *Technical Appendix B1* of the Draft EIR. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction. The land use with the greatest potential exposure to Project construction-source diesel particulate matter (DPM) emissions is Location R3 which is located approximately 86 feet south of the Project site at an existing residence located at 4625 Ironwood Avenue. R3 is placed in the private outdoor living areas (backyard) facing the Project

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site. At the Maximally Exposed Individual Receptor (MEIR), the maximum incremental cancer risk attributable to Project construction-source DPM emissions is estimated at 2.59 in one million, which is less than the South Coast AQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be less than 0.01, which would not exceed the applicable threshold of 1.0. Location R3 is the nearest receptor to the Project site and would experience the highest concentrations of DPM during Project construction due to meteorological conditions (wind speed and direction) at the site. Because all other modeled receptors would experience lower concentrations of DPM during Project construction, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified for location R3. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction activity (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

17-243 The commenter expresses concerns with the lack of proposed playgrounds, shopping centers, grocery stores, recreational amenities and other community resources such as walking paths, business centers and public transportation hubs. The commenter expresses concern that the current facilities and resources cannot handle additional overcrowding and wear. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to recreational facilities and refer to Response to Comment 1-73 for overcrowding concerns. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-244 The commenter expresses concerns with traffic and parking. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-245 The commenter expresses concerns with the height of the proposed structures. Refer to Response to Comment 17-65 regarding aesthetic concerns.

17-246 The commenter expresses concerns with safety on Lampson Avenue. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-247 The commenter expresses concerns with lack of available parking and use of existing parks for parking and recreation, and overcrowding. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Response to Comment 17-73 regarding population growth.

17-248 The commenter expresses concerns with the proposed density. Refer to Response to Comment 17-71 regarding land use consistency.

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17-249 The commenter expresses concerns with Project site ingress and egress, uncontrolled intersections and safety on Lampson. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*,regarding safety concerns. As discussed in Section 3.0, *Project Description*, of the Draft EIR, vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site (refer to Page 3-4 of the Draft EIR).

17-250 The commenter inquires about proposed open space/recreational area. Refer to Response to Comment 17-14 regarding the Project's proposed open space area.

17-251 The commenter inquires about guest parking. Refer to Master Response 2.1.3, *Parking*.

17-252 The commenter questions what is meant by affordable housing. As discussed in Section 3.0, *Project Description*, the Project intends to provide a variety of affordable housing types to support middle-income workers (refer to Pages 3-1 through 3-2 of the Draft EIR). Middle-income workers are characterized as Moderate Income as defined in the City's Housing Element.

17-253 The commenter inquires about Project construction impacts including road closures, construction equipment and noise impacts. Refer to Response to Comment 17-36 regarding construction noise. As discussed in Section 4.15, *Transportation*, of the Draft EIR, during construction, frontage improvements including median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements would be constructed in accordance with City standards. Refer to Response to Comment 17-67 regarding road closures.

17-254 The commenter expresses concerns with the zoning and incompatible use of the Project. Refer to Response to Comment 17-71 regarding land use consistency.

17-255 The commenter expresses concerns with construction noise, pollution, road closures, increased traffic, parking, use of existing parks, increased crime, and property values. Refer to Response to Comment 17-36 regarding construction noise. Refer to Response to Comment 17-34 regarding pollution concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Response to Comment 17-62 regarding police protection services and 17-67 above regarding construction road closures. The commenter also expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

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17-256 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-257 The commenter expresses concerns with traffic safety. Refer to Master Response 2.1.1, *Traffic Concerns/Congestion* regarding traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-258 The commenter expresses concerns with air quality. Refer to Response to Comment 17-35 for air quality impacts. Moreover, as discussed in Section 4.2, *Air Quality*, of the Draft EIR, impacts associated with Project-related construction and operational emissions would be less than cumulatively considerable. The Project would also have a less-than-cumulatively considerable LST impact during construction and long-term operation and impacts associated with CO "Hot Spots" would be less than cumulatively considerable (refer to Page 4.2-30 of the Draft EIR).

17-259 The commenter expresses concerns with noise pollution. Refer to Response to Comment 17-40 regarding noise impacts. Moreover, as discussed in Section 4.11, Noise, of the Draft EIR, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations during both construction and operation (refer to Page 4.11-34 of the Draft EIR). Refer also to Response to Comment D-9 for cumulative offsite traffic noise impacts.

17-260 The commenter expresses concerns with impacts to existing parks and recreation. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-261 The commenter expresses concerns with limited parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-262 The commenter expresses concerns with emergency response. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services.

17-263 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

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17-264 The commenter expresses concerns with traffic safety. Refer to Master Response 2.1.1, *Traffic Concerns/Congestion* regarding traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-265 The commenter expresses concerns with air quality. Refer to Response to Comment 17-35 regarding air quality impacts. Moreover, as discussed in Section 4.2, *Air Quality*, of the Draft EIR, impacts associated with Project-related construction and operational emissions would be less than cumulatively considerable. The Project would also have a less-than-cumulatively considerable LST impact during construction and long-term operation and impacts associated with CO "Hot Spots" would be less than cumulatively considerable (refer to Page 4.2-30 of the Draft EIR).

17-266 The commenter expresses concerns with noise pollution. Refer to Response to Comment 17-40 regarding noise impacts. Moreover, as discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations during both construction and operation (refer to Page 4.11-34 of the Draft EIR). Refer also to Response to Comment D-9 for cumulative offsite traffic noise impacts.

17-267 The commenter expresses concerns with impacts to existing parks and recreation. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-268 The commenter expresses concerns with limited parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-269 The commenter expresses concerns with emergency response. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services.

17-270 The commenter expresses general opposition to the Project and expresses concerns with traffic, noise pollution and safety. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-40 regarding noise impacts.

17-271 The commenter expresses concerns with noise and air pollution. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-35 regarding air quality impacts. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, impacts associated with Project-related construction and operational emissions would be less than cumulatively considerable. The Project would also have a less-than-cumulatively considerable LST impact during construction and long-term operation and impacts associated with CO "Hot Spots" would be less than cumulatively considerable (refer to Page 4.2-30 of the Draft EIR). Moreover, as discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations during both

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construction and operation (refer to Page 4.11-34 of the Draft EIR). Refer also to Response to Comment D-9 for cumulative offsite traffic noise impacts.

17-272 The commenter expresses concerns with damage to roads from the addition of heavy road equipment and vehicles; traffic congestion; and safety for pedestrians with additional drivers. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and Response to Comments 17-77 and 17-222 regarding road impacts from heavy equipment.

17-273 The commenter expresses concerns with pedestrian safety and traffic accidents. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for safety concerns.

17-274 The commenter expresses concerns with insufficient parking; overcrowding of existing parks; and crime with the addition of more people. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area. Refer to Master Response 2.1.8, *Public Safety*, regarding safety concerns.

17-275 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-276 The commenter expresses concerns with EIR topics such as aesthetics, air quality, cultural resources, construction noise and road closures, emergency response, greenhouse gas emissions, hazards and hazardous materials, land use and planning, noise pollution, population and housing, recreation, public services, schools and library impacts, and utilities and services systems. The commenter also expresses concerns regarding parking, road impacts from heavy equipment, rodents, and traffic safety. As discussed in Section 4.0, *Environmental Analysis*, of the Draft EIR, taking all known information and public comments into consideration, 17 primary environmental subject areas were evaluated in detail. Each subsection evaluated several specific subject matters related to the primary environmental subject. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein (refer to Page 4-1 of the Draft EIR). Please also refer to Master Response 2.1.3, *Parking*, regarding parking concerns, Response to Comment 17-77 regarding road impacts from heavy equipment, and Response to Comment 9-21 regarding rodent concerns.

17-277 The commenter expresses general concerns to the Project which are responded to below.

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17-278 The commenter expresses concerns about traffic congestion, particularly during school drop off hours. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-279 The commenter expresses concerns with parking, including meeting the needs for guest/overflow parking. Refer to Master Response 2.1.3, *Parking,* regarding parking concerns.

17-280 The commenter expresses concerns with air quality during demolition of the existing building. Refer to Response to Comment 17-242 regarding air quality impacts to sensitive receptors during construction.

17-281 The commenter requests parking studies to ensure sufficient parking for residents to avoid impacts to College Park East and other neighborhoods. The commenter notes that there are no existing groceries or schools within walking distance. The commenter requests that studies be completed on the increased traffic and pollution, especially noise and smog. An Onsite Parking Analysis, Traffic Analysis, Noise Impact Analysis, Air Quality Impact Analysis, and Health Risk Assessment were prepared for the Project and are included in Draft EIR *Technical Appendices P, N1, K, B1* and *B2*, respectively.

17-282 The commenter expresses concerns with increased traffic impact on surrounding streets including accidents and congestion, and rezoning Arbor Park for residential development. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue,* regarding roadway safety concerns. Refer to Response to Comment 17-71 regarding land use consistency. The commenter also expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-283 The commenter expresses concerns with property value, construction and road closures, public services response times, traffic safety, noise, air quality, greenhouse gas emissions, parking, pressure on schools and parks, and rodents and sanitation. Refer to Response to Comment 17-154 regarding impacts to public services. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue,* regarding pedestrian safety concerns. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-48 regarding greenhouse gas emissions. Refer to Master Response 2.1.3, *Parking,* regarding parking concerns. Refer to Response to Comment 17-79 regarding school services. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Response to Comment 17-28 regarding sanitation. Refer to Response to Comment 17-67 regarding road closures. Refer to Response to Comment 9-21 regarding rodent concerns. See response to comment 17-284 regarding property values.

17-284 The commenter expresses concerns with property value. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments

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were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-285 The commenter expresses concerns with construction road closure. Refer to Response to Comment 17-67 above regarding construction road closures.

17-286 The commenter expresses concerns with public services response times, safety concerns due to increased traffic, increased noise, and impacts to air quality and greenhouse gas emissions. Refer to Response to Comment 9-15 regarding public service response times, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns, Response to Comment 17-40 regarding noise impacts, Response to Comment 17-35 regarding air quality concerns, and Response to Comment 17-48 for greenhouse gas emissions impacts.

17-287 The commenter expresses concerns with impacts to school services, parks, and sanitation. Refer to Response to Comment 17-79 regarding school services. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Response to Comment 17-28 regarding sanitation.

17-288 The commenter expresses concerns with inadequate parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-289 The commenter expresses concerns with vehicle access to the Project site and safety issues for emergency vehicles and school buses. As discussed in Section 3.0, *Project Description*, of the Draft EIR, vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site (refer to Page 3-4 of the Draft EIR). Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns.

17-290 The commenter expresses concerns with the lack of proposed open space for recreation, and safety for children crossing Lampson to access recreational facilities. The commenter also expresses concern regarding an increase in VMT and the elimination of the current Park-n-Ride lot. The commenter suggests adding a formal telework center to the project to reduce mobile source emissions and air pollution. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding open space concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns, 2.1.1, *Transportation and Traffic Congestion*, regarding VMT impacts, and Response to Comment 10-5 regarding impacts related to the existing Park-n-Ride and telework recommendation.

17-291 The commenter states that California law requires solar panels on new housing and zero emission electric vehicle charging stations which are not mentioned in the schematics. As part of the Project's Project Design Features (PDFs), the Project will include solar photovoltaic

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with the capability to generate up to 1,229,520 kWh/annually (PDF GHG-1) and the Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1 (PDF GHG-4) (refer to Page 4.5-6 to 4.5-7 of the Draft EIR). Thus, no revisions to the Draft EIR are required.

17-292 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

17-293 The commenter expresses concerns with EIR topics, traffic congestion, pollution, and proposed density. Refer to Response to Comment 17-276 regarding EIR topics. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-35 regarding pollution concerns. Refer to Response to Comment 17-71 regarding land use consistency.

17-294 The commenter expresses concerns with parking at Arbor Park, the dog park and overflow into the surrounding communities. The commenter also expresses concern for the safety of families crossing Lampson to get to recreational facilities. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-295 The commenter expresses concerns with impacts to existing parks, pedestrian safety, lack of public transportation, crime, and property values. Refer to Response to Comment 17-11 for impacts to existing recreational facilities. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Refer to Response to Comment 17-62 regarding police protection services. Property value is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-296 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. However, it should be noted that, since these NOP comments were written prior to the preparation and release of the Draft EIR, the comment letters do not address the adequacy of the environmental analysis in the Draft EIR. Thus, no further response is required.

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17-297 The commenter expresses concerns with traffic congestion, safety issues on Lampson, parking and increased crime. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, 2.1.3, *Parking* regarding parking concerns and 2.1.6, *Public Safety*, regarding public safety concerns.

17-298 The commenter expresses concerns with insufficient parking for residents of the Project and the lack of parking for recreational users of Arbor Park. The commenter also expresses concern regarding traffic, safety, recreation, noise, pollution from cars, stress on public services. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Section 4.14, *Recreation*, of the Draft EIR for analysis regarding the Project's impact on existing recreational facilities. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-34 regarding pollution concerns. Refer to Response to Comment 17-154 for impacts to public services.

17-299 The commenter expresses concerns with medical response times, overcrowding of medical facilities, increased traffic causing safety concerns on Lampson, and lack of parks and open space. Refer to Response to Comment 17-111 regarding medical response and overcrowding of medical facilities. Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-300 The commenter expresses concerns with increased traffic and congestion and requests that an environmental study assess traffic impacts, accident risk, and emissions. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-48 regarding greenhouse gas emissions.

17-301 The commenter expresses concerns with the lack of public outreach other than the mandated 500 feet notification radius. Refer to Response to Comment 17-51 regarding public noticing procedures

17-302 The commenter expresses concerns with insufficient parking, increased traffic with no additional traffic control devices, and safety issues on Lampson. Refer to Master Response

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2.1.3, *Parking*, regarding parking concerns. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-303 The commenter expresses concerns with parking, pedestrian and cyclist safety and the adequacy of Lampson to handle additional vehicles. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns, and 2.1.1, *Transportation and Traffic Congestion*, regarding the capacity of Lampson Avenue.

17-304 The commenter expresses concerns with additional traffic on Lampson Avenue, resulting traffic accidents that may occur and traffic congestion. The commenter requests technical studies on the braking reaction times for vehicles traveling eastbound on Lampson Avenue at the intersections of Basswood Street, Candleberry Avenue and Heather Drive. The commenter also requests that studies address any additional traffic control signals devices or modifications needed to the existing devices. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns, including stopping sight distance. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns.

17-305 The commenter expresses concerns with traffic congestion, especially during the school commute, and requests a study on the phasing of the traffic control devices at Lampson Avenue and Seal Beach Boulevard and whether a right turn lane should be added. The commenter also requests a study of the traffic control devices at the intersection of Old Ranch Plaza and Lampson Avenue and would like to know what changes or modifications to these traffic control devices are proposed. A Traffic Analysis was prepared for the Project (included as Draft EIR *Technical Appendix N1* and *Attachment G* to this Final EIR*)* which evaluated potential circulation system deficiencies that may result from the development of the Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns which includes the results of the Traffic Analysis and the recommended improvement.

17-306 The commenter expresses concerns with traffic congestion and safety for those at the intersection of Seal Beach Boulevard and St. Cloud Drive. The commenter requests a study of the traffic control devices at southbound Seal Beach Boulevard at Lampson Avenue and additional lanes or modifications to the traffic control devices. The commenter also expresses concern for bicycles traveling on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns. A Traffic Analysis was prepared for the Project (included as Draft EIR *Technical*

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Appendix N1 and *Attachment G* to this Final EIR*)* which evaluated potential circulation system deficiencies that may result from the development of the Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. Regarding the commenter's concern on Seal Beach Boulevard and St. Could Drive, the Project contributes less than 50 peak hour trips to this intersection and the intersection lies outside of the study area that has been evaluated in the Traffic Analysis. Therefore, Project's contribution/effect to this intersection is not expected to meet applicable thresholds to warrant improvements to be implemented by the Project.

17-307 The commenter expresses concerns with pedestrian crossing, use of existing parks, and recommends roadway improvements including the addition of a sidewalk to the north side of Lampson Avenue between Seal Beach Boulevard and Tulip Drive. The commenter also requests a study on the impact of foot traffic on Lampson Avenue due to the Project, stating that California's "jaywalking" law will change in January of 2023 and allow for people to cross any street, as long as they safely cross, without impeding vehicular traffic. AB 2147, the Freedom to Walk Act, would decriminalize jaywalking when the roadway is safe to cross. A Safety Evaluation was prepared to confirm that the Project would have no safety impacts on public roadways and Project access points (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H* of this Final EIR). The Safety Evaluation further confirms the analysis and determination in the Transportation Section (Section 4.15) of the Draft EIR that the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding a summary of the Safety Evaluation and issues relating to pedestrian safety. Regarding the request for an additional sidewalk on Lampson Avenue between Seal Beach Boulevard and Tulip Drive, the Project would include improvements to sidewalks along the Project's frontage on Lampson Avenue; sidewalk areas beyond the Project site's frontage are not included within the Project boundary or within the scope of the Project. However, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. Refer also to Response to Comment 17-11 regarding impacts to existing recreational facilities.

17-308 The commenter expresses concern regarding traffic congestion at the intersection of Valley View Street and Lampson Avenue and requests a study on the traffic signal time and where additional traffic signal devices need to be added or modified. The commenter also requests a dedicated right turn lane be added in this area for vehicles making a right turn from Lampson Avenue to southbound Valley View Drive. The commenter also requests traffic studies for Blackmer Street, Trinette Avenue, Cerulean Avenue, Tunstall Street, St. Mark Street, and Tiffany Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Transportation analysis under CEQA is now based on VMT rather than impacts to automobile delay-based level of service (LOS) (traffic congestion). A Traffic Analysis was prepared for the Project and is included as Draft EIR *Technical Appendix N1*, and an updated Traffic Analysis was prepared and included as *Attachment G* to this Final EIR. The intersections selected for analysis is based on discussion with the City of Los Alamitos,

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Seal Beach, and Garden Grove staff. Additionally, the roadway of Blackmer, Trinette, Tunstall, St. Mark, Tiffany, and Cerulean are all internal streets to an existing residential neighborhood. Industry standard recognizes that any contribution less than 50 peak hour trips does not cause a significant increase in delay. The Project is not anticipated to contribute more than 50 peak hour trips to any of these roadways and therefore does not warrant further analysis. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns. The peak hour intersection operations analysis presented in the Traffic Analysis indicates the intersection of Valley View Drive and Lampson Avenue operates at an acceptable LOS and meets the City of Garden Grove's operational standards. As such, no improvements are needed. Furthermore, there is no available right-of-way to implement an eastbound right-turn lane without acquiring property/right-of-way.

17-309 The commenter expresses concerns with a lack of parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns

17-310 The commenter expresses concerns with lack of parking and traffic. The commenter requests a study on the potential occupancy of both the Project and College Park East developments and how many vehicles would be associated with the residents. The commenter also requests a study of how the extra vehicular traffic from the development will cause wear and tear of the streets within College Park East and Lampson Avenue. Refer to Master Response 2.1.3, *Parking*, for parking concerns which includes the results of the Onsite Parking Analysis (*Technical Appendix P* of the Draft EIR), and 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Maintenance and repair concerns regarding the "wear and tear" of streets would be addressed by the agencies with jurisdiction over those roadways. Additionally, a condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes.

17-311 The commenter expresses concerns with proposed open space and impacts to existing parks. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area. Additionally, refer to Master Comment 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities*, for concerns regarding open space.

17-312 The commenter expresses concerns regarding decreased emergency response times and requests a study of the impact the Project will have on the Seal Beach Police Department services deployed to assist the Los Alamitos Police Department. The commenter requests information on whether additional police officers would need to be hired to handle the increase in potential service calls. The commenter also requests a study on the impact additional residents will have on the response time of Orange County Fire Department. Refer to Response to Comment 17-154 regarding impacts to public services.

17-313 The commenter expresses concerns with construction noise and road impacts and requests a study on how the developer would manage demolition, removal of debris, and transportation

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of construction equipment and materials. The commenter also expresses concern regarding the impact of heavy equipment on the integrity of Lampson. The commenter requests a study on how additional cut through traffic due to construction on Lampson would impact College Park East and Garden Grove. Refer to Response to Comment 17-67 regarding road closures during construction. Refer to Response to Comment 9-19 regarding construction noise and Response to Comment 17-77 regarding road impacts from heavy equipment. Even though it is not reasonably foreseeable that one construction project would significantly deteriorate a roadway, maintenance and repair concerns regarding the "wear and tear" of streets would be addressed by the agencies with jurisdiction over those roadways. Additionally, the Project would be required to comply with South Coast AQMD Rule 403, which is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. There is no cut-through traffic that is assumed to occur (or any that has been evaluated) with the completion of the Project through any of the adjacent local residential streets since these streets do not provide any direct connection to the regional freeway system. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* for a detailed discussion on cut-through traffic into existing neighborhoods.

As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, based on the approximate construction waste generated per day, demolition and construction waste generated by the Project is not anticipated to cause these landfills to exceed their maximum permitted daily disposal volume. Furthermore, none of these regional landfill facilities are expected to reach their total maximum permitted disposal capacities during the Project's construction period. In addition, the Project would be required to comply with LAMC Chapter 8.13, Construction and Demolition Waste, which requires the Project Applicant to divert a minimum of 50 percent of the construction and demolition debris resulting from the proposed development in compliance with State and local statutory goals and policies (refer to Pages 4.17-19 through 4.17-20 of the Draft EIR).

17-314 The commenter requests a technical study on glare impacts and visual impacts of the 3-story building. The commenter expresses concern regarding the lack of privacy for Ironwood Avenue residents and requests a visual simulation for residents between 4509 and 4701 Ironwood Avenue. Refer to Response to Comment 17-113 regarding light and glare concerns. Refer to Response to Comments 17-65 and 17-239 regarding aesthetic concerns.

17-315 The commenter expresses concerns with the rodent population due to animals dispersing into nearby neighborhoods during construction. Refer to Response to Comment 9-21 regarding rodent concerns.

17-316 The commenter requests a technical study on impacts to wildlife, particularly related to how the Project would impact the coyote and rabbit population. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife. With respect to biological resources, CEQA requires an analysis of a Project's impacts to special status wildlife species. Impacts to

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common wildlife species, such as coyotes and rabbits, are not evaluated as protected species under CEQA.

17-317 The commenter requests a technical study on street lighting in the area, noting that there is limited lighting on Lampson Avenue between Valley View Street and Seal Beach Boulevard. This comment pertains to the existing lighting and it does not raise any concerns related to the Project's potential for impacts on the physical environment or the sufficiency of the environmental analysis in the Draft EIR. No further response to this comment is required.

17-318 The commenter expresses general opposition to the Project due to increased traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-319 The commenter expresses concerns that the Project would negatively impact EIR topics such as Aesthetics, Air Quality, Cultural Resources, Construction Noise and road closure, Fire / Police / Medical Response, Greenhouse Gas Emissions, Hazards & Hazardous Materials, Land Use & Planning, Noise Pollution (vehicles on Lampson), Population & Housing, Public Services, Recreation, Road impacts from heavy equipment, Rodents, Schools / Libraries, Traffic Safety, and Utilities & Service Systems. The commenter also expresses concern regarding parking. Refer to Response to Comment 17-276 regarding concerns regarding EIR topics. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-320 The commenter expresses concerns with impacts to existing parks, traffic congestion, pollution and an imbalance of housing in a small area. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-35 regarding pollution concerns. Refer to Response to Comment 17-71 regarding land use consistency.

17-321 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-322 The commenter expresses concerns with EIR topics. Refer to Response to Comment 17-276 regarding concerns regarding EIR topics.

17-323 The commenter requests submittal of studies pertaining to environment, fire and police services, parking, population growth, and school services. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-73 regarding population growth. Refer to Response to Comment 17-79 regarding impacts to school services.

17-324 The commenter expresses general opposition to the Project due to noise pollution, air quality, traffic, and parking and requests proper impact studies to be prepared and reviewed. A Noise

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Impact Analysis, Air Quality Impact Analysis, Traffic Analysis, and Onsite Park Analysis was prepared and are included as Draft EIR *Technical Appendix K, B1, N1, and P*, respectively. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-325 The commenter requests amendment of prior comments. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-326 This comment is part of an email template requesting examples of how the Project could negatively affect the community. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-327 This comment lists the EIR topics. Refer to Response to Comment 17-276 regarding EIR topics.

17-328 The commenter expresses concerns with low-income housing, Section 8 government supported housing and increased crime. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the Project intends to provide a variety of affordable housing types to support middle-income workers (refer to Pages 3-1 through 3-2 of the Draft EIR). Refer to Response to Comment 17-62 regarding police protection.

17-329 The commenter expresses concerns with crime. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Refer also to Response to Comment 17-62 regarding police protection.

17-330 The commenter opposes the Project stating concerns about traffic, increase in car accidents, and congestion and requests the Project be scaled back. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. In regard to scaling the Project back, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-331 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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17-332 The commenter expresses concerns regarding traffic, accidents and questions where the water supply for the additional units will come from. The commenter also expresses concern regarding parking for residents of the Project as well as those utilizing Arbor Park. The commenter is also concerned about existing parks handling additional people. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue,* regarding roadway safety concerns. Refer to Response to Comment 17-26 regarding water supply concerns. Refer to Master Response 2.1.3, *Parking,* regarding parking concerns. Refer to Response to Comment 17-31 regarding concerns regarding impacts to existing recreational facilities.

17-333 The commenter lists the EIR topics and expresses concerns with traffic. Refer to Response to Comment 17-276 regarding EIR topics. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns. Note that aesthetic impacts under CEQA evaluate view impacts from public spaces, and not from private backyard views.

17-334 The commenter expresses concerns with traffic, safety and noise on Lampson Avenue. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue,* regarding roadway safety concerns. Refer to Response to Comment 17-113 for off-site traffic noise impacts.

17-335 The commenter expresses concerns with traffic noise, construction noise, pollution and air quality. As discussed in Section 4.11, *Noise,* of the Draft EIR, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to Project-related traffic noise level increases and off-site traffic related noise impacts would less than significant (refer to Pages 4.11-25 through 4.11-29 of the Draft EIR). Refer to Response to Comment 17-36 for construction noise concerns. Refer to Response to Comment 17-34 for pollution and air quality concerns.

17-336 The commenter expresses concerns with open space, wildlife, including bird species like the burrowing owl, and proposed density. Refer to Response to Comment 17-11 impacts to existing recreational facilities and Response to Comment 17-14 the Project's proposed open space area. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds. Refer to Response to Comment 17-71 regarding land use consistency. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-337 The commenter expresses concerns with traffic congestion, traffic accidents, impacts to schools, and parks. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue,* regarding roadway safety concerns. Refer to Response to Comment 17-79 regarding impacts to school services. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

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17-338 The commenter expresses concerns with noise pollution, parking and road impacts from heavy equipment. Refer to Response to Comment 17-113 regarding off-site traffic noise impacts. Refer to Master Response 2.1.3, *Parking,* regarding parking concerns. Refer to Response to Comment 17-77 regarding road impacts from heavy equipment.

17-339 The commenter expresses concerns with traffic safety and impacts to existing parks. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities.

17-340 The commenter expresses concerns with parking plan, open space, and traffic. Refer to Master Response 2.1.3, *Parking,* for parking concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-341 The commenter expresses concerns with additional traffic, air quality impacts, noise pollution on Lampson Avenue, traffic safety, loss of parking, and impacts to schools. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-113 above for off-site traffic noise impacts. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns and 2.1.3, *Parking,* for parking concerns. Refer to Response to Comment 17-79 regarding impacts to schools.

17-342 The commenter expresses concerns with traffic, safety, impacts to existing parks and property value. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Property value is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-343 The commenter lists out EIR topics and expresses general opposition to the Project. Refer to Response to Comment 17-276 regarding EIR topics. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-344 The commenter expresses concerns with dust from construction and health impacts. Refer to Response to Comment 17-205 regarding erosion control and dust control measures. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR). In regard to dust

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from additional traffic upon completion of construction, the air quality analysis evaluated the increase criteria pollutants (including particulate matter) due to Project operation and determined that impacts were less than significant.

17-345 The commenter expresses concerns with increased traffic and lack of traffic lights and left turn signals. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns.

17-346 The commenter expresses concerns with noise levels from traffic and property value. Refer to Response to Comment 17-113 regarding off-site traffic noise impacts. Property value is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-347 The commenter expresses concerns with the overcrowding of existing parks and that no parks are included for the current Project. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding onsite open space concerns.

17-348 The commenter expresses concerns with fire and police protection services and questions the land use for this area. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Refer to Response to Comment 17-71 regarding land use consistency.

17-349 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-350 The commenter makes introductory remarks and expresses concern regarding existing and future sound pollution. Refer to Response to Comment 17-147 regarding concerns regarding noise pollution.

17-351 The commenter raises concerns about the number of accidents on Lampson and the safety of children and pedestrians. The commenter also provides links to news sources about accidents on Lampson. A Safety Evaluation (*Attachment H* to this Final EIR) was prepared which analyzed collision data, pedestrian and bicycle safety, and site access management (e.g. driveway sight distance, driveway spacing, project access and queuing, multimodal conflict points, and pedestrian/bicycle connections. Refer to 2.1.2, *Roadway Safety on Lampson Avenue*, regarding the results of the Safety Evaluation and pedestrian and cyclist safety concerns.

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17-352 The commenter lists concerns about the aesthetics of the Project and the impact on daytime glare, nighttime illumination, and existing visual characteristics. Refer to Response to Comment 17-113 regarding light and glare concerns and Response to Comment 17-65 regarding consistency with zoning development standards for existing visual characteristics.

17-353 The commenter expresses concerns with existing property values. Refer to Response to Comment 17-150 above regarding property values.

17-354 The commenter expresses concerns with air quality, specifically carbon monoxide emissions, particulate matter, and greenhouse gas emissions. Refer to Response to Comment 17-35 regarding air quality impacts concerns and Response to Comment 17-48 regarding greenhouse gas emissions concerns. .

17-355 The commenter expresses concerns with biological impacts, specifically impacts to wildlife, birds, and trees. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, on April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of its Urban Forest Program. This plan addresses City parkway trees. There are currently no parkway trees along the Project's frontage. The Project would not result in an impact to the City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur and mitigation is not required (refer to Page 4.3-34 of the Draft EIR).

17-356 The commenter expresses concerns with geology and soils, drainage impacts, and runoff concerns. Refer to Response to Comment 17-153 above regarding impacts to geology and soils, drainage, and runoff.

17-357 The commenter expresses concerns with impacts to public services. Refer to Response to Comment 17-154 above regarding impacts to public services.

17-358 The commenter recommends disapproval of the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-359 The commenter expresses opposition to the Project and concerns with traffic congestion and parking, noise pollution, and increased need for fire/police services. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

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17-360 The commenter expresses concerns with traffic impacts on Lampson Ave and parking on Ironwood from new residents. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns and 2.1.3, *Parking,* regarding parking concerns.

17-361 The commenter expresses concerns with health impacts and air quality impacts. The Draft EIR's Air Quality Impact Analysis (*Technical Appendix B1* of the Draft EIR) included localized air quality impacts and addressed impacts to sensitive receptors in accordance with CEQA and South Coast AQMD Guidelines. Refer to Response to Comment 17-35 regarding health impacts concerns and 17-35 regarding air quality impacts.

17-362 The commenter expresses concerns with increased traffic, road closures, crime, and emergency response. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 for fire protection services.

17-363 The commenter expresses concerns with noise impacts. As discussed in Section 4.11, *Noise*, of the Draft EIR, the operational noise analysis evaluates the potential daytime and nighttime activities at the Project site. Refer to Response to Comment 17-40 regarding noise impacts.

17-364 The commenter expresses concerns with traffic safety on Lampson Avenue along with an increase in traffic and pollution. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns

17-365 The commenter expresses concerns with impacts to youth sports at the existing parks and expresses general opposition to the Project. The commenter also expresses concern over the Project's impacts to home values. Refer to Response to Comment 17-11 for impacts to existing recreational facilities. Property value is not an environmental issue analyzed under CEQA. Additionally, in regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-366 The commenter expresses general opposition to the Project and lists out EIR topics of concern. Refer to Response to Comment 17-276 regarding EIR topics concerns.

17-367 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-368 The commenter expresses concerns with impacts to existing parks, traffic, parking and crime, and property values. Refer to Response to Comment 17-11 regarding impacts to existing

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recreational facilities. Refer to Response to Comment 17-62 regarding police protection services. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.3, *Parking*, regarding parking concerns. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Additionally, property value is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-369 The commenter recommends reconsidering the proposed location and expresses concerns with the proposed density. Refer to Response to Comment 17-71 regarding land use consistency. The commenter asserts that studies should be done to investigate and quantify short and long-term impacts of the proposed location for the Project and that community members should be given access to these studies. Technical studies by technical experts in each field were prepared to evaluate the Project's short term (construction) and long term (operation) impacts, included as technical appendices to the Draft EIR, and provided for public review. The Draft EIR and technical appendices are available for review at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720, during the City's regular business hours or can be accessed in electronic form on the City's website at http://cityoflosalamitos.org/203/Planning-Commission-Projects (refer to Page 1-36 of the Draft EIR).

17-370 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-371 The commenter expresses general opposition to the Project and lists out EIR topics concerns. Refer to Response to Comment 17-276 regarding EIR topics concerns. Moreover, as discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations during both construction and operation (refer to Page 4.11-34 of the Draft EIR). Refer also to Response to Comment D-9 for cumulative offsite traffic noise impacts.

17-372 The commenter opposes the Project and expresses concerns with air quality, noise pollution, traffic congestion, pedestrian safety, and parking. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and 2.1.3, *Parking*, for parking concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

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17-373 The commenter expresses concerns with dust and hazardous materials. Refer to Response to Comment 17-205 regarding erosion control and dust control measures concerns. Refer to Response to Comment 17-229 regarding hazardous materials concerns.

17-374 The commenter expresses concerns with land use and planning (housing density and recreation space), low income housing, and crime. Refer to Response to Comment 17-71 for land use consistency. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Refer to Response to Comment 17-62 regarding police protection services. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the Project intends to provide a variety of affordable housing types to support middle-income workers (refer to Pages 3-1 through 3-2 of the Draft EIR).

17-375 The commenter expresses concerns with traffic, accidents, and emergency response. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Additionally, as discussed in Section 4.8, *Hazards and Hazardous Materials*, construction on Lampson Avenue will require an encroachment permit and approval from the City Engineer Lane closures that may be required for median improvements would be temporary and require a permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. Compliance with LAMC 12.08.200 would ensure safe crossing and access for all vehicle and pedestrians at all times (refer to Page 4.8-21 of the Draft EIR).

17-376 This comment is part of an email template requesting examples and EIR topics for analysis. Refer to Response to Comment 17-276 regarding EIR topics.

17-377 The commenter makes introductory remarks and expresses concern regarding existing and future sound pollution. Refer to Response to Comment 17-147 regarding concerns regarding sound pollution.

17-378 The commenter raises concerns about the number of accidents on Lampson and the safety of children and pedestrians. The commenter also provides links to news sources about accidents on Lampson. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian and cyclist safety concerns.

17-379 The commenter lists concerns about the aesthetics of the Project and the impact on daytime glare, nighttime illumination, and existing visual characteristics. Refer to Response to Comment 17-113 regarding light and glare concerns and Response to Comment 17-65 regarding consistency with zoning development standards for existing visual characteristics. 17-380 The commenter expresses concerns with existing property values. Refer to Response to Comment 17-150 above regarding property values.

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17-381 The commenter expresses concerns with air quality, specifically carbon monoxide emissions, particulate matter, and greenhouse gas emissions. Refer to Response to Comment 17-35 regarding air quality impacts concerns and Response to Comment 17-48 regarding greenhouse gas emissions concerns.

17-382 The commenter expresses concerns with biological impacts, specifically impacts to wildlife, birds, and trees. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, on April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of its Urban Forest Program. This plan addresses City parkway trees. There are currently no parkway trees along the Project's frontage. The Project would not result in an impact to the City parkway trees.

17-383 The commenter expresses concerns with geology and soils, drainage impacts, and runoff concerns. Refer to Response to Comment 17-153 above regarding impacts to geology and soils, drainage, and runoff.

17-384 The commenter expresses concerns with impacts to public services. Refer to Response to Comment 17-154 above regarding impacts to public services.

17-385 The commenter recommends disapproval of the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-386 The commenter expresses opposition to the Project and concerns with traffic congestion and parking, noise pollution, increased need for fire/police services, construction noise and impacts to public services. Refer to Response to Comment 17-359 above for responses on these topics. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-387 The commenter expresses concerns with traffic impacts on Lampson Ave and parking on Ironwood from new residents. Refer to Response to Comment 17-360 above regarding traffic impacts and parking.

17-388 The commenter expresses concerns about health impacts and air quality impacts. Refer to Response to Comment 17-361 above regarding health and air quality impacts.

17-389 The commenter expresses concerns regarding increased traffic, road closures, crime, and emergency response. Refer to Response to Comment 17-362 above for responses on these topics.

17-390 The commenter expresses concerns about noise impacts. Refer to Response to Comment 17-363 above regarding noise impacts.

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17-391 The commenter expresses concerns with traffic safety on Lampson Avenue along with an increase in traffic and pollution. Refer to Response to Comment 17-364 above regarding traffic, safety, and pollution concerns.

17-392 The commenter expresses concerns regarding impacts to youth sports at the existing parks and expresses general opposition to the Project. The commenter also expresses concern over the Project's impacts to home values. Refer to Response to Comment 17-11 for impacts to existing recreational facilities. Property value is not an environmental issue analyzed under CEQA. Additionally, in regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-393 The commenter expresses concerns with increased traffic, traffic noise, traffic safety, school services in Rossmoor and impacts to roads in Rossmoor. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding roadway safety concerns. Refer to Response to Comment 17-113 regarding off-site traffic noise impacts. Refer to Response to Comment 17-79 regarding impacts to school services. Refer to Response to Comment 17-77 regarding road impacts during construction.

17-394 This comment is part of an email template requesting examples and EIR topics for analysis. Refer to Response to Comment 17-276 regarding EIR topics concerns.

17-395 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-396 The commenter expresses general opposition to the Project and lists EIR topics of concern. Refer to Response to Comment 17-276 regarding EIR topics of concern.

17-397 The commenter expresses concerns with dust from construction, health impacts, increased traffic, and lack of traffic lights and left turn signals. Refer to Response to Comment 17-344 and 17-345 for responses on these topics.

17-398 The commenter expresses concerns with noise levels from traffic. Refer to Response to Comment 17-346for responses on these topics.

17-399 The commenter expresses concerns with the overcrowding existing parks and that no parks are included for the current Project. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding onsite open space concerns.

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17-400 The commenter expresses concerns with fire and police protection services and parking. Refer to Response to Comment 17-348 regarding fire and police protection services and Master Response 2.1.3, *Parking*, regarding parking concerns.

17-401 The commenter expresses general opposition to the Project and raises concerns that the Project will negatively affect the College Park East neighborhood. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-402 The commenter expresses concerns with loss of open space for wildlife and traffic impacts. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds including hawks (several varieties). As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, common avian species detected included house finch and mourning dove (refer to Page 4.3-5 of the Draft EIR) while barn owl was detected by GLA biologists flying over or in proximity to the Project site. Implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2 would ensure that pre-construction surveys are conducted for nesting birds and nesting raptors prior to site disturbance. If nesting birds or raptors are present on the Project site, the identified mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance (refer to Pages 4.3-37 through 4.3-39 of the Draft EIR). Refer to Response to Comment 17-403, below, regarding traffic concerns.

17-403 The commenter expresses concerns with traffic with no proposed alternative route and references traffic and flooding issues that arose during a 1995 rainstorm. The commenter acknowledges the validity of affordable housing federal guidelines and suggests alternative sites for the Project. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, regarding flooding impacts. Regarding alternative Project Site suggestions, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-404 The commenter expresses general opposition to the Project and raises concerns regarding the impact of one city's project on another city, specifically the size, stature, and location. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-405 The commenter expresses concerns with traffic, pedestrian safety due to U-turns on Heather Street, and emergency response times. The commenter also requests report on the number of

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tickets written for speeding and report on accidents on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns and collision data. Refer to Response to Comment 17-62 for police protection services and Response to Comment 17-68 regarding fire protection services.

17-406 The commenter expresses concerns with on-site parking and overflow parking in the College Park East neighborhood. The commenter also raises concerns regarding the rate of vehicle accidents. Refer to Master Response 2.1.3, *Parking* for parking concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue,* for accident concerns. Additionally, a condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes.

17-407 The commenter expresses concerns with impacts to existing parks and proposed open space. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-408 The commenter expresses concerns with construction noise and road closure. Refer to Response to Comment 17-40 regarding noise impacts. As discussed in Section 4.15, *Transportation*, of the Draft EIR, during construction, frontage improvements including median improvements, sidewalks, driveway modifications needed to accommodate site access and landscaping improvements would be constructed in accordance with City standards. Refer to Response to Comment 17-67 regarding lane closures.

17-409 The commenter believes that the Project will negatively affect College Park East and expresses concerns about increased traffic and accidents. Refer to Master Responses *2.1.1, Transportation and Traffic Congestion,* regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-410 The commenter inquires about additional traffic signals and overflow parking. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue,* regarding traffic signal concerns. Refer to Master Response 2.1.3, *Parking,* regarding parking concerns.

17-411 The commenter inquires about increased use of Seal Beach public services and the City's public services. The commenter inquires about the utility infrastructure. Refer to Response to Comment 17-75 regarding impacts to Seal Beach public services. Refer to Response to Comment 17-81 for utilities concerns. As discussed in Section 4.13, *Public Services*, of the Draft EIR, fire protection services for the Project site is currently provided by the Orange County Fire Authority (OCFA) and police protection service is provided by the Los Alamitos Police Department (refer to Page 4.13-1 and 4.13-2 of the Draft EIR). Refer to Master Reponses 2.1.6, *Public Safety*, for concerns related to public services.

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17-412 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-413 The commenter expresses concerns regarding EIR topics. Refer to Response to Comment 17-276 regarding EIR topics.

17-414 The commenter expresses general concerns with the Project which are responded to below.

17-415 The commenter expresses concerns with aesthetics and visibility and suggests decreasing the height of the Project or including landscaping to screen buildings. Refer to Response to Comment 17-65 regarding aesthetic concerns. The comment regarding building height and landscaping is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-416 The commenter expresses concerns with traffic and accidents. The commenter also suggests adding traffic signals, increasing policing of roads, and improving center medians. Refer to Master Responses *2.1.1, Transportation and Traffic Congestion,* regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue,* regarding pedestrian safety concerns. Refer to Master Response 2.1.8, *Public Safety*, regarding policing concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns. Along the Project frontage, Lampson Avenue is developed to its ultimate General Plan roadway classification. Frontage improvements would include median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards.

17-417 The commenter expresses concerns with parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-418 The commenter expresses concerns with overflow into surrounding neighborhoods for park use and dog walking, apparent lack of on-site amenities, and use of existing parks. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the usable common open space areas in the Project site would include amenities such as tot-lot with rubberized play surface, shade surface with BBQ Island and dining furniture, lawn area with cornhole, ping pong table, and lounge seating with fire-pit (refer to Page 3-7 of the Draft EIR). Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities.

17-419 The commenter expresses concerns with traffic, pollution, and overcrowding at parks, and parking. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion,* regarding traffic concerns, Response to Comment 17-34 regarding pollution concerns, Master Response

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2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to exiting recreational facilities, and 2.1.3, *Parking*, regarding parking concerns.

17-420 The commenter expresses concerns with traffic and accidents. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion* regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-421 The commenter expresses concerns with potential gophers. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-422 The commenter expresses concerns with increased traffic on Lampson Avenue. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-423 The commenter expresses concerns with pedestrian safety, pollution, and noise. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-12 regarding noise concerns and Response to Comment 17-34 for pollution concerns.

17-424 The commenter expresses concerns with traffic impacts on Lampson Ave, school district impacts, and impacts to public services. As discussed in Section 2.0, *Environmental Setting*, of the Draft EIR, the Project site is zoned as "Multi-Family Residential (R-3)" and the R-3 zone applies to lots intended to provide multi-family housing (refer to Page 2-3 of the Draft EIR). Therefore, the Project proposed residential uses are consistent with the existing zoning designation. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Response to Comment 17-79 for school services. Refer to Response to Comment 17-154 for impacts to public services.

17-425 The commenter expresses concerns with traffic on Lampson Ave, lack of proposed parks and reduction of open space, use of College Park East residential streets as "cut through" routes, and fire and police services. The commenter also requests technical study results. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area. Refer to Response to Comment 9-19 regarding cut through traffic. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. As discussed in Section 1.5, *EIR Scope, Format, and Content*, of the Draft EIR, the *Technical Appendices* are available for review at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720, during the City's regular business hours or can be accessed in electronic form on the City's website at http://cityoflosalamitos.org/203/Planning-Commission-Projects (refer to Page 1-36 of the Draft EIR).

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17-426 The commenter expresses concerns with parking at Arbor Park for soccer games. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-427 The commenter expresses concerns with EIR topics. Refer to Response to Comment 17-276 regarding EIR topics.

17-428 The commenter expresses general opposition to the Project due to overcrowding, impacts to wildlife, increased traffic, health impacts, and decreased property values. Refer to Response to Comment 17-73 regarding population growth. Refer to Response to Comments 17-18, 17-19, and 17-35 regarding impacts to wildlife and birds. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

Property values are not an environmental issue analyzed under CEQA. However, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-429 This comment is part of an email template requesting examples and EIR topics for analysis. Refer to Response to Comment 17-276 regarding EIR topics.

17-430 The commenter expresses concerns with traffic on Lampson Ave, accidents, noise pollution, air quality impacts, crowded parks, crime to vehicles and homes, more vehicles within the College Park East neighborhood, lower housing values, more rodents due to construction, and damage to aesthetics. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson* Avenue, regarding accident concerns. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in the need for construction of additional facilities. Response to Comment 17-62 regarding police protection services. Refer to Response to Comment 17-65 for aesthetic concerns. Refer to Response to Comment 9-21 regarding rodent concerns. Regarding housing values, these comments are not environmental issues analyzed under CEQA; however, these comments are noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

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17-431 The commenter expresses concerns with aesthetics, air quality, construction noise and road closure, emergency response, greenhouse gas emissions, and hazards and hazardous waste. Refer to Response to Comment 17-65 regarding aesthetic concerns. Refer to Response to Comment 17-66 and 17-258 regarding air quality impacts and cumulative air quality impacts. Refer to Response to Comment 17-40 and 17-205 regarding noise impacts and cumulative noise impacts. As discussed in Section 4.13, *Public Services*, of the Draft EIR, fire protection services for the Project site is currently provided by the Orange County Fire Authority (OCFA) and police protection service is provided by the Los Alamitos Police Department (refer to Page 4.13-1 and 4.13-2 of the Draft EIR). Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Refer to Response to Comment 17-48 regarding greenhouse gas emissions. Refer to Response to Comment 17-229 regarding hazardous materials.

17-432 The commenter expresses concerns with land use and planning, noise from construction, existing noise from the Joint Base, overflow parking in College Park East, use of College Park East parks, and public services. Refer to Response to Comment 17-71 regarding land use consistency. Refer to Response to Comment 17-40 regarding construction noise impacts. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)*, regarding noise impacts due to the Los Alamitos JFTB. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding park use. Refer to Response to Comment 17-154 regarding impacts to public services.

17-433 The commenter expresses concerns with recreation, road impacts during construction, schools/libraries, traffic safety, taxes, utilities and service systems, and aesthetics. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Response to Comment 17-77 regarding road impacts during construction. Refer to Response to Comment 17-79 regarding impacts to school and library services. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-81 regarding utilities concerns. Refer to Response to Comment 17-65 regarding aesthetic concerns

17-434 This comment is part of an email template requesting examples and EIR topics for analysis. Refer to Response to Comment 17-276 regarding EIR topics.

17-435 The commenter inquires about site access, utilizing the existing traffic signal at Rose Street, left turn access at the proposed east entrance, and concern about left turns exiting the Project or making U-turns at Heather Street. As discussed in Section 3.0, *Project Description*, of the Draft EIR, vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site (refer to Page 3-4 of the Draft EIR). Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding

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traffic concerns including U-terns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns. In regard to the commenter's suggestion of land acquisition at Rose Street, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-436 The commenter expresses concerns with Project driveway entrances. As discussed in Section 4.13, *Public Services*, of the Draft EIR, access to and around structures would meet OCFA and CFC requirements. Figure 4.8-3, *Fire Master Plan*, of the Draft EIR demonstrates compliance with all codes and other regulations governing water availability for firefighting and emergency access to the Project site and structures. Compliance with OCFA requirements would ensure adequate provision of resources such as access, water mains, fire flows, and fire hydrants (refer to Page 4.13-9 of the Draft EIR).

17-437 The commenter inquires about JFTB regulations and the proposed development. As discussed in Section 4.10, *Land Use and Planning*, of the Draft EIR, the City and the Project site are within the airport planning area of the Los Alamitos JFTB. Land uses within the airport planning-area boundaries are required to conform to four key areas of military airport compatibility including: 1) aviation safety; 2) aircraft noise; 3) aircraft overflight; and 4) airspace protection/height zoning. Section 2.1 of the AELUP describes the standards and criteria adopted by the Airport Land Use Commission for Orange County for establishing planning boundaries. The Project would not conflict with JFTB AELUP's safety, height, noise, or aircraft overflight criteria, and impacts would be less than significant. No mitigation is required (refer to Page 4.10-14 through 4.10-18 of the Draft EIR).

17-438 The commenter inquires about impacts to police and fire responses. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services.

17-439 The commenter inquiries about the Statewide Community Infrastructure Program and/or other subsidies to build homes and address the City's Regional Housing Needs Allocation (RHNA) requirements and with Mello Roos Act. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-440 The commenter expresses concerns with emergency access and site access. Refer to Response to Comment 17-132 regarding emergency access. As discussed in Section 3.0, *Project Description*, of the Draft EIR, vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle

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access point with Lampson Avenue would be provided at the eastern end of the site (refer to Page 3-4 of the Draft EIR).

17-441 The commenter inquires about the City's tree ordinance. As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, on April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of its Urban Forest Program. This plan addresses City parkway trees. There are currently no parkway trees along the Project's frontage. The Project would not result in an impact to the City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur, and mitigation is not required (refer to Page 4.3-34 of the Draft EIR).

17-442 The commenter inquires about impervious surface area and water quality requirements. As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction or long-term operation. Impacts would be less than significant, and no mitigation is required (refer to Pages 4.9-14 through 4.9-16 of the Draft EIR). The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite (refer to Pages 4.9-22 through 4.9-23 of the Draft EIR).

17-443 The commenter inquires about the parking concession and parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the Project would provide 577 parking spaces, which is below the City's required 679 parking spaces pursuant to LAMC Section 17.22.030, Required Parking Spaces. The State's Density Bonus Law specifies that for housing developments that qualify for a density bonus the local government shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. (Gov't Code Section 65915(p)(1).) The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project, which is significantly more than the 440 parking spaces that would be required pursuant to the State's Density Bonus Law (refer to Page 3-13 of the Draft EIR).

17-444 The commenter inquires about the Project's greenhouse gas emissions. Refer to Response to Comment 17-48 for greenhouse gas emissions.

17-445 The commenter expresses concerns with EIR topics and traffic. Refer to Response to Comment 17-276 regarding EIR topics. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

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17-446 The commenter expresses opposition to the Project due to traffic congestion and safety. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-447 The commenter expresses concerns with noise pollution and availability of parks. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding parking concerns.

17-448 The commenter expresses concerns with impacts to wildlife and rodents. Refer to Response to Comments 17-18 and 17-19 regarding impacts to wildlife and birds. Refer to Response to Comment 9-21 regarding rodent concerns.

17-449 This comment is part of an email template requesting examples and EIR topics for analysis. Refer to Response to Comment 17-276 regarding EIR topics.

17-450 The commenter expresses concerns regarding overcrowded schools. Refer to Response to Comment 17-79 regarding impacts to school services.

17-451 The commenter expresses concerns regarding increased traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-452 The commenter requests amendment of prior comments. Refer to Response to Comment 17-325 above for responses to this comment

17-453 This comment is part of an email template requesting examples of how the Project could negatively affect the community and listing the EIR topics. Refer to Response to Comment 17-326 above for responses to these topics.

17-454 The commenter expresses concerns with low-income housing, Section 8 government supported housing, and increased crime. Refer to Response to Comment 17-328 above for responses to these topics.

17-455 The commenter expresses concerns with crime. Refer to Response to Comment 17-329 above for responses to this topic.

17-456 The commenter expresses opposition to the Project and concerns about overbuilding in the area, which will lead to more traffic and accidents. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding collision. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being

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taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-457 The commenter opposes the Project and requests to scale back the Project. Refer to Response to Comment 17-330 above for responses to these topics. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-458 The commenter expresses concerns with traffic safety, parking, quality of life, U-turns on Heather Street, and use of residential streets to bypass Lampson traffic. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding cut-through traffic, traffic safety concerns and U-turns on Heather Street. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Quality of life is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. Refer to Response to Comment 9-19 regarding cut through traffic during construction.

17-459 The commenter expresses concerns with on-site parking availability. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Additionally, a condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes.

17-460 The commenter expresses concerns with impacts to public services and existing parks. Refer to Response to Comment 17-154 regarding impacts to public services. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities.

17-461 The commenter expresses concerns with construction noise, road closure during construction, overflow parking in College Park East, road impacts from usage of heavy construction equipment, traffic safety, noise pollution, and Heather Park usage. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-67 regarding road closure during construction. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic safety concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to existing recreational facilities.

17-462 The commenter requests environmental studies on the EIR topics and expresses concerns with traffic and vehicle accidents. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding impacts related to accidents. As discussed in Section 1.5, *EIR Scope, Format, and Content*, of the Draft EIR, the *Technical Appendices* are available for review at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720, during the City's regular business hours

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or can be requested in electronic form on the City's website at http://cityoflosalamitos.org/203/Planning-Commission-Projects. (Refer to Page 1-36 of the Draft EIR)

17-463 The commenter expresses concerns with EIR topics. Refer to Response to Comment 17-276 regarding EIR topics.

17-464 The commenter expresses concerns with construction, rodent issues, aesthetics, and increased traffic. Construction impacts are analyzed throughout the Draft EIR. Refer to Response to Comment 9-21 regarding rodent concerns. Refer to Response to Comment 17-65 regarding aesthetic concerns. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-465 The commenter inquires what studies have been completed to assess impacts on residents. The commenter also expresses concerns with aesthetics/height, rodents, traffic, noise, hazardous materials, impacts to existing parks, and accidents.

As discussed in Section 1.5, *EIR Scope, Format, and Content*, of the Draft EIR, the *Technical Appendices* are available for review at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720, during the City's regular business hours or can be requested in electronic form on the City's website at http://cityoflosalamitos.org/203/Planning-Commission-Projects or by contacting the City's Development Services Department – Planning Division. (Refer to Page 1-36 of the Draft EIR) Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding vehicle accident concerns. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-229 regarding hazardous materials. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Response to Comment 9-21 regarding rodent concerns.

17-466 The commenter opposes the Project and expresses concerns regarding increased traffic, availability of open space, housing prices, poor aesthetics, worsening Air Quality and GHG emissions, hazards and hazardous materials, noise and population and housing. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding open space concerns. Refer to Response to Comment 17-65 regarding aesthetic concerns. Refer to Response to Comment 17-35 regarding air quality impacts. Refer to Response to Comment 17-48 regarding greenhouse gas emissions. Refer to Response to Comment 17-229 regarding hazardous materials. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-73 regarding population growth. Housing prices are not an environmental issue analyzed under CEQA. Additionally, in regard to the commenter's opposition to the Project, this comment is noted for the record and will be

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forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-467 The commenter expresses concerns with aesthetics and air quality impacts and makes additional remarks in opposition to the Project. Refer to Response to Comment 17-65 regarding aesthetic concerns. Refer to Response to Comments 17-35 and 17-258 regarding air quality impacts and cumulative air quality impacts. The remainder of the comments do not address potential impacts of the Project on the physical environment or the sufficiency of the Draft EIR, and therefore no further response to this comment is required.

17-468 The commenter expresses concerns with the proposed density and the impacts on traffic, recreation, noise, wildlife, and parking. Refer to Response to Comment 17-71 regarding land use consistency. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Regarding impacts to wildlife, as discussed in Section 4.3, *Biological Resources*, of the Draft EIR, wildlife, special-status vegetation communities, special-status species, nesting birds, and indirect impacts to biological resources were analyzed. Impacts to biological resources were determined to be less than significant with mitigation (refer to Pages 4.3-29 through 4.3-39 of the Draft EIR).

17-469 The commenter expresses concerns about increased traffic on Lampson, parking, and safety. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns, and 2.1.3, *Parking*, regarding parking concerns.

17-470 The commenter expresses concerns with the increase in greenhouse gas emissions and hazardous waste during construction, including soil disturbance resulting in Aerially Deposited Lead and toxic dust. Refer to Response to Comment 17-48 regarding greenhouse gas emissions. Refer to Response to Comment 17-229 regarding hazardous materials. Additionally, lead was not detected at concentrations that would pose an unacceptable health risk to future site occupants, the surrounding community or underlying groundwater. Furthermore, construction BMPs will be employed as a part of the Project to mitigate fugitive dust. Therefore, ongoing monitoring and reporting would not be warranted. Regarding construction fumes, a construction health risk assessment was prepared for the Project (*Technical Appendix B2* of the Draft EIR) and determined that Project construction impacts would be less than significant.

17-471 The commenter expresses concerns with the proposed density, parking impacts, and increased traffic. Refer to Response to Comment 17-71 regarding land use consistency. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion* regarding traffic concerns. Additionally, a condition of

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approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes.

17-472 The commenter expresses opposition to the Project and raises concerns with traffic issues, safety, noise, utilities and service systems, and vehicle accidents. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-81 regarding utilities concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety and vehicle accident concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-473 The commenter expresses concerns with property values and aesthetic views of mixed area housing. Refer to Response to Comment 17-65 regarding aesthetic concerns. Property values are not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-474 The commenter expresses concerns with traffic impacts on Lampson Avenue and water supply. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-26 regarding water supply.

17-475 The commenter expresses concerns with traffic and on-site parking. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-476 The commenter expresses concerns with AYSO parking and use of existing parks. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-11 regarding impacts to existing recreational facilities and Response to Comment 17-14 regarding the Project's proposed open space area.

17-477 The commenter expresses concerns with traffic on Lampson Avenue, increase in accidents and speeding, and flooding. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety and vehicle accident concerns. As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite (refer to Pages 4.9-22 through 4.9-23 of the Draft EIR).

17-478 The commenter expresses concerns with use of existing parks, on-site parking, and parking at Arbor Park. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of*

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On-Site Amenities, regarding impacts to recreational facilities. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-479 The commenter expresses concerns with quality of life, increased traffic, and the provided on-site parking. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.3, *Parking*, regarding parking concerns. Quality of life is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-480 The commenter expresses concerns with noise, dirt, and traffic due to construction; pedestrian safety, inadequate parking; air quality, noise, and commute time due to traffic; overcrowding of parks; population growth; and crime. Refer to Response to Comment 17-36 regarding construction and operational noise impacts. Refer to Response to Comment 17-205 regarding erosion control and dust control measures. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding safety concerns, and 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding the Project's proposed open space area and impacts to existing recreational facilities. Refer to Response to Comment 17-73 regarding population growth. Increase in crime is not an environmental impact on the physical environment unless it leads to an increase in services or decrease in response times resulting in need for construction of additional facilities. Refer to Response to Comment 17-62 regarding police protection services.

17-481 The commenter expresses concerns with Project plans, improvement plans on Lampson Avenue, and parking. Refer to Master Response 2.1.3, *Parking, regarding* parking concerns. As discussed in Section 3.0, *Project Description*, of the Draft EIR, Figure 3-4, *Site Plan*, depicts the overall site plan proposed as part of the Project. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project would implement stop controls for the southbound approach at all driveways on Lampson Avenue. The driveway for the apartment entry would be restricted to right in/right-out access only. Vehicular circulation would be unrestricted throughout the Project site. Along the Project frontage, Lampson Avenue is developed to its ultimate General Plan roadway classification. Frontage improvements would include median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards (refer to Pages 3-2 through 3-4 of the Draft EIR).

17-482 The commenter expresses general opposition to the Project and lists EIR topics. Refer to Response to Comment 17-276 regarding EIR topics. In regard to the commenter's opposition

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to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-483 The commenter expresses concerns with traffic and accidents on Lampson Avenue. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding vehicle accident concerns.

17-484 The commenter expresses concerns with use of existing parks and proposed open space. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding the Project's proposed open space area and impacts to existing recreational facilities.

17-485 The commenter expresses concerns about insufficient parking and safety. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns.

17-486 The commenter expresses concerns with traffic, overcrowding, and parking. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-73 regarding population growth.

17-487 The commenter expresses general opposition to the Project and concerns with safety. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns and Master Response 2.1.8, *Public Safety*, regarding general safety concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-488 The commenter expresses general opposition to the Project and expresses concern with traffic. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-489 The commenter expresses general opposition to the Project and lists EIR topics. Refer to Response to Comment 17-276 regarding EIR topics. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-490 The commenter expresses opposition to the Project and concerns with traffic congestion, crowded schools, and use of existing parks. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-79 regarding impacts to school services. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding the Project's proposed open space area and impacts to existing recreational facilities. In regard to the commenter's opposition to the

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Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-491 The commenter lists EIR topics. Refer to Response to Comment 17-276 regarding EIR topics.

17-492 The commenter opposes the Project and expresses concerns with overpopulation, overuse of resources, and traffic issues. Refer to Response to Comment 17-73 regarding population growth. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. As discussed in Section 5.0, *Other CEQA Considerations*, of the Draft EIR, the Project would also not reduce the availability of non-renewable natural resources associated with long-term operational activities (refer to Page 5-2 and 5-3 of the Draft EIR). In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-493 The commenter expresses concerns with emergency response times, increased traffic, U-turns at Heather Street, accidents, and use of existing parks. Refer to Response to Comment 17-62 regarding police protection services and Response to Comment 17-68 regarding fire protection services. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for vehicle accident concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to existing recreational facilities.

17-494 The commenter expresses concerns with increased traffic accidents and emissions. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding vehicle accident concerns. Refer to Response to Comment 17-48 regarding greenhouse gas emissions.

17-495 The commenter expresses concerns with traffic on Lampson Avenue and traffic safety. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic safety and vehicle accident concerns.

17-496 The commenter expresses concerns with noise pollution and air quality. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-66 regarding air quality impacts.

17-497 The commenter expresses concerns with parking. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns.

17-498 The commenter expresses concerns with flooding on Lampson Avenue. As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which

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would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite (refer to Pages 4.9-22 through 4.9-23 of the Draft EIR).

17-499 The commenter expresses concerns with recreation areas. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding the Project's proposed open space area and impacts to existing recreational facilities.

17-500 The commenter expresses concerns with aesthetics. Refer to Response to Comment 17-65 regarding aesthetic concerns. The Draft EIR and technical studies are available for public review on the City's website: https://cityoflosalamitos.org/203/Planning-Commission-Projects.

17-501 The commenter expresses concerns with extra traffic on Lampson Avenue. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-502 The commenter expresses concerns with inadequate parking and use of existing recreational facilities. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding the Project's proposed open space area and impacts to existing recreational facilities.

17-503 The commenter recommends reducing the intensity of the Project. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-504 The commenter recommends a sound wall on the Los Alamitos side of the Project and reducing the Project intensity. The Project includes sound walls along the southern edge of the Project. site. Also refer to Response to Comment 17-40 regarding noise impacts. Regarding the intensity of the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-505 The commenter recommends that funds for air purifiers and higher fences for College Park East residents be provided by the developer. Refer to Response to Comment 17-66 regarding air quality impacts. Refer to Response to Comment 17-65 regarding aesthetic concerns.

17-506 The commenter expresses concerns with parking, safety, traffic, noise, and public services. Refer to Master Responses 2.1.3, *Parking*, regarding parking concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Response to Comment 17-154 regarding impacts to public services.

17-507 The commenter expresses concerns with insufficient on-site parking and pedestrian safety. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns, and 2.1.2, *Roadway*

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Safety on Lampson Avenue, regarding pedestrian safety. A condition of approval has been added to the Project to ensure the parking garages onsite be used primarily for parking purposes. In regard to the commenter's request for reduced units, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-508 The commenter expresses concerns with traffic and traffic safety on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns and 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic safety concerns.

17-509 The commenter expresses concerns with construction noise impacts. Refer to Response to Comment 17-40 for noise impacts. Additionally, as discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations during both construction and operation (refer to Page 4.11-34 of the Draft EIR). Refer also to Response to Comment D-9 for cumulative offsite traffic noise impacts.

17-510 The commenter expresses opposition to the Project and concerns with public services and utilities. Refer to Response to Comment 17-154 regarding impacts to public services. Refer to Response to Comment 17-81 regarding utilities concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-511 The commenter provides an introduction and expresses concerns which are responded to below.

17-512 The commenter expresses concerns regarding availability of on-site parking, overflow parking to Arbor Park and College Park East, and the lack of signal control from the Project. Refer to Master Response 2.1.3, *Parking* regarding a detailed discussion on parking impacts. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, and Response to Comment 17-10 regarding traffic and signal control concerns.

17-513 The commenter expresses concerns regarding provision of open space/park space for residents. The commenter requests the Draft EIR include a listing of existing parks within a half-mile of the Project and an evaluation of Project impacts to recreational facilities. Refer to Response to Comment 17-11 regarding availability of open space and impacts to recreational facilities.

17-514 The commenter requests the Draft EIR include an evaluation of noise at Arbor Park during weekends. The commenter requests the noise study to include all hours of the day on Saturdays when whistles, loud voices, cheering, and other noises are made. Refer to Response to Comment 17-12 regarding noise at Arbor Park.

17-515 The commenter expresses concerns about new recreational areas, availability of on-site parking, a need for widening the existing bicycle lane on Lampson Ave, and traffic conditions

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on North Seal beach Boulevard. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding the Project's proposed open space area and impacts to existing recreational facilities. Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue* regarding a discussion about bicycle facilities. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns.

17-516 The commenter provides an introduction and expresses concerns which are responded to below.

17-517 The commenter expresses concerns with traffic, drainage, and backyard privacy. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite (refer to Pages 4.9-22 through 4.9-23 of the Draft EIR). Backyard privacy is not an environmental issue evaluated under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-518 The commenter expresses concerns with dust, pollution, and noise. Refer to Response to Comment 17-35 regarding health impacts. As discussed in Section 4.6, *Geology and Soils*, the Project would be required to implement erosion and dust control measures pursuant to South Coast AQMD Rule 403 to minimize water- and windborne erosion and to control fugitive dust. Mandatory compliance with the Project's SWPPP and the erosion control and dust control measures would reduce, prevent, or minimize soil erosion from Project-related construction activities. Refer to Response to Comment 17-40 regarding noise impacts. The Project's Air Quality Impact Analysis and Noise Study is included as *Technical Appendices B1 and K* to the Draft EIR, respectively.

17-519 The commenter expresses concerns with increased traffic and noise on Lampson. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-40 regarding noise impacts.

17-520 The commenter expresses concerns with pollution and noise impacts to pets, and accidents. Refer to Response to Comment 17-35 regarding air quality and health impacts. Refer to Response to Comment 17-40 regarding noise impacts. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding vehicle accident concerns.

17-521 The commenter expresses opposition to the Project and concerns with traffic and safety issues on Lampson Avenue, accessibility issues to Arbor Park and Dog Park, overflow parking into College Park East, and burdens on the school district. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, 2.1.2, *Roadway Safety on*

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Lampson Avenue, regarding traffic safety concerns, and 2.1.3, *Parking*, regarding parking concerns. Refer to Response to Comment 17-32 regarding impacts on the school district. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-522 The commenter expresses opposition to the Project and concerns with aesthetics. Refer to Response to Comment 17-65 regarding aesthetic concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-523 The commenter expresses concerns with construction pollution, noise, and traffic. The Draft EIR's Air Quality Impact Analysis (*Technical Appendix B1* of the Draft EIR) included localized air quality impacts and considered sensitive receptors in accordance with CEQA and South Coast AQMD Guidelines. Refer to Response to Comment 17-35 regarding health impacts. As discussed in Section 4.6, *Geology and Soils*, of the Draft EIR, the Project would be required to implement erosion and dust control measures pursuant to South Coast AQMD Rule 403 to minimize water- and windborne erosion. Mandatory compliance with the SWPPP and the erosion control and dust control measures would reduce, prevent, or minimize soil erosion from Project-related construction activities. Refer to Response to Comment 17-40 for noise impacts. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

17-524 The commenter expresses concerns with traffic safety, population growth, school services, and use of existing parks. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic safety concerns. Refer to Response to Comment 17-73 regarding population growth. Refer to Response to Comment 17-32 regarding impacts on school services. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to existing recreational facilities.

17-525 The commenter provides concluding remarks. This comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

17-526 The commenter expresses concerns with impacts to AYSO and Arbor Park. Refer to 2.1.8, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to existing recreational facilities. Refer to Master Response 2.1.3, *Parking*, regarding concerns regarding parking at Arbor Park.

17-527 The commenter expresses concerns with traffic on Lampson and overflow parking from Project residents in College Park East. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns, and 2.1.3, *Parking* regarding parking concerns.

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17-528 The commenter expresses concerns regarding parking availability at Arbor Park and the impact on AYSO operations. Refer to Master Response 2.1.3, *Parking*, regarding concerns regarding parking at Arbor Park.

17-529 The commenter opposes the Project and expresses concerns with parking availability at Arbor Park and overflow parking in College Park East. Refer to Master Response 2.1.3, *Parking*, regarding Arbor Park and on-site parking concerns. In regard to the commenter's opposition to the Project, this comment is noted for the record and will be forwarded to the decision makers for their review and consideration prior to any action being taken on the Project.

17-530 The commenter expresses concerns with access onto Lampson Avenue, traffic during and after construction, and availability of open space to Project residents. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion* regarding traffic concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities,* regarding the Project's proposed open space area and impacts to existing recreational facilities.

Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project would implement stop controls for the southbound approach at all driveways on Lampson Avenue. The driveway for the apartment entry would be restricted to right-in/right-out only. Vehicular circulation would be unrestricted throughout the Project site. Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding traffic signal concerns.

17-531 The commenter expresses concerns with traffic impacts, accidents, and noise impacts from JFTB operation on the Project's future residents. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion* regarding traffic concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, regarding pedestrian safety concerns, and 2.1.7, *Proximity to the Los Alamitos Joint Force Training Base (JFTB)* for related responses.

17-532 The commenter provides an introduction and expresses concerns which are responded to below. Refer to Response to Comment 17-511 above for responses to these topics.

17-533 The commenter expresses concerns regarding availability of on-site parking, overflow parking to Arbor Park and College Park East, and the lack of signal control from the Project. Refer to Master Response 2.1.3, *Parking*, regarding a detailed discussion on parking impacts. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, and Response to Comment 17-10 regarding traffic and signal control concerns.

17-534 The commenter expresses concerns regarding provision of open space/park space for residents. The commenter requests the Draft EIR include a listing of existing parks within a ½ mile of the Project and an evaluation of Project impacts to recreational facilities. Refer to Response to Comment 17-11 regarding availability of open space and impacts to recreational facilities.

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17-535 The commenter requests the Draft EIR include an evaluation of noise at Arbor Park during weekends. The commenter requests the noise study to include all hours of the day on Saturdays when whistles, loud voices, cheering, and other noises are made. Refer to Response to Comment 17-12 regarding concerns regarding noise at Arbor Park.

17-536 The commenter expresses concerns with water supply and electricity. As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, the Project would be served in accordance with the California Public Utilities Commission (CPUC) and Federal Energy Regulatory Commission tariffs. As discussed in Section 4.5, *Energy*, Project operational energy demands are estimated to be 98,388 kWh/year of electricity which would be supplied by Southern California Edison (SCE) (refer to Page 4.17-15 of the Draft EIR). Refer to Response to Comment 17-26 regarding water supply.

17-537 The commenter expresses concerns with traffic, police services, and the scale of the Project. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, regarding traffic concerns. Refer to Response to Comment 17-62 regarding police protection services. Refer to Response to Comment 17-65 regarding aesthetic concerns.

17-538 The commenter expresses concerns with affordable housing, parking, and use of existing parks. As discussed in Section 3.0, *Project Description*, of the Draft EIR, the Project intends to provide a variety of affordable housing types to support middle-income workers (refer to Pages 3-1 through 3-2 of the Draft EIR). Refer to Master Response 2.1.3, *Parking*, regarding parking concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, regarding impacts to existing recreational facilities.

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Comment Letter 18

Re: Lampson Project Draft Environmental Impact Reports

Tom Oliver <Toliver@cityoflosalamitos.org>
Mon 6/10/2024 8:46 AM
To:Kristal De Boer <kristal.a.deboer@gmail.com>

Thanks for your comments on the project, Kristal. I will forward your comments to the Environmental Consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303



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From: Kristal De Boer <kristal.a.deboer@gmail.com>
Sent: Sunday, June 9, 2024 2:32 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Fwd: Lampson Project Draft Environmental Impact Reports

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kristal.a.deboer@gmail.com

> Dear Mr. Oliver,,
>
> I have been in touch with you previously regarding the impact that the Lampson Project will have on our community here in Los Alamitos and College Park East in Seal Beach. I have also attended several city council meetings to discuss and address the impact that this project will have on our community. After reviewing all the documentation available, I am extremely concerned about the impact that this project will have on our beautiful community and neighborhood. I personally feel that the concerns of the residents have been ignored and just swept under the carpet due to the financial gains that the developers are going to make if this project is allowed to go forward. 18-1

> Please, please, please I would ask that you obtain new environmental reports that are unbiased and provide environmental remediation measures. I would also like to ask that a request be made to release the Peer Review report before any environmental decisions are made on the Lampson Project. 18-2

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It is crucial that this information be made available to all concerned and to those of us who will be the most affected by this project.
>
> I have lived in this area for 25 years and had hoped to live out my life in this beautiful neighborhood. However, with these proposed changes, I feel this area will become overridden with traffic and increased pollution, and that a huge strain will be placed upon the sewage, drainage, public utilities and emergency response providers in our area, and that tremendous environmental issues will result in destroying our beautiful community if this project is allowed to go forward.
>
> I thank you for your time in reading my email. I do appreciate and respect your time.
>
> Sincerely,
>
> Kristal De Boer
> College Park East Resident and Concerned Citizen
> Kristal.a.deboer@gmail.com
> Sent from my iPad

18-2 (CONT.)

18-3

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Responses to Comment 18

De Boer, Kristal, dated June 09, 2024.

18-1 The commenter expresses concerns with the Project on the College Park East community. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

18-2 The commenter requests new environmental reports that are unbiased and provide environmental remediation measures. The commenter requests the City to release the Peer Review report before any environmental decisions are made on the Project.

The City staff and the City's environmental consultant conducted peer review of the Draft EIR prior to release of the Draft EIR for public review. Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. As documented in the Draft EIR, the EIR represents the independent judgment of the City of Los Alamitos (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from construction and operation of the proposed 4665 Lampson Avenue Project (see Draft EIR, pp. S-1, 1-1, and 1-4).

18-3 The commenter expresses concerns with traffic, increased pollution, sewage, drainage, public utilities, and emergency response. The Draft EIR addressed the environmental topics raised by the commenter. Also refer to Section 2.1, Master Response, of this Final EIR. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

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Comment Letter 19

Re: Comments on the DEIR for the 4665 Lampson Project

Tom Oliver <Toliver@cityoflosalamitos.org>
Mon 6/10/2024 8:30 AM
To:Ellery Deaton <ellerydeaton@gmail.com>
Thanks for your comments, Ellery. I will forward these to the Environmental Consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

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From: Ellery Deaton <ellerydeaton@gmail.com>
Sent: Friday, June 7, 2024 9:25 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Comments on the DEIR for the 4665 Lampson Project

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ellerydeaton@gmail.com

July 7, 2024

Tom Oliver, Associate Planner
City of Los Alamitos
Planning Department
3191 Katella Avenue

Comments on the DEIR for 4665 Lampson Avenue

Dear Mr. Oliver:
Lampson Avenue is a street that suffers many safety concerns. There have been many fatal accidents on this street. It is unconscionable to add 246 residential units knowing there is yet another large development on its way. And all of these units with minimum parking. While providing housing is admirable, to not give a thought to whether those who live there are safe is

19-1

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not. This is dangerous and it is asking for problems—both foreseeable and unforeseeable in the future. I urge the Council to cut back the density. 19-1 (CONT.)

Once upon a time quality of life meant something to our officials. This huge project will not only increase accidents, air pollution, tire dust, noise, but will overcrowd this small impacted area of Los Alamitos, Seal Beach and West Garden Grove. There is absolutely no concern for the new residents or existing resident's quality of life. 19-2

The safety concerns continue in the proposed project with the idea of sharing a very old sewer system with Seal Beach. If Seal Beach concurs with this bad idea, you should require a new sewer system be built so sewage spills do not become an issue, a safety concern for everyone. 19-3

And then there is water drainage. The Golf Course and College Park East already flood when we have rain. There needs to be mitigation worked out with the City of Seal Beach to ensure that new drainage systems are in place for the new development, College Park East, West Garden Grove and the Golf Course. 19-4

My suggestions are: 1. Cut the density, 2. Increase the parking, 3. Replace Seal Beach City's sewer system along Lampson, 4. Add new drainage projects for all the affected neighborhoods —College Park East, West Garden Grove, The Golf Course and the new development.

Thank you for the opportunity to examine and comment on the DEIR for 4665 Lampson. I request that my observations and requests be entered into the EIR, addressed, answered, and mitigated. 19-5

Sincerely yours,
Ellery Deaton

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Responses to Comment 19

Deaton, Ellery, dated June 07, 2024.

19-1 The commenter expresses concerns with traffic safety on Lampson Avenue. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue,* for pedestrian safety concerns.

19-2 The commenter expresses concerns with increased accidents, air pollution, tire dust, noise, and overcrowding and overall quality of life. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

19-3 The commenter expresses concerns with sharing an "old" sewer system with the City of Seal Beach and requests that a new sewer system is built to avoid sewage spills. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for a discussion on sewer impacts.

19-4 The commenter expresses concerns with drainage and recommends mitigation be worked out with the City of Seal Beach to ensure new drainage systems are in place for the Project and nearby neighborhoods. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

19-5 The commenter makes suggestions to: 1) to cut the density, 2) increase the parking, 3) replace Seal Beach's sewer system along Lampson Avenue, 4) add new drainage projects for affected neighborhoods. The commenter requests the comments to be included in the Final EIR, addressed, answered, and mitigated. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 20

Lampson Project EIR response

Kellie DuRose <kelliedurose@gmail.com>
Mon 6/10/2024 4:42 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

6 attachments (9 MB)
image_50427649.JPG; image_50372353.JPG; image_67171585.JPG; image_50735873.JPG; image_67210241.JPG; image_50422785.JPG;

I am writing in response to the Lampson Housing Project EIR. I live in the College Park East neighborhood and have lived here for over 6 years and think the proposal for the location does not make sense for the area and should not be approved. I have concerns about parking, safety, traffic, infrastructure, and services. 20-1

The proposed number of parking spots allocated to the community is highly insufficient. A little over 2 parking spaces per home is not sufficient for any neighborhood. Prior to moving to Seal Beach my husband and I lived in the 360 at South Bay planned community in Hawthorne, CA. It was new construction consisting of condos, townhouses, and single family homes. Each home had a garage and there were also street parking spots (both parallel parking along streets as well as pull-in spots on side streets). We parked our cars inside our garage and only needed street parking for our guests. Even with this, parking was a nightmare. We had many occasions where we had to have guests park outside the community and we had to go pick them up and shuttle them to our home. The amount of parking proposed at this location seems very similar and therefore very inadequate. Residents and guests are going to end up parking in the College Park East neighborhood and trying to cross a very dangerous street, Lampson. Even in our single family home community I find that our street is always full of cars because people don't use their garages and have more than 2 cars, filling our streets with overflow from another community will only make it worse. If this is to proceed then I think fewer homes should be planned and more space allocated to parking so that all of the residents and their guests can easily park in the community without needing our streets for overflow. 20-2

Earlier I mentioned Lampson being a dangerous street and this community would make it even worse. In my short 5 years here there have been an extreme amount of accidents on Lampson, including fatalities. People drive too fast and don't notice people pulling out of the CPE community and the West Garden Grove community and adding a new community is not going to change that. Additionally, we have many problems with people heading on Lampson towards Seal Beach Blvd and u-turning at Heather from the dog park and based on the proposed configuration I see that only increasing. Forcing tons of cars into u-turn situations is extremely dangerous and opening the street up to more accidents than it already has, and it already has too much. 20-3

I also have concerns about traffic. The intersections of Seal Beach Blvd and Lampson and Valley View and Lampson are very congested today with the existing communities and the traffic they produce that adding many more people and homes is only going to make it worse. Additionally, if a portion of this community is truly allocated for low income housing (I 20-4

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have my doubts that any of these properties will actually be affordable for low income families but that is beside the point) then public transportation will need to be easily accessible. To my knowledge there are no bus stops along Lampson and if they were to be introduced (if they aren't, people are going to walk 1.5 miles to Seal Beach Blvd or 1.1. miles to Valley View to catch the bus one way?!?!) then that would make traffic even more of a problem along Lampson. If residents are going to be needing to walk to bus stops there aren't adequate sidewalks on Lampson to accommodate this (specifically from Seal Beach Blvd to Tulip). Walking would require crossing a very busy Lampson.

On the topic of public transportation, a park and ride is being eliminated by this development which is actually discouraging current residents from carpooling and hurting the environment. The state government is saying that we need to be environmentally conscious and increase low income housing and I don't see this development focused on either.

20-4 (CONT.)

In addition to driving and walking safety the EIR does not address airplane safety concerns raised by CalTrans and CALUC. I think both agencies raise valid concerns and don't understand why those aren't included in the EIR.

20-5

I am concerned about the existing infrastructure in the area and additional development that will negatively contribute to it. We have dealt with flooding in the CPE neighborhood for many years with no solutions presented. The water table issues exist in that area as well and will only lead to more issues with the existing issues going unresolved. I feel as if the existing residents flooding issues should be resolved before new construction starts. I have attached some pictures to show the flooding on our street over the past few years. It's bad and needs to be resolved before we eliminate runoff options with more building.

20-6

Finally, I feel as if we do not have the appropriate amount of services in the area to accommodate a new community. We have very few grocery stores in the area and some of them are very old. The stores in the strip malls at Valley View and Lampson which would be the closest for this community are closing down, are very run down, or have been left empty for years. People in the community have raised concerns to the city of Garden Grove and to the owners of the properties and nothing is being addressed. We also have very old infrastructure for electricity, internet, cable, etc. and are well overdue for upgrades for the existing communities. And now we're proposing adding new residents and communities with no plans to address any of these issues.

20-7

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Responses to Comment 20

DuRose, Kellie, dated June 10, 2024.

20-1 The commenter provides introductory remarks and expresses concerns with parking, safety, traffic, infrastructure, and services which are responded to below.

20-2 The commenter expresses concerns about the insufficient number of parking spaces and provides personal experience of inadequate parking. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

20-3 The commenter expresses concerns with traffic safety on Lampson Avenue. The commenter states that Lampson is a dangerous street, there have been many accidents, and there are problems with U-turns on Heather. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue,* for pedestrian safety concerns.

20-4 The commenter expresses concerns with traffic congestion on Lampson Avenue and nearby intersections. Additionally, the commenter expresses concerns with accessibility of public transportation for affordable housing residents and elimination of the Park-n-Ride. The commenter states that there is no bus stop along Lampson Avenue and inadequate sidewalks on Lampson to accommodate walking from Seal Beach Boulevard to Tulip.

The commenter is correct that there is no transit service along Lampson Avenue; the nearest OCTA bus stop from the Project site is Route 123, approximately 1.2 miles at the intersection of Valley View Street and Lampson Avenue. The existing Park-n-Ride that previously occupied the Project site has not been in operation for the past 18 months and when in operation had limited usage. As discussed in Section 4.15, *Transportation*, of the Draft EIR, the Project Mitigation Measure MM 4.15-1 has been incorporated which includes implementing CAPCOA strategies such as coordination with OCTA to determine whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards (refer to Page 4.15-19 of the Draft EIR). Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.2, *Avenue, for* pedestrian safety concerns.

20-5 The commenter states that the EIR does not address airplane safety concerns raised by Caltrans and ALUC. The commenter is incorrect in stating that the Draft EIR did not address airplane safety concerns. Please refer to Draft EIR, Section 2.4.3 for a discussion regarding Airport Environs Land Use Plan for the Joint Forces Training Base Los Alamitos and the ALUC process. Airport safety is analyzed in Section 4.8, *Hazards and Hazardous Materials*, in the Draft EIR. Refer also to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (*JFTB).

20-6 The commenter expresses concerns with flooding and existing storm drainage infrastructure in the area. The commenter expresses concerns with the existing water table and recommends

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flooding issues be resolved before construction starts. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

20-7 The commenter expresses concerns with existing utility infrastructure and services (i.e. grocery stores) in the area due to the Project's population growth. The commenter expresses concerns with the age of existing grocery stores and nearby stores to the Project site. As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, there is sufficient capacity in utility services to serve the Project site. The Project would be served in accordance with the CPUC and Federal Energy Regulatory Commission tariffs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration. No new or expanded off-site dry utilities are required to serve the Project, and therefore there would be no impact associated with any such facilities that could cause significant environmental effects. (refer to Draft EIR p. 4.17-15) The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

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Comment Letter 21

From: Chris Eble
To: Tom Oliver
Subject: Lampson project
Date: Sunday, May 5, 2024 3:32:45 PM

Mr. Oliver-

I'm sure you've heard from many of us about this residential project to be built on Lampson Ave. you've probably heard many concerns about the number of parking spaces to be provided per number of units. It is unacceptable. To think that people will be taking public transit to offset the lack of parking is to be intellectually dishonest. The residents would park in college park because that will be the only option. Not only will it impact residents that already are dealing with lack of parking as children grow older and start to drive but it will become a real safety concern. I've lived in college park for only 5 years and in that time I've seen a dozen or so serious accidents on Lampson. The last one was almost in our back yard just 6-7 weeks ago. Lampson is already dangerous as everybody knows- you add to that hundreds of people crossing it (maybe at a traffic light maybe not) everyday and you have made life in this neighborhood much more dangerous. The likeliness that there will be a fatality will go up exponentially if the project goes through as planned. 21-1 21-2

This of course doesn't even take into account the joint air base and the study that seems to have been ignored by the powers that want this project. I don't understand how a federal study/conclusion can be ignored by local government. 21-3

Safety should be the first concern and at least from where I sit it has been overtaken by the affordable housing cartel and whatever monies that brings to the city. It's almost always about money and it certainly is with the Lampson project. It's unsafe and it's wrong to put revenue above safety. 21-4

Sincerely,

Chris Eble

Responses to Comment 21

Eble, Chris, dated May 05, 2024.

21-1 The commenter expresses concerns about the number of parking spaces provided. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

21-2 The commenter expresses concerns about pedestrian safety and traffic on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

21-3 The commenter expresses concerns with the ALUC and Caltrans conclusions and states that the studies have been ignored. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

21-4 The commenter expresses general opposition to the project. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

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Comment Letter 22

Lampson Housing Project

susanne farjami <sfarjami@hotmail.com>
Sun 6/9/2024 11:18 AM

To:Tom Oliver <Toliver@cityoflosalamitos.org>
Cc:Farhad <ffarjami@aol.com>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender sfarjami@hotmail.com

We were dismayed to learn that the Lampson Project draft environmental impact reports were prepared by consultants hired by Lampson LLC (the property developer), not by independent consultants who should have been hired by the City of Los Alamitos. 22-1

It makes sense that land bordering a military airport would not be zoned for residential development. It makes no sense that this area was re-zoned to allow for residential development, especially after the Airport Land Use Commission and the California Department of Transportation - Division of Aeronautics deemed this area unsuitable and unsafe for residential housing. 22-2

It is our understanding that hundreds of opposition letters written by members of this community in November 2022 were not provided to the City Council or the Planning Commission. Why would they be prevented from knowing the extent of opposition to this project within the community before making this decision?

Before this project proceeds any further, all conflicts of interest should be disclosed and unbiased consultants should prepare new environmental reports that address the obvious public safety and quality of life issues this project creates for the residents of Los Alamitos, Rossmoor and Seal Beach. In addition, the "Peer Review" report should be released before any environmental decisions are made on the Lampson Project. 22-3

We have lived in Rossmoor for 30 years, raised a family here and enjoyed a relatively safe and quiet community. Building so much new housing in a small area will have a huge impact on our quality of life with increased traffic, congestion, noise and safety issues. Building these houses next to a military airbase just adds to these concerns.

We would urge the Los Alamitos City Council, the Planning Commission, and everyone involved in this project to listen to the many, many voices in this community that oppose this project for so many reasons - you work for them! 22-4

Fred and Susanne Farjami

Sent from my iPad

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Responses to Comment 22

Farjami, Susanne dated June 09, 2024.

22-1 The commenter expresses dismay that the EIR was prepared by consultants hired by the Project Applicant and not the City. The City staff and the City's environmental consultant conducted peer review of the Draft EIR prior to release of the Draft EIR for public review. Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. As documented in the Draft EIR, the EIR represents the independent judgment of the City of Los Alamitos (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from construction and operation of the proposed 4665 Lampson Avenue Project (see Draft EIR, pp. S-1, 1-1, and 1-4).

22-2 The commenter expresses concerns with the zoning of the Project site and expresses concerns with ALUC and Caltrans conclusion on the site. Please refer to Draft EIR, Section 2.4.3 for a discussion regarding Airport Environs Land Use Plan for the Joint Forces Training Base Los Alamitos and the ALUC process. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

22-3 The commenter inquires why the NOP comment letters were not provided to City Council or Planning Commission. The commenter requests all conflicts of interest be disclosed and new unbiased environmental reports that address public safety and quality of life issues. The commenter also requests the Peer Review report be released before any environmental decisions are made.

The NOP comment letters are intended to inform the scope of the Project's EIR. The NOP comments were summarized in the Draft EIR (see Table 1-1 of the Draft EIR) and included in *Technical Appendix A* of the Draft EIR, therefore, the NOP comments were made publicly available. The Draft EIR and Final EIR, including all comments made on the Project will be made available to the decision makers prior to any scheduled public hearings on the Project.

Please refer to Response to Comment 16-16 and 22-1 regarding the EIR reflecting the independent judgment of the City, as Lead Agency, and peer review. There are no known conflicts of interest.

22-4 The commenter opposes the Project and expresses concerns with increased traffic, congestion, noise, and safety issues and quality of life. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

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Comment Letter 23

From: rosemaryfrenkiel@gmail.com
To: Tom Oliver
Subject: 4665 Lampson Project
Date: Thursday, May 2, 2024 12:15:08 PM

Sir:
Just a quick note in regards to this project. First, I think that 246 housing units are a bit too many. People have to go to work, school, shopping and doctor's appointments etc. This will lead to much traffic congestion, much more than there is now. Second, it is too close to the Los Alamitos Military airport. The training that goes on there is very loud on weekends and sometime during the week. How happy do you think people will be when they find themselves in that noise and the level will be higher because they are close to the airport. Third, what will you do, if God forbid, a helicopter or military plane crashes.
I believe I read that that safety board did not give your project its blessing. Who will be morally and monetarily responsible? Maybe cut back on the project and put it as far from the military runway as possible. Maybe it would be a good idea for you to hire a small plane and pilot and fly over the area to get a birds eye view. The runway is closer than you think. You can't use a drone because it is a military facility, but a small plane is allowed to make a fly over.

23-1

23-2

Cordially,
Rosemary Frenkiel

Sent from my iPad

Responses to Comment 23

Frenkiel. Rosemary dated May 02, 2024.

23-1 The commenter expresses concerns with the proposed density and traffic congestion. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

23-2 The commenter expresses concerns with proximity to the JFTB, noise, and safety. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

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Comment Letter 24

From: Laurie Fulton
To: Tom Oliver
Cc: churchillca@194741738.mail
Subject: Lampson Project and Old Ranch Country Club Project
Date: Saturday, May 4, 2024 11:24:53 AM

Dear Mr. Oliver,

We are two of many community residents who are deeply concerned about these high density / low income projects moving forward. It seems that we as a community have no say in this matter. 24-1

The negative impact these projects will have to our community in terms of traffic congestion, parking, noise and air pollution, crime, increased demand on city and energy resources, etc., are very serious. 24-2

It should be noted that two State Agencies, Cal Trans Division of Aeronautics and the California Airport Land Use Commission, issued warnings that these projects have safety and health issues due to their close proximity to the Joint Forces Training Base. These warnings were omitted from the Draft Environmental Impact Report. This is unacceptable "editing" to get your projects approved. 24-3

In closing, we will stress again that we highly disapprove of these projects which have such a high negative impact to our community. 24-4

Mr. & Mrs. L.C. Fulton
3271 Hillrose Drive
Rossmoor, CA 90720

Responses to Comment 24

Fulton, L.C., dated May 04, 2024.

24-1 The commenter expresses concerns with high density/low-income projects. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and no further response is required.

24-2 The commenter expresses concerns with traffic congestion, parking, noise and air pollution, crime, increased demand on city and energy resources. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

24-3 The commenter states that Caltrans and ALUC warnings were omitted from the Draft EIR. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

24-4 The commenter expresses opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 25

From: zombie4me2
To: Tom Oliver
Subject: Lampson project
Date: Sunday, May 19, 2024 1:09:45 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender zombie4me2@aol.com

I have lived in college park east half my life, my mother still lives there. I now live in rossmoor. This project will make it that much harder to get to and from visiting with my mother. Traffic is already awful on lampson. I agree with all the points made below. This was not well thought out and is only benefiting the builder and creating more property tax for Los alamitos which is not being directly impacted by the new traffic. 25-1

1. The mixed use of density of 20 units per acre is too high to accommodate adequate parking. Spill-over right into College Park East. 25-2

2. AYSO games will be impacted and not be able to continue with limited parking. 25-3

3. Vehicle access to the project site via two driveways on Lampson is not safe.

Ingress and egress are severely limited due to the green belt divider on Lampson.

This is a safety issue for school buses and emergency vehicles. 25-4

4. The project opens space should be converted into a recreational park with playground equipment for neighborhood children.

Without the play area, the kids will be dangerously crossing Lampson via walking or biking to access Heather Park. 25-5

5. Vehicle miles travel will be significantly increased on Lampson, Seal Beach Blvd, and Valley View.

The current **Park and Ride** lot that supports car pooling and van pooling will be eliminated increasing vehicle miles traveled further. Project should providing a **Telework Center** in the project to mitigate travel impacts. 25-6

6. California law requires **solar panels** on new housing and **zero emission electric vehicle charging stations**. Neither are mentioned in the draft plan.

SINCERELY, 25-7

KIM GARTHWAITE

Sent via the Samsung Galaxy S23 Ultra 5G, an AT&T 5G smartphone

25-7

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Responses to Comment 25

Garthwaite, Kim, dated May 19, 2024.

25-1 The commenter provides introductory remarks, expresses concerns with traffic on Lampson Avenue, and expresses general opposition to the Project. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Other specific comments are addressed below.

25-2 The commenter expresses concerns with inadequate parking due to the proposed density and potential spill over into College Park East. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

25-3 The commenter expresses concerns with AYSO operations and parking. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

25-4 The commenter expresses concerns with vehicle access onto the Project site and safety issues for emergency vehicles and school buses. Refer to Master Responses 2.1.2, *Roadway Safety on Lampson Avenue*, and 2.1.7, *Emergency Vehicle Access.*

25-5 The commenter recommends the Project open space be converted into a recreational park. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities.*

25-6 The commenter expresses concerns with VMT, states that the elimination of the current Park and Ride Lot will further increase VMT, and recommends the Project provide a Telework Center. The existing Park-n-Ride that previously occupied the Project site has not been in operation for the past 18 months and when in operation, had limited usage. Additionally, as discussed in 4.15, *Transportation*, of the Draft EIR, the Project would result in significant VMT impacts with the implementation of Mitigation Measure MM 4.15-1. Mitigation Measure MM 4.15-1 includes implementing CAPCOA strategies such as installing broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission (refer to Page 4.15-19 of the Draft EIR).

25-7 The commenter states that California law requires solar panels on new housing and zero emission electric vehicle charging stations which are not mentioned in the Draft EIR. Contrary to the commenter's assertions, as part of the Project's Project Design Features (PDFs), the Project will include solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually (PDF GHG-1) and the Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1 (PDF GHG-4) (refer to Page 4.5-6 to 4.5-7 of the Draft EIR) Thus, no revision to the Draft EIR is required.

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Comment Letter 26

From: gizem oksuz gulec
To: toliver@cityoflosalamitos.org
Subject: Lampson project
Date: Sunday, May 19, 2024 11:47:03 AM

Dear Tom Oliver,
Please consider below points and our requests as residents before moving forward with the Lampson project as most of the residents are opposed to this not so well planned development. Below are the most pressing concerns; 26-1

1. The mixed use of density of 20 units per acre is too high to accommodate adequate parking. Spill-over right into College Park East will cause air pollution and accidents in the neighborhoods. 26-2

2. AYSO games will be impacted and not be able to continue with limited parking. This takes away the right of our kids play soccer in our own neighborhoods. 26-3

3. Vehicle access to the project site via two driveways on Lampson is not safe. Ingress and egress are severely limited due to the green belt divider on Lampson. This is a safety issue for school buses and emergency vehicles. 26-4

4. The project opens space should be converted into a recreational park with playground equipment for neighborhood children. Without the play area, the kids will be dangerously crossing Lampson via walking or biking to access Heather Park. 26-5

5. Vehicle miles travel will be significantly increased on Lampson, Seal Beach Blvd, and Valley View.
The current **Park and Ride** lot that supports car pooling and van pooling will be eliminated increasing vehicle miles traveled further. Project should provide a **Telework Center** to mitigate travel impacts. 26-6

6. California law requires **solar panels** on new housing and **zero emission electric vehicle charging stations**. Neither are mentioned in the draft plan. 26-7

7. This area is a lovely and relatively quiet community where most households are families where we feel safe and its not congested by traffic, pollution or too much housing squeezed into a small area. This project causes a HUGE loss to the hundred of families calling College Park East and the surrounding area “home”. **Only a win for the developer.** 26-8

8. Lampson Avenue is not only used by the over 1,700 households in College Park East, but those who live nearby in Rossmoor and Los Al and Garden Grove who go shopping, drop/pick up kids at school and bypass the freeway.

Lampson is only a two lane street with constant use and at times extremely congested. By adding one 246 units and potentially 500 additional car trips daily, Lampson will be a nightmare.

26-9

9. **I am requesting a study on the impact of foot traffic on Lampson** due to the development.
I would also like a **sidewalk added** to the north side of Lampson between Seal Beach Blvd and Tulip Drive. I am concerned that with the **decreased visibilit**y of drivers traveling eastbound on Lampson due to curves in the roadway, as well as the boulders and trees in the center divider, there will be an i**ncrease in pedestrian injuries and fatalities.**

Please stop the Lampson project.
Kindly,

Gizem Gulec

26-10

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Responses to Comment 26

Gulec, Gizem, dated May 19, 2024.

26-1 The commenter provides introductory remarks and expresses opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

26-2 The commenter expresses concerns with inadequate parking due to the proposed density, spill over into College Park East air pollution, and accidents. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

26-3 The commenter expresses concerns with AYSO operation and parking. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

26-4 The commenter expresses concerns with vehicle access onto the Project site and safety issues for emergency vehicles and school buses. Refer to Master Responses 2.1.2, *Roadway Safety on Lampson Avenue*, and 2.1.7, *Emergency Vehicle Access*.

26-5 The commenter recommends the Project open space be converted into a recreational park. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities.*

26-6 The commenter expresses concerns with VMT, states that the elimination of the current Park and Ride Lot will further increase VMT, and recommends the Project provide a Telework Center. The existing Park-n-Ride that previously occupied the Project site has not been in operation for the past 18 months and when in operation had limited usage Additionally, as discussed in 4.15, *Transportation*, of the Draft EIR, the Project would result in significant VMT impacts with the implementation of Mitigation Measure MM 4.15-1. Mitigation Measure MM 4.15-1 includes implementing CAPCOA strategies such as installing broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission (refer to Page 4.15-19 of the Draft EIR).

26-7 The commenter states that California law requires solar panels on new housing and zero emission electric vehicle charging stations which are not mentioned in the Draft EIR. Contrary to the commenter's assertions, as part of the Project's Project Design Features (PDFs), the Project will include solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually (PDF GHG-1) and the Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will

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equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1 (PDF GHG-4) (refer to Page 4.5-6 to 4.5-7 of the Draft EIR) Thus, no revision to the Draft EIR is required.

26-8 The commenter expresses concerns with traffic congestion, pollution, and proposed density, and expresses general opposition to the Project. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

26-9 The commenter expresses concerns with traffic on Lampson Avenue. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

26-10 The commenter requests a study on the impact of foot traffic on Lampson Avenue and a sidewalk added to the north side of Lampson between Seal Beach Boulevard and Tulip Drive. A Safety Evaluation was prepared to confirm that the Project would have no safety impacts on public roadways and Project access points (see Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, and *Attachment H* of this Final EIR). The Safety Evaluation further confirms the analysis and determination in the Transportation Section (Section 4.15) of the Draft EIR that the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature. As for the commenter's request for an additional sidewalk on Lampson Avenue between Seal Beach Boulevard and Tulip Drive, the Project would include sidewalks along the Project's frontage on Lampson Avenue and areas beyond the Project site's frontage is not part of the Project boundary or a requirement of the Project Applicant. However, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

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Comment Letter 27

Re: Lampson Project Comments

C.K. Gulec <ckgulec@gmail.com>
Mon 6/10/2024 4:23 PM

To:Tom Oliver <Toliver@cityoflosalamitos.org>
Cc:Shelley Hasselbrink <SHasselbrink@cityoflosalamitos.org>;Tanya Doby <TDoby@cityoflosalamitos.org>;Mark Chirco <MChirco@cityoflosalamitos.org>;Jordan Nefulda <JNefulda@cityoflosalamitos.org>;jkalmick@sealbeachca.gov <jkalmick@sealbeachca.gov>;mvaripapa@sealbeachca.gov <mvaripapa@sealbeachca.gov>;tmoore@sealbeachca.gov <tmoore@sealbeachca.gov>;ssustarsic@sealbeachca.gov <ssustarsic@sealbeachca.gov>;smassalavitt@sealbeachca.gov <smassalavitt@sealbeachca.gov>;StopLampsonProject@gmail.com <StopLampsonProject@gmail.com>

Following up on this email.

Unfortunately, the quality of the EIR work that has been released is very disappointing. There are claims of conflict of interest as well and tremendous safety concerns with respect to the JFTB. These do not appear to be properly addressed.

As noted in my prior email, a proper due diligence on such a controversial development requires these reports independently reviewed and results of those to be shared with the public. Without independent peer review, there is no way to address these concerns.

As a resident of Seal Beach, I trust this route will be followed and concerns of the residents will be addressed.

CK Gulec, PhD, PE, SE

On Tue, Nov 1, 2022 at 9:29 PM Kerem Gulec <ckgulec@gmail.com> wrote:

> Dear All
>
> It is remarkable to propose this location for such a high density, boilerplate housing project. The idea of state mandating housing is rather ridiculous by itself and most likely won't achieve the results it is intended to, but proposing this right next to a neighborhood with completely different characteristics defies pretty much every urban planning principle in the book. Self inflicted wound is perhaps best way to describe this, very short sighted. Destroying livability is essentially akin to asking those who live there to move somewhere else. Perfect way to diminish the attractiveness of the city in the long term by making life miserable for those who live there.
>
> Clearly this can have a significant impact on our neighborhood and such consequences will be unacceptable and unfair but ultimate losers will also include the city of los Alamitos and city of seal beach.
>
> This project location appears to be ill conceived in many ways. Right next to Arbor and Dog parks, which are two of the busiest recreation areas in the city, with arbor park hosting soccer events every week. There is absolutely no way lampson can handle this added traffic due to this development. There is absolutely no way our parks can handle this additional demand from the new condensed housing. It will create parking issues in our neighborhood, crime will go up. It will be a disaster from urban planning perspective and not only diminish value of our neighborhood but our city as well.
>
> As a CPE resident, and an engineer/consultant who has contributed to many planning studies as part of numerous developments across California, I strongly recommend reconsidering the

27-1

27-2

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proposed location for the high density housing. This will certainly have a significantly negative impact to its neighbors. And those "neighbors" will likely use every legal tool they have to oppose this development location of which not only defies common sense but likely would not pass any objective criteria/test either. Hopefully, this idea goes away but if not an extensive due dilligence process should be expected and planned. Studies by reputable consultants/experts that investigate and quantify the short/long term impact of the proposed location on its surrounding communities and the city overall should be performed. If these studies are done by the developer, they should be independently peer reviewed by the city and findings should be objectively reconciled. Community members also should be given access to these studies and also an opportunity to perform independent peer reviews, and city should collect their comments. All comments need to should be addressed satisfactorily.

Thank you,

CK GULEC, PhD, PE
3701 Fuchsia Street, Seal Beach

27-3
(CONT.)

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Responses to Comment 27

Gulec, CK, dated June 10, 2024.

27-1 The commenter states that there is a conflict of interest and safety concerns with JFTB. The commenter requests proper due diligence on the Draft EIR and should be independently reviewed and shared to the public. The City staff and the City's environmental consultant conducted peer review of the Draft EIR prior to release of the Draft EIR for public review. Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. As documented in the Draft EIR, the EIR represents the independent judgment of the City of Los Alamitos (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from construction and operation of the proposed 4665 Lampson Avenue Project (see Draft EIR, pp. S-1, 1-1, and 1-4). Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB).*

27-2 The commenter expresses opposition to the Project. The commenter does not provide any specific comments on the adequacy of the Draft EIR. However, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

27-3 The commenter expresses concerns with impacts to existing parks, traffic on Lampson Avenue, and parking, as well as independent peer review of developer initiated studies. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities.* Refer to Response to Comment 27-1 regarding independent review.

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COMMENT LETTER 28

From: Ann Gunvalsen
To: Tom Oliver
Subject: 4665 Lampson Avenue Project
Date: Thursday, April 25, 2024 5:04:33 PM

Dear Planning Committee,

I am in favor of this new devleopment on Lampson. Nobody wants more traffic etc., but how are we going to control homelessness when people can't afford homes. The only solution is building more projects like this one in all communities.

28-1

Ann Gunvalsen Saks
4273 Candleberry Ave

Responses to Comment 28

Gunvalsen Saks, Ann, dated April 25, 2024.

28-1 The commenter expresses approval for the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and no further response is required.

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Comment Letter 29

Comments to the Draft Environmental Impact Report for the proposed Lampson Park Place, LLC Project at 4665 Lampson Ave.

Donald Horning <donaldmhorning@gmail.com>
Mon 6/10/2024 4:31 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

1 attachments (18 KB)
Los Al Lampson Project-Horning comments.docx;

June 10, 2024

To: Tom Oliver toliver@cityoflosalamitos.org

From: Donald M. Horning

Subject: Comments to the Draft Environmental Impact Report for the proposed Lampson Park Place, LLC Project at 4665 Lampson Ave.

I am a retired environmental professional with 40+ years of experience. I submit the following comments based upon my review of the Draft Environmental Impact Report. My emphasis is primarily on sections noted to have no significant environmental impact where a clear argument to the contrary exists. 29-1

Section 4.8 Environmental Hazards / Hazardous Materials

Threshold E. The Project is located within the Joint Forces Airport land use plan. The report determined that there is a "less than significant impact" with no mitigation required.

Comment: This is a military airport used for training pilots from the US military and from other allied countries. The training involves practice primarily in helicopters and smaller winged aircraft with occasional large cargo planes.

This military airport is regulated primarily by the US Military and not the Federal Aviation Authority. The entire area of the Project site is within a designated Military Airport Safety Zone. Permanent housing is not recommended. 29-2

Threshold F. *Physical Interference* There is a written Military Emergency Response Plan and Emergency Evacuation Plan

Comment: Construction of a permanent housing Project within this Military Airport Safety Zone is clearly not in the best interests of anyone.

Mitigation: At a minimum, measures need to be developed to provide full disclosure to residents of the hazards noted in Thresholds E and F at this site noted by the State Airport Land Use Commission and the National Commission on Military Safety (2020). 29-3

Section 4.9 Hydrology and Water Quality. The report notes a determination of less than significant impact with no mitigation required.

Threshold C Impact of Drainage and Surface Water

Comment: The Project area is underlain with liquefaction soils that can heave more than 10% under wet conditions. The entire Project area along the residential areas across 29-4

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Lampson Street (College Park East) are currently subject to significant flooding. 29-4 (CONT.)

Mitigation: The combination of liquefaction soils and clear evidence of decades of nearby flooding during even moderate rain events signals a need for mitigation within the Project area, so as to not repeat what is happening in the nearby existing College Parke East neighborhood.

Surface drainage likewise needs a suitable outlet that directs drainage to unoccupied areas adjacent to the military airport. 29-5

Section 4.10 Land Use Planning. The report notes no significant impact with no mitigation required.

Comment: The Project is clearly located within the Military Airport Safety Zone. This should be a red flag regarding suitableness for permanent housing. 29-6

Section 4.12 Population and Housing. The report indicates less than significant impact with no mitigation required

Comment: This area was never zoned for permanent multifamily housing due to the proximity of the military airport.

Mitigation: Again, at a minimum, measures need to be developed to provide full disclosure to residents of the hazards noted in Sections 4.10 and 4.12 at this site noted by the State Airport Land Use Commission and the National Commission on Military Safety (2020). 29-7

4.13 Public Service. The report indicates less than significant impact to existing Fire, Emergency, and Police Services

Comment: It is foolish to assume that a large high density, multifamily complex has no significant impact to emergency services. The services of Rossmoor, Los Alamitos, Seal Beach and Orange County are already at capacity. The fact that two other proposed projects within the same general area, will certainly have an adverse impact to the current load to response agencies.

Mitigation: Instead of the erroneous assumption that such development would have no impact on response services, there needs to be a documented study to assess current response times and the personnel needed to meet the needs once this project is completed and how the developers can help meet that new need. 29-8

4.15 Transportation. The report indicates a potentially significant impact.

Comment: I agree with this determination but the report offers no suggestion of possible mitigation.

Mitigation: A study by OCTA should be required and funded by the developers to determine specific mitigation measures for the developers to address. 29-9

4.17 Utilities and Service System. The report indicates a less than significant impact.

Comment: This is clearly an erroneous conclusion as the primary sanitary sewer connection will be to the City of Seal Beach sewer line. This line is currently at an approximate 50% 29-10

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capacity. The addition of 10-15 % increase to the base capacity by the Project will move close to the recommended 80% maximum flow for the pipe.

In addition, the City of Seal Beach officials have stressed that some sewer lines are over 100 years old and there are critical concerns of an aging sewer system which results in brakes that can lead to pollution violations and fines.

The study of this sewer line in this report only was regarding volume and capacity but did not address the age of the pipe and whether nearing the maximum capacity of an aging pipe would result in catastrophic failure or the probability of stormwater intrusion.

29-10 (CONT.)

Mitigation: Further study is needed to determine the age of the sewer line, the relationship to the proposed increase capacity, the additional increased capacity from the proposed development at Old Ranch, whether the line needs to be replaced to effectively handle the resulting increased capacity of both developments, and if one or both of these developers need to replace this sewer line because a relining of the sewer line reduces the capacity, such that the line would not be able to accommodate both projects hooking into the line.

29-11

I appreciate the opportunity to comment on this Environmental Impact Report.

Donald M. Horning, Resident

Seal Beach

DRAFT

Responses to Comment 29

Horning, Donald, dated June 10, 2024.

29-1 The commenter provides an introduction and provides comments on the Draft EIR which are responded to below.

29-2 The commenter lists Threshold e of Section 4.8, *Hazards and Hazardous Materials*, and states that the entire area of the Project site is within a designated Military Airport Safety Zone and permanent housing is not recommended. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

29-3 The commenter lists Threshold f of Section 4.8, *Hazards and Hazardous Materials* and states that construction of permanent housing within the Military Airport Safety Zone is not in the best interests of anyone. The commenter recommends mitigation measures be developed to provide full disclosure of the hazards noted in Thresholds e and f noted by the State ALUC and National Commission on Military Safety (2020). Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (*JFTB).The proposed mitigation measure is already mandated through regulatory requirements. Per Master Response 2.1.9, ALUC mandates the provision of the State's real estate disclosure regarding buyer and renter notification for new residential land uses within an airport influence area even if these state laws were to be revised or rescinded. The ALUC also requires that signs providing these disclosures and notices be "prominently posted" in real estate sales offices and within the new development depicting overflight areas and helicopter traffic patterns. Buyer awareness is required as part of the City's approval process for the Project. The buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location (refer to Page 4.10-18 of the Draft EIR).

29-4 The commenter lists Threshold c of Section 4.9, *Hydrology and Water Quality*, and states that the Project area is underlain with liquefaction soils that can heave more than 10% under wet conditions. The commenter states the entire Project area along the residential areas across Lampson are currently subject to significant flooding. Section 4.6, Geology and Soils, in the Draft EIR, states that the Project site is located within a liquefaction hazard zone per the State of California Seismic Hazard Zone for liquefaction potential, imposes mitigation measures, and determined that impacts were less than significant after mitigation. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

29-5 The commenter recommends a mitigation measure to provide a suitable outlet that directs drainage to unoccupied areas adjacent to the military airport due to current flooding conditions. Arbor Park is within the JFTB and drains south to the same earthen channel outlet as the Project site. If the proposed flows from the Project are not allowed to outlet to the JFTB at the

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southwest corner of the site, proposed flows from the Project would not be allowed to outlet to the JFTB to the north of the site either since they are essentially the same outlet location. In addition, the existing site does not flow in the northerly Arbor Park/ JFTB area as the site drains in the southwesterly direction, therefore directing stormwater runoff to the north would change the historic drainage pattern which can potentially cause downstream flooding. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

29-6 The commenter states that the Project is clearly located within the Military Airport Safety Zone and should be a red flag regarding suitableness for permanent housing. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

29-7 The commenter incorrectly states that the Project site was never zoned for permanent multifamily housing due to the proximity of the military airport. The commenter recommends mitigation measures be developed to provide full disclosure of the hazards noted in Thresholds e and f noted by the State ALUC and National Commission on Military Safety (2020).

The Project site is currently zoned for residential uses (refer the Draft EIR, Section 2.4.2, *Zoning*). Refer to Response to Comment 29-3 and Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)* regarding disclosures required.

29-8 The commenter disagrees with the impact conclusion in Section 4.13, *Public Services* and states that the public services of Rossmoor, Los Alamitos, Seal Beach, and Orange County are already at capacity. The commenter recommends mitigation measures to assess current response times and personnel needed to meet the needs once the Project is completed.

The commenter does not provide evidence that the services of Rossmoor, Los Alamitos, Seal Beach, and Orange County are already at capacity. The Draft EIR includes correspondence from the public service providers for the Project site which demonstrate adequate capacity for the Project (*Technical Appendix L*). As discussed in Section 4.13, *Public Services*, of the Draft EIR, implementation of the Project would increase the overall demand on fire and police protection and emergency services in the City. However, considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Per correspondence with the OCFA, response times would not decrease to necessitate the construction of a new fire station. In order to maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs. Similarly, the increase in potential services needed would not require the construction of a new police station or improvements to the existing station that serves the Project site. Implementation of the Project would result in an increase in calls for service; however, Los Alamitos Police Department has indicated that this increase would not adversely impact Los Alamitos Police Department's existing resources. Therefore, impacts to public services would be less than significant (refer to Page 4.13-9 to 4.13-10).

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29-9 The commenter agrees with the impact conclusion for VMT but recommends a study by OCTA to determine specific mitigation measures for the developers to address. The commenter incorrectly states that the Draft EIR offers no suggested mitigation measures. As discussed in Section 4.15, *Transportation*, of the Draft EIR, the Project would result in significant VMT impacts with the implementation of Mitigation Measure MM 4.15-1. Mitigation Measure MM 4.15-1 includes implementing CAPCOA strategies such as coordination with the OCTA whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards (refer to Page 4.15-19 of the Draft EIR).

It is also not necessary for the developer to hire OCTA to determine mitigation measures. The Draft EIR was circulated to OCTA for public review and comment, which is the appropriate process for OCTA to suggest mitigation. It should be noted that OCTA did provide a comment letter on the Draft EIR and responses were provided under Comment Letter F, above.

29-10 The commenter disagrees with the impact conclusion in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, and states that the sewer lines are currently at 50% capacity and the Project would lead to near the recommended maximum flow for the sewer pipe. The commenter states that the sewer study addressed the volume and capacity but did not address the age of the pipe and whether nearing the maximum capacity of the sewer pipe would result in catastrophic failure or probability of stormwater intrusion.

A Sanitary Sewer Analysis (*Technical Appendix O* of the Draft EIR) was prepared for the Project and investigates the sewer discharge route for the proposed development to the existing sewer mains of three manholes: 1) Basswood and Aster Street (Manhole A-16); 2) Candleberry Avenue and Aster Street (Manhole A-21); and 3) Elder Avenue (Manhole A-25). As concluded in the Project's Sanitary Sewer Analysis, Basswood and Aster Street [Manhole A-16] is at depth-to-diameter ratio of 0.3013; Candleberry Avenue and Aster Street [Manhole A-21] is at depth-to-diameter ratio of 0.3266; and Elder Avenue [Manhole A-25] is at depth-to-diameter ratio of 0.3958 under existing conditions. As demonstrated, in all cases the sewer pipe system capacity is capable of maintaining an adequate flow well below 50% of its flow depth capacity with the additional flow from the proposed development. Moreover, in order to connect to the City of Seal Beach sanitary sewer service, the Project Applicant would be required to pay connection fees, which may be used by the City of Seal Beach to maintain its existing infrastructure and implement needed improvements.

29-11 The commenter recommends for further study to determine the age of the sewer line, the relationship to the proposed increase capacity, the additional increase capacity from the proposed development at Old Ranch, whether the lines need to be replaced to effectively handle the resulting increased capacity of both developments. Refer to Response to Comment 29-10 regarding the sewer line capacity and maintenance (e.g. age of the sewer line). The Sanitary Sewer Analysis (*Technical Appendix O* of the Draft EIR) evaluated upstream sewer flows in combination with the Project. As indicated in Response to Comment 29-10, the sewer discharge route to the existing sewer mains has adequate capacity to accept the Project's sewer

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generation. Old Ranch Country Club would connect to sewer facilities/manholes downstream of the manholes analyzed for the Project. The sewer analysis for Old Ranch Country Club will need to demonstrate adequate sewer capacity along with upstream sewer flows. Additionally, a sewer capacity analysis has been conducted to include all components of the Old Ranch Country Club (see *Attachment L* to this Final EIR). To evaluate a potential increase in the flow depth to pipe diameter ratio (d/D) based on the increase in total demand associated with the Old Ranch Country Club project and after taking into consideration the amount of sewer discharge associated with the Project, C&V Consulting, Inc. applied the increase in total demand from the further refined Old Ranch Country Club Project to manhole (MH) IDs B03-A14 and B01-A13 through B01-A02A. These manholes and their associated pipeline segments are located downstream of the three manholes that were monitored for the Project and as such include the upstream sewer flows anticipated by the Project and currently existing development. The Draft EIR concluded that the proposed flows from the Project, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems, and that the existing sewer system has adequate capacity for the proposed development.

As concluded, the overall d/D is anticipated to be less than 0.5 for the identified segments with the increased demand added to the system. This means that when the sewer flows from the further refined Old Ranch Country Club project are added to the sewer flows from the Project based on the downstream monitored manhole flows, the depth of flow to pipe diameter ratio is less than 50%. This in turn means that even with the Old Ranch Country Club project, the sewer pipe system capacity remains capable of maintaining an adequate flow well below 50% of its flow depth capacity. As such, adequate capacity exists to serve the Project's projected demand in addition to the sewer pipe systems existing commitments, even after taking into account the Old Ranch Country Club project. The anticipated d/D increase determined from the Project plus the Old Ranch Country Club Project is approximately 2.6-3.4%, which is considered negligible.

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Comment Letter 30

Concerns Regarding the Lampson Project

Leah N. Huffington <lhuffington@lclark.edu>
Fri 6/7/2024 7:00 AM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lhuffington@lclark.edu

Dear Tom Oliver,

We hope this message finds you well. We are writing to express our pressing concerns regarding the proposed Lampson Project in Los Alamitos. The project poses significant environmental and infrastructural challenges that will predominantly affect our neighborhoods once the developer departs. While Los Alamitos stands to gain financially, Seal Beach (and Garden Grove) will bear the brunt of increased pollution, strained infrastructure, and potential health risks associated with the development of 246 new complexes and apartments.

As mentioned previously, the proposed development also raises air, water, and noise pollution that could jeopardize the well-being of future and current residents. The noise pollution from military jets and aircraft, in violation of established aircraft codes, threatens to disrupt the peace and quality of life for apartment residents. This decision, though overturned by distant decision-makers, overlooks the direct effects on Seal Beach residents who rightfully deserve a say in matters that could detrimentally affect their community.

30-1

Additionally, the proposed placement of townhomes between heavily fertilized golf courses poses significant health risks, including potential exposure to cancer-causing agents and water contamination from pesticides and toxins. The increased water usage by new residents could worsen contamination of groundwater, surface water, soil, air quality, and ocean health. Moreover, the removal of trees without adequate replacement would exacerbate air pollution, harm the environment, and diminish essential greenery crucial for maintaining air quality, reducing carbon footprint, and preserving wildlife habitats. It's essential to prioritize preserving green spaces, especially as our community grows.

30-2

The strain on local road infrastructure, compounded by dangerous intersections such as Rose and Lampson, poses significant risks to pedestrians and drivers alike. Illegal U-turns on Lampson are frequent, further endangering residents—members of our family have narrowly avoided accidents multiple times. Increased population density will exacerbate traffic congestion and safety concerns, especially during peak hours and events like soccer games. How will Los Alamitos plan to accommodate the increased vehicle miles traveled? Installing one traffic light will do little to prevent the inevitable increase in cars, which will escalate accidents and deaths in the Seal Beach neighborhood.

30-3

Additionally, the Lampson Project not only impacts convenience but also raises safety concerns with increased traffic and parking on residential streets, compromising pedestrian and vehicle safety. The plan appears to narrow streets, reduce potential greenery, and deliberately limit parking so Los Alamitos tenants must park at College Park East (CPE). The builder plans to force Los Alamitos residents to find parking elsewhere, adding strain to CPE infrastructure and streets. The developer aims to have residents utilize Seal Beach parks without contributing, minimizing open park space.

30-4

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Essentially, new residents will be forced to use parks and residential parking outside their own development due to property overbuilding, likely leading developers to limit on-site parking to maximize units. As discussed in the Ayres Hotel open house, attempts have even been made to segregate townhome and private residence parking in their development. Ultimately, Seal Beach stands to gain nothing but increased infrastructure costs and overcrowding. The developer benefits from the CPE community without contributing to costs and maintenance by overbuilding and failing to provide enough parking or sufficient open park spaces and recreation areas in the development.

30-4 (CONT.)

The flooding issue along Lampson will worsen with the addition of 246 homes. Seal Beach purchased the Ironwood property to improve drainage to the Old Ranch Country Club golf course. The Lampson project's Draft EIR mentions potential drainage solutions, including undersized exit drainage that might discharge onto Lampson, potentially damaging vehicles and houses along Ironwood Ave. Flooded streets pose risks like structural damage, health hazards from mold and contaminated water, and financial burdens from repairs and property devaluation. Would Los Alamitos be accountable for repairing these damages to Seal Beach? Are there alternative measures to reduce burdens on Seal Beach residents or lower risks on Lampson Road?

30-5

In conclusion, while recognizing the importance of housing development, we urge the committee to reconsider the scale of the Lampson Project. Rather than completely halting the project, we propose a reduction in the number of units (possibly halving the number of units or eliminating the construction of the townhomes or apartments). This adjustment aims not to thwart housing development but rather to safeguard the well-being of Seal Beach residents and mitigate the project's negative repercussions on our community and environment.

We appreciate your attention to these matters and look forward to your thoughtful consideration of the concerns raised.

Thank you for your time.

30-6

Best regards,
Leah, Lidia, and Hector Huffington

Contact us:
Phone: (562) - 370 - 4235
Email: huffmanhlls@yahoo.com

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Responses to Comment 30

Huffington, Leah, Lidia, and Hector, dated June 07, 2024.

30-1 The commenter expresses concerns with strained infrastructure and potential health risks, along with air, water, and noise pollution from the Project.

Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to the Project, and impacts would be less than significant (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

As discussed in Section 4.9, *Hydrology and Water Quality*, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction or long-term operation. Impacts would be less than significant and no mitigation is required (refer to Pages 4.9-14 through 4.9-16 of the Draft EIR).

As discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not exceed significance thresholds for construction noise levels, operational noise levels, and off-site traffic noise levels. As such, the Project would not generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant (refer to Pages 4.11-23 through 4.11-29 of the Draft EIR).

30-2 The commenter expresses concerns with health risks, including potential exposure to cancer-causing agents and water contamination from pesticides and toxins due to the placement of proposed townhomes between heavily fertilized golf courses. The commenter states concerns that increased water usage by new residents could worsen contamination of groundwater, surface water, soil, air quality and ocean health. The commenter expresses concern regarding the removal of trees without adequate replacement stating that this could exacerbate air pollution, and diminish greenery crucial for maintaining air quality, reducing carbon footprint, and preserving wildlife habitats.

The Phase I ESA (*Technical Appendix H1* of the Draft EIR) concluded that no other adjoining/immediately surrounding properties (within 100 feet) were listed on any of the regulatory databases researched or the listings were not associated with the storage or disposal of hazardous wastes including aboveground or underground storage tanks, did not indicate a known chemical release, and did not indicate a property use where the use of hazardous chemicals would be expected. The commenter does not provide evidence that existing and/or

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future residences adjacent to the golf course would create a health risk. As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR, Based on a review of regulatory databases and a site reconnaissance, the Project site does not contain any hazards, nor is the Project site affected by any off-site hazards. The Phase I ESA and Limited Phase II ESA identified no RECs, HRECs, or CRECs during the course of the assessment. The potential chemicals of concern detected in the soil in the areas assessed do not indicate that a significant subsurface chemical release occurred. The detected concentrations found during the investigation are considered to be de minimis for the proposed residential redevelopment. Therefore, past and present uses do not represent a significant environmental concern for the Project site. As a result, implementation of the Project would result in less than significant impacts. No mitigation is required (refer to Pages 4.8-16 through 4.8-17 of the Draft EIR).

It is unclear how the increased use of water at the Project would result in air quality impacts. Regarding the potential of groundwater, surface water, and soil contamination impacts due to the increased in water usage, as discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, the Project Applicant would be required to implement a WQMP to demonstrate compliance with the City's NPDES municipal stormwater permit, and to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters. The WQMP is a site-specific post-construction water quality management program designed to address the pollutants of concern of a development project via best management practices (BMPs), implementation of which ensures the on-going protection of the watershed basin (refer to Page 4.9-15 of the Draft EIR).

As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, there would be sufficient water supplies available to serve the Project and impacts would be less than significant. No mitigation is required (refer to Pages 4.17-15 through 4.17-17 of the Draft EIR).

Regarding the removal of trees without adequate replacement, as discussed in Section 4.1, *Aesthetics*, of the Draft EIR, the Project site does contain a number of ornamental trees onsite that will be removed and replaced. As shown in Figure 3- 18, *Landscape Plan*, a total of 441 trees would be planted throughout the Project site (refer to Page 4.1-10 of the Draft EIR).

30-3 The commenter expresses concerns with the strain on local road infrastructure including dangerous intersections such as Rose and Lampson, and the impact on pedestrian safety. The commenter also expresses concern regarding the increased population density and its impact on traffic congestion during peak hours and events such as soccer games. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Response 2.1.2, *Roadway Safety on Lampson Avenue* for pedestrian safety concerns.

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30-4 The commenter expresses concerns with safety due to increased traffic and parking. The commenter is concerned that the plan narrows streets, reduces greenery and limits parking so that tenants will have to park at College Park East. The commenter expresses concern that tenants will use existing Seal Beach parks for parking and minimize open park space without the developer contributing to costs and maintenance. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for impacts to existing parks.

30-5 The commenter expresses concerns with flooding along Lampson Avenue. The commenter expresses concern that the exit drainage that may discharge to Lampson is undersized and flooding could potentially damage homes and vehicles along Ironwood Avenue. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, related to flooding impacts.

30-6 The commenter recommends reconsidering the scale of the Project and reducing the number of units proposed. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

COMMENT LETTER 31

4232 Birchwood Ave

Seal Beach, CA 90740

Tom Oliver
Associate Planner, City of Los Alamitos Planning Department
3191 Katella Avenue Los Alamitos, California 90720

Dear Mr. Oilver

I am very disappointed with the sequence of events by which the plan to develop the property on Lampson Avenue was approved by your city. Two State Agencies (CalTrans Division of Aeronautics and the California Airport Land Use Commission) issued written findings that the Lampson Ave. location was not suitable for residential development due to public safety and health risks as a result of activities at the Joint Forces Training Base that borders the project site. The State Agencies' warnings have been omitted from the Draft Environmental Impact Report prepared by Lampson Consultants. This sounds VERY shady to me.

31-1

Also, Consultants Nick Johnson and T&B Planning employee Les Johnson, are consultants Employed by Lampson LLC, according to the City of Los Alamitos Planning Department-Public Records. This sounds like a clear conflict of interest to me. It sure looks like this project is being pushed through despite these issues, just because the city of Los Alamitos wants to make some money, because they don't give a damn about the neighbors that this project will directly affect, and it's just "win at all costs" for the city of Los Alamitos.

I am sure if the situation were reversed and YOU were the one that was directly impacted by the very questionable actions of another nearby city, you would be upset too, so do you have any sense of empathy and fairness? If the city of Los Alamitos wants to make enemies out of their neighbors, they are doing a very good job of that. Is that what you want? Do you care? Will this somehow come back to bite the city of Los Alamitos in the future?

31-2

Sincerely,

David Kalish

Responses to Comment 31

Kalish, David, dated No date.

31-1 The commenter expresses concerns that the Caltrans and California ALUC findings regarding public safety and health risks were omitted from the Draft EIR. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*.

31-2 The commenter expresses opposition to the Project and states there is a conflict of interest between consultants and the Project Applicant. Refer to Response to Comment 16-16 related to the preparation of the Draft EIR and conflicts of interest. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 32

Re: Comments for Proposed Lampson Project

Tom Oliver <Toliver@cityoflosalamitos.org>
Mon 6/10/2024 8:59 AM
To:lassertom@aol.com <lassertom@aol.com>

Thanks for your comments on this project, Tom. I will forward your email to the Environmental Consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303



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From: Tom Lasser <lassertom@aol.com>
Sent: Sunday, June 9, 2024 6:44 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Comments for Proposed Lampson Project

Mr Oliver, Reference, Draft Enviromental Impact Report (DEIR)

My name is Tom Lasser. I am a retired military aviation officer with no official connection to the Joint Forces Training or Los Alamitos Army Airfield.

Encroachment(noun)- Intrusion on a person's territory, etc, a gradual advance beyond usual or acceptable limits...(Dictionary)

No one questions the ability to development, build housing especially under the current conditions of the State of California. But encroachment is the most critical threat to military bases and airfields in California. Encroachment in all forms is the bane of military installations.

32-1

DRAFT

I did not see a clear sign or evidence of a professional response from the airfield staff at Los Alamitos Army Airfield. I highly suggest the EIR considers the input of the assigned, local aviation subject matter experts from the airfield to better describe flight operations, altitudes, flight patterns, safety concerns including briefings, charts and testimony. This is evidence that needs to be documented.

There will be noise complaints, disagreement issues, quality of life allegations, negative comments and unrest from the residents of this new project which projects into the base, overlooks the airfield and is under the flight patterns.

The first thing people do when they knowingly move adjacent to an airport...*is to complain about the airport*.

Though there may be some documentation, this proposal must still comply to laws, ordinances or regulations. And common-sense facts.

The EIR does not clearly address this enduring topic and effect upon the airfield and I recommend it be researched and documented.

T*om Lasser*
232 S. Guadalupe
Redondo Beach, CA
310-562-1121
8 June 2024

32-2

Project: Lampson Park Place Project | City of Los Alamitos (mylosalengage.com)

DRAFT

Responses to Comment 32

Lasser, Tom, dated June 09, 2024.

32-1 The commenter provides an introduction and expresses concerns regarding encroachment onto military bases and airfields. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB).*

32-2 The commenter recommends that the Draft EIR consider input of the experts from the airfield staff at Los Alamitos Army Airfield to better describe flight operations, altitudes, flight patterns and safety concerns. The commenter states there will be various complaints about the airport from residents of the project since it projects into the base, overlooks the airfield and is under the flight patterns. The commenter states that the Draft EIR does not clearly address these topics and their effects upon the airfield. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB).*

DRAFT

Comment Letter 33

RE: Lampson Project

Valerie Lindow <v.lindow@outlook.com>
Mon 6/10/2024 1:24 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

Mr. Oliver,

Our house backs up to the Armed Forces Reserve Center aka "The Base". As you may or may not know… they have not mowed the base in about a year. They are not mowing the property because California in their infinite "wisdom" has declared the base a protected "wetlands" area because the drainage ditch has water in it. Right now the weeds are green because of all the rain… but they are going to dry become a serious fire hazard. Last year on the Fourth of July our neighbors placed Tiki torches on the top of their back fence and lit them… not knowing the danger on the other side of the fence.

33-1

Anything you can do to help this danger would be appreciated.

Thank you,

Valerie Lindow

From: Tom Oliver <Toliver@cityoflosalamitos.org>
Sent: Monday, June 10, 2024 12:09 PM
To: Valerie Lindow <v.lindow@outlook.com>; Emily Hibard <EHibard@cityoflosalamitos.org>; csimmons@cityoflosalmitos.org; jnefuda@cityoflosalamitos.org; Tanya Doby <TDoby@cityoflosalamitos.org>
Subject: Re: Lampson Project

Thanks for your comments on this project, Valerie. I will forward your email to the Environmental Consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

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H2OC STORMWATER PROGRAM | LEARN MORE

From: Valerie Lindow <v.lindow@outlook.com>
Sent: Thursday, June 6, 2024 12:54 PM

DRAFT

To: Emily Hibard <EHibard@cityoflosalamitos.org>; Tom Oliver <Toliver@cityoflosalamitos.org>; csimmons@cityoflosalmitos.org <csimmons@cityoflosalmitos.org>; jnefuda@cityoflosalamitos.org <jnefuda@cityoflosalamitos.org>; Tanya Doby <TDoby@cityoflosalamitos.org>
Subject: Lampson Project

Dear Council Members and City Manager

Please obtain NEW environmental reports
that are unbiased and provide environmental remediation measures
And
Release the “Peer Review” Report
before any environmental decisions are made on the Lampson Project.

Sincerely,

Valerie Lindow

33-2

DRAFT

Responses to Comment 33

Lindow, Valerie, dated June 06, 2024.

33-1 The commenter expresses concerns with current wetland conditions on the JFTB not being mowed and potential fire hazards on the base as this vegetation dries out. The commenter is providing an opinion regarding the existing conditions at JFTB. The Project would not impact wetlands on JFTB or create an increased risk of fire to JFTB. As discussed on Section 4.3, *Biological Resources*, of the Draft EIR, the Project site does not contain any wetlands as defined under the federal CWA or by the State of California (refer to Page 4.3-32 of the Draft EIR). Refer also to *Technical Appendix C2*, Jurisdictional Determination, of the Draft EIR. However, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

33-2 The commenter requests new unbiased environmental reports, remediation measures, and to release the peer review report before any decisions are made on the project. Refer to Response to Comment 16-16, above, related to the preparation of the Draft EIR and conflicts of interest.

DRAFT

COMMENT LETTER 34

Re: Lampson Park Place, TPM 2022-133

Tom Oliver <Toliver@cityoflosalamitos.org>
Mon 6/10/2024 8:40 AM
To:Robert Liu <rchliu98@gmail.com>

Thanks for your comments on this project, Robert. I will forward your email to our Environmental Consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303



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From: Robert Liu <rchliu98@gmail.com>
Sent: Sunday, June 9, 2024 10:33 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Lampson Park Place, TPM 2022-133

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rchliu98@gmail.com

Hello Mr. Oliver,

I received a copy of draft EIR for the project listed above. I am very concern about this project.

I live in College Park East for over 45 years. I grew up here and went to Pine Junior High School and Los Alamitos High School. I have seen our area change from a small community to a much larger neighborhood with all the traffic congestion on Los Alamitos Blvd to the 405 freeway. This project with such high density, I can just foresee all the issues such as damage on the road with additional cars traveling and additional traffic congestion going on to the freeway. As an architect myself, I have completed numerous projects similar to this in Orange and Ventura Counties. I have seen the final impact of the project where the traffic has increased and the lifestyle changed because of that. Besides the traffic, there is no amenity such as a large green area so the occupants in this community must go elsewhere like Heather Park across the street or into Garden Grove.

34-1

DRAFT

This project is just too densely designed and the traffic, infrastructure and lifestyle will have a negative impact on the surrounding neighborhoods. I hope you can reconsider this project to be less dense and more amenity.

34-1 (CONT.)

Thank You

Robert Liu
3530 Daffodil Circle
Seal Beach, CA. 90740

DRAFT

Responses to Comment 34

Liu, Robert, dated June 09, 2024.

34-1 The commenter expresses concerns about damage to the roads from additional cars and traffic congestion going on to the freeway. The commenter also states concern that there is no amenity such as a large green area, and as such, residents must go to Heather Park or Garden Grove. The commenter states that the project is too densely designed and requests reconsideration of the density and requests the addition of more amenities. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for concerns regarding on-site amenities.

In regard to the proposed density of the Project, the Project is consistent with the density allowed by the existing zoning. However, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 35

Re: Lampson Project DEIR

Tom Oliver <Toliver@cityoflosalamitos.org>
Mon 6/10/2024 8:35 AM
To:Renee Lloyd <rlglloyd@yahoo.com>

Thanks for your comments on this project, Renee. I will submit your email to the Environmental Consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303



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From: Renee Lloyd <rlglloyd@yahoo.com>
Sent: Saturday, June 8, 2024 2:27 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Lampson Project DEIR

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rlglloyd@yahoo.com

Attached are my comments regarding the proposed Lampson Park Place Project.
I live in College Park East and will be directly affected by the Project which is why I am submitting these comments.
I also work in Los Alamitos and will be affected by the increased traffic along Lampson and Seal Beach Blvd.
Please sincerely consider my comments.

Thank you,
Renee Lloyd

35-1

DRAFT

June 8, 2024

To: City of Los Alamitos

Attn: toliver@cityoflosalamitos.org

RE: Lampson Project DEIR

I have three comments:

1. There are apartments located within the 60 dBA zone in the northwest corner of the development. Windows would need to be shut and AC use only to bring interior noise level w to 45 dBA. In the alternate plan as a Senior community this area is used for parking. Since parking is a shortage in this plan, eliminate the apartments within the 60 dBA zone and use this area for parking.

35-2

2. The design calls for several gates leading to Arbor Park. This park is locked from dusk until dawn by order of JFTB. The only pedestrian gate currently existing is always locked and cannot be accessed. It is only open during the park's use by the soccer organizations. Any gates would need to be approved by JFTB and be locked every evening- most likely by JFTB personnel.

35-3

3. There was no mention in the DEIR of the existing California Redwood trees growing on the site in the species survey. The DEIR describes "mature ornamental trees" and all pictures of the site exclude pictures of the three trees growing at the southwest corner of the site. The site plan shows an apartment building where the Redwood trees are growing which means the trees will be eliminated. The Redwood trees should remain untouched and this area used as a park location, for the following reasons:
   A) California Redwoods are an endangered species.
   B) The trees are 50 years old, with the seedlings planted circa 1973-1976.
   C) These trees were likely planted in celebration of the Bicentennial.
   D) There is a good possibility these trees were grown from seeds carried on board Apollo 14, and be "Moon Trees".
   E) Given C & D, these California Redwoods also have historical value and should be preserved from destruction.

35-4

Thank you for consideration of my comments.

Renee Lloyd

4433 Dogwood Avenue
Seal Beach, CA 90740

DRAFT

Responses to Comment 35

Lloyd, Renee, dated June 08, 2024.

35-1 The commenter attaches comments which are responded to below and expresses concerns with increased traffic along Lampson and Seal Beach Boulevard. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

35-2 The commenter expresses concerns with the apartments located within the 60 dBA zone in the northwest corner of the Project and recommends eliminating the apartments in this zone and using the area for parking. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for noise concerns related to proximity to the JFTB.

35-3 The commenter states that any gates proposed would need to be approved by JFTB and be locked every evening. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

35-4 The commenter incorrectly states that there was no mention in the Draft EIR of existing California redwood trees growing at the southwest corner of the site. The commenter requests the redwood trees remain untouched due to their endangered species status, age, and historical value. The commenter proposes this area be used as a park location.

As discussed in Section 4.3, *Biological Resources*, of the Draft EIR, coast redwood (*Sequoia sempervirens*) is listed as one of the tree types under existing conditions (refer to Page 4.3-3 of the Draft EIR). Refer to Response to Comment 11-22 above regarding the redwood trees onsite; the existing redwood trees are not considered endangered species nor are they designated a historical resource. The commenter's suggestion for the park is noted and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

DRAFT

COMMENT LETTER 36

From: Bart Lundblad
To: toliver@cityoflosalamitos.org
Subject: Review Comments on the DEIR for the 4665 Lampson Avenue Project
Date: Wednesday, May 22, 2024 4:16:38 PM
Attachments: Lundblad Comments to 4665 Lampson Project DEIR.pdf

Mr. Oliver:

I have attached my review comments for the Draft Environmental Impact Report for the 4665 Lampson Avenue Project. Thank you for the opportunity to review the documents. If this electronic copy of my comments is not sufficient, please let me know so I can mail a hard copy to you.

Thanks again,

Herbert Lundblad
4200 Ironwood Avenue
Seal Beach, CA 90740

36-1

May 21, 2024

Mr. Tom Oliver, Associate Planner
City of Los Alamitos
Planning Department
3191 Katella Avenue
Los Alamitos, California 90720

Subject: Review Comments on the Draft Environmental Impact Report (DEIR) for the 4665 Lampson Avenue Project

Dear Mr. Oliver:

Thank you for the opportunity to review the DEIR for the 4665 Lampson Avenue Project in the City of Los Alamitos. I am a graduate of Los Alamitos High School and have lived in the College Park East neighborhood of Seal Beach for 36 years. I believe that the proposed housing project will have serious environmental and safety impacts that need to be further addressed before the project is approved. Please see my specific comments below.

36-2

Sincerely,

Herbert Lundblad
4200 Ironwood Avenue
Seal Beach, California 90740

1. <u>On-site School Bus Stop</u>. There appears to be no plan to construct an onsite school bus stop at the project site. The DEIR estimates that 647 people will be living at the project site. A large percentage of this population will be school-aged children attending elementary, middle, and high schools in the Los Alamitos Unified School District. The relatively long distance to these schools from the project site will require many children to take school buses to and from school. The lack of a school bus stop at the project location will force many of these children to cross Lampson Avenue to utilize existing school bus stops in College Park East (CPE). Lampson Avenue is a dangerous, high-speed, four-lane highway with a history of numerous fatal collisions. Forcing children to cross this highway to and from school (even with the protection of crossing guards) is a serious safety risk.

The lack of a safe process for school children to access a bus stop violates goals and policies in the Los Alamitos General Plan. As presented on DEIR page 4.15-10, Policy 1.2 (Transportation Decisions) states that "Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists of all ages and abilities." The decision to not construct a school bus stop at the project site does not comply with this policy and instead endangers the safety of school children on their way to and from school. In addition, the intent of Goal 3 (DEIR page 4.15-11) is "Safe and convenient access to schools and parks that promote healthy and active living." Forcing children to cross Lampson Avenue is not safe and convenient and is in fact very dangerous and inconvenient.

36-3

DRAFT

It is strongly recommended that an on-site school bus stop be installed at the project site to protect the health and safety of children commuting to Los Alamitos schools. The bus stop should be designed so that it does not block traffic and bike lanes on Lampson Avenue.

36-3 (CONT.)

2. On-Site Parking. As described by the Onsite Parking Analysis in the DEIR, the proposed project would violate the onsite parking requirements of both the City of Los Alamitos and the City of Seal Beach. The proposed project includes a total of 557 parking spots, which is 122 parking spots fewer than what is required by Los Alamitos city ordinance. The proposed project provides 98 parking spots for the affordable housing portion of the project. This is 20 parking spots below what is required by Seal Beach city ordinance for affordable housing projects. Assuming that the parking ordinances used by Los Alamitos and Seal Beach are based on sound justification, there will be a severe parking shortage at the proposed project. This shortage will result in serious safety and environmental impacts for project residents and nearby residents in CPE.

There is no on-street parking on Lampson Avenue. All overflow parking will occur in the residential areas of CPE which are across Lampson Avenue from the proposed project. This will require those using off-site parking, whether project residents or visitors to the project, to walk across the four traffic lanes of Lampson Avenue to access the project. Many of these crossings will be during night time hours after on-site parking has filled. The speed limit on Lampson Avenue is 45 mph with many drivers exceeding this limit. The DEIR has not addressed this serious safety issue. How many people will be crossing Lampson Avenue during night time hours? How many accidents will result? How many pedestrian fatalities will result? In addition, what are the safety and noise impacts to CPE residents caused by project residents parking their cars on CPE streets during night time hours?

36-4

The DEIR states that "the project's proposed parking supply is appropriate to serve the needs of the development." This conclusion is based solely on comparing the number of proposed parking spots to the number recommended by a national parking publication. The Onsite Parking Analysis does not include an empirical analysis of actual parking issues caused by similar-sized projects in Orange County or Southern California. We are all familiar with the terrible off-site parking congestion that occurs around many apartment complexes in our area. The DEIR should tell us why this project would be any different by using empirical comparisons to similar existing housing developments.

3. Drainage of Storm Water from Project Site. It is estimated by the DEIR that the proposed project will increase the impervious surface coverage at the site by 48% resulting in a significant increase in storm water runoff from the site. The proposed method for removing storm water from the project site is to direct it into an existing drainage system on the adjacent Joint Forces Training Base (JFTB). This antiquated drainage system consists of earthen ditches and pipes that eventually drain to the Old Ranch golf course. The DEIR states that the project does not yet have JFTB permission to use this antiquated system, however, and that the project is proposing that it be allowed to pump storm water runoff directly onto Lampson Avenue as an alternative. As proposed, this large quantity of water would flow to the west on the north side of Lampson Avenue for an estimated 2,200 feet until it flows into an existing storm drain and onto the Old Ranch golf course. The preliminary hydrology study included in the DEIR estimates that this alternative drainage option would result in flooding of the bike lane and one lane of traffic on this section of Lampson Avenue during heavy rain events. This would create a dangerous situation for traffic traveling west on Lampson Avenue.

36-5

DRAFT

It is recommended that the project be amended to include an adequate off-site storm water drainage system that provides a long-term solution for removing storm water from the site. Possible options include installation of a proper drainage system under Lampson Avenue that flows to the east to the large Bolsa Chica flood control channel, or to the west to Old Ranch golf course. Another option is to reach an agreement with the Navy golf course that abuts the project to allow drainage to this nearby area. Pumping of storm waters onto Lampson Avenue creates a safety hazard and should not be allowed under any circumstances.

36-5 (CONT.)

4. Lower- Density Housing Project Alternative. The DEIR includes three development alternatives to the proposed project: a) Project with higher housing density, b) Project with the same housing density but with senior housing rather that low-come housing, and c) Project with no housing at all. The DEIR does not include a lower housing density alternative. Such an alternative would have fewer environmental impacts than the proposed project and would be a preferred alternative.

It is recommended that the DEIR be revised to include a project alternative that consists of a lower number of housing units. Such an alternative would mitigate many of the environmental and safety impacts resulting from the proposed project.

36-6

5. Location for Low-Income Housing. It would be difficult to choose a worse location for a low-income housing project than the proposed location. This location is essentially an island on Lampson Avenue with no connection to public transportation and no proximity to supermarkets or other stores and services. Low-income residents will be forced to use private transportation to access work and neighborhood services. This will further aggravate the serious parking shortage at the proposed site.

36-7

DRAFT

Responses to Comment 36

Lundblad, Herbert, dated May 22, 2024.

36-1 The commenter attaches comments on the Draft EIR which are responded to below.

36-2 The commenter expresses gratitude for the opportunity to review the Draft EIR and provides comments that are responded to below.

36-3 The commenter expresses concerns about the lack of an on-site school bus stop and states that children would have to cross Lampson Avenue to utilize existing stops at College Park East. The commenter asserts that the lack of a safe bus stop violates the City's General Plan and is dangerous and inconvenient. The commenter recommends that a bus stop be installed at the Project site to protect the health and safety of children commuting.

No bus stop is proposed at the Project site. It is anticipated that children using the school bus to get to school would cross at Heather Street and use the existing school bus stop at Heather Park which serves the following schools: McGaugh Elementary, Weaver Elementary, McAuliffe Middle, and Los Alamitos Hight School. Refer also to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

36-4 The commenter expresses concerns with on-site parking and pedestrian safety. The commenter opines that the Project violates the onsite parking requirements of the cities of Los Alamitos and Seal Beach and results in a severe parking shortage. The commenter expresses concern that residents utilizing off-site parking must cross Lampson Avenue and states that the DEIR does not address this safety issue. The commenter questions what the safety and noise impacts are to College Park East residents caused by residents of the Project parking vehicles on College Park East streets during nighttime hours. The commenter suggests the Draft EIR use empirical comparisons with similar existing housing developments for the parking analysis. Refer to Master Response 2.1.3, *Parking*, for parking concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue,* for pedestrian safety concerns.

36-5 The commenter expresses concerns with drainage of stormwater from the Project site and states that the alternative drainage option would result in flooding of the bike lane and one lane of traffic on Lampson Avenue, which would create a safety concern for those traveling west on Lampson Avenue. The commenter recommends that the Project be amended to include an adequate off-site storm water drainage system that provides a long-term solution for removing storm water from the site and suggests two possible options. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

36-6 The commenter recommends the Draft EIR be revised to include a Project alternative that consists of a lower housing density alternative and states that this would have fewer environmental impacts and would be the preferred alternative.

DRAFT

Section 6.3.3 of the Draft EIR analyzed a reduced housing density alternative (refer to Page 6-6 of the Draft EIR), which was considered and rejected from further analysis because it would not substantially reduce the Project's environmental impacts. Although a Reduced Density Alternative would have the ability to partially meet most of the Project objectives, it was rejected from further consideration because it would not avoid or substantially lessen the Project's significant impacts. More specifically, this alternative would not avoid the Project's significant and unavoidable VMT impacts. VMT impacts are evaluated based on VMT per capita (population). Although the Reduced Density Alternative would reduce vehicle trips and VMT, it would also result in a proportional reduction in population, resulting in substantially the same VMT per capita and VMT impact as compared to the Project. In other words, because both the number of trips and the population generated would be proportionally reduced, the ultimate VMT calculation would be the same as the Project.

In addition, as evaluated in this EIR, the Project's significant impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources, would be less than significant with implementation of mitigation measures. The Reduced Density Alternative would have similar impacts to the Project related to biological resources, cultural resources, geology and soils, and tribal cultural resource because the development area under the Reduced Density Alternative would be the same. Because the Reduced Density Alternative would not avoid or substantially lessen the Project's significant and unavoidable VMT impacts, it was rejected from further consideration (refer to Page 6-6 of the Draft EIR).

36-7 The commenter expresses concerns with the Project location due to lack of public transportation and the proximity to supermarkets or other stores and services for the low-income housing units.

The nearest OCTA bus stop from the Project site is Route 123, approximately 1.2 miles at the intersection of Valley View Street and Lampson Avenue.

As discussed in 4.15, *Transportation*, of the Draft EIR, implementation of Mitigation Measure MM 4.15-1 would be required to reduce trip distances per resident by providing pedestrian and bicycle improvements; coordinating with the OCTA whether providing new or re-routing existing transit services to the site would be feasible; installation of broadband infrastructure or other communication technologies that encourages telecommuting and working from home (refer to Page 4.15-19 of the Draft EIR).

DRAFT

Comment Letter 37

From: Tamara Madison
To: Tom Oliver
Subject: Lampson Project
Date: Monday, April 29, 2024 10:49:15 AM
Attachments: Outlook-jku4vcfi.jpg

Dear Mr. Oliver,

I am writing to add my voice to the chorus of opposition to the Lampson Project. While I understand the need to build more housing, I feel this project is way too ambitious for the area. When two state agencies (CalTrans Division of Aeronautics and California Airport Land Use Commision) find that the location is not suitable for residential development, it's incumbent on the City to heed the warnings of public safety and heath risks resulting from activities at the JFTB. There are already so many traffic accidents in this part of Lampson, I shudder to think of the impact of still more traffic. I would not object to a smaller-scale development on that land (although it pains me to imagine the loss of those lovely sycamores lining West Ed), but the project as proposed strikes me as a terrible overreach. Furthermore, should the project go through as planned, I predict that many of the residents in this part of College Park East and Parkewood would drastically reduce their patronage of businesses on Seal Beach Boulevard because of traffic concerns.

37-1

37-2

37-3

Thank you for paying attention to the concerns of your constituents.
Sincerely,
Tamara Madison

Tamara Madison
tamaramadisonpoetry.com

Responses to Comment 37

Madison, Tamara, dated April 29, 2024.

37-1 The commenter expresses general opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

37-2 The commenter states that two state agencies Caltrans Division of Aeronautics and California Airport Land Use Commission had found the location of the Project site not suitable for residential development and expresses concern with public safety and health risk associated with the Project's proximity to JTFB. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*. Thus, no further response is required.

37-3 The commenter expresses concern with traffic due to past traffic accidents on Lampson Avenue and expresses support for a smaller-scale development on the Project site. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, related to traffic collision in the Project area.

DRAFT

Comment Letter 38

comment on draft EIR for Lampson Park Place proposal

N Manzo <nmanzo333@gmail.com>
Mon 6/10/2024 4:41 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

Dear Mr. Oliver,

I hope you are having a good day.

I was trying to get a look at the reports regarding the Lampson Avenue project. (I regret that I was not able to get to this earlier. It is a busy time.)

Just so you know, it is difficult to read these documents. I use a tablet most of the time, and somehow, I could only use about half the screen. (Of course, I understand that this is not your fault personally - perhaps this is some kind of new software.)

As that may be, I am *very concerned* about this project. 38-1

Lampson Avenue is the only way I can drive my family members to the Emergency Room on Katella Avenue. (I have had to do this multiple times already - and I know we are very lucky to have the hospital relatively close.)

If you have ever had to make such a journey, then you will know how uncomfortable it is - and how any additional delay just adds to the worry.

I am sure that in the reports I wasn't able to effectively access, it will say something about how burdening our access to emergency medical care is regrettable but necessary (to someone). (I tried to do a search for "mitigation" but that did not work. I used the search box right on the page. Command + F did not work either. I am not a traffic engineer, but I was interested to see what the report would say on the subject. Perhaps I just didn't wait long enough - sometimes with large documents, the search takes a while to work. I don't know why.) 38-2

Adding hundreds more housing units to an already impacted road does not seem wise. (In fact, I don't know that this is a good place to put new residents at all. It is hard to access already.)

If the report says that this development will not cause any serious traffic problems, then I respectfully disagree. We already have traffic problems in this area, and it can be a life-or-death matter.

Even on an ordinary day, there is too much traffic and on occasion, I have even seen other drivers behave badly on Lampson - this never used to happen here.

Further, as I understand, this development will also be too close to an airfield flight path. This is another excellent reason for this project to be rejected. 38-3

Thank you for listening.

Sincerely,
N Manzo

DRAFT

Responses to Comment 38

Manzo, N, dated June 10, 2024.

38-1 The commenter provides introductory remarks. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

38-2 The commenter expresses concern about the increase of traffic on Lampson Avenue leading to additional delay for resident access existing emergency medical facilities. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns.

38-3 The commenter expresses further concern about traffic congestion on Lampson Avenue and the Project site being too close to an airfield flight path. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns and Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for safety issues related to the JFTB.

DRAFT

Comment Letter 39

From: Tom Maulhardt
To: Tom Oliver
Subject: DEIR Lampson Project
Date: Monday, April 29, 2024 2:56:32 PM

Mr Oliver

The Lampson project, if passed and implemented, would adversely affect the residents of Seal Beach in College Park East and Garden Grove. The addition of these housing units would greatly increase the traffic and congestion on Lampson Avenue and change the character of the area. Public expenditures on infrastructure (sewers, water, utilities, etc.) and other services would be considerable and unjustified. 39-1

A particularly irritating factor is that this project is nowhere near any Los Alamitos housing, so that city's citizens will not be directly affected by the above-mentioned impacts.

I think the project should be rejected or drastically reduced in scope. 39-2

Sincerely,

Thomas Maulhardt
College Park East resident

Responses to Comment 39

Maulhardt, Thomas, dated April 29, 2024.

39-1 The commenter expresses concern with the increase in traffic and congestion on Lampson Avenue, changes to the character of the area, and public expenditures on infrastructure (sewers, water, utilities, etc.) and other services. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns. As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, provides an analysis of the Project's aesthetic impacts. The Project proposes a number of site design, architectural, and landscaping elements that would be consistent with the surrounding residential land uses. Moreover, as discussed in Section 4.13, *Utilities and Service Systems*, of the Draft EIR, there is sufficient capacity in utility services to serve the Project site.

39-2 The commenter states that the Project is not located in an area that will have an impact on City of Los Alamitos residents and requests that the Project be rejected or drastically reduced in scope. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 40

From: Luciann Maulhardt
To: Tom Oliver
Subject: DEIR 4665 Lampson Avenue Project
Date: Thursday, May 23, 2024 6:05:32 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender luciann.maulhardt@gmail.com

Mr Oliver

The 4665 Lampson Avenue Project, if passed and implemented, would adversely affect the residents of Seal Beach in College Park East and Garden Grove. The addition of these housing units would greatly increase the traffic and congestion on Lampson Avenue and change the character of the area. We have lived in our home in College Park East for 50 years, and the traffic on Lampson has considerably changed for the worse in the last few years. Public expenditures on infrastructure (sewers, water, utilities, etc.) and other services would be considerable and unjustified. 40-1

A particularly sad situation is that this project is not going to affect a great number of Los Alamitos housing units, so that city's citizens will not be directly affected by the above-mentioned impacts.

I think the project should be rejected or drastically reduced in scope. 40-2

--
Luciann Maulhardt
luciann.maulhardt@gmail.com
562 743-0791 cell

Responses to Comment 40

Maulhardt, Luciann, dated May 23, 2024.

40-1 The commenter expresses concern with the increase in traffic and congestion on Lampson Avenue, changes to the character of the area, and public expenditures on infrastructure (sewers, water, utilities, etc.) and other services. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns. As discussed in Section 4.1, *Aesthetics*, of the Draft EIR, provides an analysis of the Project's aesthetic impacts. The Project proposes a number of site design, architectural, and landscaping elements that would be consistent with the surrounding residential land uses. Moreover, as discussed in Section 4.13, *Utilities and Service Systems*, of the Draft EIR, there is sufficient capacity in utility services to serve the Project site.

40-2 The commenter states that the Project is not located in an area that will have an impact on City of Los Alamitos residents and requests that the Project be rejected or drastically reduced in scope. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

COMMENT LETTER 41

From: Robbi Maurer
To: Tom Oliver
Subject: Re: Lampson Project
Date: Tuesday, April 30, 2024 6:57:46 PM
Attachments: image003.png
image004.png
image002.png

Thanks for all you do, Tom. I'm spreading the word to neighbors but it's frustrating thst they don't participate. 41-1

On Tue, Apr 30, 2024 at 8:33 AM Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

> Thanks for your response, Robbi. I will forward your response to the Environmental Impact Report consultant.
>
> As always, if you have any questions, please email or call me,
>
> **Tom Oliver**
> Associate Planner
> City of Los Alamitos
> 3191 Katella Avenue
> Los Alamitos, CA 90720
> (562) 431-3538 x303

From: Robbi Maurer <robbimaymaurer@gmail.com>
Sent: Tuesday, April 30, 2024 6:25 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Lampson Project

I have lived off Lampson Ave. for most of my 72 years. I have watched our community grow and change with enthusiasm and support. However, the proposed building project of multiple units on Lampson is too much. Traffic is already a serious problem. parking for the 1000 units will overflow into the neighborhoods. And local shopping will be overcrowded. It is time these huge, greedy developers move on. Our community has consistently fought them. 41-2

Responses to Comment 41

Maurer, Robbi, dated April 30, 2024.

41-1 The commenter expresses gratitude to the City's Associate Planner and frustration on low participation from the public. It should be noted that several residents provided comments throughout the CEQA process. Comments received during the NOP and Scoping Meeting are presented on Tables 1-1 and 1-2 of the Draft EIR; additionally, 74 residents submitted comments on the Draft EIR, which are included and responded to in this Final EIR. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

41-2 The commenter expresses concern with traffic, parking, and overcrowding at local shopping. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns and 2.1.3, *Parking*, for parking impacts. Overcrowding at local shopping is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. Thus, no further response is required.

DRAFT

Comment Letter 42

Re: DEIR Comments and Questions

Tom Oliver <Toliver@cityoflosalamitos.org>
Tue 6/11/2024 11:00 AM

To:Donna McGuire <sealbeachma@hotmail.com>
Cc:Greg Kutzbach <greg@exhibitaforensics.com>;deangmcguire <deangmcguire@gmail.com>

Thanks so much for your email, Donna. I will forward your email to our Environmental Consultant.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

H2OC STORMWATER PROGRAM | LEARN MORE

From: Donna McGuire <sealbeachma@hotmail.com>
Sent: Monday, June 10, 2024 4:19 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Greg Kutzbach <greg@exhibitaforensics.com>; deangmcguire <deangmcguire@gmail.com>
Subject: Fw: DEIR Comments and Questions

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender sealbeachma@hotmail.com

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From: Donna McGuire <sealbeachma@hotmail.com>
Sent: Monday, June 10, 2024 4:09 PM
To: P Senecal <psenecal@rocketmail.com>; Greg Kutzbach <greg@exhibitaforensics.com>
Cc: P Senecal <psenecal@rocketmail.com>
Subject: DEIR Comments and Questions

Dean and Donna McGuire
4824 Dogwood Ave
Seal Beach, CA 90740

DRAFT

June 10, 2024
3pm PST

Tom Oliver
Planning Department
City of Los Alamitos
3191 Katella Ave
Los Alamitos, CA 90720

Regarding 4665 Lampson Ave,
Draft Enviromental Impact Report Dated April 24, 2024

Mr. Oliver,
In response to the Notice seeking Comments to the Draft Environmental Report for 4665 Lampson Ave, please see below for our comments and questions:

Public Health - Of concern, is near road exposures to tire and brake wear. I am attaching a study from US Environmental Protection Agency, CRC Mobile Source Air Toxics Workshop, dated February 14, 2024. The report notes, "Tire and/or brake wear contains many toxic pollutants including metals, PAHs, microplastics, nanomaterials, and the emerging compounds of concerns 6PPD/6PPD quinone". Tire wear particles (TWPs) can be coarse, fine and ultrafine and thus transport hundreds of meters to/ from the roads." The California Air Resources Board report attached notes "brake-ware PM, which is currently the largest source of primary PM from non-road vehicles, is predicted to increase over time". 42-1

The reports note that non-exhaust PM can deposit in soils near roadsides or transport downwind. Road dust from tire and brake-wear can be absorbed into plants, gardens, and lawns. The roadway dust is then carried by wind and stormwater run-off. College Park East and Old Ranch Country Club have stormwater flooding issues. Since we are flooding, that would suggest we are already at drain capacity and cannot handle the Lampson Park Place project. 42-2

The EIR which was used for the Old Ranch Town Center Development (from the 1990's) stated that the corner of Lampson and Seal Beach Blvd were at capacity post the completion of that project. Indeed, the traffic builds up at that corner and at times, the line of cars extends to more than 40 cars staging east on Lampson. What mitigation will be completed to reduce the added congestion on the corner and Lampson as a whole? As a 40-year 1st responder, without a doubt, this effects emergency vehicle response times; when seconds matter, lives are at stake. Where are the mapping response times needed for an accurate evaluation?
College Park East housing is not on a grid system, which in itself, causes slower response times, and the streets are not through streets (which also increases responses times). The increased traffic from the proposed

42-3

42-4

DRAFT

development must be mapped in conjunction with existing development in order to evaluate the response times and therefore the safety of the current residents. Existing condition as it relates to our Lampson concrete medians with the bolders and trees, firetrucks cannot cross over the medians. The firetrucks would be potentially stuck in traffic. This needs to be taken into consideration during the mapping of emergency responses. As College Park East is an aging community, medical emergency responses are expected to increase and quick response times are very important.

42-4 (CONT.)

Further, the EIR from the 1990's also stated that post that development, we were at 100-year flood capacity. Even with the mitigation implemented during that development, during 2023/2024, College Park East had significant flooding. As the proposed project would be concrete instead of grassland that was used as mitigation to absorb some of the rain, please explain the mitigation measures to be used to increase the rain runoff capacity which is being displaced by this project. The Lampson Park Place project must be able to contain stormwater and not allow it to freely flow back across Lampson Street into College Park East.

42-5

Safety - To our knowledge, what was not mentioned, was the high-pressure gas line that runs along Lampson Ave. Has that been removed? If not, what are the plans to mitigate this hazard? If that line were to burst, say during a 7-magnitude earthquake, there would be significant fires along Lampson Ave. College Park East residents have only 5 exits. With approximately 1700 homes and 2800 residents, the necessary quick evacuation is already a challenge. If you are adding even more cars and people across from College Park East, which also only has Lampson in which to evacuate, what is the mitigation plan to quickly move even more vehicles? Has mapping been completed to show the impact of increased development?

42-6

Although I searched the DEIR for data regarding the capacity needed for emergency water and daily usage water, it doesn't seem to be included in the DEIR. With the added development, do the current fire hydrants meet the required fire flow?

42-7

Thank you in advance for your responses.

DRAFT

,
Wishing you Many Blessings,
Donna Barron-McGuire
562-881-0793

"You can't live a perfect day without doing something for someone who will never be able to repay you."

John Wooden

Responses to Comment 42

McGuire, Donna and Dean, dated June 10, 2024.

42-1 The commenter expresses concern related to public health from tire and brake wear. As discussed in the Project's Air Quality Impact Analysis (*Technical Appendix B1* to the Draft EIR), mobile source emissions include fugitive dust related to vehicle travel. Vehicles traveling on paved roads would be a source of fugitive emissions the generation of road dust inclusive of brake and tire wear particulates. The emissions estimates for travel on paved roads were considered in the air quality analysis (refer to Section 3.5.3 of *Technical Appendix B1* of the Draft EIR). The emissions estimates for travel on paved roads were calculated using CalEEMod. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, construction and operation of the Project would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant (refer to Page 4.2-23 to 4.2-25 of the Draft EIR).

42-2 The commenter expresses concerns related to road dust and flooding and storm drain capacity. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for storm drainage impacts and Response to Comment 42-1 above related to air quality impacts from tire and brake wear.

42-3 The commenter references an EIR conducted for the Old Ranch Town Center Development Project from the 1990s which stated that the intersection of Lampson Avenue and Seal Beach Boulevard will be at capacity at Project buildout. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns. The updated Traffic Analysis (*Attachment G* of this Final EIR) identifies the Project's contribution to a deficiency at Seal Beach Boulevard and Lampson Avenue. The recommended improvement is to restripe the number 2 westbound left as a shared left-right turn lane, which will improve the level of service (see Table 6-3 of *Attachment G* of this Final EIR). The Project Applicant would be required to pay fair share fees towards this improvement.

42-4 The commenter expresses concern with emergency response times due to the increase in traffic. As discussed in Section 4.13, *Public Services*, of the Draft EIR, per correspondence with the Orange County Fire Authority (OCFA), there are currently no deficiencies in fire protection service provided to the Project site. Additionally, response times would not decrease or necessitate the construction of a new fire station. To maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs (refer to Page 4.13-9 of the Draft EIR).

42-5 The commenter expresses concern with flooding and stormwater capacity at the Project site. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*. Thus, no further response is required.

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42-6 The commenter expresses concern with safety related to the existing pressure gas line that runs along Lampson Avenue. Construction of the Project would not involve trenching that would affect the existing gas line. In the alternatives considered for the proposed drainage design, constructing storm drain pipe under Lampson Avenue to west and east was found to be infeasible due to conflicts with existing utilities (refer to Page 4.9-21 of the Draft EIR).

42-7 The commenter inquires about capacity for emergency water and fire hydrants meeting the required fire flow. Figure 4.8-3, *Fire Master Plan*, of the Draft EIR, depicts the location of the proposed fire hydrants that will serve the Project site. Additionally, as discussed in Section 4.13, *Public Services*, of the Draft EIR, the Project would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirement based upon the tenant type, building size, and building type. Access to and around structures would meet OCFA and CFC requirements. Compliance with OCFA requirements would ensure adequate provision of resources such as access, water mains, fire flows, and fire hydrants.

DRAFT

COMMENT LETTER 43

Draft Environmental Impact Report for the 4665 Lampson Avenue Project

gamiller@sprintmail.com <gamiller@sprintmail.com>
Mon 6/10/2024 2:49 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>
Tom Oliver, Associate Planner
toliver@cityoflosalamitos.org

Re: Draft Environmental Impact Report (DEIR) for the 4665 Lampson Avenue Project (Project)

Dear Mr. Oliver:

I was the Seal Beach District 4 City Council Member from 2008 through 2016 and I offer the comments below regarding the DEIR.

Arbor Park: The City of Seal Beach obtained a grant from the US Army in 1981 for the park and in 2003 that grant was extended to December 31, 2028. I know of no reason why the City of Seal Beach will not request the grant be extended again. The City of Los Alamitos has never been involved in any way with the park since its inception in 1981.

It is nice the Project offers a ten foot easement to accommodate AYSO parking, however, that is a Joint Forces Training Base (JFTB) installation security perimeter fence the Project proposes to move. Without giving the land to the Federal government, it is unlikely they would want to let the Project move the fence. I believe the 10 feet would better serve the Project by providing additional parking and recreation. I am sure the City of Seal Beach would welcome a donation from the Project to expand the parking in the park, subject to approval of JFTB. Plus, there is probably an option to use some of the grass area for parking. The pedestrian gate at the park was not approved by JFTB or the City of Seal Beach, but it was allowed to remain as long as it was locked when the park was not in use by AYSO. The perimeter fence is required by the U.S. Army for the security of the JFTB. Pedestrian gates are not permitted and the current pedestrian gate should be removed when the Project construction begins, only the drive-in-gate to the park should remain.

City of Los Alamitos Municipal Code does not have jurisdiction over Federal land where the park is located. The park modification are subject to JFTB approval and JFTB has approved all of the City of Seal Beach improvements over the years, including the construction of the parking lot.

43-1

Storm Water: The impervious surface of the Project is over 100% greater than post-Project conditions, which means the Project will create double the amount of storm water. Currently, storm water from the existing Project site flows to the Join Forces Training Base (JFTB). Before this Project is approved there must be a permanent agreement with the JFTB for all Project storm water to flow to JFTB. Otherwise, all storm water must be stored at the Project property until it can be released onto Lampson Avenue in a manner as not to add to the flooding in College Park East (CPE) of Seal Beach, even if this means the Project must be downsized to satisfy this requirement.

Storm water on Lampson Avenue flows into CPE at Heather Street and Candleberry Avenue. Thus, storm water from the Project onto Lampson during significant rain will add to potential flooding or the flooding of Ironwood Avenue and contiguous streets to Ironwood Avenue.

43-2

Traffic: The Project traffic analysis failed to consider that Old Ranch Country Club's proposal also includes 51 senior housing units, a 150 room hotel, and a large medical facility, all of which are located on Lampson Avenue.

43-3

DRAFT

Affordable Housing/ Senior Housing Alternatives: Residents for either alternative that do not have their own transportation will be faced with very difficult situations to contend with due to the location of the Project. Public transportation is just over a mile away from Project and grocery stores are just under two miles away. There is limited opportunity for employment within one mile of the Project. The plan to provide an electric vehicle for use by Affordable Housing residents for transportation to local grocery stores would seem to be more of a problem than a solution. The DEIR does not address possible transportation needs of Senior Housing residents.

43-4

Parking: Since 10 feet of Project property likely cannot be combined with existing Arbor Park Federal land in the manner proposed by the Project, it could be used to provide additional parking for the benefit of Project residents.

Please confirm receipt of this email today, June 10, 2024.

Regards,

43-5

Gary Miller

gamiller@sprintmail.com
562-241-3883

4632 Guava Ave.
Seal Beach, CA 90740

DRAFT

Responses to Comment 43

Miller, Gary, dated June 10, 2024.

43-1 The commenter provides information on the history of Arbor Park's ownership and states that it is unlikely that the JFTB would allow the Project to move the fence for the 10-foot dedication. The commenter suggests that the 10-foot dedication be used for more parking and recreation for the Project and the exiting pedestrian gate be removed during Project construction since it was not approved by the JFTB or City of Seal Beach. These comments do not raise CEQA related issues; however, these comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

43-2 The commenter states that there should be an agreement with JFTB for the Project stormwater to flow onto the JFTB or it must be stored onsite until it can be released onto Lampson Avenue. Stormwater flow onto JFTB will need to be approved by JFTB. The commenter also expresses flooding due to storm drain during significant rain events. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for the proposed storm drainage systems and stormwater runoff impacts.

43-3 The commenter asserts that the Project's Traffic Analysis failed to consider the Old Ranch Country Club. Refer to Response to Comment D-9 regarding inclusion of Old Ranch Country Club in the Project's cumulative impact analysis.

43-4 The commenter expresses concern that the Draft EIR does not address transportation needs, such as public transit, for residents of affordable housing or senior housing alternative. The Draft EIR correctly identifies the nearest transit options near the Project site. The future residents' specific transportation needs would be determined by the future tenant when deciding whether to reside at the Project site. The transportation analysis in the Draft EIR followed the required methodology in accordance with the State CEQA Guidelines and City procedures, which included City of Los Alamitos' requirements and the City of Seal Beach's Transportation Analysis Guidelines. It should be noted that implementation of Mitigation Measure MM 4.15-1 includes implementing CAPCOA strategies such as coordination with the OCTA to determine whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards (refer to Page 4.15-19 of the Draft EIR).

43-5 The commenter states since the 10-foot dedication would most likely not combine with the existing Arbor Park Federal land in the manner proposed by the Project, it should be used to provide additional parking for the benefit of Project residents. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues

DRAFT

concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 44

From: Suzy Mokhtari
To: Tom Oliver
Subject: Lampson Avenue Project
Date: Wednesday, May 1, 2024 2:33:46 PM

Thank you for the notice of the DEIR.
I am a resident of College Park East and am very concerned about the community, societal and environmental implications of destroying green park space to put in more living spaces without plans for the functionality and well being of the people who will be living there (and here).
Thanks,
Suzy Mokhtari
Sent from my iPhone

44-1

Responses to Comment 44

Mokhtari, Suzy, dated May 1, 2024.

44-1 The commenter expresses concerns about the community, societal and environmental implications of replacing green park space to put in more living spaces without plans for the functionality and well-being of the people who will be living there. The Project site is currently not used as a park space. As shown in Figure 3-3, *Aerial Photograph*, of the Draft EIR, the Project site is currently developed with a vacant two-story, 88,000 sf commercial office building located centrally within the Project site and surface parking lot located within the western portion of the Project site. As such, the Project would not replace or destroy any green park space. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 45

From: Ed V. Morgan
To: toliver@cityoflosalamitos.org
Subject: RE: the WestEd property on Lampson
Date: Monday, May 20, 2024 7:07:02 AM

Hi,
We are Ed and Sylvia Morgan and live in College Park East.
We DO NOT WANT THE PROPERTY DEVELOPED on the WestEd site.
It will 1) busy our neighborhood, 2) over load Lampson, 3) add congestion, 4) cause our Park on Heather to be used, 5) bring more cars that will occasionally park by our house on Lampson, 6) restrict the AYSO Soccer parking, 7) it will add yet ANOTHER SIGNAL to our already over signaled area, 8) AND NOT ONE PERSON THAT WE'VE TALKED TO WANTS IT!
Please be considerate of our neighborhood and consider our request!

Thank-you,

Ed and Sylvia Morgan
562-221-2362

45-1

Responses to Comment 45

Morgan, Ed and Sylvia, dated May 20, 2024.

45-1 The commenter expresses opposition to the Project and is concerned with congestion, overcrowding on Lampson Avenue, usage of Heather Park, overflow parking into College Park East, AYSO parking, and the additional of a traffic signal into the over signalized area. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, related to congestion concerns, Master Response 2.1.3, *Parking*, related to onsite parking and Arbor Park parking. Additionally, as discussed, Section 4.14, *Recreation*, of the Draft EIR, the projected number of Project visitors to these parks are well within the carrying capacity, there is sufficient capacity at existing nearby neighborhood parks to accommodate the Project residents. With full occupancy of the Project, the designed neighborhood open spaces within the Project site, the capacity and existing maintenance and usage of existing parks, and the estimated visitation of the Project residents to the existing parks; the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated (refer to Page 4.14-9 of the Draft EIR). Refer to Response to Comment 17-10 and Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for traffic signal concerns.

DRAFT

Comment Letter 46

From: Bayan Naime
To: Tom Oliver
Subject: Lampson project
Date: Sunday, May 5, 2024 12:19:12 PM

To whom it may concern,

I am writing this knowing it will fall on deaf ears, nonetheless, I feel it necessary. Building on Lampson will obviously bring more traffic and with it more criminal activity. College park east has always been a small, tight knitt community. It is a hidden gem and I had the pleasure of growing up here and now I have a house of my own and hop my children will have the same safe upbringing. With the addition of anything except one family homes, the increase in traffic and people will jeopardize our small community. Everyone is against building apartments or condos, but as we all know money is all that matters not maintaining small happy finally oriented communities. Everyone knows the impact and no one wants it except those who will profit from it financially, who do not live in our community.

46-1

I wish these concerns would be taken into consideration,

Sent from my iPhone

Responses to Comment 46

Naime, Bayan, dated May 5, 2024.

46-1 The commenter expresses concern with the increase in traffic and crime. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, related to traffic congestion concerns and 2.1.6, *Public Safety*, related to the increase in crime. Thus, no further response is required.

DRAFT

Comment Letter 47

Lampson Project

mnikuta@aol.com <mnikuta@aol.com>
Wed 5/15/2024 1:40 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mnikuta@aol.com

I am very concerned about the Lampson Project.

The traffic created with that many unit will be unbearable. The corner of Lampson and Los Al Blvd is already very busy.

The safety of the people living in the proposed properties so close to the Airbase has not been addressed. There are also health concerns being right under the flight path.

We would loose this open space for sports.

The proposal fails to provide adequate setbacks and areas for community outdoor use. Parking will be a nightmare with this overbuilding.

We already pay some of the highest taxes in the area and our taxes will increase due to the increases of infrastructure (sewer, electricity, storm drains, etc) need to complete this project.

This project is NOT good for Los Alamitos and the surrounding communities.

Please reconsider your decision and keep the area a great place to live/thrive.

Thank you for your time

Mary Noud-Ikuta

47-1

DRAFT

Responses to Comment 47

Noud-Ikuta, Mary, dated May 15, 2024.

47-1 The commenter expresses concern with traffic, safety from the proximity to JFTB, loss of open space for sports, lack of onsite outdoor spaces, parking, and increase in taxes. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns, 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for airport safety impacts, 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for recreation impacts and 2.1.3, *Parking*, for parking impacts. The increase in taxes from infrastructure need to complete the Project is not a foreseeable consequence of the Project and not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. Thus, no further response is required.

DRAFT

Comment Letter 48

DEIR-Lampson Project

MIKE o <mikesteven56@msn.com>
Tue 6/4/2024 1:26 PM
To:Tom Oliver <TOliver@cityoflosalamitos.org>

1 attachments (237 KB)
TomOliver.pdf;

Tom,

Attached are my comments to the draft EIR. If I'm conveying something that does not make sense (I'm not a civil engineer) could you please let me know.
I can rewrite it so the people who are responding are able to understand what I am trying to say.
Also, can the responders reply in layman's terms so that I can understand their response?

Thanks much,
Jean Orland
562-493-8454

48-1

DRAFT

June 4, 2024

Mr. Tom Oliver, Associate Planner
City of Los Alamitos
Planning Department
3191 Katella Avenue
Los Alamitos, CA 90720

Mr. Oliver,

My comments are enclosed regarding the draft environmental report (DEIR) for the Lampson Park Place development. I'm focusing on section 4.6 – Geology and Soils and 4.9 – Hydrology and Water Quality.

I do not understand how the DEIR can state that flooding is considered not a significant issue because Seal Beach does not have a plan, but yet it acknowledges that flooding is a problem. Please explain this inconsistency.

48-2

I don't understand how a technical report cannot be completed until after the contractor grades the site. How does the contractor plan to build/grade/reinforce the structures due to the high water table? Depending on how this is completed, it will cause major flooding problems for College Park East. Can you please describe/list the various grading options with the pro's and cons for each option? Please see below P4.6.1 in that the technical report can't determine this until the grading is completed.

How can the contractor address these issues and help correct the water problem?

48-3

P4.6.1 (p.276) c. soil is very moist to wet. Later in the DEIR it states the need to shore up infrastructure but the technical report says they can't determine this depending on how the site is graded?

P4.6.2 (p277) d. groundwater – How does the contractor prevent/stop surface seepage? DEIR states that seepage may develop once site development is completed. E. tsunamis/flooding – A Seal Beach City study shows that due to climate change, flooding will occur over essentially the entire City where retreating is an option. Can you provide/review the study from the Joint Forces

48-4

DRAFT

Training Base and the Naval Weapons Station? What were the conclusions and what can you do to help prevent/slow down climate change flooding on this project?

48-4 (CONT.)

P4.6.5 (p280) Second paragraph – what did SHMA find and what are the mitigation measures? Mitigation measures are needed prior to permitting developments designed for human occupancy. Number 3, what did the site specific investigations find? The DEIR states that local agencies can be more restrictive than state law requires. What is Los Alamitos City's position on this?

P4.6.9 (p284) Liquefaction – seems to be a serious issue. The DEIR states "to reduce liquefaction impacts to an acceptable level". Since this seems serious can there be a higher/more rigorous level to meet other than just "acceptable"? Please explain.

48-5

P4.6.13 (p288) Cumulative impact analysis – paragraph 2 states that a proposed development project are not influenced by … other, offsite properties. These hazards and the measures to address them would have no direct/indirect connection to similar issues to or from other properties. This is simply not true. When the first option of creating a storm flow through the Joint Forces Training Base and a change is made, or blockage occurs and the storm water cannot flow through that area which is more than likely to occur, the second and more realistic option of having the water flow down Lampson Avenue will occur. Lampson Avenue will turn into a river because the streets in College Park East are already above a 100 year storm event – currently the streets are rivers where the water is easily flowing above the curb. Can the flow of water on Lampson Avenue flow onto the Los Alamitos/Joint Forces Training Base side of the street rather than the College Park East side of the street? Can Lampson Avenue be regraded? Please explain.

48-6

P4.9.1 (p349) The DEIR does not list any flood control facilities for Seal Beach. Flood control facility cities are located around Seal Beach but not Seal Beach. However, this project directly impacts Seal Beach. How can a discussion/strategy begin with the Cities of Seal Beach/Los Alamitos, Orange County, State of California, the Federal government and the developer in coming up with an alternative and addressing this issue? Seal Beach City has stated in the DEIR that water flow exceeds the top of the curbs. Knowing this information, has the

48-7

DRAFT

contractor responded with higher or more rigorous standards that are necessary to not make the problem worse? If so, what are they and if not, why?

48-7 (CONT.)

P4.9.7 (p355) Does Executive Order 11988 place any conditions on this project? If so, what are they and if not, why? It seems that bullet two – help with finance and assist in construction would be beneficial to all involved entities. Who is responsible and is it feasible to make the aquafer larger? Can another aquafer be built on the Joint Forces Training Base/Base golf course? Seal Beach City has stated that when the aquafer is full it drains back into College Park East which defeats the purpose. Having this project and a possibility of another larger project draining into the aquafer makes no sense. With help from the State of California and the Federal Government does this project have the ability to directly drain into other nearby creeks, rivers or other locations? If no, why?

48-8

P4.9.14 (p362) Regarding PDF HYD-1 the DEIR states that the buildings will be set at a one foot minimum above the water surface elevation. Can this number be increased for a more rigorous requirement since the site is over a 100 year storm event? If no, why not?

P4.9.19 (p367) Since a storm water sump pump is being built and the site has over a 100 year storm event, can the sump pump be built to hold more than 38,800 cf of water? Could it provide an additional 25 or 30 percent factor of safety? Please explain.

48-9

In the F1 Geotechnical report:

P24/25 (p27/28) Section 4.6 discusses prevention of ponding within 5 feet of the foundation. Section 4.7 discusses that in general, the vast majority of … issues are directly related to improper drainage. Can the site be graded so that no ponding occurs and that the water flows toward the Joint Forces Training Base/Base golf course? Please explain.

48-10

DRAFT

Responses to Comment 48

Orland, Jean, dated June 4, 2024.

48-1 The commenter provides introductory remarks for the attached comment letter. Thus, no further response is required.

48-2 The commenter inquires about the conclusion of the Draft EIR related to flooding not being a significant issue, but it acknowledges that flooding is a problem. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for flooding impacts. Both the proposed and alternative storm drain facilities would be designed to detain the increased flows from the proposed condition and ensure that peak flows are less than existing conditions during all storm events. Therefore, the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

48-3 The commenter states they do not understand why a technical report cannot be completed until after the contractor grades the site and about the various grading options due to high water table.

A geotechnical report was prepared for the Project (included as *Technical Appendix F1* of the Draft EIR) to analyze geotechnical and soils impacts and identify recommendations during grading and construction. As described in Section 4.6, *Geology and Soils*, of the Draft EIR, with implementation of Mitigation Measure MMM 4.6-1, verification of all recommendations provided in the geotechnical report will be required prior to the issuance of grading permits (refer to Page 4.6-15 of the Draft EIR). These recommendations will be confirmed and modified as needed based on actual as-graded conditions. The final grading plan will be updated as needed during the construction drawing (CD) review process upon Project approval. During the CD process that is subjected to City review and approval, all Project plans including grading and structural drawings will be evaluated to ensure compliance with all applicable regulatory building safety standards and guidelines issuance of a building permit.

Section 4.0 of the Geotechnical Report (*Technical Appendix F1*) identifies design recommendations to reduce liquefaction impacts (due to the high water table) to an acceptable level. The recommendations include seismic design parameters for the site, prevention of the intentional infiltration of storm water into subsurface soils and require foundations to be constructed based on the expansion index and shear strength of on-site soils. The estimated seismic settlement can be mitigated by performing the recommended remedial grading and constructing the buildings with the recommended post-tensioned slab and interconnecting isolated pad footings with grade beams.

DRAFT

The Project would be required to be designed and constructed in accordance with applicable seismic safety guidelines, including the standard requirements of the CBSC. Furthermore, as stated in the LAMC Section 15.04.020, the Project would be required to comply with the grading and construction recommendations contained within the geotechnical report. Therefore, a technical report was completed (see *Technical Appendix F1* of the Draft EIR), however, as stated in the Geotechnical Report, the recommendations shall be confirmed and modified as needed based on actual as-graded conditions. Furthermore, the grading plan for the Project is shown in Figure 3-26, *Grading Plan*, of the Draft EIR. Final grading plans would be completed following Project approval, which will be subject to City review and approval.

48-4 The commenter asserts that the Draft EIR states the need to shore up infrastructure but the technical report says it cannot determine this depending on how the site is graded. The commenter inquires about the potential for seepage and states that the past Seal Beach study shows that due to climate change, flooding will occur over the entire City where retreating is an option. The commenter also asked to review a study from the JFTB and Naval Weapons Station.

Refer to Response to Comment 48-3 regarding the mitigation required to ensure that the geotechnical recommendations are implemented. Additionally, the Geotechnical Report (*Technical Appendix F1* of the Draft EIR) recommendations are intended to protect against the potential damaging effects of geotechnical phenomena, including groundwater seepage. The commenter does not provide citation details (e.g. title, date, or author name) of the Seal Beach or JFTB studies being referenced. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for flooding impacts. In any event, the Draft EIR evaluated the potential for flooding due to tsunamis and determined that impacts would be less than significant due to distance from the Pacific Ocean (refer to Page 4.9-24 of the Draft EIR).

48-5 The commenter inquires about the results of the Seismic Hazards Mapping Act and the results of the site-specific geotechnical investigations, expresses concern with liquefaction, and requests whether there can be a more rigorous level to meet other than just acceptable. As discussed in Section 4.6, *Geology and Soils*, of the Draft EIR, the Project site is not located within the State of California Earthquake Fault Zone (Alquist-Priolo) and no faults were identified on the site during the site evaluation. Moreover, as indicated in the Geotechnical Report (*Technical Appendix F1* of the Draft EIR), the Project site is not at an increased risk relative to the surrounding areas. The Project would incorporate the construction recommendations contained within the geotechnical report as required by the LAMC Section 15.04.020. Project-related structures and buildings would be required to be designed and constructed in compliance with the California Building Code (CBC [California Code of Regulations, Title 24, Part 2]), which contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the probable strength of ground motion. Therefore, as structures would be designed to meet or exceed CBC standards for earthquake resistance, development of the Project would create less than significant impacts

DRAFT

related to seismic ground shaking and no mitigation is required (refer to Page 4.6-8 of the Draft EIR).

Section 4.0 of the Geotechnical Report (*Technical Appendix F1*) identifies design recommendations to reduce liquefaction impacts to an acceptable level. The term "acceptable level," means in accordance with the California Building Code seismic criteria and is the appropriate standard for which to analyze geotechnical hazard risks under CEQA and ensure the Project would not result in the risk of loss, injury, or death.

48-6 The commenter disagrees with the Draft EIR stating that potential hazardous effects related to geologic and soil conditions addressed under Thresholds a, c, d, and e are unique to the Project site and inherently restricted to the specific property proposed for development. The commenter states this is untrue and describes potential stormwater/flooding events. The commenter further asserts that Lampson Avenue will turn into a river and inquires about whether water on Lampson Avenue can flow onto the JFTB.

The cumulative impact discussion on Page 4.6-13 of the Draft EIR is specific to geological hazards. The commenter concern is related to flooding which is discussed under Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, not Section 4.6, Geology and Soils. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for flooding impacts.

48-7 The commenter states that the Draft EIR does not list any flood control facilities for the City of Seal Beach and whether the contractor has responded with higher and more rigorous standards that are necessary to not make the issue of flooding worse. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for flooding impacts.

48-8 The commenter inquiries whether Executive Order 11988 places any conditions on the Project. Executive Order 11988 requires agencies to protect against the risk of flood loss and to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The commenter also inquiries about the potential to build another aquifer on the JFTB and golf course.

As discussed in Section 4.9, *Hydrology and Water Quality*, of the Draft EIR, FEMA Flood Insurance Rate Maps identify flood zones and areas that are susceptible to 100-year (1% annual chance of occurrence) and 500-year floods (0.2% annual chance of occurrence). These areas are referred to as Special Flood Hazard Areas and Moderate Flood Hazard Areas respectively. According to FEMA FIRM No. 06059C0116J (effective 12/03/2009), the Project site is located within FEMA Flood Zone D. Flood Zone D is correlated with areas with a possible risk of flooding, but the probability has not been determined. It should be noted that the Project site is not in proximity to an area within a flood zone (refer to Page 4.9-24 of the Draft EIR).

DRAFT

Therefore, Executive Order 11988 does not place any conditions on the Project site as it is not designated as a floodplain. The commenter also inquiries about the potential to build another aquifer on the JFTB and golf course. The commenter does not provide evidence for the need for an additional aquifer. However, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. Thus, no further response is required.

48-9 The commenter inquires whether the finished floor elevation for the onsite buildings can be set higher than what is stated under Project Design Feature (PDF) HYD-1 and whether the sump pump under the alternate storm drain facilities can be increased to hold more than 38,800 cubic feet (cf) of water for an additionally 25 to 30 percent factor of safety. The Project site is designed to protect against a 100-year storm event; therefore, there is no justification for increasing the finished floor elevations on site. As discussed in the updated Hydrology Study (*Attachment E* to this Final EIR), a proposed stormwater pump system with upstream detention storage has been incorporated into the onsite drainage design to provide onsite peak flow and volume mitigation for the development for all storm events. The pump system will control the outflow discharge rate matching the existing 2-year peak flow at approximately 8.9 cfs. The stormwater system has been designed with a 20% factor of safety, which is above requirements.

48-10 The commenter inquires whether the Project would be graded to avoid ponding onsite based on the conclusion from the Project' geotechnical report. The Project will be graded to avoid ponding onsite. As discussed above, the Project would be constructed in accordance with the recommendations of the Project's Geotechnical Investigation (*Technical Appendix F1 of the Draft EIR*).

DRAFT

Comment Letter 49

Request to obtain new unbiased enviornmental impact reports for Lampson project

Justin Osburn <justin.osburn@gmail.com>
Mon 6/10/2024 8:18 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

IRONSCALES finds this email suspicious! We know Justin Osburn by name, but the email was sent from an unfamiliar address justin.osburn@gmail.com | Know this sender?

Hi Tom,

I'm a resident of the College Park East neighborhood in Seal Beach, which as you know borders the Lampson Project. I'm writing this email to request a new unbiased environmental impact report for the Lampson project. It appears that these reports were prepared by consultants hired by the Lampson LLC property developer and not by independent consultants hired by the City of Los Alamitos. 49-1

I understand that finding sites for California's required affordable housing projects is important for each city, but I feel that this is not the right place for a housing project, due to its proximity to the Joint Forces Training Base. Placing homes next to commercial and military airports is very dangerous due to the potential public health and safety problems such as crash risks, air pollution, hearing loss and much more. 49-2

I believe that this site will also cause severe traffic to Lampson St. which will make it hard for residents like myself to commute back and forth and more importantly take first responders more time to respond to any emergencies within our community. I have a 4 year old daughter and this probably concerns me more than anything.

I appreciate your time and hope you can consider this request for a new unbiased environmental impact report for the Lampson project, for the benefit of Los Alamitos and neighboring communities like Seal Beach CPE and West Garden Grove that can be truly affected by this. 49-3

Sincerely,

Justin Osburn
3860 Rose St.
Seal Beach, CA 90740

DRAFT

Responses to Comment 49

Osburn, Justin, dated June 10, 2024.

49-1 The commenter requests a new unbiased environmental impact report for the Project due to the preparation of the document being hired by the Project applicant and not by the City. Refer to Response to Comment 16-16, above, related to the preparation of the Draft EIR and conflicts of interest.

49-2 The commenter expresses concern with the Project due to its proximity with the JFTB. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for airport safety impacts.

49-3 The commenter expresses concern with the increase in traffic on Lampson Avenue leading to a decrease in emergency response times. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns. As discussed in Section 4.13, *Public Services*, of the Draft EIR, per correspondence with the Orange County Fire Authority (OCFA), there are currently no deficiencies in fire protection service provided to the Project site. Additionally, response times would not decrease to necessitate the construction of a new fire station. To maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs (refer to Page 4.13-9 of the Draft EIR).

DRAFT

Comment Letter 50

Lampson Draft Environmental Impact Report - Written Comments

J Penney <jpenn927@icloud.com>
Mon 6/10/2024 1:43 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>
Cc:J Penney <jpenn927@icloud.com>

Good afternoon Mr. Oliver,

Please review written comments to the Lampson Draft Environmental Impact Report:

Firstly, the report should be conducted by an UNBIASED party - not by a firm contracted by the Developer, in the interests of the Developer and not of the city or its residents - whether they be current or future. 50-1

The preliminary Environmental Impact Report (EIR) fails to adequately acknowledge and address the documented safety concerns highlighted by OCALUC. Moreover, it neglects to sufficiently examine the significant strain on public health, safety, emergency services, and significantly diminished quality of life that would be imposed on all residents in the area. There is a massive lack of Public Disclosure of Known Safety Issues with Proximity to Military Airport - why? 50-2

Hearing loss caused by proximity to military base necessitates additional insulation in windows, walls, ceilings, in all construction. 50-3

Overbuilding of on 12+ acres will create runoff and flooding issues in existing neighborhoods. Tax payers should not fund any element of Developer's infrastructure. 50-4

The setback should be increased from street and the site plan creates a dangerous situation for any children, bicyclists, pedestrians, and drivers on Lampson. 50-5

Parking count is too low and will not accommodate the actual parking needs. What is the plan to mitigate parking along Lampson and within adjacent neighborhoods? How will increased pedestrian and vehicle traffic and accidents created by this overflow be addressed? 50-6

Public disclosure of State Declared Known Health and Safety Risks must be included in sales and escrow documents. 50-7

These critical omissions must be rectified in the EIR to ensure a comprehensive assessment of the project's ramifications are completed and the negative impacts are adequately mitigated.

It is customary for reviews and reports, particularly the significant undertaking of an Environmental Impact Report to be conducted by independent third parties contracted by the city. Any departure from this standard is perceived as a clear conflict of interest.

I strongly urge you to reassess the situation and commission a new EIR to be drafted by an UNBIASED, impartial third party, contracted by the city but financially supported by the developer, prior to any additional environmental determinations being made. 50-8

Thank you for your time and reflection on these decisions that will impact the future of our communities and our children.

Jennifer Penney

DRAFT

Responses to Comment 50

Penney, Jennifer, dated June 10, 2024.

50-1 The commenter states that the Draft EIR should be prepared by an unbiased party not by a firm contracted by the Developer in the interests of the Developer and not of the City or its residents. Refer to Response to Comment 16-16, above, related to the preparation of the Draft EIR and conflicts of interest.

50-2 The commenter states the Draft EIR fails to adequately acknowledge and address the document safety concerns highlighted by ALUC and examine the impacts on public health, safety, emergency services, and quality of life. The commenter also states that there is a lack of public disclosure of known safety issues with proximity to military airport. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for airport safety impacts and buyer's awareness, and 2.1.8, *Public Safety*, for public safety impacts. Quality of life is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. Thus, no further response is required.

50-3 The commenter is concerned about hearing loss caused by the proximity to military base necessitates additional insulation in windows, walls, and ceiling in all construction. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for noise impact from the JFTB. The Project would be designed to achieve a 25 dBA reduction and meet the 45 dBA CNEL interior noise standard with PDF-N-2, which includes the use of windows with a STC rating of 29 on all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos.

50-4 The commenter states that overbuilding on 12 acres will create runoff and flooding issues for existing neighborhoods. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for flooding and storm drain concerns.

50-5 The commenter requests the setback to be increased from the street to avoid dangerous situation for any children, bicyclist, pedestrian, and drivers on Lampson Avenue. As shown in Table 4.1-1, *Zoning Development Standards Consistency Analysis*, the Project would comply with the minimum setback requirements under the City's Municipal Code (refer to Page 4.1-14 of the Draft EIR). Refer also to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*.

50-6 The commenter states that the parking count is too low and inquires about the overflow parking to adjacent neighborhoods and increase in pedestrian and vehicle traffic and accidents. Refer to Master Response 2.1.3, *Parking*, for impacts related to onsite parking, 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety impacts.

DRAFT

50-7 The commenter requests that public disclosure of State declared known health and safety risk to be included in sales and escrow documents. The Draft EIR evaluated and determined that there were no health and safety risks associated with the Project. In California, sellers are required to disclose the presence of any known environmental hazards. Refer also to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, related to notifications to potential buyers.

50-8 The commenter provides concluding remarks and asserts again that a new Draft EIR be drafted by an unbiased impartial third party. Refer to Response to Comment 16-16 related to the preparation of the Draft EIR and conflicts of interest. Thus, no further response is required.

DRAFT

COMMENT LETTER 51

From: Jessica Polye
To: Tom Oliver
Subject: Re: Notice of Availability of a Draft Environmental Impact Report for the 4665 Lampson Avenue Project
Date: Wednesday, April 24, 2024 3:23:45 PM
Attachments: image002.png
image003.png
image004.png

As a resident of CPE, it is incredibly disappointing that a City adjacent to us would allow for such a monstrosity that is going to have a huge negative impact on us. Lampson is already overly impacted with traffic, I can't understand how this would go through. 51-1

On Wed, Apr 24, 2024 at 2:34 PM Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

> Hello Interested party of the proposed Lampson project,
>
> Please see the attached, Notice of Availability of a Draft Environmental Impact Report for the 4665 Lampson Avenue Project.
>
> As always, if you have any questions, please email or call me,
>
> **Tom Oliver**
> Associate Planner
> City of Los Alamitos
> 3191 Katella Avenue
> Los Alamitos, CA 90720
> (562) 431-3538 x303

Responses to Comment 51

Polve, Jessica, dated April 24, 2024.

51-1 The commenter expresses general opposition to the Project and states that Lampson is already overly impacted with traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

DRAFT

COMMENT LETTER 52

From: Janet A. Riness
To: Tom Oliver
Subject: Land Use
Date: Tuesday, May 7, 2024 11:02:07 AM

Dear Mr. Oliver,

We are opposed to the land use plan for the Lampson Ave project. Here are our reasons: 52-1

1. Way too many housing units are planned for the use area 52-2
2. We don't have a drought issue too much this year but lots more people will use more water in our drier years. 52-3
3. There is not enough parking for new housing - estimate two cars minimum per household. 52-4
4. Not enough open space for parks and general recreation 52-5
5. This is located right next to the military base which is our emergency "headquarters" for earthquakes, attacks, or other disasters. They have advised AGAINST the project. 52-6
6. AND LAMPSON IS THE ONLY WAY OUT OF OUR AREA IF WE NEED TO ESCAPE. Check a map! Too many cars trying to use one street. 52-7

Thank you for your attention.

Janet and Dennis Riness

3750 Oleander Street

Seal Beach, CA 90740

Responses to Comment 52

Riness, Janet and Dennis, dated May 7, 2024.

52-1 The commenter provides introductory remarks and expresses opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

52-2 The commenter states that there are too many housing units planned for the use area. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

52-3 The commenter expresses concern with water supply during dry years. As discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, Golden State Water Company West Orange's waters supplies would be sufficient for the Project's estimated water demand of 50.63 acre-feet of water per year (AFY) in normal, single dry years, and five consecutive dry year conditions through 2045 (refer to Pages 4.17-16 to 4.17-17 of the Draft EIR).

52-4 The commenter expresses concern with the lack of onsite parking. Refer to Master Response 2.1.3, *Parking*, for parking impacts.

52-5 The commenter states that there is a lack of open space for parks and general recreation. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*.

52-6 The commenter expresses concern with the Project being located next to JFTB and that ALUC have advised against the Project. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for airport safety impacts,

52-7 The commenter expresses concern that Lampson Avenue is the only way out of College Park East and there are too many cars using one street. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns.

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COMMENT LETTER 53

From: Abraam Saad
To: Tom Oliver
Subject: RE: Notice of Availability of a Draft Environmental Impact Report for the 4665 Lampson Avenue Project
Date: Thursday, April 25, 2024 9:33:44 AM
Attachments: image003.png
image004.png
image002.png

Hello Tom,

We are against this Project because it will have significant impact on environmental resources, and it will disturb our quiet and green community. 53-1

This project will help in the increase of Greenhouse Gas (GHG) emissions within a local area of the project. Some construction work may result in the exceed of some hazardous waste thresholds established by the California Code of Regulation (CCR) and may produce toxic fumes when heated which is very dangerous on Health.
Some soil disturbance may result in Aerially Deposited Lead (ADL) which is very contaminated substance and toxic to human health. Soil disturbance also may result in toxic dust.

Please keep our community safe, sustainable and green to enhance our health and livability. 53-2

Regards,
Abraam & Mirna
3881 Rose St.
Seal Beach, CA 90740

From: Tom Oliver <Toliver@cityoflosalamitos.org>
Sent: Wednesday, April 24, 2024 2:34:01 PM
Subject: Notice of Availability of a Draft Environmental Impact Report for the 4665 Lampson Avenue Project

Hello Interested party of the proposed Lampson project,

Please see the attached, Notice of Availability of a Draft Environmental Impact Report for the 4665 Lampson Avenue Project.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

Responses to Comment 53

Saad, Abraam and Mirna, dated April 25, 2024.

53-1 The commenter provides introductory remarks and expresses opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

53-2 The commenter states that the Project will increase greenhouse gas emissions in the area, construction work may result in the exceedance of some hazardous waste thresholds, and soil disturbance may result in Aerially Deposited Lead and toxic dust.

As discussed in Section 4.7, *Greenhouse Gas Emissions*, of the Draft EIR, construction and operation of the Project would generate a 2,757.11 $MTCO_2e/yr$; the Project would not exceed the significance threshold of 3,000 $MTCO_2e/yr$. Thus, impacts would be less than significant and no mitigation is required (refer to Page 4.7-27 of the Draft EIR). Refer to Response to Comment 16-4 regarding hazardous waste, aerial deposited lead and toxic dust.

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Comment Letter 54

From: Brittany Salling
To: Tom Oliver
Subject: Lampson project objection
Date: Sunday, May 5, 2024 6:22:04 PM

To Whom it may concern,

We live in a neighborhood on Lampson a block from this proposed project. Mornings are already a nightmare when heading to schools in Seal Beach/ Los Alamitos and this will surely make it so much worse. Not to mention AYSO and other sports play on the field right there and it was a perfect solution as the business park was not open on the weekends which allows for parking that is almost always full... now it will be the other way with residents parking at the park and all of the kids sports will need to park in the neighborhoods and cross lampson which will create a dangerous situation for families and children. Additionally, the air base is right there which restricts all of us of only having a 2 story, this will be even closer to the runway but can be taller which does not makes sense. In my research, it seems it has been deemed unsafe to build residential there for the residence as well, so I am not sure why that is being disregarded. I do not see a single benefit to building this yet I can easily point out many ways in which this will be terrible for our already backed-up lampson (for your own research, go ahead and drive down lampson heading towards Seal Beach Blvd when we are trying to get our kids to school, it's a nightmare and I have already been rear ended while driving my child to Hopkinson because people drive so aggressively at that time already due to the gridlock. PLEASE, PLEASE, PLEASE reconsider this; this is a TERRIBLE idea for our community!

54-1

54-2

Thank you,

Brittany Sakkubf

Responses to Comment 54

Sakkubf, Brittany, dated May 5, 2024.

54-1 The commenter expresses concerns with traffic, parking and safety for AYSO participants crossing Lampson. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns, 2.1.2, *Roadway Safety on Lampson Avenue*, for safety, and 2.1.3, *Parking*, for parking impacts regarding AYSO.

54-2 The commenter expresses concern for the proposed residential use onsite due to its proximity to JFTB and traffic congestion. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for airport safety impacts; 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns; and 2.1.2, *Roadway Safety on Lampson Avenue*, for Lampson Avenue safety concerns.

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COMMENT LETTER 55

Sent by email: toliver@cityoflosalamitos.org

June 10, 2024

Mr. Tom Oliver
Planning Department
City of Los Alamitos
3191 Katella Ave.
Los Alamitos, Ca 90720

Regarding: Draft EIR Report April 24, 2024, for 4665 Lampson Ave. (Lampson Park Place)

Mr. Oliver,

In response to the Notice seeking comments to the DEIR report for 4665 Lampson Ave, (Lampson Park Place), I have the following comments:

1) **The project's 3rd Party Peer Reviewed DEIR Report was not made public.** This report should have been available to the public during this comment period. The Peer Review would have been informative to the public in their evaluation of the project and their comments. 55-1

2) **Cumulative Impacts were not evaluated.** The Lampson Park Place DEIR does not consider the Old Ranch Country Club (ORCC) proposed project which is on the Seal Beach website. These projects are in close proximity and share the same roadway. The cumulative impacts that need to be analyzed include public safety, public health and capacity of city services (sewer and stormwater drainage), Lampson road maintenance and traffic congestion. The Lampson Park Place DEIR is silent about cumulative project impacts and need to be addressed. 55-2

3) **Public Safety on Lampson**. The Seal Beach Police Department (SBPD) response to questionnaire notes SBPD has concerns about the cumulative impact of multiple projects on Lampson relative to the flow of traffic and safety. This road has a long history of accidents and tragic fatalities. Traffic safety must be improved if hundreds more car trips are to be added to Lampson. 55-3

4) **Parking Impacts** – The SBPD response to questionnaire noted concerns about parking impacts to College Park East and visitors to Arbor Park. They noted existing personnel levels may not be adequate to manage traffic safety concerns on Lampson. SBPD also noted the only additional overflow parking is College Park East, placing a cost burden on SBPD for enforcement. Having mores car parked next to Heather Park will create a public safety nuisance for our families, dog walkers and bike riders due to increased moving cars on our quiet residential street. Another safety consideration is pedestrians crossing a busy street after they park cars in College Park East. 55-4

5) **No traffic mitigation was presented.** The imposed traffic congestion from the Lampson Park Place development must be considered with the Old Ranch Country Club proposed 55-5

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project for cumulative impacts. Lampson Street was not designed to handle the amount of traffic that is projected from both projects. The traffic congestion creates needless idling of cars.

55-5 (CONT.)

6) **Emergency response times.** Lampson is the only street available to College Park East residents to get in/out of our housing track. With no traffic mitigation options available – what is the impact to response times for our first responders (police, fire, ambulance). The surrounding communities of Leisure World, Rossmoor, Seal Beach and West Garden Grove will be impacted if response times are delayed by our first responders being held up in traffic. The majority of ambulances on their return emergency trip go to Los Alamitos Hospital via Seal Beach Blvd or Valley View. The added traffic congestion puts our communities at risk in emergency situations when every second matters.

55-6

7) **Bike Riders Safety**. Seal Beach is expanding the bike lanes on Lampson Street. What are the impacts to the bike riders for public health and public safety with hundreds of more car trips?

55-7

Thank you for your written response to address my questions/concerns.

Patty Senecal
College Park East Resident

Responses to Comment 55

Senecal, Patty, dated June 10, 2024.

55-1 The commenter states that the peer review Draft EIR should have been made available to the public. Refer to Response to Comment 16-16, above.

55-2 The commenter states that cumulative impacts were not evaluated, specifically the Old Ranch Country Club project, and that public safety, public health, capacity of City services, Lampson Road maintenance, and traffic congestion need to be analyzed. Refer to Response to Comment D-9 regarding cumulative impacts from the proposed Old Ranch Country Club project. Additionally, cumulative impacts for all environmental topics under the CEQA Guidelines are addressed in each section of the Draft EIR. Section 4.0, *Environmental Analysis*, of the Draft EIR, discusses the scope of cumulative effects analysis (refer to Pages 4-3 to 4-6 of the Draft EIR).

55-3 The commenter states that SBPD had concerns about the cumulative impact of traffic and safety on Lampson Avenue and that traffic safety must be improved if vehicles are added to Lampson. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for Lampson Avenue safety concerns.

55-4 The commenter states that SBPD had concerns with parking impacts to College Park East and visitors to Arbor Park and that existing personnel may not be adequate to manage traffic safety concerns on Lampson. The commenter also asserts that SBPD noted that the only additional overflow parking is College Park East which places a cost burden on SBPD for enforcement. The commenter expresses concern that more vehicles parked next to Heather Park will create a public safety nuisance due to additional moving cars and also expresses concern for pedestrians crossing a busy street after parking cars in College Park East. Refer to Master Response 2.1.8, *Public Safety*, for concerns regarding existing public safety personnel adequacy. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*. Refer to Master Response 2.1.3, *Parking*, for impacts related to onsite parking.

55-5 The commenter states that no traffic mitigation was presented. The commenter requests that the traffic congestion from the Lampson Park Place development must be considered with the Old Ranch Country Club proposed project in regard to cumulative impacts. The commenter expresses concerns with traffic congestion creating idling of cars.

Refer to Response to Comment D-9 regarding cumulative impacts from the proposed Old Ranch Country Club project. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns. As discussed in 4.15, *Transportation*, of the Draft EIR, the Project would result in significant VMT impacts and Mitigation Measure MM 4.15-1 is proposed to reduce impacts to the extent feasible (refer to Page 4.15-20 of the Draft EIR).

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55-6 The commenter expresses concerns with emergency response times on Lampson Avenue and states that the surrounding communities of Leisure World, Rossmoor, Seal Beach and West Garden Grove would be impacted by delayed response times. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns. As discussed in Section 4.13, *Public Services*, of the Draft EIR, per correspondence with the Orange County Fire Authority (OCFA), there are currently no deficiencies in fire protection service provided to the Project site. Additionally, response times would not decrease to necessitate the construction of a new fire station. In order to maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs (refer to Page 4.13-9 of the Draft EIR).

55-7 The commenter expresses concerns for bicyclists' health and safety on Lampson Avenue with the addition of cars. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*.

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Comment Letter 56

From: Marc Serlin
To: Tom Oliver
Subject: Lampson Park Place LLC
Date: Sunday, May 5, 2024 4:38:05 PM

Hi Tom,

I am a resident of Seal Beach and reside in the College Park East (CPE) neighborhood adjacent to the proposed housing development and I am writing to you to share my concerns over the proposed residential housing development on the West Ed property on Lampson. My key concerns are: 56-1

1) The housing development lacks sufficient recreation space(s) - With the lack of adequate recreation space for children and adults, I fear that the residents of the development will cross Lampson to use facilities for the residents of CPE. As it is, the parks and facilities in our neighbor are inadequate and many have deferred maintenance. Sharing the available capacity with an additional set of neighbors will increase the wear and tear on the facilities. As it is, Seal Beach residents pay a 10% utility tax (one of the highest in California) to help cover city maintenance and it's not enough to keep our neighborhood parks and equipment in excellent condition. A steady stream of residents from the new housing development who have no "skin in the game" when it comes to the treatment of CPE parks and equipment is not a value add for my neighborhood. Why isn't the City of Los Alamitos requiring the developer to set aside a detailed recreation plan for the development? 56-2

2) Parking - The parking provided by the developer is inadequate for the number of units and expected residents let alone visitors for the residents. Most of the lots in CPE are +- 5,200 Sq.Ft. and around 52' wide. At best, that leaves room for one and in some cases two cars that can park in front of each home. When CPE was developed, most families had one or two cars. Today, with packed garages and the proliferation of trucks and SUV's as well as cars for children still living at home, it is not uncommon for a homeowner to have three or four cars and it can be challenging, at times, to find a place to park in front of your home. For residents of the proposed development, they will be no different and the homeowners and apartment dwellers will be challenged to find a spot to park in their development. Further, for the apartment dwellers, there is no way near enough parking available in the planned parking. So, what will the new residents do without a place to park? They will park their cars in CPE in front of resident homes on Ironwood, Heather, surrounding Heather Park and other nearby streets. What happens when the residents of the new development host a holiday event or have a party? It will be even more burdensome. If the development goes through as planned, the next step will be for my neighbors to reach out to the City of Seal Beach to Issue parking stickers so that any of the residents from the new development parking on our streets will get their cars towed (Seal Beach will have a new revenue stream sharing tow fees with the tow operator). If that were to happen, the development residents will come running to the City of Los Alamitos to complain. 56-3

3) Traffic on Lampson - As it is, Lampson is a very crowed street. With 240+ new units, figure another 600+ cars travelling on Lampson at least one time per day. Further, a big problem is that one can only make a right turn out of the proposed new signal is not approved What to do if the residents want to travel towards Garden Grove? They can attempt to make a U turn at the signal on Heather or Candleberry which is even more dangerous. Further, Lampson is not that wide and many cars can't seamlessly complete the U turn without having to stop, back up and then continue, which will further impact traffic on Lampson and those exiting CPE. The other option is to drive into CPE at Heather or Candleberry and then maneuver their way back to Lampson. Of the 600 or more cars that belong to residents of the new development, what percentage are wanting to head toward Valley View and how many times a day would they need to do this? Clearly, this is accidents waiting to happen that the developer clearly didn't take into consideration or could care less about. 56-4

4) Sewer and Storm Drains – the storm drains in CPE were inadequately engineered which has resulted in flooding during rain events. The existing drains empty into Old Ranch Country Club (ORCC) and run-off on Lampson flows east and onto Ironwood in CPE adding to the flooding. The City of Seal Beach is 56-5

considering a hotel development, proposed by the owner of ORCC, that would reduce/eliminate one of the drainage sites. Either way, this will most likely have an impact on the new Lampson Park development.

56-5 (CONT.)

In closing, I understand that the developer purchased the land to develop and maximize profit through the more relaxed conditions of the California housing mandate. That doesn't mean that it's development plan can be approved by the City of Los Alamitos without considering existing adjacent developments, traffic and safety impacts, etc.

56-6

Thank you for taking the time to learn about my concerns.

Marc Serlin
4241 Candleberry AVE
Seal Beach, CA 90740

Cell: 562-756-4427

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Responses to Comment 56

Serlin, Marc, dated May 05, 2024.

56-1 The commenter provides an introduction and shares concerns which are responded to below.

56-2 The commenter expresses concerns with lack of sufficient recreation space and states that the existing parks in CPE neighborhood are inadequate and many have deferred maintenance. Questions why the developer does not have a detailed recreation plan for the Project. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*.

56-3 The commenter expresses concerns with inadequate parking provided for the Project and that residents will utilize parking in nearby neighborhoods. Refer to Master Response 2.1.3, *Parking*, for parking impacts.

56-4 The commenter expresses concerns about traffic congestion and states that the Project will result in 600+ cars on Lampson at least one time per day. The commenter questions the safety aspect of only being able to make a right turn out of the proposed new signal and questions what should be done if residents want to travel toward Garden Grove.

As discussed in Section 3.0, *Project Description*, of the Draft EIR, Project is anticipated to generate 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147 PM peak hour trips, which is well within the capacity of Lampson Avenue even at General Plan Buildout (refer to Page 3-17 of the Draft EIR). Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project would implement stop controls for the southbound approach at all driveways on Lampson Avenue. The driveway for the apartment entry would be restricted to right in/right-out access only (refer to Page 3-4 of the Draft EIR). The Project proposes a cross-street stop-controlled intersection at the primary neighborhood entry, which will allow for full access, including left turns for eastbound vehicles.

The Project initially proposed to install a traffic signal at the primary neighborhood to alleviate neighborhood concerns related to safety. Subsequent public comments received on the Draft EIR during the 45-day public review period expressed concern with installing a traffic signal and after further traffic signal warrant and safety analyses, it was determined that the proposed traffic signal is not warranted (see *Attachment G* of this Final EIR). Therefore, the Project no longer proposes a traffic signal at this entryway.

56-5 The commenter expresses concerns that storm drains in College Park East were inadequately engineered, resulting in flooding during rain events. The commenter states that existing drains empty into Old Ranch Country Club and run-off on Lampson flows onto Ironwood, adding to the flooding. The commenter adds that the City of Seal Beach is considering a hotel

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development that would reduce or eliminate one of the drainage sites and opines that this would have an impact on the new development proposed by the Project. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for flooding impacts.

A hydrologic analysis and street capacity analysis per Orange County Hydrology & Hydraulics Manuals were prepared for Lampson Avenue along the site frontage (see *Attachment E* of this Final EIR). Calculation results indicate that Lampson Avenue flooding does not occur along the Project site, but rather downstream at the sump condition near the Old Ranch Country Club. The hydrologic analysis and street capacity analysis for Lampson Avenue has been expanded downstream to determine the depth of flow. Both street capacity analysis indicate that the 100-year water surface elevation is held within the street and less than the existing top of curb elevations.

The Project has been designed to ensure that proposed stormwater flows do not exceed existing and therefore will not contribute to additional flooding events downstream. The Old Ranch Country Club will also be required to detain stormwater on-site to ensure stormwater flows do not exceed existing conditions.

56-6 The commenter concludes the comment letter. No further response is required.

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Comment Letter 57

From: JULIA SHORES
To: Tom Oliver
Subject: Lampson Project
Date: Tuesday, May 7, 2024 10:23:31 AM

Mr. Oliver: We know that housing is very much needed in California, but Lampson Avenue is not the answer. We encourage the city to look elsewhere. Every open-space area may look like a great place to build multiple houses, but there was a reason this space was left open with one large structure on it. Here are some of the reasons....

57-1

1) Lampson Avenue is a road adequate for the number of cars and houses that were built for it. Additional housing will change this road to a 'boulevard' that will not be able to accommodate the traffic it will create.

57-2

2) CPE has parking and housing for homeowners living in the tract. The additional houses planned will bring additional cars into the CPE neighborhood causing problems for homeowners that have to find parking for their own cars.

57-3

3) The noise from the base is not always a problem for CPE homeowners, but it will be a constant problem for homes that are next to the base. Again, this land was left open for a reason.

57-4

4) CPE is dealing with flooding issues on some of their streets during the heavier rainstorms. This housing will only add to the problem and may create a larger one.

57-5

Only people that live in and around CPE are fully concerned with this project. We believe if your councilmembers lived in this area, they would also feel concern for this project and strongly fight against the new development.

57-6

Julia and James Shores
4833 Fir Ave.
Seal Beach, CA

Responses to Comment 57

Shores, Julia and James, dated May 07, 2024.

57-1 The commenter opposes the Project and shares concerns which are responded to below.

57-2 The commenter expresses concerns that Lampson Avenue will not be able to accommodate the traffic the proposed Project would create. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic congestion concerns.

57-3 The commenter expresses concerns that the Project will bring additional cars into the College Park East neighborhood looking for places to park. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

57-4 The commenter expresses concerns that noise from the JFTB will be a problem for residents of the Project. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB).*

57-5 The commenter expresses concerns that flooding issues in College Park East will increase with the addition of housing from the Project. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

57-6 The commenter expresses concerns with the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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COMMENT LETTER 58

June 4, 2024

Tom Oliver, Associate Planner
City of Los Alamitos
Planning Department
3191 Katella Avenue
Los Alamitos, CA 90720

RE: Draft Environmental Impact Report for the 4665 Lampson Avenue Project

Dear Mr. Oliver:

Upon reading the DEIR, I offer the following comments for consideration. The report states that the traffic caused by the Project on Lampson Avenue cannot be mitigated. That in itself is a death knell for this Project! If traffic cannot be mitigated, noise and air pollution cannot be contained and will only grow worse over time. Traffic and pedestrian safety will deteriorate in the area. All of this is common sense. It doesn't require a planning or engineering degree to recognize it.

The 12.3 acre Project site with 246 residential units is not conducive to the space. Too much housing is crowded into the area. Simply put, the Project does not fit within the confines of the space. The two roadways leading into and out of the Project onto Lampson are inadequate to handle not only the demand of those living there but others who are visiting or participating in sports events. Arbor Park with AYSO soccer games and the dog area will generate trips. The abolishment of the current West Ed parking lot creates a serious problem. Parking is inadequate especially on weekends. No doubt, cars will be parking in College Park East as a result of the increased activity across Lampson and this is not acceptable. It is not a credible or realistic solution to the problem. Adequate parking must be available within the Project grounds to handle the demand. 58-1

The City of Seal Beach cannot afford to share the sewer and water drainage systems with the City of Los Alamitos. The infrastructure is old and decaying throughout Seal Beach and current budgeted funds are not adequate to sustain much less replace rusting pipes and damaged equipment. This Project does not benefit the City of Seal Beach in any way. If it goes forward, the scope of it would impact the Old Ranch development that is coming in the near term. As you are well aware, they are both located on Lampson Avenue, just down the street from one another, and cumulative impacts cannot be predicted at this time. Even though the City of Los Alamitos Lampson Project is projected to be constructed over 39 months (over three years), the DEIR states that some of the buildings will be completed by early 2025. How does that schedule impact the yet unknown impacts of the Old Ranch development? 58-2

The Project cannot go forward unless the City of Seal Beach makes three critical concessions. I urge diligent and legal review of these requested concessions by the City of Seal Beach staff, Planning Commission and City Council. We cannot afford to subsidize the City of Los Alamitos! We simply cannot accommodate another city's request to use our limited resources.

I appreciate that there is now mention of a telecommuting workspace in the Project, even though no specifics are provided. I am also encouraged with the mention of the State of California required solar roofs and some accommodation for charging electric vehicles within the Project. However, one electric car to be shared by hundreds of residents is a far cry for a successful neighborhood program. How will that service be managed or is it not a serious plan of action? It is stated that natural gas will not be used 58-3

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in the Project. Really? Does that mean that all the kitchens will have electric stoves? All the heating and air conditioning equipment will be electric? How can this be? Am I misunderstanding that tenet?

58-3 (CONT.)

With these comments, my attempt is to point out areas that are at the heart of the Project moving forward without repeating the hundreds of negative comments you have already received by concerned residents. In particular, those living in College Park East have the most to lose if this Project development moves forward as described. It doesn't stop there, however. Those living in other Districts of Seal Beach and the surrounding areas of Rossmoor, Cypress and East Garden Grove also have quality of life issues at stake. Unfortunately, I understand that there are ways to get around common sense arguments by filing density related appeals with the State of California. I am appalled to learn that the Project developer has already filed for that appeal process to begin! Do public comments even matter at this point?

I understand that the need for more housing to meet density requirements is here and now but please take into account the serious consequences, both intended and unintended, in finalizing the Project. Reduce the size of the housing units by 50% for a development that is more suited to the area and will not cause such severe environmental impacts. The health and safety of our neighborhood communities should be first and foremost in the minds of the City of Los Alamitos decision makers.

Thank you for the opportunity to comment on the released DEIR. I am aware of the June 10, 2024 deadline for comments to be submitted but I hope you will are willing to accept comments beyond that date. Please let me know if July 1, 2024 would be an acceptable extension of time. The highest priority for many families at the moment is attending and celebrating graduations across the country due in no small part to the excellent education provided by our Los Alamitos School District. I look forward to hearing from you.

58-4

Sincerely,

Catherine L. Showalter
Resident of College Park East
Member, City of Seal Beach Environmental Quality Control Board
District Four
4609 Hazelnut Avenue
Seal Beach, CA 90740-2919
Email: clshowalter@roadrunner.com

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Responses to Comment 58

Showalter, Catherine, dated June 04, 2024.

58-1 The commenter expresses concerns with traffic, pedestrian safety, noise and air pollution, and parking. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

As discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to the Project, and impacts would be less than significant (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

As discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not exceed significance thresholds for construction noise levels, operational noise levels, and off-site traffic noise levels. As such, the Project would not generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant (refer to Pages 4.11-23 through 4.11-29 of the Draft EIR).

58-2 The commenter expresses concerns with Seal Beach's limited resources, such as sharing old sewer and drainage systems with the City of Los Alamitos. The commenter states that the Project would impact the Old Ranch Country Club Specific Plan development and that cumulative impacts cannot be predicted at this time. Refer to Response to Comment 56-5, for sewer concerns and Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for hydrology concerns.

58-3 The commenter appreciates the mention of a telecommuting workspace, solar roof and electric vehicle charging stations within the Project. However, the commenter inquiries about the management of one shared community vehicle. The commenter questions the feasibility of no natural gas use onsite and inquires whether kitchens will have electric stoves and if heating and air conditioning will be electric. These comments are acknowledged and the commenter accurately represents components of the project including commuting workspace, solar roof and electric vehicle charging stations, community vehicle, and no natural gas. Kitchens will have electric stovetops, and all heating and air conditioning equipment will also be electric.

58-4 The commenter expresses concerns with State density related appeals and the proposed density and requests that the size of the housing units be reduced to decrease environmental impacts. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment

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does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 59

4488 Candleberry Avenue
Seal Beach, CA 90740
May 4, 2024

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

To Whom it May Concern,

I oppose any additional housing being build on Lampson. Lampson isn't a big enough street to accommodate additional traffic. The stores where residents between Seal Beach Blvd. and Valley View cannot accommodate additional shoppers. The lines are long enough now to be a problem.

Plz don't destroy our nice neighborhood. We have lived here for 40 years and don't want to be forced to move due to overcrowding, increased crime, etc. I believe it will reduce our property value to turn this into an inner-city neighborhood.

59-1

Thank you for your consideration,

Paulette M. Smith

Paulette m. Smith

Responses to Comment 59

Smith, Paulette, dated May 04, 2024.

59-1 The commenter expresses general opposition and concerns with traffic, overcrowding and increased crime. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.8, *Public Safety*. As discussed in Section 4.12, *Population and Housing*, of the Draft EIR, the Project would not result in substantial unplanned growth in the area because: 1) the Project is within the growth projections of the City's General Plan, 2) the planned housing is a requirement of State Housing Law and in response to an existing unmet need for housing, 3) the Project is consistent with the existing General Plan land use and zoning designations, and 4) the Project improves the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Therefore, implementation of the Project would not result in substantial unplanned population growth, and impacts would be less than significant (refer to Pages 4.12-8 through 4.12-10 of the Draft EIR).

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Comment Letter 60

4488 Candleberry Avenue
Seal Beach, CA 90740
May 4, 2024

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

To Whom it May Concern,

I oppose any additional housing being build on Lampson. Lampson isn't a big enough street to accommodate additional traffic. The stores where residents between Seal Beach Blvd. and Valley View cannot accommodate additional shoppers. The lines are long enough now to be a problem.

Plz don't destroy our nice neighborhood. We have lived here for 40 years and don't want to be forced to move due to overcrowding, increased crime, etc. I believe it will reduce our property value to turn this into an inner-city neighborhood.

60-1

Thank you for your consideration,

David J. Smith

Responses to Comment 60

Smith, David, dated May 04, 2024.

60-1 The commenter expresses concerns with traffic, overcrowding and increased crime. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns. Refer to Master Response 2.1.8, *Public Safety*. As discussed in Section 4.12, *Population and Housing*, of the Draft EIR, the Project would not result in substantial unplanned growth in the area because: 1) the Project is within the growth projections of the City's General Plan, 2) the planned housing is a requirement of State Housing Law and in response to an existing unmet need for housing, 3) the Project is consistent with the existing General Plan land use and zoning designations, and 4) the Project improves the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Therefore, implementation of the Project would not result in substantial unplanned population growth, and impacts would be less than significant (refer to Pages 4.12-8 through 4.12-10 of the Draft EIR).

DRAFT

COMMENT LETTER 61

From: epcb4@roadrunner.com
To: Tom Oliver
Subject: Concerns Regarding the High-Density Project(s)
Date: Monday, April 29, 2024 1:18:47 PM

To Whom it May Concern,

I am resident at 4916 Ironwood Avenue, Seal Beach, I understand the housing mandates dictated by the State of California; however, the plans outlined by the cities of Seal Beach and Los Alamitos will excessively impacting the communities north of the 405 Freeway. There are already problems with the current traffic and environment concerns which will only be exacerbate by these projects. Below are some of my concerns regarding the housing developments. 61-1

-Current traffic congestion on Lampson Avenue between Basswood Street and Tulip Street and the intersection of Seal Beach Boulevard and Lampson Avenue are already a concern with the traffic volume, ongoing traffic collisions and the speed of vehicles. This has already caused increasing safety concerns for bicycles, pedestrians, and motorists over the last ten years. 61-2

-The standing cars especially in the morning and evening hours will increase the carbon emissions footprint in the area and add to the levels already increased by the recently completed 405 Freeway expansion project. 61-3

-New housing developments estimate the number of parking space on the number of residents who should occupy the home not the actual number. When factoring adult children/families returning to their childhood homes and rental units, the true occupancy of the household is much larger. For example, the high-density housing long the east side of Montecito Road for years has increasing encroached on the side street west of Montecito Road, on adjacent streets and within the adjacent shopping center. 61-4

As a concerned citizen of Seal Beach, decisions that are made today will have long-term effects on our community which cannot be undone. Please reconsider the size/footprint of these project. 61-5

Sincerely,

Eric Smitson

562-896-2932

DRAFT

Responses to Comment 61

Smitson, Eric, dated April 29, 2024.

61-1 The commenter expresses general traffic concerns on proposed housing developments in the cities of Los Alamitos and Seal Beach impacting communities north of the 405 Freeway. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

61-2 The commenter expresses safety concerns for bicycles, pedestrians, and motorists with the current traffic congestion on Lampson Avenue between Basswood Street and Tulip Street and the intersection of Seal Beach Boulevard and Lampson Avenue due to traffic volume, ongoing traffic collisions and the speed of vehicles. Refer to Master Responses 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety impacts.

61-3 The commenter states that standing cars especially in the morning and evening hours will increase the carbon emissions footprint in the area and add to the levels already increased by the recently completed 405 Freeway expansion project. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, construction and operation of the Project would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant (refer to Page 4.2-23 to 4.2-25 of the Draft EIR).

61-4 The commenter states that new housing developments simply estimate the number of parking space needed for the number of residents who should occupy the home, rather than determining the true occupancy. The commenter provides an example of high-density housing along the east side of Montecito Road, which has increasingly encroached on adjacent streets and the shopping center. Refer to Master Response 2.1.3, *Parking*, for a detail discussion on parking impacts. Thus, no further response is required.

61-5 The commenter provides concluding remarks and requests that the City reconsider the size/footprint of the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 62

Lampson EIR

Marty Sprong <marty@sprongcpa.com>
Mon 6/10/2024 4:34 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

Hi Tom,

I'm disappointed to see that they expect AYSO to play on less fields and spread the games to times when it's the hottest. They also recommend to play on Sundays, when that is not going to happen. It's God's day for many.

Reality is that people who live in CPE know that the traffic is going to be a huge issue. Those in Los Al have no clue because they don't live near this area except for the town homes. It's a shame that once this monster is built, it's too late. All the " I told you so" will continue to fall on deaf ears.

62-1

My one question about the EIR is this:

Please make sure, as I DON'T SEE IT CURRENTLY, is please tell us what the impact of the Lampson Project AND the proposed development at Old Ranch. The two together will be a complete disaster to our area. It needs to be addressed.

62-2

Thanks

Marty Sprong

DRAFT

Responses to Comment 62

Sprong, Marty, dated June 10, 2024.

62-1 The commenter expresses concerns regarding the impact to AYSO operations and traffic. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for impacts related to traffic. Comments regarding AYSO operation is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. Thus, no further response is required.

62-2 The commenter notes that the impact of both the Lampson Project and the proposed development at Old Ranch must be addressed. Refer to Response to Comment D-9 for a detailed discussion on the cumulative impacts of the Project. As discussed, the Project would not cumulatively contribute to environmental impacts associated with buildout of Old Ranch Country Club.

DRAFT

Comment Letter 63

Lampson Proposed Project

Dora Stathopoulos <dorastat1@gmail.com>
Tue 5/14/2024 11:26 AM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

Just want to let you know that my family and I are very much against the proposed projects that are looking to happen on Lampson.

I understand you don't live in the area so you will not be impacted personally.

Please try and understand our frustrations. I don't need to go into detail as you are very aware of all the concerns all of my neighbors have. Please do right by all of us and do what is right for this community. Put yourself in our shoes. What has been proposed is way too much for that much area of land. It needs to be scaled back.

I appreciate your time.

Thank you.

Dora Stathopoulos.

63-1

DRAFT

Responses to Comment 63

Stathopoulos, Dora, dated May 14, 2024.

63-1 The commenter expresses opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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COMMENT LETTER 64

From: Timothy I. Still
To: Calvin Mingione
Subject: FW: Lampson Project
Date: Thursday, May 16, 2024 9:56:02 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender timothy.still@outlook.com

Regards,

Timothy I. Still

+1 925 200 6445 (mobile)

From: Timothy I. Still <timothy.still@outlook.com>
Date: Thursday, May 16, 2024 at 9:53 AM
To: toliver@cityoflosalamitos.org <toliver@cityoflosalamitos.org>
Subject: Lampson Project

Dear Tom –

Our family has owned our home in College Park East since 1976. Our home is on Hazelnut Avenue.

Under no circumstances does the proposed Lampson project make sense.

We have heard from the experts that the proposed plan is not lawful, it's a hinderance, and recommended.

We do not support the current Lampson project.

We support the recommendation of the experts – residential units being built in the proposed location is not in the city's, neighbors, or local community's best interest. In fact – it's unlawful.

Regards,

Timothy I. Still

+1 925 200 6445 (mobile)

64-1

Responses to Comment 64

Still, Timothy, dated May 16, 2024.

64-1 The commenter expresses opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

DRAFT

Comment Letter 65

Comments on the Lampson Park Place Project

Michelle Banks <banks731@gmail.com>

Thu 6/6/2024 6:45 PM

To:ssustarsic@sealbeachca.gov <ssustarsic@sealbeachca.gov>;Tom Oliver <Toliver@cityoflosalamitos.org>

Dear Council Member Sustarsic and Mr. Oliver,

I am a CPE resident and am writing against the Lampson Park Place Project. I insist that you require the Los Alamitos City Manager to obtain unbiased new environmental reports, provide environmental remediation measures, and release the “Peer Review” Report before any environmental decisions are made on the Lampson Project. The quality of life we enjoy now will be greatly impacted by this project. 65-1

Thank you for your time and efforts to protect our community.

Michelle Stohler
4280 Birchwood Ave.

DRAFT

Responses to Comment 65

Stohler, Michelle, dated June 6, 2024.

65-1 The commenter expresses opposition to the Project and insists that new reports be prepared, provide environmental remediation measures and release "Peer Review" Report prior to decision making. Refer to Response to Comment 16-16 for a discussion on the preparation of the Draft EIR. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project.

DRAFT

Comment Letter 66

From: Tom SUGIHARA
To: Tom Oliver
Subject: New residential developments on Lampson in seal Beach/Los Alamitos
Date: Friday, May 17, 2024 4:35:28 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tomsugi@verizon.net

This letter is to present my protest in the development of new residential buildings in the college Park East/Los Alamitos area. I have lived here all my life and have seen traffic increasing slowly. I have also worked for a traffic engineering company that helped plan Lampson as a traffic engineer. The street is not designed for the capacity of the increase of traffic that these residence would bring. These type of high density have not been taken into consideration by the planners of the city and could be better located on the outskirts of our cities. Please do not build these residents and further, increased traffic for us longtime residence who have put up with much in the past, but refused to concede this much damage to our quality of life. 66-1

Sincerely,

Tom Sugihara
College Park East resident
Sent from my iPhone

Responses to Comment 66

Sugihara, Tom, dated May 17, 2024.

66-1 The commenter expresses opposition to the Project and asserts that Lampson is not designed for the capacity of the increase in traffic from the Project. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for impacts related to traffic and the capacity of Lampson Avenue.

DRAFT

Comment Letter 67

Comments regarding Draft EIR for 4665 Lampson

Schelly Sustarsic <ssustarsic@sealbeachca.gov>
Mon 6/10/2024 3:29 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

1 attachments (143 KB)
Comments regarding the DEIR on 4665 Lampson...06.10.24.pdf;

Mr. Oliver,

My comments for the Draft EIR for 4665 Lampson are attached.

Thank you very much.

Schelly Sustarsic

67-1

DRAFT

June 10, 2024

To: Tom Oliver

City of Los Alamitos

Re: Comments regarding Draft Environmental Impact Report for 4665 Lampson Avenue:

My foremost concern with this project is **safety**. Safety for the Joint Forces Training Base (JFTB or base), safety for drivers on our streets, safety for children, and keeping residents safe in our homes. Progress is fine, but the cost should not be making us all more vulnerable.

Early on, as the developers made their plans for development of the property, it was suggested that they donate the northern 10 feet of their property to be added to the Arbor Park parking lot to enable AYSO soccer to be able to continue their games at Arbor Park, even though the West Ed parking lot was being developed. This was a helpful, generous potential solution to a problem regarding continued use of the Arbor Park soccer field. According to this document, it seems that that donation of land to the park will give control of the park over to the City of Los Alamitos – not just new residents using the park, but control of the park. Perhaps the developer should keep the 10 feet of property and use it for parking for the residents of their project, especially the apartments since they have an extremely low number of parking spaces allotted to them.

67-2

Arbor Park has been leased from the Army Corps of Engineers by the City of Seal Beach for almost 43 years. Because College Park East was built out with only four small park spaces (a total of 5.3 acres) our city worked with the base and Los Alamitos to secure a lease on base property to allow a larger space for recreation such as soccer and baseball to be played (Los Alamitos received space from the base for their Los Alamitos Youth Baseball field). Seal Beach put in baseball and soccer fields, allowing the community to also enjoy the open space. When an agreement with AYSO gave them exclusive rights to the soccer fields in exchange for upkeep, the dog park at Arbor Park was constructed, to keep dogs off the playing field.

Seal Beach has been a good tenant. It has provided space for sports as well as space for dog owners to run their dogs off leash. They have also followed the rules placed on them by the Army to protect the base: no lights for the playfield, no permanent structures such as a restroom, all in case the park needed to be reverted to the Army in case of needed military use or emergency. Seal Beach has followed the rules to keep the park protected, securing the 7-foot-high fence with barbed wire and locking the entrance during the hours from dusk to dawn.

We should not compromise the security of the base. Discussions with the military may not have included such important issues as security, drainage, and encroachment of their operations. This property abuts the southern border of a military installation and proper concern should be with that.

67-3

Lampson is a street on which drivers travel fast, and has multiple accidents each year due to speed, as well as unsafe turns. The addition of more vehicles to the area will mean a greater chance of accidents. More eastbound traffic means more difficulty making left turns into College Park East at Candleberry, Heather, Rose and Tulip. Vehicles need to be careful entering and exiting our tract because of speeds on Lampson. However, most everyone seems to be in a hurry and drivers often drive late through yellow

67-4

DRAFT

lights. Lampson is the only access both for residents of College Park East and to the new residents of the proposed development. Whenever an accident occurs, traffic is either diverted through College Park East, or all the way around via Westminster or Katella to Valley View.

67-4 (CONT.)

I would prefer a place inside this property to allow a **school bus** to stop and pick up students for school. With 246 housing units in a small area, there would undoubtedly be many students. Our school district is a draw, with parents and would be parent moving here to be in the Los Alamitos Unified School District. Lampson is a busy, fast street and a bus should not stop on the street to load students. Although I have no problem with an adult walking a child or children over to the bus stop at Heather Park, I have doubts that most students would get there in that manner. Probably quite a number would be in a hurry and their caregivers drive over to Heather Street, which would add to congestion there; A mix of automobiles, kids, and everyone in a rush would increase concerns for the safety of children. Heather Park is presently a bus stop for McGaugh Elementary, Weaver Elementary, McAuliffe and Oak, and Los Alamitos High School students. At some point, children will begin to walk unaccompanied. However, crossing Lampson is still a safety concern, with drivers concentrating on other things. Please keep all our children safe.

67-5

Parking will be a problem in the present project plan. The cluster homes and townhomes may be fine in that they have garages, driveway spots and some free parking spots for guests and additional occupants. However, 102 spots for 77 apartments will not be adequate for guest parking, and probably even for residents. This will lead to an overflow of parking into the College Park East neighborhood, especially on Heather and Rose Streets. On Rose Street, this would mean competition for spaces that those residents use for guests and extra family members; On Heather, street spaces are used as bus stops, parking for park use such as Special Events, recreation classes, sports practices, tennis, and use by the residents for their guests as well. Supplying additional parking in the development, or decreasing density, would help to prevent overflow parking from impacting our neighborhood. Children needing to walk between cars to board the bus is not optimal.

67-6

Lampson is a secondary arterial which could hold more Average Daily Traffic. However, traffic stacks up in the mornings at Seal Beach Blvd, as drivers head off to work and drive students to school. The idea of the center lane (#2) becoming a left-turn right-turn lane could possibly help this, but only to a small degree. The right lane would probably still be favored by those turning right as they could turn right at the red light. Those in the # 2 lane would be held up by the first driver who intends to turn left onto Seal Beach Blvd. Traffic in the DEIR is presented as Cumulative for 2026. This apparently adds this project's traffic to the existing traffic but is only including traffic from 120 proposed housing units being added at Old Ranch Country Club; that project is currently proposed to add 167 housing units, probably in 2027-2028 from 116 multifamily apartments exiting their property during peak morning hours as well as 51 senior apartments. Exits from these properties near the corner of Lampson and Seal Beach Blvd will act to increase the number of vehicles and impair traffic flow, and a left-turn right-turn #2 may no longer make this mitigation to the intersectional functional. The Old Ranch Country Club proposed plan also includes a hotel and medical offices with traffic impacts unknown at this time, but include employees, guests, diners, vendors deliveries and patients.

67-7

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The answer is less density, more parking, or possibly **the Senior Housing Option would be better**. There would be fewer residents and more parking spaces offered. Although many may be still be working, their hours may not be the traditional 9 to 5, and varied hours would mean the addition of fewer vehicles to those present at peak times. Seniors' recreation needs may be simpler as well. For those who are more active, they may become members of the Seal Beach Tennis and Pickleball Center, just down the street within biking distance.

67-8

There seems to be a discrepancy in the discussion over which noise contours to use in the document. The newest studies, such as a 2020 AICUZ study, may not be the ones used in planning (that would be the 2017 AELUP that the ALUC would use). Regardless of how much of the 60-decibel noise contour covers the project, aircraft noise will be present for these residents. Helicopters fly all around the base, in closed loops, both on and off the base. Visiting aircraft do not always follow the fixed flight paths and fixed-wing aircraft take off every morning and during the day. CNEL is measured over 24 hours, while the base does not operate flights in the late night or very early morning hours. A noisy helicopter is not an event averaged over time. There are plenty of opportunities for annoyance to bother the residents who will be living there. I have heard people complain about aircraft noise while trying to work from home. It is not ideal to place children in a noisy environment or low-income residents. The outdoor environment will be unavoidably noisy for residents of the project.

67-9

Drainage – Hydrology:

This project will result in a large increase in the amount of coverage of the property by buildings and hardscape. This will be a change from the present office building and parking lot (42% impervious) to the project (90% impervious) with a corresponding reduction of permeable space from the current (58%) to the project (10%) (Preliminary WQMP, Appendix, page 6). This means that most of the rain from storms will run-off and will need to go somewhere.

Two proposals are presented to handle stormwater runoff. One of them proposes stormwater travel across the JFTB to the Old Ranch Country Club, which acts as a retention basin for the area, including College Park East. It is noted that this proposal depends on acceptance by the JFTB as they have control over their property. A second method of drainage is through underground boxes with microfilters, which would store excess rainwater until after the storm, then release it onto Lampson Avenue.

67-10

College Park East neighborhood has been dealing with drainage problems and rising stormwater levels, with some homes with water intrusions and multiple automobiles damaged. There is not adequate ability to transfer stormwater over to Old Ranch golf course retention basin. In addition, stormwater comes off Lampson, into our tract on Heather St. and Candleberry Ave. Any runoff from this project that adds to flooding on Lampson Avenue could exacerbate our drainage problems in College Park East.

Also, College Park East depends upon not only the ability to export water to Old Ranch golf course, but the ability of the golf course to be able to accept our runoff. Additional projects such as 4665 Lampson and Old Ranch's own proposed development projects will both be adding stormwater to the retention basin. Cumulative impacts of both projects should be considered in the combined amount of stormwater being sent to Old Ranch golf course and its ability to accept this runoff (and transfer it to the Federal channel).

67-11

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Recreation and Park Use:

Seal Beach has 75.5 acres of park space, community centers and sport fields. Quite a bit of it is not actually city property but leased or shared by joint use agreements (Arbor Park, Mc Gaugh Elementary School gymnasium, swimming pool, tennis courts, and baseball field). In Planning Area 4, park space was judged to be deficient, as during development of the CPE neighborhood, some identified recreation was not developed by the builder, and only resulted in four small neighborhood parks, three with tot lots to serve the 1,739 homes and approximately 5,000 residents (a total of 5.3 acres). In 1981, Seal Beach obtained a lease from the Army Corps of Engineers for a section of base property that Seal Beach developed as Arbor Park, a larger recreation area with space for baseball and soccer games and practices.

It has been suggested that the developer would donate 10 feet at the northern edge of the property, adjacent to Arbor Park, to that parking lot, for additional parking due to the loss of the present West Ed lot for games on weekends. However, there would still be a need to consult with AYSO to see if it would be a workable solution to spread games out later into the day, or on Sunday. It is also stated that this donation, because it is a donation of property in the City of Los Alamitos, would necessitate control of the parks to the City of Los Alamitos. I am not in favor of this if it would result in a loss of park space for Seal Beach. The City of Seal Beach signed a lease with the Army Corps of Engineers in 1981 for the lease of Federal base property. This lease was renewed in 2003 and the current lease extends until December 31, 2028. (The City of Los Alamitos has also received the use of base property for sport purposes, for Los Alamitos Youth Baseball).

67-12

Construction Impacts: the area surrounding I-405 has been having construction for the last 5-6 years, almost constantly on Lampson. This includes trucks, lane closures, and detours. This project would add more (until 2026) and a project at Old Ranch would add even more, if approved, through 2027-2028.

Adding vehicles to Lampson will generate more **Vehicle Miles Traveled (VMT).** This will generate more Green House Gases and more air pollution, with potential health impacts to all nearby residents. VMT is something that cannot be mitigated with this project unless the project density is reduced, or an Alternative is selected.

67-13

Senior Housing appears to be a better alternative with possibly fewer vehicles and some coming and going at non-peak travel times. There would also be more parking spaces required, which would be a positive.

67-14

Thank you for your consideration of my comments.

Sincerely,

Schelly Sustarsic

4288 Candleberry Ave, Seal Beach, CA 90740

(562) 431-32466

DRAFT

Responses to Comment 67

Sustarsic, Schelly, dated June 10, 2024.

67-1 The commenter makes introductory comments to the attached comment letter. Response to comments made are discussed below; thus, no further response is required.

67-2 The commenter raises concerns regarding safety and suggests that the 10-foot dedication to the north be used for parking for the Project instead. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for impacts to motorist and pedestrian safety and Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for safety impacts related to the JFTB. The commenter's suggestion for the 10-foot dedication is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

67-3 The commenter provides background information about Arbor Park and the agreements between the City of Seal Beach and the Army Corps of Engineers. The commenter also raises concerns regarding the security of the military base. This comment is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

67-4 The commenter states that the addition of more vehicles to the area will lead to more accidents on Lampson Avenue, and accessibility into and out of College Park East will be more difficult due to those potential accidents. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, regarding the impact of the Project on collision rates.

67-5 The commenter suggests that a school bus stop be included within the Project site and expresses concerns regarding the safety of children walking to the existing bus stop at Heather Park and crossing Lampson Avenue. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for pedestrian safety concerns.

67-6 The commenter states that the parking provided for the apartments is inadequate and will lead to overflow parking in College Park East on Heather and Rose Streets and competition with CPE residents. The commenter suggests increasing parking within the Project or decreasing the density of the Project. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

67-7 The commenter challenges the functionality of making the center lane (#2) of Lampson into a left-turn right-turn lane and states that the Cumulative Analysis for traffic through 2026 excludes impacts from additional proposed units and other uses at Old Ranch Country Club that will be added after 2026. Refer to Response to Comment D-9 for cumulative traffic impacts

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and D-38 for the feasibility of restriping the number two westbound left turn lane as a shared left-right turn lane on Seal Beach Boulevard & Lampson Avenue.

67-8 The commenter suggests that the Senior Housing Alternative be adopted and provides reasons to adopt the alternative, including fewer residents, fewer vehicles at peak times, and simpler recreational needs. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

67-9 The commenter notes the discrepancy between noise contours used in the most recent studies and in the Draft EIR, points out that CNEL is measured over 24 hours, despite the base ceasing flights in the late night and early morning, and states that aircraft noise will be an annoyance for residents of the Project. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for impacts related to noise from JFTB. The analysis of exposure of excessive noise levels due to proximity to airport operations is evaluated by determining whether the Project places residents or workers within noise contours deemed incompatible for sensitive land uses. This analysis included a review of the City's General Plan, JFTB Los Alamitos AELUP, and the State of California, Division of Aeronautics' California Airport Land Use Planning Handbook (refer to Page 4.1-19 of the Draft EIR).

The noise compatibility criteria in the AELUP are guidelines to evaluate the land use compatibility of aircraft-related noise, which does rely on CNEL. CNEL represents a composite 24-hour noise level which is a weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA Leq sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA Leq sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure (refer to Section 2.2, Noise Descriptors of *Technical Appendix K*, Noise Study, of the Draft EIR).

67-10 The commenter summarizes the changes in the percentage of impervious and permeable surfaces from existing to proposed conditions and the two proposed stormwater drainage systems. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required. Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis* for flooding and drainage impacts.

67-11 The commenter states that College Park East has drainage problems, runoff from the Project will exacerbate the problems, and Old Ranch Golf Course may not have capacity to accept runoff from additional developments. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis* for flooding and drainage impacts. Refer to Response to Comment 56-5 regarding cumulative impacts from Old Ranch Golf Course.

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67-12 The commenter provides background information about Arbor Park and the City of Seal Beach's property lease from the Army Corps of Engineers. The commenter opposes the transfer of control of Arbor Park from the City of Seal Beach to the City of Los Alamitos resulting from the Project's 10-foot dedication for additional parking and states that AYSO must still be consulted about the timing of games. These comments are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

67-13 The commenter expresses concerns regarding current and future construction including the Old Ranch Country Club Development and the VMT, GHG, and air pollution impacts caused by routing vehicles onto Lampson. Refer to Response to Comment D-9 for cumulative traffic impacts.

As discussed in Section 4.15, *Transportation*, of the Draft EIR, the Project would result in significant VMT impacts with the implementation of Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis. (refer to Page 4.15-20 of the Draft EIR).

As discussed in Section 4.7, *Greenhouse Gas Emissions*, of the Draft EIR, construction and operation of the Project would generate a 2,757.11 $MTCO_2e$/yr; the Project would not exceed the significance threshold of 3,000 $MTCO_2e$/yr. Thus, impacts would be less than significant, and no mitigation is required (refer to Pages 4.7-26 through 4.7-27 of the Draft EIR).

As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

67-14 The commenter reiterates the benefits of the Senior Housing Alternative and makes concluding remarks. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 68

FW: DEIR

Thomas Elizabeth <lizee11@hotmail.com>
Mon 6/3/2024 5:32 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>
Cc:lizthom4572@yahoo.com <lizthom4572@yahoo.com>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lizee11@hotmail.com

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From: Thomas Elizabeth <lizee11@hotmail.com>
Sent: Monday, June 3, 2024 4:06 PM
To: toliver@cityoflosalamitos.or; Thomas Elizabeth <lizee11@hotmail.com>
Cc: Thomas Elizabeth <lizee11@hotmail.com>
Subject: DEIR

Dear Mr. Oliver,

First of all, thank you for providing information regarding the DEIR to us here in College Park East, Seal Beach. As a resident of this neighborhood, I hope you can understand the impact the proposed development at the West Ed site will have on our community. My husband and I have numerous concerns about this project and are saddened that such a large project is being approved. After reviewing many documents and attending numerous meetings, we continue to have the following concerns:

- Air quality during construction with large trucks coming and going. Air quality after construction as there will be an increase in population and vehicle use polluting our air.
- Traffic during construction and after. Again, large trucks coming and going down Lampson. The number of proposed units will have a big impact on traffic on Lampson.
- Strain on services with regards to police, fire, schools, libraries.
- Natural resources impacted such as an increase demand for water, waste management impact, increase need for electricity, etc.

Also, we are concerned that this project doesn't include a park or adequate parking. During construction, we are worried about the traffic, noise, dirt, air pollution and the possibility of rodents and other animals moving into our neighborhood.

Again, thank you for reaching out to those of us who will be directly impacted.

Sincerely,

Thom and Elizabeth Thomas

4572 Hazelnut Ave.

Seal Beach, CA 90740

68-1

68-2

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Responses to Comment 68

Thomas, Thom and Elizabeth, dated June 3, 2024.

68-1 The commenters make introductory remarks, express opposition to the Project, and raise concerns regarding the impact to air quality and traffic during and after construction. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for impacts related to traffic. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to the Project, and impacts would be less than significant (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

68-2 The commenters express concerns regarding the impact on police, fire, school, and library services; the impact on demand for water, waste management, and electricity; the adequacy of the Project's provided parking; the impact of construction on traffic, noise, dirt, air pollution; and the potential for rodents to move into College Park East. Regarding impacts to police services, refer to Master Response 2.1.8, *Public Safety*. Refer to Response to Comment 68-1 regarding traffic and air quality impacts. Refer to Master Response 2.1.3, *Parking*, for parking concerns.

Regarding impacts to fire services, schools, and libraries, as discussed in Section 4.13, *Public Services*, implementation of the Project would result in an increased requirement for public services. However, considering the existing resources available, the Project is not expected to result in the need for new or physically altered governmental facilities, and impacts would be less than significant (refer to Pages 4.13-9 through 4.13-12 of the Draft EIR).

Regarding impacts to water demand, as discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, there would be sufficient water supplies available to serve the Project and impacts would be less than significant (refer to Pages 4.17-15 through 4.17-17 of the Draft EIR).

Regarding impacts to waste management, as discussed in Section 4.17, *Utilities and Service Systems*, of the Draft EIR, solid waste from the City is transported to Frank R. Bowerman Sanitary Landfill in the City of Irvine and the Olinda Alpha Sanitary Landfill near the City of Brea. The two landfills have a combined permitted disposal capacity of 19,500 tons per day. The Project's estimated solid waste generation represents approximately 0.0077 % of the two landfill's capacity and therefore, would not contribute significantly to both landfill's daily

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capacity. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, impacts would be less than significant, and no mitigation is required (refer to Pages 4.17-19 through 4.17-20 of the Draft EIR).

Regarding the impact to electricity demand, as discussed in Section 4.5, *Energy*, operations for the Project would result in approximately 1,131,132 kWh of electricity annually and would offset the demand through the use of on-site photovoltaic solar power which is expected to generate 1,229,520 kWh of electricity annually – which results in a net electricity demand of 98,388 kWh/year of electricity (refer to Page 4.5-10 of the Draft EIR).

Regarding impacts to noise during construction, as discussed in Section 4.11, *Noise*, of the Draft EIR, the construction noise analysis shows that noise impacts at the nearest receiver locations will be less than the daytime 80 dBA L_{eq} significance threshold during Project construction activities. Because the highest construction related noise level is 63.31 dBA L_{eq} at the nearest sensitive receiver, the noise impacts due to Project construction noise are considered less than significant and no mitigation is required (refer to Pages 4.11-23 through 4.11-24 of the Draft EIR).

Regarding the impact of construction as to "dirt," as discussed in Section 4.6, *Geology and Soils*, of the Draft EIR, the Project would be required to implement erosion and dust control measures pursuant to South Coast AQMD Rule 403 to minimize water- and windborne erosion. Mandatory compliance with the SWPPP and the erosion control and dust control measures would reduce, prevent, or minimize soil erosion from Project-related construction activities (refer to Page 4.6-6 of the Draft EIR).

Regarding the potential for rodents and small animals to move into CPE, refer to Response to Comment 9-21 related to the potential of rodents. Additionally, as discussed in Section 4.3, *Biological Resources*, of the Draft EIR, the Project site is not located within or part of a wildlife movement corridor. Therefore, the Project would not substantially interfere with an established migratory wildlife corridor. (refer to Page 4.3-33 through 4.3-34 of the Draft EIR). This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 69

Objection to The Lampson Park Place Project

Jeff T <jefftilson.77@gmail.com>
Mon 5/13/2024 11:24 AM

To:Tom Oliver <Toliver@cityoflosalamitos.org>
Cc:Jordan Nefulda <JNefulda@cityoflosalamitos.org>

The purpose of this letter is to voice my objection to The Lampson Park Place Project. As a long time resident of Seal Beach, College Park East, I see this development a serious problem for my family and many of my neighbors due to the following reasons:

- Parking overflow is already congested and we see cars parking in the neighborhood from patrons of the tennis and gold club as it is already. With the large increase in new residents, this will only get even worse.
- With the increased traffic, emergency response times would be delayed.
- Stop lights would impact traffic flow due to increased crossing of people on Lampson using the parks in CPE.
- Child and bicycle safety is a concern of higher traffic rates.

69-1

- Infrastructure will increase sewer, storm drain, water and other draining problems we already face in this part of Seal Beach.
- Loss of open space and failure to provide on-site adequate areas for community outdoor use by over-building, inadequate setbacks, and lack of adequate trash disposal bins for rental units.
- Seems there is a general safety issue with proximity to the military airport, crash risk, hearing loss due to noise impacts.
- **This project has has zero negative impact to Los Alamitos residents and businesses considering the land is separated from the rest of the city by the military base. Seal Beach residents are left with their hands tied to absorb all the negative ramifications. If the voting residents and business of Los Alamitos were impacted, this project would not exist. That is not right.**

69-2

Thank you for your consideration.

Jeffrey Tilson
4157 Banyan Ave
Seal Beach, CA 90740
562-310-3096

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Responses to Comment 69

Tilson, Jeffrey, dated May 13, 2024.

69-1 The commenter expresses opposition to the Project and raises concerns about overflow parking, emergency response times, stop lights interrupting traffic flow, and child and bicycle safety. Refer to Master Response 2.1.3, *Parking*, for parking concerns, 2.1.7, *Emergency Vehicle Access*, for impacts to emergency response times, 2.1.1, *Transportation and Traffic Congestion*, for traffic concerns, and 2.1.2, *Roadway Safety on Lampson Avenue*, for impacts to child and bicycle safety.

69-2 The commenter raises concerns regarding exacerbation of sewer, stormwater, and water drainage problems; loss of open space; lack of on-site community outdoor space; lack of trash bins for rental units; and safety, crash risk, and noise due to proximity to the military airport. The commenter states that Los Alamitos residents and business are not impacted by the Project due to separation from the City by the military base. Refer to Master Response 2.1.4, *Hydrology and Wastewater Infrastructure Analysis*, for drainage concerns, 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for open and outdoor space concerns, and 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for concerns related to proximity to the military base.

As discussed in Section 4.2, *Air Quality*, of the Draft EIR, Project-generated solid waste (refuse) would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with South Coast AQMD Rule 402 to prevent occurrences of public nuisances. (Refer to Page 4.2-29 of the Draft EIR) Thus, the Project is required to provide adequate trash bins for rental units, and the impact of refuse associated with Project operations would be less than significant.

Regarding the lack of impact on Los Alamitos residents and businesses, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 70

From: Teresa Werner
To: Tom Oliver
Subject: Lampson project
Date: Monday, May 6, 2024 6:54:30 AM

I would like to comment on the new housing projects planned by Los alamitos and seal beach. Please reconsider and do not do this! I am sure you see that Lampson is a very busy street with no parking. It is unique because of the limited access out of the area making emergency vehicles and too much congestion a real problem. It has had more accidents than any other area in Los Al or Seal Beach. If this project is built children will go to the only park, Heather park, crossing this busy street! A terrible plan! Where are their visitors to park? Most homes have two cars so really how does this really work? They will park in neighborhood across from them making problems for those people. What about the two studies that said building here next to the Joint Forces Training base is not recommended. Are you ready for the law suits any problems will give the city? There are more problems but let me just end this email saying we should never fix a problem by making so many other problems. I hope you will consider all the safety issues, the impact on water, medical/emergencies and the community welfare and stop this plan. Thank you Tom for giving this much more time and consideration. Teresa Werner
Sent from my iPhone

70-1

70-2

Responses to Comment 70

Werner, Teresa, dated May 6, 2024.

70-1 The commenter expresses opposition to the Project and raises concerns about emergency vehicle access, vehicle congestion and accidents, pedestrian safety, and overflow parking in the neighborhood due to inadequate on-site parking. Refer to Master Response 2.1.7, *Emergency Vehicle Access*, for impacts related to emergency vehicle access 2.1.1, *Transportation and Traffic Congestion*, 2.1.2, *Roadway Safety on Lampson Avenue*, for impacts related to vehicle accidents and pedestrian safety, and 2.1.3, *Parking*, for on-site parking concerns.

70-2 The commenter expresses concerns regarding the two studies recommending against development next to the JFTB, makes concluding remarks, and asks for the consideration of impacts on safety, water, emergencies, and community welfare. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, for impacts related to proximity to the JFTB. The concluding remarks are noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. The concluding remarks do not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 71

From: CW
To: Tom Oliver
Subject: Lampson project
Date: Wednesday, May 22, 2024 8:50:37 AM

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Hi. We live at 2641 Copa De Oro Dr in Rossmoor. I was horrified to see that very large, ~50 acres, bulldozed on the base, off Lampson, without any warning or discussion or environmental impact study done. This was a beautiful and important wildlife sanctuary. I've seen a dozen Kestrels hovering simultaneously over the area-amazing and beautiful and now gone and wiped out. Tragic-nothing to see here!! Curt & Cindy Wheeler

71-1

Responses to Comment 71

Wheeler, Curt, dated May 22, 2024.

71-1 The commenter states that 50 acres of land were bulldozed on the base without warning or completion of an environmental impact study and that American Kestrels were flying over the bulldozed area. The 50-acre project that the commenter is referring to is independent from the proposed Project. The Project will be confined to the Project Site with the exception of offsite infrastructure improvements. However, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 72

From: Nancy Wiest
To: Tom Oliver
Subject: Lampson Project
Date: Friday, May 17, 2024 2:10:43 PM

I have been a resident of College Park East "CPE" for 55 years. I am very concerned about the impact that the Lampson Project "project" will cause. The City of Los Alamitos needs to be aware of the following problems: 72-1

1. Traffic on Lampson will be intolerable. There will be at 500 plus additional cars on Lampson at all times of the day and night. As it is traffic
is too heavy on that street. Residents of CPE only have access to our homes via Lampson. 72-2

2. As a result of additional cars on Lampson, emergency services will not be able to access CPE homes (and those new Project residences)
and lives might be lost since emergency services will not be able to enter CPE and the new residences. 72-3

3. There are health and safety issues due to so many additional residences planned by the Project. 72-4

4. I demand public disclosure of state declared health and safety risks due to the Project. 72-5

5. Stop lights on Lampson will be impacted. Residents living in the Project will be crossing Lampson to access our parks. 72-6

6. The plans for the Project do not provide enough free space so the residents will be accessing Heather Park and other parks in CPE. 72-7

7. Residents of CPE will be required to obtain parking permits to park on our own streets since the residents of the Project will be parking on our streets 72-8

8. Noise will be magnified due to additional residents and traffic. Air quality will also be lowered for everyone in the area. 72-9

9. Building new residences next to the flight path at the military base will put numerous people in constant danger. 72-10

Those are just a few of the problems the Project will cause. Should there be victims due to the military base or emergency vehicles not able to enter CPE and the new residences the City will be liable such as what happened in Cerritos many years ago. Your budget will be blown away should any of that occur.

I implore you to reconsider the Project. I have attended many of the City Council meetings and was extremely upset that your City Council still voted to proceed with the Project. Thank you for your consideration. 72-11

NANCY WIEST
562/431-7874

9.

Responses to Comment 72

Wiest, Nancy, dated May 17, 2024.

72-1 The commenter makes introductory remarks for concerns with the Project, which are responded below.

72-2 The commenter raises concerns regarding traffic on Lampson. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for impacts related to traffic.

72-3 The commenter asserts that emergency services will be unable to access CPE homes and the Project's homes due to heavier traffic. Refer to Master Response 2.1.7, *Emergency Vehicle Access*, for impacts to emergency services; and 2.1.8, *Public Safety*, for safety concerns.

72-4 The commenter asserts that additional residences will cause health and safety issues. As discussed in Section 4.2, *Air Quality*, of the Draft EIR, implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction. (Refer to Pages 4.2-30 through 4.2-31 of the Draft EIR) Refer to Master Responses 2.1.2, *Roadway Safety on Lampson Avenue*, and 2.1.8, *Public Safety*, for safety concerns.

72-5 The commenter demands disclosure of state-declared health and safety risks due to the Project. The Draft EIR discloses health and safety risks throughout the environmental analysis sections, as appropriate, and concluded impacts would be less than significant. Refer to Response to Comment 72-4 above.

72-6 The commenter states that residents from the Project will cross Lampson to access Heather Park, impacting stop lights on Lampson. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

72-7 The commenter asserts that the Project lacks free space and that residents of the Project will utilize parks in College Park East. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for impacts related to open space and park use.

72-8 The commenter claims that residents of CPE will be required to obtain parking permits for street parking because residents of the Project will park in CPE. Refer to Master Response 2.1.3, *Parking*, for impacts related to overflow parking. Parking permits for street parking in CPE is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any

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issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

72-9 The commenter states that noise will increase due to more residents and traffic, and that air quality will decrease.

As discussed in Section 4.11, *Noise*, of the Draft EIR, the Project would not exceed significance thresholds for construction noise levels, operational noise levels, and off-site traffic noise levels. As such, the Project would not generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant (refer to Pages 4.11-23 through 4.11-29 of the Draft EIR).

As discussed in Section 4.2, *Air Quality*, of the Draft EIR, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to the Project, and impacts would be less than significant (refer to Pages 4.2-26 through 4.2-29 of the Draft EIR).

72-10 The commenter asserts that the Project's proximity to the JFTB will put people in danger. Refer to Master Response 2.1.9, *Proximity to the Los Alamitos Joint Forces Training Base (JFTB)*, regarding safety concerns related to proximity to JFTB Los Alamitos.

72-11 The commenter warns about the liability of the City should there be victims due to the military base or failure of emergency vehicle access and makes concluding remarks regarding opposition to the Project. This comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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Comment Letter 73

Comments on 4665 Lampson Ave Project

Ksatria Williams <ksatria@gmail.com>
Sun 6/2/2024 3:41 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

Hello Tom,
I would like to submit the following comments for the 4665 Lampson Ave Project DEIR.

1. The DEIR Park Impact analysis only accounted for visits and not types of usage. The tennis courts are a highly limited feature of Heather Park which are frequently at capacity for residents of College Park East. This development will further strain utilization without equivalent facilities being added to the new development. Please recognize this impact and require the developers to mitigate it in the project plan.
2. The report makes it clear that the existing parking situation at Arbor park is insufficient once the parking spots available at 4665 are removed. This will frustrate the AYSO community, College Park East Residents, and the residents of the new project. Please require that option 2 is funded and constructed as part of the development plan and/or that AYSO permits are limited to events where parking can be accommodated completely within what is available at the park instead of the documents 9 simultaneous games.

Thank You,
Ksatria Williams
College Park East Resident

73-1

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Responses to Comment 73

Williams, Ksatria, dated June 2, 2024.

73-1 The commenter states that the Park Impact analysis did not take type of usage into account, believes that recreational facilities will be strained without equivalent facilities such as tennis courts within the Project, and asks for the developer to be required to mitigate the impact. The commenter also states that parking at Arbor Park will be insufficient and asks that the funding and construction of Option 2 as part of the development plan be required and/or that AYSO permits are limited to events where on-site parking is sufficient.

Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for impacts related to park use and mitigation of impacts. Refer to Master Response 2.1.3, *Parking*, for impacts related to parking at Arbor Park. The commenters suggestion to require Option 2 and/or that AYSO permits are limited to events where on-site parking is sufficient is acknowledged and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. This comment does not raise any issues concerning the environmental analysis provided in the Draft EIR and thus no further response is required.

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COMMENT LETTER 74

4665 Lampson Avenue Project

John Williams <johnwwii@yahoo.com>
Thu 6/6/2024 10:15 PM
To:Tom Oliver <Toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender johnwwii@yahoo.com

As a longtime resident of College Park East . I would like to voice my concerns with this project.

I am keenly aware of the need to provide more housing for California residents but quality of life and way of life has to be taken into consideration. Having looked through the proposal for this project I do not believe **quality of life and way of life has been taken into account.**

My first concern is the parking to be provided for the proposed housing. Given where the neighborhood will be located and how Californians commute by automobile their is a severe shortage of parking. **To provide for quality of life and way of life there should be a minimum of 3 parking spots per household. Also if street cleaning services (which is necessary) are to be provided where would the vehicles move to?** 74-1

My second concern is access to Lampson. The two exit and entrances will create many automobile accidents either pulling out into the north bound lanes or when the they attempt u-turns at Heather. **We are anticpating over 500+ vehicles which will eventually feed into Seal Beach Blvd or Valley View. If we assume a minimum of 100-200 vehicles per morning the traffic going to school /work will cause anxiety every morning. Also there needs to be a third lane on the Northbound side to allow for residents to merge onto Lampson not interrupt the bicycle lane.** 74-2

My third concern is the Neighborhood Open Space. Given the number of people anticipated to reside in the neighborhood there would need to be an additional space of 10,000 - 20,000 square feet. **If this is not provided it would cause additional anxiety with the residents for securing time at the Open Space. Also they would attempt to use the parks in CollegePark East which is not part of the city of Los Alamitos.** 74-3

My fourth concern is the Public Park behind the neighborhood. If the Park is still used for other activities parking would be greatly reduced as people now park in the current parking lot. **This would create additional anxiety as people using the park and Dog Park would park in the neighborhood. Additonal parking would need to be built to accomodate the park users.** 74-4

My fifth concern is Lampson only has 2 lanes per direction. **Without traffic lights there is not a merge lane and people trying to exit would block the bicycle lane on the northbound side. Also from a policing standpoint who will support tyhe Los Alamitos residents? Response Times?** 74-5

My sixth concern is where the entrance/exits of the neighborhood are located. In no way should these exits be considered from a safety stand point. **Either traffic accidents or the need for emergency services highly compromise residents abilities to enter/exit.** 74-6

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Given my concerns I believe that this project needs to be revamped to accomadate less people and more parking , traffic lanes and open space.

I appreciate the developer wanting to be helpful and profitable but too many times these type of projects do not work well for the residents of the new and surrounding communities. The developer will make their money and disappear. Another thing to consider is have the developer take out a $20 million dollar insurance policy to cover any "improvements " that would be neceassary once it is determined that changes are necessary for quality of life. **If the goal is to improve the way people live and their perception of living in Los Alamitos these concerns need to be accounted for.**

74-7

Regards,

John
John Williams

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Responses to Comment 74

Williams, John, dated June 6, 2024.

74-1 The commenter states that quality of life and way of life have not been considered, suggests that a minimum of three parking spots be provided per household for quality and way of life, and questions where vehicles will be moved to during street cleaning. Refer to Master Response 2.1.3, *Parking*, for impacts related to on-site parking. Quality of life is not an environmental issue analyzed under CEQA; however, this comment is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. Thus, no further response is required.

74-2 The commenter raises concerns that the two exits/entrances to the Project Site will cause accidents, expresses concerns with traffic, and recommends adding a third lane on the northern side of Lampson to avoid interference with the bike lane. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for impacts related to vehicle accidents and bicycle facilities. Refer to Master Response 2.1.1, *Transportation and Traffic Congestion*, for impacts related to traffic.

74-3 The commenter states that an additional 10,000 to 20,000 square feet of open space is needed for residents of the Project and raises concerns that without the additional open space, residents of the Project would utilize parks in College Park East, which is not part of the City of Los Alamitos. Refer to Master Response 2.1.10, *Loss of Existing Open Space and Provision of On-Site Amenities*, for concerns regarding impacts to open space and local parks.

74-4 The commenter raises concerns about the possible shortage of parking at Arbor Park and overflow parking in College Park East and states that additional parking is needed to accommodate park users. Refer to Master Response 2.1.3, *Parking*, for concerns regarding parking at Arbor Park.

74-5 The commenter expresses concerns regarding the lack of a merge lane on Lampson and states that people exiting the Project would block the bicycle lane. The commenter also questions police services for Los Alamitos residents and how response times will be affected. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for impacts to bicycle facilities and safety.

As discussed in Section 4.13, *Public Services*, of the Draft EIR, implementation of the Project would increase the overall demand on fire and emergency services in the City. Per correspondence with the OCFA, response times would not decrease to necessitate the construction of a new fire station. To maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs. Similarly, implementation of the Project would result in an increase in calls for police service; however, Los Alamitos Police Department has indicated that this increase would not adversely

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impact Los Alamitos Police Department's existing resources. Therefore, impacts to public services would be less than significant (refer to Page 4.13-9 to 4.13-10 of the Draft EIR).

74-6 The commenter states that the proposed locations of the Project entrances and exits are unsafe due to potential for traffic accidents or the need for emergency services access. Refer to Master Response 2.1.2, *Roadway Safety on Lampson Avenue*, for concerns regarding sight distance and 2.1.7, *Emergency Vehicle Access*, for concerns regarding emergency services.

74-7 The commenter makes concluding remarks regarding the concerns addressed above and suggests that the developer take out an insurance policy to cover additional improvements needed for quality of life. The commenter's suggestion is noted for the record and will be forwarded to the decision makers for their required review and consideration prior to any action being taken on the Project. Thus, no further response is required

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4.0 CLARIFICATION AND REVISIONS

Corrections to the Draft Environmental Impact Report (EIR) text generated either from responses to comments or independently by the City, are stated in this section of the Final EIR. The information included in this section does not constitute substantial new information that requires recirculation of the Draft EIR. Section 15088.5 of the State CEQA Guidelines states in part:

> *(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:*
>
> *(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.*
>
> *(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.*
>
> *(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.*
>
> *(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.*
>
> *(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.*

None of the information contained in this section constitutes significant new information or changes to the analysis or conclusions of the Draft EIR. There were no new significant environmental impacts identified following circulation of the Draft EIR. Likewise, there were no substantial increases in the severity of environmental impacts identified after circulation of the Draft EIR. Therefore, recirculation of the Draft EIR is not required because no new information was added to the EIR.

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CLARIFICATIONS AND REVISIONS TO THE DRAFT EIR

This section includes recommended clarifications and revisions to the Draft EIR. This section is organized by respective sections of the Draft EIR. Deleted text is shown as strikeout and new text is underlined.

Section S.0 Executive Summary

1. Page S-3 is hereby modified due to typographical error.

   The Project Applicant, Lampson Park Place, LLC, proposes to redevelop the Project site with a residential development consisting of a variety of housing product types, including single family detached homes, townhomes, and apartments. The unit mix proposes 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes. The Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the ~~440~~441 parking spaces that would be required pursuant to the State's Density Bonus Law. Refer to EIR Section 3.0, *Project Description*, for a detailed description of the Project.

2. Page S-12 is hereby modified due to typographical error.

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		~~MM 4.6-3~~ If the discovery is determined to be significant by the paleontologist based on the Society of Vertebrate Paleontology guidelines, a monitoring and recovery plan shall be initiated, which will include notification of appropriate personnel involved and monitoring of earth disturbance activities.	

Section 1.0 Introduction

1. Page 1-37 is hereby modified as follows in Response to Comment D-2.

   For the Project, the City of Seal Beach, Orange County Airport Land Use Commission (ALUC), Regional Water Quality Control Board (RWQCB), Orange County Sanitation District (OCSD), Southern California Gas Company (SoCalGas), Southern California Edison

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(SCE), and the South Coast Air Quality Management District (SCAQMD) are identified as Responsible Agencies. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether identified in this EIR or not, as part of their decision-making processes in relation to the proposed Project.

Section 2.0 Environmental Setting

1. Page 2-11 is hereby modified as follows in Response to Comment F-1.

~~The Project site is currently served by~~ Orange County Transit Authority (OCTA) ~~with~~ currently provides bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). ~~The Project site is served by OCTA bus routes 42 and 123.~~ The nearest OCTA bus stops to the Project site is Route 123, located at the intersection of Valley View Street and Lampson Avenue (approximately 1.2 miles from the Project site) and Route 42, located at the intersection of Seal Beach Boulevard and Lampson Avenue (approximately 1.6 miles from the Project site).

Section 3.0 Project Description

1. Page 3-4 is hereby modified due to typographical error.

The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the ~~440~~441 parking spaces that would be required pursuant to the State's Density Bonus Law.

2. Page 3-4 is hereby modified as follows in Response to Comment D-3.

Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project would implement stop controls for the southbound approach at all driveways on Lampson Avenue. The driveway for the apartment entry would be restricted to right-in/right-out access only. Vehicular circulation would be unrestricted throughout the Project site. The primary neighborhood entry is not anticipated to meet a peak hour or planning level (daily volume) based traffic signal warrants. ~~However, per the request of the City of Seal Beach and in response to public comments during scoping, the Project will install a traffic signal at the primary neighborhood entry in coordination with both the City of Los Alamitos and City of Seal Beach.~~

3. Page 3-8 is hereby modified due to typographical error.

PDF N-1 Prior to the issuance of occupancy permits, the Project will construct a 7-foot-high noise control barrier along Lampson Avenue. The noise control barrier will be constructed so that the top of each wall and /or berm combination

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extends to the planned height above the pad elevation of the lot it is shielding. Since the pad elevations varies, the top of each wall and /or berm combination will be 7' above each applicable pad elevation. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. The noise barrier shall be constructed using the following materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of at least 4 pounds per square foot;
- Material with sufficient weight per square foot capable of providing a minimum transmission loss of ~~20~~25 dBA;
- Earthen berm; or,
- Any combination of these construction materials

4. Page 3-9 is hereby modified as follows in Response to Comment D-4.

Golden State Water Company would provide water service to the Project. Domestic water lines would be provided as shown in Figure 3-23, *Utility Plan*. In addition, the Project would include a 1,200 feet watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Project would include, at a minimum, an 8" watermain size for the extension. The proposed water infrastructure would require an encroachment permit from the City of Seal Beach and Agreement of Franchise Facilities between GSWC and the City of Seal Beach.

5. Page 3-9 is hereby modified as follows in Response to Comment D-5.

Although the Project site is in the City of Los Alamitos, sanitary sewer will be served by the City of Seal Beach via the Rossmoor-Los Alamitos Area Sewer District. The Rossmoor/Los Alamitos Sewer District would provide wastewater conveyance and treatment services to the Project. A lift station and force main is proposed at the southeast corner of the Project site (refer to Figure 3-23, *Utility Plan*). The Project would connect the force main to the existing 8-inch sanitary sewer line at the southeast corner of the site. All connections to existing sanitary sewer lines require approval by the City of Seal Beach and would be constructed in accordance with the City of Seal Beach standards. Additionally, an agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach would be required for Inter-Jurisdictional Wastewater Services.

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D. Stormwater Drainage Infrastructure

1. Preferred Stormwater Drainage

The proposed Project site's stormwater runoff would be conveyed by roof downspouts or street surface flow to the proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the Project site. From the detention system, a stormwater sump pump located in the southwest corner of the Project site would outlet flow into the existing 18" outlet storm drain pipe at the southwest corner of the site, which conveys stormwater runoff to ~~match the historical flow pattern across the~~ Los Alamitos Joint Forces Training Base (JFTB) property directly west of the site. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing conditions for all storm events. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will be conveyed through a parkway drain discharging flow onto Lampson Avenue, matching historical drainage patterns.

2. Alternate Stormwater Drainage

An alternate plan for stormwater conveyance is proposed in the event the preferred route (historical flow) across the JFTB, as described above, is not available. The alternate would include stormwater outflow onto Lampson Avenue, which would subsequently flow west to an existing stormwater catch basin approximately 2,200 feet west of the Project site. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows to Lampson Avenue would resume. Under the Alternate Off-Site Storm Drain plan, stormwater will be detained and mitigated onsite such that Lampson Avenue meets OC Hydrology flooding standards. Approximately 33,106 ~~32,300~~ cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates.

6. Page 3-10 is hereby modified as follows in Response to Comment D-6.

An alternate plan for stormwater conveyance is proposed in the event the preferred route (historical flow) across the JFTB, as described above, is not available. The alternate would include stormwater outflow onto Lampson Avenue within Seal Beach right-of-way, which would subsequently flow west to an existing stormwater catch basin approximately 2,200 feet west of the Project site. Stormwater outflow onto Lampson Avenue would require approval

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and/or an encroachment permit from the City of Seal Beach. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows to Lampson Avenue would resume. Under the Alternate Off-Site Storm Drain plan, stormwater will be detained and mitigated onsite such that Lampson Avenue meets OC Hydrology flooding standards. Approximately 32,300 cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates.

7. Page 3-12 is hereby modified due to an amendment to the Density Bonus Law Request to the City.

A. Concession Request

The Project Applicant is requesting three concessions pursuant to the State's Density Bonus Law.

- ~~Concession #1:Reduction in Setback Distance Between Structures~~
- Concession #1~~2~~:Exception for Building Step Back Requirements
- Concession #2~~3~~:Reduction in Minimum Storage Space

~~As to Concession #1, LAMC, Section 17.08.030, Table 2-03 requires a 10-foot minimum distance between structures. Though most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances, the setback distance is reduced to 6 feet at certain locations within the Project site plan. Meeting the required 10-foot minimum setback distance would require a significant change to the site plan and likely result in a reduction of residential units. As such, the Applicant is requesting as Concession #1 that the setback requirement in certain locations identified on the site plan be reduced to 6 feet.~~

As to Concession #1~~2~~, LAMC Section 17.08.045.A.1 requires that for buildings higher than two stories, the third story must have a minimum 5-foot step back from the story below to minimize building bulk and create façade articulation. This requirement appears to govern regardless of building location within a project site or surrounding land uses. While the City interprets this requirement as applying only to perimeter buildings (i.e., buildings that are located along the perimeter of a Project site), however, given the requirement's ambiguity, the Applicant is requesting as Concession #2 an exception from the required minimum 5-foot step back requirement for those structures identified on the site plan.

As to Concession #2~~3~~, LAMC Section 17.08.030, Table 2-03, requires a minimum storage space in a garage or carport of 200 cubic feet per unit. For certain units within the Project, this storage space requirement will be difficult to satisfy because of limitations in garage and carport space. As such, the Applicant is requesting as Concession #3 that the minimum storage

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space requirement be reduced to 175 cubic feet per unit for market rate units and 50 cubic feet per unit for affordable units identified on the site plan.

8. Page 3-13 is hereby modified due to due to an amendment to the Density Bonus Law Request to the City and typographical error.

B. Waiver Request

The State's Density Bonus Law specifies that an applicant may submit to a local government a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development providing the requisite amount of affordable housing at the densities or with the concessions permitted under the Density Bonus Law. A waiver request can be denied only if the waiver would (i) have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact; (ii) have an adverse impact on any real property that is listed in the California Register of Historical Resources (CRHR); or (iii) be contrary to state or federal law. (Government Code Section 65915(e)(1))

The Applicant requests one waiver pursuant to the State's Density Bonus Law:

- Waiver #1: Reduced Common Area Requirement
- Waiver #2: Reduction in Setback Distance Between Structures

As to Wavier #1, LAMC Section 17.08.030, Table 2-03 requires a minimum 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, but the Project will not be able to comply with the common area requirement. This is due to the proposed dedication or grant of easement related to the northerly 10 feet strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of property. When this area is dedicated to the City, then the Project will be unable to comply with the common area requirement because compliance with this requirement would physically preclude construction of the Project at the densities allowed and with the concessions described above. Therefore, the Applicant is requesting as a waiver a reduction in the common area requirement from 200 to 150 square foot per unit.

As to Wavier #2, Section 17.08.030, Table 2-03 of the City's Municipal Code requires a 10-foot minimum distance between structures. Though most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances, at certain locations within the Project site plan, the setback distance is 6 feet. Meeting the required 10-foot minimum setback distance would require a significant change to the site plan and would result in a reduction of residential units. We estimate that the Project could lose up to seven units, and potentially more units, if the Project were required to comply with this

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requirement. Moreover, to meet the required 10-foot minimum setback distance, the Project would require a reduction in private yard space, and likely an even further reduction in common area requirement. As such, compliance with this requirement would physically preclude construction of the Project at the densities allowed and with the concessions described above. Therefore, the Applicant is requesting as a waiver a reduction in setback distance between structures.

B. Parking Reduction Request

The Project would provide 577 parking spaces, which is below the City's required 679 parking spaces pursuant to LAMC Section 17.22.030, Required Parking Spaces. The State's Density Bonus Law specifies that for housing developments that qualify for a density bonus the local government shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. (Gov't Code Section 65915(p)(1).)
The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project, which is significantly more than the ~~440~~441 parking spaces that would be required pursuant to the State's Density Bonus Law.

9. Page 3-17 is hereby modified due to changes to the approving body for the Project.

3.7 SUMMARY OF REQUEST ACTIONS

The City of Los Alamitos has primary approval responsibility for the Project. As such, the City serves as the Lead Agency for this EIR pursuant to CEQA Guidelines Section 15050. The City Council~~Planning Commission~~ serves as the approval body for the Project and will consider the Project along with the Planning staff's recommendations within its staff report. The City Council~~Planning Commission~~ will make a decision to approve, approve with changes, or deny the Project. In the event of approval of the Project and certification of the EIR, the City would conduct future administrative reviews and grant ministerial permits and approvals to implement Project requirements and conditions of approval.

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10. Page 3-18 is hereby modified due to changes to the approving body for the Project and in Response to Comment D-3 and D-4.

Table 4-1 Table 3-6 Project-Related Approvals/Permits

Public Agency	Approvals and Decisions
City of Los Alamitos	
Proposed Project – City of Los Alamitos Discretionary Approvals	
~~Planning Commission~~ City of Los Alamitos	• Certify the Project's EIR and adopt the Mitigation Monitoring and Reporting Program and Findings and Statement of Overriding Considerations. • Approval of a Site Development Permit - Major • Approval of Tentative Parcel Map No. 2022-113 • Approval of Vesting Tentative Tract Map No. 19263 • Approval of Affordable Housing Unit Application for Density Bonus Request, Concessions, and a Waiver
Subsequent City of Los Alamitos Discretionary and Ministerial Approvals	
City of Los Alamitos Subsequent Implementing Approvals	• Approval of Landscaping/Irrigation Plan • Issuance of Demolition Permits • Issuance of Grading Permits • Issuance of Building Permits • Approval of Road Improvement Plans • Issuance of Encroachment Permits • Approval of Infrastructure Plans • Approval of public right-of-way dedications • Approval of Water Quality Management Plan • Approval of connections to the municipal sewer system
Responsible Agencies – Approvals and Permits	
Regional Water Quality Control Board (RWQCB)	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit.
Rossmoor Los Alamitos Area Sewer District.	• Issuance of a Sewer Connection Permit • Agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach for Inter-Jurisdictional Wastewater Services.
City of Seal Beach	• Issuance of Public Works Permit (encroachment permit) for infrastructure improvements within the Lampson Ave. right-of-way. • Agreement of Franchise Facilities between GSWC and the City of Seal Beach for water service.

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Public Agency	Approvals and Decisions
	• Agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach for Inter-Jurisdictional Wastewater Services. • Approval of stormwater discharge/conveyance. • Approval of a Water Quality Management Plan • Approval of infrastructure plans directly/indirectly related to Seal Beach
South Coast Air Quality Management District	• Issuance of permits that allow for the construction and operation of the Project.
JFTB	• Issuance of encroachment permit for stormwater improvements.
GSWC	• Agreement of Franchise Facilities between GSWC and the City of Seal Beach for water service.

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Section 4.0 Environmental Analysis

1. Page 4-7 is hereby modified as follows in Response to Comment D-9.

Table 4.0-1 Cumulative Development Land Use Summary

ID	Project	Land Use	Quantity	Unit[1]
City of Los Alamitos				
LA1	Los Alamitos Luxury Apartments	Multifamily (Low-Rise) Housing	107	DU
LA2	Chevron Gas Station	Gas Station w/ Convenience Store	2.724	TSF
LA3	4562 Katella Avenue	Medical Office Building	5.200	TSF
LA4	Los Alamitos Medical Center (Phase 2 & 3)	Hospital Building I	92	Beds
		Hospital Building II	126	Beds
City of Seal Beach				
SB1	13980 Seal Beach Boulevard Project/Hydrogen Fueling Station	Hydrogen Fueling Facility	1.010	TSF
SB2	Accurate Storage	Multifamily (Mid-Rise) Housing	59	DU
SB3	Shops at Rossmoor	Multifamily (Mid-Rise) Housing	400	DU
SB4	Old Ranch Town Center	Multifamily (Mid-Rise) Housing	200	DU
SB5	Old Ranch Country Club	Multifamily (Mid-Rise) Housing	~~120~~116	DU
		Senior Housing - Attached	51	DU
		Medical Office	25.340	TSF
		Hotel	150	Rooms
SB6	Leisure World	Multifamily (Mid-Rise) Housing	150	DU
SB7	Seal Beach Plaza	Multifamily (Mid-Rise) Housing	75	DU
City of Garden Grove				
GG1	Valley View Lanes (CUP-211-2021)	Bowling Alley	13.740	TSF
GG2	12141 Valley View Street	Restaurant	7.214	TSF
		Drive-Thru Restaurant	2.000	TSF
GG3	Marley's Preschool (CUP-212-2021)	Preschool/Day Care	84	STU
GG4	Pro Athletics (CUP-216-2022)	Athletic & Health Club/Gym	7.100	TSF

2. Figure 4.0-1, *Cumulative Development Location Map*, is hereby modified as follows in Response to Comment D-9.

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Source(s): Urban Crossroads (07-01-2024)

Figure 4.0-1

Not to Scale

Cumulative Location Development Map

Section 4.8 Hazards and Hazardous Materials

1. Page 4.8-16 is hereby modified as follows in Response to Comment E-4.

Title 17, CCR, Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, defines and regulates lead-based paint. Any detectable amount of lead is regulated. During the demolition of the existing structure, there is a potential for exposing construction workers to health hazards associated with lead. The Project would be required to comply with Title 17, CCR, Division 1, Chapter 8, which includes requirements such as employer-provided training, air monitoring, protective clothing, respirators, and handwashing facilities. Mandatory compliance with these requirements would ensure that construction workers and the public are not exposed to significant LBP health hazards or upset during demolition and/or during transport of demolition waste to an appropriate disposal facility and would ensure that impacts related to LBP remain less than significant.

Moreover, EFI prepared a Phase II ESA for the Project site dated September 22, 2022 based on a geological survey and soil sampling conducted on August 16, 2022. Select soil samples were collected and analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), TPH as oil (TPHo), volatile organic compounds (VOCs), PCBs, organochlorine pesticides (OCPs), arsenic, and lead (Pb). Analytical results for PCBs indicated concentrations were not detected above the laboratory reporting limits in any of the soil samples analyzed (refer to Page 4.8-5 of the Draft EIR). However, caulk containing PCBs were used in buildings in the 1950s through the 1970s and may be present in the existing building. Therefore, the Project would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of PCBs including Title 40, Code of Federal Regulations, Part 761.

There is also a potential for mercury containing products at the existing buildings. When a mercury-containing product breaks and the mercury is released, the exposed mercury can evaporate and become an invisible, odorless toxic vapor. Mercury-containing products exhibit hazardous characteristics as described in the California Code of Regulations, Title 22, chapter 11 and are classified as a type of hazardous waste called "universal waste." Universal wastes are hazardous wastes that pose a lower immediate risk to people and the environment when handled properly. Due to this lower risk, universal wastes can be handled and transported under more relaxed rules compared to other hazardous wastes.[7] The Project would be required to comply with all applicable federal, State, and local hazardous materials regulations including California Health and Safety Code Section 25214.8.16, to prevent mercury releases.

[7] *https://dtsc.ca.gov/toxics-in-products/mercury-waste/*

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Compliance with the above regulatory requirements would ensure that removal of ACMs, ~~or~~ LBPs, PCBs, or mercury would result in a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant. No mitigation is required.

Section 4.9 Hydrology and Water Quality

1. Pages 4.9-17 and 4.9-19 are hereby modified as follows to reflect the changes made in the updated Hydrology Study.

The combined, total 100-year peak flow rate for the Project site is 31.51~~40.28~~ cfs under existing conditions. The combined, total 100-year peak flow rate for the Project Site is approximately 42.15~~44.31~~ cfs under the proposed conditions without improvements. Figure 4.9-4, *Proposed Conditions Hydrology Map* illustrates the post development drainage conditions of the Project site. The proposed drainage design would follow the existing drainage pattern with surface flows to on-site drainage facilities that would ultimately outlet into the existing storm drain pipe at the southwest corner of the Project site. The results from the hydrology study demonstrate that the proposed conditions of the Project site of 42.15~~44.31~~ cfs would generate a higher peak runoff flowrate than the existing condition of the site of 31.51~~40.28~~ cfs.

Due to increased peak runoff flows created from the proposed change in land use and increased impervious coverage by 48%, stormwater would need to be detained and minimized ~~mitigated~~ on-site to match existing conditions. ~~By matching the maximum flows conveyed by the outlet pipe and providing a 20 percent factor for safety for preliminary sizing, approximately 10,000 cubic feet (cf) would be required to be detained on-site based on a conservative 100-year storm event.~~ To prevent overflow into Lampson Ave, the detention system will be sized to match the maximum flows conveyed by the outlet pipe, approximately 33,106 cubic feet. In addition, a proposed stormwater pump system with upstream detention storage has been incorporated into the onsite drainage design to provide onsite peak flow and volume detention for the development for all storm events. The pump system will control the outflow discharge rate matching the existing 2-year peak flow at approximately 8.9 cfs. As such, the proposed on-site detention facilities will be designed to detain ~~a minimum volume of 10,000 cf and detained~~ volumes that would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. As such, downstream facilities would not be hydrologically impacted by the proposed Project. Impacts would be less than significant and no mitigation is required.

2. Alternate Storm Drain Facilities

In the event the preferred route (historical flow across the JFTB) is not available, an alternate treatment of stormwater runoff for the Project would be conveyance to offsite storm drain facilities. Figure 4.9-5, *Proposed Alternate Conditions Hydrology Map*, illustrates the post-development drainage conditions for this drainage and detention alternate. The proposed site's

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stormwater runoff would be conveyed by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows onto Lampson Avenue via a parkway culvert. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the pre-development ~~allowed~~ 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the pre-development ~~allowed~~ 25-year storm event in Lampson Avenue, onsite flows would continue pumping to Lampson Avenue normally.

Under the Alternate Storm Drain plan, stormwater will need to be detained and minimized ~~mitigated~~ onsite such that Lampson Avenue meets OC Hydrology flooding standards. Onsite and offsite small unit hydrographs were analyzed using AES Rational Method Analysis to identify the time that the flows exceed the allowed offsite 25-year storm event flows to prevent flooding of one travel lane of the half-street per the OC Local Drainage Manual. Approximately 33,106 ~~32,300~~ cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. By matching the maximum flows and providing an additional 20 percent factor of safety for preliminary sizing, approximately 38,800 cf of water would be detained onsite. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed improvements. Additionally, the proposed finished floor elevations for the onsite buildings would be set 1-foot minimum above the 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements.

2. Page 4.9-21 is hereby modified as follows to reflect the changes made in the updated Hydrology Study.

3. Outlet Runoff to Arbor Park to North: Arbor Park is within the JFTB and drains south to the same earthen channel outlet as the project site. If the proposed flows from the Project are not allowed to outlet to the JFTB at the southwest corner of the site, proposed flows from the Project would not be allowed to outlet to the JFTB to the north of the site either since they are essentially the same outlet location. In addition, the existing site does not flow in the northerly Arbor Park/ JFTB area as the site drains in the southwesterly direction, therefore directing stormwater runoff to the north would change the historic drainage pattern which can potentially cause downstream flooding.

4. Outlet Runoff to Golf Course to East: The golf course to the east is within the JFTB and drains east, ultimately ~~outletting~~ to the Bolsa Chica Channel. ~~Outletting~~Discharging to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed

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to accommodate flows from the Project site; therefore, potentially cause downstream flooding. In addition, the golf course and Bolsa Chica Channel are upstream from the site, therefore not feasible due to elevation differences.

5. Construct storm drain pipe under Lampson Avenue to east: ~~Outletting~~Discharing to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the site. Additionally, installation of underground storm drain pipe within Lampson Avenue is infeasible due to conflicts with existing utilities, maintenance concerns, and head losses as described above (see #1). Similarly to item #4, changing the historical drainage pattern may potentially cause unforeseen drainage impacts.

3. Page 4.9-23 of the Draft EIR is hereby modified as follows to reflect the changes made in the updated Hydrology Study.

1. On-Site Storm Drain Facilities

The results from the hydrology report demonstrate that the proposed drainage conditions would generate a higher peak runoff flowrate than the existing conditions on the Project site due to an increase in impervious area and change in land use. The preferred detention facilities would be designed to detain the increased peak flow between the existing outlet pipe flows and proposed conditions. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements (C&V, 2024a).

2. Alternate Storm Drain Facilities

A second hydrology report was prepared for the alternate stormwater conveyance plan. The results from the report demonstrated that the proposed condition of the alternate would generate a ~~10 percent (44.31 cfs proposed/40.28 cfs existing)~~ higher 100-year storm event peak runoff flowrate than the existing condition of the site due to an increase in impervious area and change in land use. The proposed underground detention facilities would be designed to detain the increased flows under the proposed conditions, which would be discharged from the site via a pump station at flow rates that would not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements. ~~(C&V, 2023)~~ (C&V, 2024a).

Section 4.10 Land Use and Planning

1. Page 4.10-27 is hereby modified as follows in Response to Comment F-2.

Policy 4.7 **Transit stops.** Improve and maintain safe, clean, comfortable, well-lit, and rider friendly transit stops that are well marked and visible to motorists.	**Not Applicable.** The nearest OCTA Route 123 bus stop from the Project site is approximately 1.2~~1.6~~ miles walking distance at the intersection of Valley View Street and

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	Lampson~~Champman~~ Avenue. The nearest OCTA Route 42 bus stop from the Project site is approximately 1.6~~3.5~~ miles walking distance at the intersection of Seal Beach Boulevard and Lampson Avenue.~~Katella Avenue and Los Alamitos Boulevard~~ Therefore, this policy is not applicable to the Project.

2. Page 4.10-33 is hereby modified as follows in Response to Comment D-23.

4. City of Seal Beach General Plan

Table 4.10-3, *Seal Beach General Plan Consistency Analysis*, provides an analysis of the Project's consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 4.10-3, the Project would not conflict with any of the applicable General Plan goals and policies. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the City of Los Alamitos General Plan and mitigation is not required.

Table 4.10-3 Seal Beach General Plan Consistency Analysis

General Plan Policy	Consistency
Circulation Element	
Objective: Provide a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use.	
Policy: Maintain existing pedestrian facilities and require new development to provide pedestrian walkways between developments, schools, and public facilities.	**No Conflict.** The Project would promote future residents of the Project to walk, bike, or ride the bus to and from developments, schools, and public facilities. Project frontage improvements such as sidewalk improvements, the existing bike lanes on Lampson Avenue adjacent to the Project site, and bike storage would promote residents and students to utilize these facilities. Therefore, the Project would not conflict with this policy.
Growth Management Element	
Goal 3: Cooperate with Neighboring Jurisdictions and the County of Orange and County of Los Angeles to Achieve Reduction in Regional Traffic Congestion.	
Policy 3.1 - The City shall participate in inter-jurisdictional planning forums within its established growth management areas as adopted	**No Conflict.** The City of Seal Beach is a responsible agency for the Project. Table 3-6, *Project-Related Approval/Permits*, lists all

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by the Regional Advisory Planning Council and will continue to participate in forums with neighboring or affected jurisdictions to address transportation or other planning issues.	approvals and decisions required by the City of Seal Beach for the Project. Additionally, the City of Los Alamitos and City of Seal Beach have been in coordination throughout the planning process for this Project including the preparation of the Traffic Analysis. Therefore, the Project would not conflict with this policy.

Section 4.11 Noise

1. Page 4.11-22 is hereby modified due to typographical error.

PDF N-1 Prior to the issuance of occupancy permits, the Project will construct a 7-foot-high noise control barrier along Lampson Avenue. The noise control barrier will be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. Since the pad elevations varies, the top of each wall and /or berm combination will be 7' above each applicable pad elevation. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. The noise barrier shall be constructed using the following materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of at least 4 pounds per square foot;
- Material with sufficient weight per square foot capable of providing a minimum transmission loss of ~~20~~25 dBA;
- Earthen berm; or,
- Any combination of these construction materials

2. Page 4.11-26 is hereby modified to reflect the changes made in the updated Noise Impact Analysis.

As shown on Table 4.11-7, *Existing Off-Site Project-Related Traffic Noise Impacts*, the Existing 2023 with Project will generate a noise level increase of up to 0.3~~4~~ dBA CNEL on the study area roadway segments. Based on the significance criteria for off-site traffic noise impacts, the Project-related noise level increases are considered less than significant under Existing plus Project conditions at the land uses adjacent to roadways conveying Project traffic. Table 4.11-8, *Opening Year Off-Site Project-Related Traffic Noise Impacts*, shows that the Opening Year Project off-site traffic noise level increases of up to 0.2~~4~~ dBA CNEL. Based on

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the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated Opening Year Project-related traffic noise levels.

Table 4.11-9, *General Plan Buildout Off-Site Project-Related Traffic Noise Impacts*, shows that the General Plan Buildout Project off-site traffic noise level with the Project increases of up to 0.2~~3~~ dBA CNEL. Based on the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated General Plan Buildout Project-related traffic noise levels with the Project.

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3. Page 4.11-27 is hereby modified to reflect the changes made in the updated Noise Impact Analysis.

Table 4.11-7 Existing Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o[4] Los Alamitos Blvd.	Sensitive	71.6	71.8	0.2	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4	71.6	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4	70.6 ~~70.7~~	0.2~~0.3~~	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8	70.1	0.3	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8	70.1~~70.2~~	0.3~~0.4~~	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8	70.1	0.3	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8	70.0	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0	70.2	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3	70.5~~70.6~~	0.2~~0.3~~	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	69.3~~69.4~~	0.0~~0.1~~	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1	69.2~~69.5~~	0.1~~0.4~~	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9	69.0	0.1	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	70.7~~70.8~~	0.1	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	70.7	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?
[4] Refers to the direction of the roadway segment (i.e. e/o = east of, n/o = north of, s/o = south of).

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4. Page 4.11-28 is hereby modified to reflect the changes made in the updated Noise Impact Analysis.

Table 4-2 Table 4.11-8 Opening Year Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o[4] Los Alamitos Blvd.	Sensitive	73.0~~72.3~~	73.2~~72.4~~	0.2~~0.1~~	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.2~~72.0~~	72.4~~72.2~~	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.3~~71.0~~	71.5~~71.3~~	0.2~~0.3~~	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.8~~70.5~~	71.0~~70.8~~	0.2~~0.3~~	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	70.9~~70.6~~	71.1~~70.8~~	0.2	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.8~~70.5~~	71.0~~70.8~~	0.2~~0.3~~	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.8~~70.5~~	71.0~~70.8~~	0.2~~0.3~~	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	71.0~~70.7~~	71.2~~70.9~~	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.3~~71.1~~	71.5~~71.3~~	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	70.2~~69.7~~	70.3~~69.8~~	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	70.2~~69.4~~	70.2~~69.8~~	0.0~~0.4~~	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	70.1~~69.5~~	70.1~~69.6~~	0.0~~0.1~~	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.6~~71.2~~	71.6~~71.2~~	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.5~~71.1~~	71.5~~71.1~~	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?
[4] Refers to the direction of the roadway segment (i.e. e/o = east of, n/o = north of, s/o = south of).

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5. Page 4.11-29 is hereby modified to reflect the changes made in the updated Noise Impact Analysis.

Table 4.11-9 General Plan Buildout Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]					Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				Existing	No Project	With Project	Cumulative Increase	Cumulative Contribution~~Project Addition~~		Limit	Exceeded?
1	Lampson Ave.	e/o[4] Los Alamitos Blvd.	Sensitive	71.6	73.0~~72.7~~	73.2~~72.8~~	1.6	0.2~~0.1~~	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4	72.2	72.4	1.0	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4	71.3~~71.2~~	71.5	1.1	0.2~~0.3~~	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8	70.8~~70.7~~	71.0	1.2	0.2~~0.3~~	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8	70.9~~70.8~~	71.1~~71.0~~	1.3	0.2	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8	70.8~~70.7~~	71.0	1.2	0.2~~0.3~~	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8	70.8~~70.7~~	71.0~~70.9~~	1.2	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0	71.0~~70.9~~	71.2~~71.1~~	1.2	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3	71.3	71.5	1.2	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	70.2	70.3	1.0	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1	70.2~~70.1~~	70.2	1.1	0.1	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9	70.1~~70.0~~	70.1~~70.0~~	1.2	0.0	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	71.6	71.6	0.9	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	71.5	71.5	0.8	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?
[4] Refers to the direction of the roadway segment (i.e. e/o = east of, n/o = north of, s/o = south of).

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Section 4.12 Population and Housing

1. Page 4.12-10 is hereby modified due to typographical error.

   The jobs-housing ratio is a general measure of the number of jobs versus housing in a defined geographical area and the recommended target is 1.0. As shown in Table 4.12-5, above, the City is "jobs-rich" and at a ratio of 3.4 jobs/housing, it is currently well above the target ratio. At Project buildout, the Project's addition of ~~647~~247 units would be expected to beneficially affect the City's jobs- housing balance, by increasing more housing to the City and reducing the jobs-housing ratio from 3.33 to 3.17 at Project buildout (see Table 4.12-5).

Section 4.13 Public Services

1. Page 4.13-15 is hereby modified for clarification purposes.

   As discussed in Section 4.14, Recreation, cumulative development will increase the demand in parks and recreational facilities. Recreational needs of future residents of the Project would add to citywide and regional demand for park and recreational facilities. As discussed in Section 4.14, Recreation, Project impacts to recreation would be less than significant. As shown in Table 4.14-1, there is a total of 317.49 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 389.02 acres of park and recreational facilities in the City and its SOI. Pursuant to the City's General Plan Update EIR, Table 5.10-2, buildout of the General Plan (14,204 residents in the City and 10,540 residents in Rossmoor) would be accommodated by the existing parkland in the City and its SOI and no significant impacts would occur related to the physical deterioration of recreational facilities. Therefore, with the increase of projected population in 2027 at Project buildout, there is sufficient parkland and recreational facilities to serve City residents. The Project would not cumulatively contribute to deterioration of recreational facilities or the construction of recreational facilities which might have an adverse physical effect on the environment.

Section 4.14 Recreation

1. Page 4.14-10 is hereby modified for clarification purposes.

   The recreational needs of future residents of the proposed Project would add to citywide and regional demand for park and recreational facilities, which could contribute to a deterioration of recreational facilities. As shown in Table 4.14-1, there is a total of 316.83 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 351.88 acres of park and recreational facilities in the City and its SOI available to meet the needs of City residents. To determine the cumulative public park and recreational impacts, citywide growth forecasts were considered. As shown in Table 4.12-6, *Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos*, the projected population at Project buildout, combined with related projects in the City, would be 13,806 by 2027. Pursuant to the City's General Plan Update EIR, Table 5.10-2, the buildout of the General Plan (14,204 residents in the City and 10,540 residents in Rossmoor) would be

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accommodated by the existing parkland in the City and its SOI and no significant impacts would occur related to the physical deterioration of recreational facilities. Therefore, with the increase of projected population in at Project buildout, there is sufficient parkland and recreational facilities to service city residents. The Project would not cumulatively contribute to deterioration of recreational facilities or the construction of recreational facilities which might have an adverse physical effect on the environment.

Section 4.15 Transportation

1. Page 4.15-1 is hereby modified as follows in Response to Comment F-3.

   As shown in Figure 4.15-1, *Existing Transit Routes*, ~~the Project site is currently served by the~~ Orange County Transportation Authority (OCTA) ~~with~~ currently provides bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). OCTA route 42 runs along Seal Beach Boulevard and serves Seal Beach to Orange with an existing stop provided at the intersection of Seal Beach Boulevard and Lampson Avenue ~~Katella Avenue and Los Alamitos Boulevard~~. The existing stop is approximately 1.6~~3.5~~ miles ~~walking distance~~ from the Project site. Bus service frequency is approximately 20-minute intervals during the peak commute hours and 40 minutes during other times of the day during a typical weekday. OCTA Route 123 serves the city of Anaheim to city of Huntington Beach via Malvern Avenue, Valley View Street, and Bolsa Chica. There are existing stops along Valley View Street with an existing stop at Chapman Avenue. The nearest OCTA Route 123 existing stop is located approximately 1.2~~1.6~~ miles ~~walking distance~~ from the Project site to the intersection of Lampson~~Champman~~ Avenue and Valley View Street. Bus service frequency is approximately 60-minute intervals on a typical weekday for OCTA Route 123.

2. Page 4.15-13 is hereby modified as follows in Response to Comment F-4.

Policy 4.7 **Transit stops.** Improve and maintain safe, clean, comfortable, well-lit, and rider friendly transit stops that are well marked and visible to motorists.	**Not Applicable.** The nearest OCTA Route 123 bus stop from the Project site is approximately 1.2~~1.6~~ miles walking distance at the intersection of Valley View Street and Lampson~~Champman~~ Avenue. The nearest OCTA Route 42 bus stop from the Project site is approximately 1.6~~3.5~~ miles walking distance at the intersection of Seal Beach Boulevard and Lampson Avenue.~~Katella Avenue and Los Alamitos Boulevard~~ Therefore, this policy is not applicable to the Project.

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3. Page 4.15-15 is hereby modified due to typographical error.

The Project includes 77 affordable housing units, which generate vehicle trips at a lower rate per unit as compared to market rate housing. As the reduction in trips and associated VMT could not be accurately accounted for by the calculations conducted using the OCTAM model, these adjustments are made through calculations as described in the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2021) Specifically, "Land Use – T-4. Integrate Affordable and Below Market Rate Housing"; requires multifamily residential units to be permanently dedicated as affordable for lower income families. Additionally, the Project's parking supply will be limited to 577 parking spaces, which is 12 parking spaces below the 589 parking spaces required by the lead agency. This would reduce project-generated VMT by 0.28% or 39 VMT. This results in a Project generated VMT of 12,55912,598 in the baseline condition and 12,17412,213 in the cumulative condition as shown in Table 4.15-2.

Section 4.17 Utilities and Service Systems

1. Page 4.17-12 is hereby modified as follows to reflect the changes made in the updated Sewer Sanitary Analysis.

For the sewer monitoring analysis, flow monitoring was conducted under the existing conditions of the three manholes from August 23, 2022 to September 5, 2022: 1) Basswood and Aster Street (Manhole B03-A-16); 2) Candleberry Avenue and Aster Street (Manhole B06-A-21); and 3) Elder Avenue (Manhole B08-A-25). However, the monitored manholes by CVC showed a lower flow average than the monitoring flows conducted AKM Consulting Engineers (AKM) who prepared the City of Seal Beach Sewer Master Plan. Therefore, using the results from AKM, ratios were used from the flow monitored averages to calculate the flows for all reaches upstream of the monitored manholes. For reaches downstream of the monitored manholes, the delta flow value was added to the last monitored manholes to calculate the flow for the remaining reaches. ~~The existing Project site peak flow was subtracted from the projected Project site flow. The delta flow was then added to the existing monitored peak flows to obtain the proposed development conditions.~~ (C&V, 20242022)

2. Pages 4.17-17 is hereby modified as follows to reflect the changes made in the updated Sewer Sanitary Analysis.

Although the Project site is in the City of Los Alamitos, sanitary sewer services are currently provided by and will be provided by the City of Seal Beach. Per the City of Seal Beach Sewer Master Plan 2018, the City provides sewer service throughout the City in a service area that collects and conveys wastewater from the service area for treatment by the OCSD.

A Sanitary Sewer Analysis was prepared for the Project and investigates the sewer discharge route for the proposed development to the existing sewer mains of three manholes: 1) Basswood and Aster Street (Manhole B03-A-16); 2) Candleberry Avenue and Aster Street (Manhole B06-A-21); and 3) Elder Avenue (Manhole B08-A-25). (C&V, 20242022)

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3. Page 4.17-19 is hereby modified as follows to reflect the changes made in the updated Sewer Sanitary Analysis.

4. Sanitary Sewer Update

A revised Sanitary Sewer Analysis (*Attachment M* of the FEIR) was prepared in response to comment from the City of Seal Beach. A Sewer Demand Memorandum (*Attachment L* of the FEIR) was prepared to address the updates in the sanitary sewer analysis and respond to comments on the DEIR related to the Old Ranch Country Club.

The City of Seal Beach's updated Sewer Master Plan (September 2022) identified the sewer loads for potential development areas within the City of Seal Beach. Those sewer loads are summarized in Table 1 of that Sewer Master Plan. The Old Ranch Country Club is listed as Site B-5, and it is identified as comprising 150 acres, five of which are indicated as "redevelopment area," with a potential for 120 dwelling units and a sewer load of 19,200 gallons per day (gpd).

Since 2022, the proposed development of the Old Ranch Country Club Project has been further refined, and as of January 2023 now includes more than the residential component identified in Table 1 of the Sewer Master Plan. Per the Initial Study dated February 7, 2023, prepared to support the Old Ranch Country Club Specific Plan, the anticipated redevelopment area has increased from 5 acres to approximately 35 acres over the existing site, and includes a 116-unit multi-family housing development, a 51-unit senior housing complex including an approximately 25,340 square foot medical office facility on the ground floor, a 150-key overnight accommodation, an approximately 2,650 square foot relocated maintenance facility, a parking structure, and a new clubhouse pool and associated structures (21,000 square feet) abutting the existing clubhouse.

This more refined development proposal for the Old Ranch Country Club project would result in an increase in the sewer demand by approximately 32,246 gpd, totaling 51,626 gpd (see *Attachment L* of the FEIR).

The revised Sanitary Sewer Analysis, prepared in March 2024 (*Attachment M* of the FEIR), used sewer system model data provided by the City of Seal Beach (AKM's City wide sewer study). The data was based on an area calculation method which indicated there are 16 sewer segments shown to have a d/D level above 0.5. Because the area calculation is used to calculate flows for large areas and is not necessarily representative of actual flows, actual monitored flows were determined and evaluated. Using the actual monitored flows indicated that there are only 7 segments estimated to exceed the City's peak dry weather flows (PDWF) d/D criteria after the proposed project is implemented. The remaining capacity above a PDWF d/D of 0.50 is reserved for wet weather flows. Flows over the d/D criteria range from 0.51 to 0.55 and represent approximately 56% of the pipe's flow capacity, which is well within the capacity of the downstream sewer lines.

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No additional pipe segments in the AKM study were found to be undersized. The nine (9) segments that were found to be undersized in AKM's study were determined to be acceptable after analysis using the actual monitored flows. The d/D levels are shown to be higher because the existing segments have flat slopes, ranging from 0.16% - 0.22%. However, the pipe size can handle proposed flow levels, and sewer pipe upgrades are not required.

To evaluate a potential increase in the flow depth to pipe diameter ratio (d/D) based on the increase in total demand associated with the further refined Old Ranch Country Club project and after taking into consideration the amount of sewer discharge associated with the Project, C&V Consulting, Inc. applied the increase in total demand from the further refined Old Ranch Country Club Project to manhole (MH) IDs B03-A14 and B01-A13 through B01-A02A, as shown in *Attachment L* of the FEIR. These manholes and their associated pipeline segments are located downstream of the three manholes that were monitored for the Project and as such include the upstream sewer flows anticipated by the Project and currently existing development. As shown in *Attachment L* of the FEIR, the overall d/D is anticipated to be less than 0.5 for the identified segments with the increased demand added to the system. This means that when the sewer flows from the further refined Old Ranch Country Club Project are added to the sewer flows from the Project based on the downstream monitored manhole flows, the depth of flow to pipe diameter ratio is less than 50%. This in turn means that even with the Old Ranch Country Club Project, the sewer pipe system capacity remains capable of maintaining an adequate flow well below 50% of its flow depth capacity. As such, adequate capacity exists to serve the Project's projected demand in addition to the sewer pipe systems existing commitments, even after taking into account the further refined Old Ranch Country Club project. The anticipated d/D increase determined from the 4665 Lampson Avenue Project plus the Old Ranch Country Club Project is approximately 2.6-3.4%, which is considered negligible.

As a result, the proposed flows from the Project, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems, and that the existing sewer system has adequate capacity for the proposed development. Accordingly, impacts would be less than significant and no mitigation is required.

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Section 5.0 Other CEQA Considerations

1. Page 5-3 is hereby modified due to typographical error.

   Because no significant non-renewable natural resources occur within the Project site, the Project would also not reduce the availability of any non-renewable natural resources associated with long-term operational activities. Accordingly, the Project would not result in a significant, irreversible change to the environment related to energy use.

Attachments

The following technical appendices have been updated and do not contain new significant information or change the findings of the Draft EIR. The updated technical appendices further support the conclusions in the Draft EIR and do not present any new or substantially more severe impacts, which were not previously disclosed. These technical appendices are incorporated herein as Attachments B, C, E – G, and M of this Final EIR:

- B, VMT Analysis
- C, Updated Phase I Environmental Site Assessment
- E, Updated Hydrology and PWQMP
- F, Updated Noise Impact Analysis
- G, Traffic Analysis
- M, Updated Sewer Analysis

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Attachment A

Comment Letters 16 & 17 Attachments

DRAFT

Attachment B

VMT Analysis

DRAFT

Attachment C

C1, Updated Phase II Environmental Site Assessment Slip Sheet & C2, EFI Technical Memorandum

DRAFT

Attachment D

Nick Johnson Resume

DRAFT

Attachment E

E1, Updated Hydrology Study & E2, PWQMP

DRAFT

Attachment F

Updated Noise Impact Analysis

DRAFT

Attachment G

Traffic Analysis

DRAFT

Attachment H

Safety Evaluation

DRAFT

Attachment I

Shade and Shadow Study

DRAFT

Attachment J

Fire Master Plan & Fire Flow

DRAFT

Attachment K

Will-Serve Letters

DRAFT

Attachment L

Old Ranch Country Club Sewer Demand Calculations

DRAFT

Attachment M

Updated Sewer Analysis

DRAFT

Attachment N

Historic Research for Moon Trees

Attachment O

Mitigation Monitoring and Reporting Program

DRAFT

"ATTACHMENT X"

Findings of Fact and Statement of Overriding Considerations for:

4665 Lampson Avenue

State Clearinghouse No. 2022090476

Lead Agency
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

CEQA Consultant
T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

Lead Agency Discretionary Permits
Site Development Permit – Major
Tentative Parcel Map No. 2022-113
Vesting Tentative Tract Map No. 19263
Affordable Housing Unit Application–
for Density Bonus Law Request, Concessions and Waivers

September 17, 2024

"ATTACHMENT X"

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1.0 INTRODUCTION AND PURPOSE

The 12.3-acre Project site, as described under Section 1.2.1 below, is in the City of Los Alamitos, Orange County. The City of Los Alamitos (the "City") in approving the 4665 Lampson Avenue Project (the "Project") makes the Findings described below. The Findings are based upon the entire record before the City, as described in Subsection 1.3, below, including but not limited to the Environmental Impact Report ("EIR") prepared for the Project with the City acting as lead agency under the California Environmental Quality Act ("CEQA").

Hereafter, the Notice of Preparation ("NOP"), Notice of Availability ("NOA"), Draft EIR ("DEIR"), Technical Studies, and Final EIR ("FEIR") (containing responses to public comments on the DEIR and textual revisions to the DEIR), will be referred to collectively herein as the "EIR" unless otherwise specified.

1.1 FINDINGS REQUIRED UNDER CEQA

Public Resources Code Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" The statute also provides that the procedures required by CEQA are "intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects." Finally, Section 21002 indicates that "in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

The mandate described in Public Resources Code Section 21002 is implemented, in part, through the requirement that for projects with one or more significant environmental effects, agencies must adopt written findings before approving projects for which EIRs are required. For each significant environmental effect identified in an EIR for a project, the approving agency must issue a written finding reaching one or more of three permissible conclusions. The first such finding is that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR. The second finding is that such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding, and that such changes have been adopted by such other agency or can and should be adopted by such other agency. The third finding is that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR (CEQA Guidelines Section 15091(a)). Public Resources Code Section 21061.1 defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." As stated in CEQA Guidelines Section 15093(a), "[i]f the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered `acceptable.'"

1.2 PROJECT SUMMARY

1.2.1 SITE LOCATION

The 12.3-acre Project site is in the City of Los Alamitos, Orange County, California. The City of Los Alamitos (City) is in the northwestern corner of Orange County, bordering the county lines of Orange and Los Angeles. The City is located east of the city of Long Beach, southwest of the city of Cypress, west of the city of Garden Grove, and north of the city of Seal Beach. The Project site is located approximately 0.47-mile north of I-405/State Route 22 (SR-22), approximately 0.83-mile northwest of SR-22, and approximately 2.36 miles east of I-605. Regional access to the Project site is provided from Seal Beach Boulevard via I-405, I-605, and SR-22 Freeways and Valley View Steet via I-405 and SR-22. At the local scale, the Project site is located north of and adjacent to Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street. The legal address for the Project site is 4665 Lampson Avenue, Los Alamitos, CA 90720, and the Project site's Assessor Parcel Number (APN) is 130-012-35.

1.2.2 PROJECT OVERVIEW

The Project Applicant, Lampson Park Place, LLC, proposes to redevelop the Project site with a residential development consisting of a variety of housing product types, including single family detached homes, townhomes, and apartments. The unit mix proposes 55 single family detached homes, 114 townhomes, and 76 for rent affordable multi-family apartment units, as well as one for rent market rate manager's apartment unit. The Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the 441 parking spaces that would be required pursuant to the State's Density Bonus Law.

1.2.3 PROJECT OBJECTIVES

The underlying purpose of the Project is to redevelop the site with a residential community that will serve the City of Los Alamitos. The following is a list of specific objectives that the proposed Project is intended to achieve.

A. Provide residential development consistent with the City's General Plan, including the 2021-2029 Housing Element, to help meet the City's RHNA requirement.

B. Provide a variety of housing types and affordability (for lower income and above moderate income households) that satisfies the residential market and accommodates increased demand for housing.

C. Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.

D. Improve the City's jobs housing balance to support reduced commute distances consistent with the Southern California Association of Governments' Connect SoCal.

E. Create a residential character that provides for a high quality architectural design.

1.2.4 CITY OF LOS ALAMITOS ACTIONS COVERED BY THE EIR

The following discretionary and administrative actions are required of the City, as Lead Agency, to implement the Project. The EIR prepared for the Project covers all discretionary and administrative approvals which may be needed to construct or implement the Project, whether or not they are explicitly listed. They include:

- Site Development Permit – Major;
- Tentative Parcel Map (for finance and conveyance purposes);
- Vesting Tentative Tract Map (for Condominium Purposes); and
- Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions pursuant to the State's Density Bonus Law (Government Code Section 65915) and the City's Municipal Code Section 17.28.050.

1.2.5 APPROVALS FROM OTHER AGENCIES

The California Public Resource Code (Section 21104) requires that all EIRs be reviewed by responsible and trustee agencies (see also CEQA Guidelines Section 15082 and Section 15086(a)). As defined by CEQA Guidelines Section 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A "Trustee Agency" is defined in CEQA Guidelines Section 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

The anticipated agencies expected to use the EIR are described below. However, the EIR can be used by any Responsible or Trustee Agency, whether identified in the EIR or not, as part of their decision-making processes in relation to the Project.

Public Agency	Approvals and Decisions
City of Los Alamitos	
Proposed Project – City of Los Alamitos Discretionary Approvals	
City of Los Alamitos	• Certify the Project's EIR and adopt the Mitigation Monitoring and Reporting Program, , Findings and Statement of Overriding Considerations. • Approval of a Site Development Permit - Major • Approval of Tentative Parcel Map No. 2022-113 • Approval of Vesting Tentative Tract Map No. 19263

Public Agency	Approvals and Decisions
	• Approval of Affordable Housing Unit Application for Density Bonus Request, Concessions, and Waivers
Subsequent City of Los Alamitos Discretionary and Ministerial Approvals	
City of Los Alamitos Subsequent Implementing Approvals	• Approval of Landscaping/Irrigation Plan • Issuance of Demolition Permits • Issuance of Grading Permits • Issuance of Building Permits • Approval of Road Improvement Plans • Issuance of Encroachment Permits • Approval of Infrastructure Plans • Approval of public right-of-way dedications • Approval of Water Quality Management Plan • Approval of connections to the municipal sewer system
Responsible Agencies – Approvals and Permits	
City of Seal Beach	• Issuance of Public Works Permit (encroachment permit) for infrastructure improvements within the Lampson Ave. right-of-way. • Agreement of Franchise Facilities between Golden State Water Company (GSWC) and the City of Seal Beach for water service. • Agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach for Inter-Jurisdictional Wastewater Services. • Approval of stormwater discharge/conveyance. • Approval of a Water Quality Management Plan • Approval of infrastructure plans directly/indirectly related to Seal Beach
Regional Water Quality Control Board (RWQCB)	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit.
Rossmoor Los Alamitos Area Sewer District.	• Issuance of a Sewer Connection Permit • Agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach for Inter-Jurisdictional Wastewater Services.
South Coast Air Quality Management District	• Issuance of permits that allow for the construction and operation of the Project.
JFTB	• Issuance of encroachment permit for stormwater improvements.
GSWC	• Agreement of Franchise Facilities between GSWC and the City of Seal Beach for water service.

1.3 ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

The City conducted an extensive environmental review of the Project to ensure that the City's decision makers and the public are fully informed about the potential significant environmental effects of the Project; to identify ways that environmental damage can be avoided or significantly reduced; and to prevent significant, avoidable damage to the environment by requiring changes in the Project using mitigation measures which have been found to be feasible. To do this, the City, acting as Lead Agency under CEQA, undertook the following:

- Circulated a Notice of Preparation (NOP) to the California Office of Planning and Research (the "State Clearinghouse"), Responsible Agencies, Trustee Agencies, and other interested parties on September 26, 2022, for a 30-day review period between October 3, 2022 and November 2, 2022;

- The NOP was posted on the City's website and City of Los Alamitos Planning Division on September 26, 2022;

- The NOP was posted at the Orange County Clerk's office on September 26, 2022;

- Published the NOP in the Event News Enterprise, which is the newspaper of general circulation in the area affected by the Project, on September 21, 2022;

- Held a publicly noticed EIR Scoping Meeting in the City Council Chamber of the City of Los Alamitos, and open to public attendance on October 20, 2022, to solicit comments from the public on the environmental issue areas that should be analyzed in the EIR;

- Sent a Notice of Availability (NOA) and Notice of Completion (NOC) and electronic copies of the DEIR to the California Office of Planning and Research, State Clearinghouse, on April 24, 2024;

- Mailed via certified mail a copy of the NOA to all Responsible Agencies, Trustee Agencies, and other interested parties and organizations to inform recipients that the DEIR was available for a 45-day review period beginning on April 24, 2024, and ending on June 10, 2024;

- The NOA was posted on the City's website and at the Orange County Clerk's office on April 24, 2024;

- Published the NOA in the Event News Enterprise, which is the newspaper of general circulation in the area affected by the Project, on May 1, 2024;

- The DEIR was posted on the City's website at https://cityoflosalamitos.org/203/Planning-Commission-Projects during the public review period for the DEIR;

- Prepared responses to comments on the DEIR received during the 45-day comment period on the DEIR, which have been included in the FEIR;

- Provided the FEIR, including individual responses to agencies that commented on the DEIR in the Staff Report for Planning Commission on September 18, 2024; and

- Held a Planning Commission hearing on September 25, 2024;

The Record of Proceedings for the Project consist of those items listed in CEQA Section 21167.6(e), along with other items contained within the City's files that are relevant to the consideration of the Project. The Record of Proceedings for the City's decision on the Project consists of the following documents, at a minimum and without limitation, which are herein incorporated by reference and made part of the record supporting these Findings:

- The NOP, NOA, and all other public notices issued by the City in conjunction with the Project;

- The DEIR for the Project and all technical appendices and documents cited, relied upon or incorporated by reference;

- All written comments submitted by agencies, organizations, or members of the public during the public review comment period on the DEIR and the City's responses to those comments;

- The DEIR for the Project and all technical appendices and documents cited, relied upon or incorporated by reference;

- The Mitigation Monitoring and Reporting Program for the Project;

- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by the City or consultants to the City with respect to the City's compliance with the requirements of CEQA and with respect to the City's action on the Project;

- All documents submitted to the City by public agencies, organizations or members of the public in connection with the DEIR;

- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the City in connection with the Project;

- Any documentary or other evidence submitted to the City at such information sessions, public meetings, and public hearings;

- All findings and resolutions adopted by the City regarding the project, all documents, cited or referred to therein and all staff reports, analyses, and summaries related to the adoption of those resolutions;

- Matters of common knowledge to the City, including, but not limited to federal, state, and local laws and regulations;

- Any documents expressly cited in these Findings, in addition to those cited above; and any other materials required for the record of proceedings by CEQA Section 21167.6(e).

All the documents identified above and all the documents which constitute the Record of Proceedings for the City's actions related to the Project pursuant to Public Resources Code Section 21167.6(e) are located at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720. Questions should be directed to Tom Oliver, Associate Planner.

2.0 ENVIRONMENTAL IMPACTS AND FINDINGS

The EIR was prepared by T&B Planning, Inc., a professional consulting firm. The professional qualifications and reputation of the EIR Consultant, the supervision and direction of the EIR Consultant by City staff and its peer review consultants, the thorough and independent peer review of the EIR, including comments and responses by City staff and its consultants, and the review and careful consideration of the EIR by the City, including comments and responses; all demonstrate that the EIR is the product of and reflects the independent judgment and analysis of the City as the Lead Agency.

Based on the NOP, *Technical Appendix A* to the DEIR, and the responses of the NOP, the EIR analyzed 17 potential areas where significant environmental impacts could result from implementation of the Project. These environmental topics were analyzed in the EIR and include aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems.

Having received, reviewed, and considered the information in the DEIR, as well as any and all other information in the record, the City hereby makes findings pursuant to and in accordance with CEQA Sections 21081, 21081.5, and 21081.6.

3.0 ENVIRONMENTAL IMPACTS NOT REQUIRING MITIGATION

The City hereby finds that the following potential environmental impacts associated with the implementation of the Project are less-than-significant and therefore do not require the imposition of mitigation measures.

3.1 AESTHETICS

Project impacts for Aesthetics do not result in significant impacts, and related findings are discussed below.

3.1.1 THRESHOLD A

Impact Statement: The Project would not have a substantial adverse effect on a scenic vista.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in Section 4.1.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site is located in the southwestern portion of the City immediately north of Lampson Avenue. The Project site is not adjacent to or bounded by Katella Avenue and Los Alamitos Boulevard, which are identified as scenic corridors for the City and provide distant scenic views to the San Gabriel, San Bernardino, and San Jacinto Mountains. The City's General Plan does not designate any other scenic resources within the City and does not identify the Project site as a scenic resource nor Lampson Avenue as a scenic corridor. (DEIR, p. 4.1-8)

The Project site is currently occupied by a vacant two-story, 88,000 sf commercial office building, surface parking lot, ornamental landscaping and open space. Overall, the Project site is relatively flat and provides distant, partially obstructed views of the San Gabriel Mountains from Lampson Avenue. Views of the San Gabriel Mountains from Lampson are not panoramic and do not provide a focal view (visual access to a particular object, scene, or feature of interest) of the landform. (DEIR, pp. 4.1-8 to 4.1-9)

The Project would demolish the existing building and surface parking lot and remove all ornamental trees on-site. The Project would result in the redevelopment of the Project site with two- and three-story residential buildings and extensive landscaping. The maximum building height for the Project is approximately 41 feet with the typical single family dwelling ranging from 25.9 feet to 36 feet in height, typical townhomes are approximately 35.5 to 37 feet in height, and typical multi-family ranging approximately 37 to 39 feet in height. As shown on DEIR Figure 3-18, a variety of trees, shrubs, accent plants, and ground cover are proposed along the perimeter of the Project site, in common areas, recreational amenities, open space areas, and parking areas. A total of 441 trees, including 51 36" box

focal trees, 190 15-gallon trees, 5 10 x10'specimen canopy trees, and 195 24/36" box trees, would be planted throughout the Project site. (DEIR, p. 4.1-9)

DEIR Figure 4.1-2, *Visual Renderings on Lampson Looking Northeast*, and DEIR Figure 4.1-3, *Visual Renderings on Lampson Looking Northwest*, provide visual simulations of the proposed Project from Lampson Avenue based on the existing conditions of the Project site. As shown in DEIR Figure 4.1-2, the multi-family units would be located along the western edge of the Project site and a wall would be constructed along the Project's perimeter. DEIR Figure 4.1-3 depicts the proposed single-family homes from the southeastern corner of the Project site. Upon implementation of the Project, views of the townhomes and cluster homes from Lampson Avenue would consist of the three-story buildings, street trees, shrubs and groundcover. The Project would be attractive and of quality design, and provide visual interest through varied architectural detailing, including but not limited to building massing, heights, building materials, and decorative features. Architectural materials include vertical siding, composite shingle roof, stucco light sand finish, faux wood trim, decorative faux vent, barge board, decorative gable end outlooker, vinyl windows, wood railing, stone veneer, decorative fiberglass entry door, and metal utility door. Refer to DEIR Figures 3-12, 3-13, and 3-14 for a complete list of the materials. (DEIR pp. 4.1-9 to 4.1-10)

In the existing condition, views of the San Gabriel Mountains from Lampson Avenue are partial and distant, and obscured by existing mature ornamental trees and the vacant commercial office building, Arbor Park, Navy Golf Course. The Project site is not part of a designated scenic vista. The Project development would block the partial and distant views of the San Gabriel Mountains from Lampson Avenue along the Project frontage. However, redevelopment of the Project site would not result in a substantial adverse effect on a scenic vista, because background views of the San Gabriel Mountains are distant and limited due to existing development and landscaping and the Project site is not considered to be part of a designated scenic vista. Therefore, impacts would be less than significant. (DEIR, p. 4.1-10)

3.1.2 THRESHOLD B

Impact Statement: The Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 4.1.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts with respect to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site does not contain any special or unique scenic attributes, such as rock outcroppings, native vegetation, or historic buildings. The Project site does contain a number of ornamental trees onsite that will be removed and replaced. As shown in DEIR Figure 3-18, *Landscape Plan*, a total of 441 replacement trees would be planted throughout the Project site. (DEIR, p. 4.1-10)

The Project site is not located near any designated State scenic highways. The closest State-eligible highway is State Route 1 (SR-1) located approximately 3.8 miles southwest of the Project site. Due to distance and intervening topography and development, the Project site is not visible from SR-1. Accordingly, implementation of the Project would not adversely impact the scenic resources within a State scenic highway corridor. No impact would occur. (DEIR p. 4.1-10)

3.1.3 THRESHOLD C

Impact Statement: The Project would not, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings. The Project would not, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in Section 4.5-1 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site is located in an area that meets the U.S. Census Bureau's definition of an "urbanized area" and is planned for urban uses by the City General Plan; therefore, for purposes of evaluation herein, the Project is considered to be located in an urbanized area. The following discussion analyzes the Project's potential to conflict with applicable zoning and other regulations governing scenic quality. (DEIR, p. 4.1-10)

The Project would result in construction activities that would temporarily change the visual character of the Project site and its surroundings. Construction activities would involve demolition, grading and site clearing activities and building and site improvements. Construction staging areas on the Project site, including earth stockpiling, storage of equipment and supplies, and related activities would contribute to a generally "disturbed site," which may be perceived by some as a visual impact. Construction activities would occur over an approximate three-year timeframe with first occupancy occurring approximately one year following Project approval. Construction activities may be unsightly during the site preparation and construction phases; however, they are not considered significant because they are temporary in nature and would not conflict with zoning or other regulations governing scenic quality. Additionally, as a condition of approval, prior to the start of any construction activities, temporary construction chain link fencing with a privacy screen approximately eight feet in height would be erected to secure the site and shield the construction areas and public views. (DEIR, p. 4.1-13)

The Project-applicable goals and policies and a discussion of the Project's potential to conflict with applicable General Plan policies with the purpose of avoiding or mitigating an environmental effect related to aesthetics are discussed in DEIR Section 4.10, *Land Use and Planning*, Table 4.10-2, *General Plan Consistency Analysis*. As shown, the Project would not conflict with General Plan policies governing scenic quality. (DEIR, p. 4.1-13)

The Project's design, including the site layout, architecture, and landscaping is discussed and illustrated in detail in DEIR Section 3.0, *Project Description*. The Project site's underlying zoning classification is Multi-Family Residential Zone (R-3). DEIR Table 4.1-1, *Zoning Development Standards Consistency Analysis*, discusses the Project's consistency with the development standards provided within Los Alamitos Municipal Code (LAMC) Chapter 17.08.030 (Development Standards in Residential Zones).

Buildout of the Project would change the existing visual character of the site from a two-story, 88,000 sf commercial office building to a two- to three-story residential development consisting of 246 units. As shown in DEIR Figures 4.1-2 and 4.1-3, the Project would be attractive and of quality design and visually compatible with the existing residential and park uses in the Project site's vicinity. Additionally, as shown in DEIR Table 4.1-1, the Project would be compliant with the zoning development standards and City requirements pertaining to scenic quality. Accordingly, the Project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant. (DEIR, p. 4.1-18)

3.1.4 THRESHOLD D

Impact Statement: The Project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

❑ Findings

Potential impacts of the Project related to Threshold d are discussed in Section 4.5.1 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold d; therefore, no mitigation is required.

❑ Substantial Evidence

Currently, the Project site is developed with a use that previously produced artificial light. The Project would redevelop the Project site with residential uses which would produce artificial light. The Project would be required to adhere to the light and glare requirements as set forth in the LAMC (Chapter 8.48 - Lighting Performance Standards and Section 17.24.040 Light and Glare). Chapter 8.48 addresses the visual impacts of exterior lighting on adjacent property owners and neighborhoods. The chapter outlines guidelines for the design, scale, location, and illumination level of lighting fixtures. The guidelines aim to reduce light trespass and prevent glare. Section 17.24.040 would require shielding of light sources to reduce impacts on surrounding land uses. The City would confirm compliance with applicable lighting requirements during future review of building permit applications/plans. Mandatory compliance with LAMC Chapter 8.48 and Section 17.24.040 would ensure that the Project would not introduce any permanent design features that would adversely affect day or nighttime views in the area. Thus, light and glare impacts from the Project would be less than significant. (DEIR, p. 4.1-19).

3.1.5 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to aesthetics.

❑ **Findings**

Potential cumulative impacts of the Project related to aesthetics are discussed in detail in Section 4.1.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to aesthetics; therefore, no mitigation is required.

❑ **Substantial Evidence**

The CEQA Guidelines define a "cumulative impact" as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines § 15355). The Project's impacts to partial distant views of the San Gabriel Mountains, would be localized to the immediate Project site area and would not extend beyond the public viewing area that immediately abuts the Project site (Lampson Avenue). The views that would be affected only occur abutting the Project site and the Project site does not contain off-site components that could adversely affect scenic views that occur elsewhere in the City. (DEIR, p. 4.1-19)

As noted under the analysis of Threshold b, the Project site is not located within close proximity to any designated State scenic routes. Therefore, the Project has no potential to contribute to a cumulatively significant impact to scenic resources within a designated scenic route corridor. (DEIR, p. 4.1-19)

Under existing conditions, the area surrounding the Project site is entirely developed with residential land uses, the Los Alamitos Joint Forces Training Base (JFTB), Arbor Park, and the Navy Golf Course. There are portions of undeveloped land within the JFTB between and adjacent to its runways. However, these areas are not readily visible from elsewhere in the City and therefore do not have an existing substantial impact on the visual setting of other portions of Los Alamitos. No new or pending development projects are known to occur adjacent to the Project site. Accordingly, the Project would not contribute to cumulatively considerable impacts to local visual quality. Notwithstanding, as with the Project, any redevelopment in the surrounding area would be subject to applicable development regulation and design standards including, but not limited to the LAMC and General Plan. Mandatory compliance with applicable development regulations and design standards would ensure that development would incorporate high quality building materials, site design, and landscaping to preclude potential conflicts with applicable zoning and other regulations governing visual quality. (DEIR, p. 4.1-19)

With respect to potential cumulative light and glare impacts, the Project would be required to comply with LAMC Chapter 8.48 - Lighting Performance Standards and Section 17.24.040 Light and Glare. Development projects with artificial light sources in surrounding jurisdictions would be required to comply with the light reduction requirements applicable in their respective jurisdictions. Although cumulative development in the Project's surrounding area is expected to introduce new sources of lighting and potentially reflective materials, the required compliance with the applicable legal standard

and code requirements would ensure that future cumulative development does not introduce substantial sources of lighting or glare. As such, the Project would not contribute to cumulatively-considerable, adverse impacts to the existing daytime or nighttime views of the Project site or its surroundings. (DEIR, p. 4.1-20)

3.2 AGRICULTURAL AND FORESTRY RESOURCES

Project impacts for Agricultural and Forestry Resources do not result in significant impacts. Findings are discussed below.

3.2.1 THRESHOLD A

Impact Statement: The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 5.4.1 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

According to mapping information available from the California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP), the Project site is designated as Urban and Built-Up land and does not contain any Prime Farmland, Unique Farmland or Farmland. The nearest area of any FMMP significance is adjacent to the Project site, within the Los Alamitos JFTB. Given that the Project would not convert Prime Farmland, Unique Farmland, or Farmland, as shown on maps prepared pursuant to the FMMP, to non-agricultural use, no impact would occur. (DEIR, p. 5-7)

3.2.2 THRESHOLD B

Impact Statement: The Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 5.4.1 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site is currently zoned as "Multi-Family Residential (R-3)." The Project's implementation will not result in a loss of land zoned for agriculture. There are no farming activities occurring at the Project site. As discussed above, the Project site is designated as Urban and Built-Up land. As a result,

the Project will not conflict with existing agricultural zoning or Williamson Act contracts. No impact would occur. (DEIR, p. 5-7)

3.2.3 THRESHOLD C

Impact Statement: The Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).

❑ **Findings**

Potential impacts of the Project related to Threshold c are discussed in Section 5.4.1 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ **Substantial Evidence**

The Project site is located within the City of Los Alamitos and has a zoning designation of R-3. The Project site does not contain forest land. Therefore, the Project would not conflict with existing zoning for forest land or timberland. Accordingly, no impact would occur. (DEIR, p. 5-8)

3.2.4 THRESHOLD D

Impact Statement: The Project would not result in the loss of forest land or conversion of forest land to non-forest use.

❑ **Findings**

Potential impacts of the Project related to Threshold d are discussed in Section 5.4.1 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold d; therefore, no mitigation is required.

❑ **Substantial Evidence**

The Project site and surrounding areas do not consist of forest land. Therefore, the Project would not result in the loss of forest land or result in the conversion of forest land to non-forest use. Accordingly, no impact would occur. (DEIR, p. 5-8)

3.2.5 THRESHOLD E

Impact Statement: The Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

❑ Findings

Potential impacts of the Project related to Threshold e are discussed in detail in Section 5.4.1 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold e; therefore, no mitigation is required.

❑ Substantial Evidence

The Project would not result in changes in the environment which, due to their location and nature, could result in conversion of forest land to non-forest use. Accordingly, no impact would occur. (DEIR, p. 5-8)

3.3 AIR QUALITY

Project impacts for Air Quality do not result in significant impacts. Findings are discussed below.

3.3.1 THRESHOLD A

Impact Statement: The Project would not conflict with or obstruct implementation of the applicable air quality plan.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.2.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

In December 2022, the South Coast Air Quality Management District (AQMD) released the Final 2022 Air Quality Management Plan (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the National Ambient Air Quality Standards (NAAQS), as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements. The Project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below. (DEIR, p. 4.2-22)

Criteria for determining consistency with AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the 1993 CEQA Handbook. These indicators are discussed below:

- ***Consistency Criterion No. 1:*** *The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the*

timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 1 refers to violations of the California Ambient Air Quality Standards (CAAQS) and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significant thresholds were exceeded. As evaluated under Thresholds b and c below, the Project's localized and regional construction-source and operation-source emissions would not exceed applicable regional significance thresholds. As such, the Project is consistent with this criterion, and impacts would be less than significant. (DEIR, p. 4.2-22)

- ***Consistency Criterion No. 2:*** *The Project will not exceed the assumptions in the AQMP based on the years of project build-out phase.*

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by the applicable cities are provided to SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Los Alamitos General Plan is considered to be consistent with the AQMP. (DEIR, p. 4.2-22)

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, the Project is consistent with this criterion, and a less than significant impact would result. (DEIR, p. 4.2-22 to 4.2-23)

The City of Los Alamitos General Plan designates the Project site for "Multi-Family Residential-25" land uses. The "Multi-Family Residential-25" land use designation is defined as "single family detached and attached residences, including all development permitted in other residential categories as well as stacked flats and other building types with 4 or more units. Other uses such as convalescent hospitals, churches, and mobile home parks are also permitted subject to special procedures. (DEIR, p. 4.2-23)

The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 76 affordable apartment dwelling units, as well as one market rate manager's unit (total of 246 dwelling units). The Project's proposed uses are consistent with the site's land use designations. Development consistent with the growth projections in City of Los Alamitos General Plan is considered to be consistent with the AQMP. As such, the Project is determined to be consistent with the second criterion. (DEIR, p. 4.2-23)

The Project does not have the potential to result in or cause NAAQS or CAAQS violations. Construction and operational-source emissions would not exceed the applicable South Coast AQMD

regional thresholds for emissions of any criteria pollutant. Additionally, the Project is consistent with the City's General Plan. As such, the Project is considered to be consistent with the AQMP. (Urban Crossroads, 2023a, pp. 46-47). Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.2-23)

3.3.2 THRESHOLD B

Impact Statement: The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in detail in Section 4.2.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

Construction

The latest version of California Emissions Estimator Model (CalEEMod) has been used for this Project to determine construction and operational air quality emissions. Refer to DEIR Appendices 3.1 through 3.2 of the Project's Air Quality Impact Analysis (*Technical Appendix B1* of the DEIR) for Criteria Air Pollutant CalEEMod Output Files. Construction emissions impacts could result from demolition activities, grading activities, and offsite utility and infrastructure improvements. (DEIR, p. 4.2-23)

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions without mitigation for both summer and winter periods are summarized in DEIR Table 4.2-5, *Overall Construction Emission Summary*. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.2-23)

Operation

Operational emissions would be expected from Area Source Emissions, Energy Emissions, and Mobile Source Emissions. For additional information regarding the calculation of Project operational emissions, please refer to Appendix 3.2 of the Project's Air Quality Analysis (*Technical Appendix B1* of the DEIR). Operational emission impacts from the Project would include area source emissions as a result of architectural coatings, consumer products, and landscape maintenance equipment, and mobile source emissions. (DEIR, p. 4.2-24)

Project mobile source emissions impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The estimated operational-source emissions from mobile sources and area sources for the

Project are summarized in DEIR Table 4.2-6, *Summary of Peak Operational Emissions*. As shown, Project operations would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.2-24)

3.3.3 THRESHOLD C

Impact Statement: The Project would not expose sensitive receptors to substantial pollutant concentrations.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in detail in Section 4.2.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ Substantial Evidence

Construction Localized Impact Analysis

Criteria Pollutant Emissions

DEIR Table 4.2-7, *Localized Construction-Source Emissions,* identifies the localized impacts at the nearest receptor location in the vicinity of the Project. As shown, localized construction emissions would not exceed the applicable South Coast AQMD Localized Significance Thresholds (LSTs) for emissions of any criteria pollutant, and as such, impacts would be less than significant and no mitigation is required. (DEIR, p. 4.2-26)

DPM Source Cancer and Non-Cancer Risks Impact Analysis

The land use with the greatest potential exposure to Project construction-source diesel particulate matter (DPM) emissions is Location R3 which is located approximately 86 feet south of the Project site at an existing residence located at 4625 Ironwood Avenue. R3 is placed in the private outdoor living areas (backyard) facing the Project site. At the Maximally Exposed Individual Receptor (MEIR), the maximum incremental cancer risk attributable to Project construction-source DPM emissions is estimated at 2.59 in one million, which is less than the South Coast AQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be less than 0.01, which would not exceed the applicable threshold of 1.0. Location R3 is the nearest receptor to the Project site and would experience the highest concentrations of DPM during Project construction due to meteorological conditions (wind speed and direction) at the site. Because all other modeled receptors would experience lower concentrations of DPM during Project construction, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified for location R3. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction activity. Accordingly, impacts would be less than significant and no mitigation is required. (DEIR, pp. 4.2-26 to 4.2-27)

Operation Localized Emissions Impact Analysis

Criteria Pollutant Emissions

According to South Coast AQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized analysis is needed. (DEIR, p. 4.2-27)

CO Hot Spot Analysis

To establish a more accurate record of the baseline carbon monoxide (CO) concentration affecting the South Coast Air Basin (SCAB), a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any exceedance of the 1-hour (20.0 parts per million (ppm)) or 8-hour (9.0 ppm) CO standards. For example, of the 8.4 ppm 8-hr CO concentration measured at the Long Beach Boulevard/Imperial Highway intersection (i.e., the highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. In contrast, an adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. (DEIR, pp. 4.2-27 to 4.2-28)

The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 1.9 ppm and 1.5 ppm, respectively (data from Central Orange County station for 2021). Therefore, even if the traffic volumes for the proposed Project were ten times the traffic volumes generated at the Long Beach Boulevard/Imperial Highway intersection, due to the on-going improvements in ambient air quality and vehicular emissions controls, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections. As noted above, only 0.7 ppm were attributable to the traffic volumes and congestion at one of the busiest intersections in the SCAB. Therefore, if these traffic volumes were multiplied by ten times, it could be expected that the CO attributable to traffic would increase tenfold as well, resulting in 7 ppm – even if this were added to either the 1-hour or 8-hour CO concentrations within the Project study area, this would result in 9.1 ppm and 8.5 ppm for the 1-hr and 8-hr timeframes, respectively. Neither of which would exceed the applicable 1-hr standard of 20 ppm or the 8-hr standard of 9 ppm. As discussed further below, the Project would not result in an increase of traffic in these amounts. (DEIR, p. 4.2-28)

Furthermore, and to inform this analysis, the Bay Area Air Quality Management District (BAAQMD) concluded that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph) - or 24,000 vph where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. The busiest intersection evaluated in South Coast AQMD's 2003 AQMP was that at Wilshire Blvd and Veteran Ave., which had AM/PM traffic volumes of 8,062 vph and 7,719 vph respectively. (DEIR, p. 4.2-28)

The highest trips on a segment of road for the Project operation is the intersection of Driveway 2 and Lampson Avenue with traffic volumes of 91 vph during AM peak hours and 133 vph during PM peak hours. As such, Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP. The proposed Project would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Localized air quality impacts related to mobile-source emissions would therefore be less than significant. Based on the foregoing analysis, the Project would result in less-than-significant impacts related to the creation of CO Hot Spots. No mitigation is required. (DEIR, pp. 4.2-28 to 4.2-29)

Potential Health Impact of the Project

Based on the foregoing analysis, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to operation of the Project, and impacts would be less than significant. No mitigation is required. (DEIR, pp. 4.2-28 to 4.2-29)

3.3.4 THRESHOLD D

Impact Statement: The Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

❑ **Findings**

Potential impacts of the Project related to Threshold d are discussed in detail in Section 4.2.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold d; therefore, no mitigation is required.

❑ **Substantial Evidence**

Land uses generally associated with odor complaints include agricultural uses (livestock and farming), wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, diaries, and fiberglass molding facilities. The Project does not contain land uses typically associated with emitting objectionable odors. (DEIR, p. 4.2-29)

Construction

Potential odor sources associated with the Project may result from construction equipment exhaust and the application of asphalt and architectural coating during construction activities. The Project would be subject to standard construction requirements, including the use of low-VOC architectural coatings as required by South Coast AQMD Rule 1113, Table of Standards; and compliance with South Coast AQMD Rule 402, Nuisance, which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.

Compliance with these standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and thus would be less than significant. No mitigation is required. (DEIR, p. 4.2-29)

Operation

Potential sources of operational odors generated by the Project would include temporary storage of typical solid waste (refuse). Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed would also be required to comply with South Coast AQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the Project operations would be less than significant and no mitigation is required. (DEIR, p. 4.2-29)

3.3.5 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to air quality.

❑ **Finding**

Potential cumulative impacts of the Project related to air quality are discussed in detail in Section 4.2.7 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to air quality; therefore, no mitigation is required.

❑ **Substantial Evidence**

With exception of the issue of odors, the cumulative study area for air quality includes the City of Los Alamitos and the SCAB. The SCAB is designated as a nonattainment area for State standards of ozone (O_3), Fine Particulate Matter (10 microns or smaller) (PM_{10}), and Fine Particulate Matter (2.5 microns or smaller) ($PM_{2.5}$). The region is also designated as a nonattainment area for federal standards of O_3 and $PM_{2.5}$. Cumulative growth in population and vehicle use could inhibit efforts to improve regional air quality and attain ambient air quality standards. Thus, with the exception of odors, the setting for this cumulative analysis consists of the SCAB and associated growth and development anticipated in the air basin. For the issue of odors, the cumulative study area includes the Project site and lands in the immediate vicinity to the Project site, as odors diminish rapidly with distance from the source. (DEIR, p. 4.2-29)

According to South Coast AQMD, projects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. As shown in DEIR Table 4.2-5, *Overall Construction Emission Summary*, construction activities associated with the Project would not exceed South Coast AQMD thresholds for any criteria pollutants. Therefore, impacts associated with Project-related construction emissions would be less than cumulatively considerable. (DEIR, p. 4.2-30)

Similarly, as shown in DEIR Table 4.2-6, *Summary of Peak Operational Emissions*, Project operation-source emissions would not exceed the South Coast AQMD regional thresholds of significance for any criteria pollutants. Therefore, impacts associated with the Project-related operational emissions would be less than cumulatively considerable. (DEIR, p. 4.2-30)

As shown in DEIR Table 4.2-7, *Localized Construction-Source Emissions*, emissions would not exceed the South Coast AQMD Localized Threshold for CO, Nitrogen Oxides (NO_x), PM_{10}, or $PM_{2.5}$. Pursuant to the South Coast AQMD's CEQA Air Quality Significance Thresholds, projects with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant impact; therefore, the Project's emissions during construction would be less than significant on a direct and cumulative basis. (DEIR, p. 4.2-30)

The Project does not include uses that generate stationary sources, or that attract mobile sources that may spend long periods queuing and idling at the site. Therefore, the Project would have a less-than-cumulatively considerable LST impact during long-term operation. Additionally, the Project would have no potential to result in or contribute to a CO "Hot Spot." Accordingly, impacts associated with CO "Hot Spots" would be less than cumulatively considerable. (DEIR, p. 4.2-30)

Cumulatively considerable odor impacts could occur if the Project in combination with other nearby projects resulted in combined construction- or operational-related odor impacts. However, the Project's compliance with South Coast AQMD Rules 1113 and 402 would ensure that the Project does not generate substantial odors adversely affecting a substantial number of people during construction and operation. Additionally, there are no nearby related projects that generate substantial odors that could combine to create a cumulatively considerable odor impact. Therefore, impacts associated with odors would be less than cumulatively considerable. (DEIR, p. 4.2-30)

The Project includes the following Project Design Features (PDFs) that serve to reduce the Project's impacts. This will also be included as a Conditional of Approval for the Project.

PDF AQ-1 The Project will utilize Tier 4 Interim construction equipment during construction activities.

3.4 BIOLOGICAL RESOURCES

Project impacts for Biological Resources Thresholds b, c, e, and f do not result in significant impacts. Findings are discussed below.

3.4.1 THRESHOLD B

Impact Statement: The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 4.3.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

Temporary Construction-Related Activities

The Project site contains no riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Thus, construction-related activities would not result in significant impacts on any riparian or special-status vegetation alliances. (DEIR, p. 4.3-32)

The Project site does not support natural vegetation communities, only non-native ornamental vegetation. The development of the proposed Project would remove 5.97 acres of Developed/Ornamental lands and 6.40 acres of Disturbed/Ornamental lands. Removal of 12.37 acres of developed/ornamental and disturbed/ornamental lands would not result in a substantial adverse effect on any sensitive communities. No significant impact would occur and no mitigation is required. (DEIR, p. 4.3-32)

Long-Term Operation

The Project site contains no riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The Project site does not support natural vegetation communities, only non-native ornamental vegetation. Long-term operation would not result in significant impacts on any riparian or special-status vegetation alliances. No impact would occur, and no mitigation is required. (DEIR, p. 4.3-32)

3.4.2 THRESHOLD C

Impact Statement: The Project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in Section 4.3.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site does not contain any wetlands as defined under the federal Clean Water Act (CWA) or by the State of California. Based on the results of the Jurisdictional Delineation prepared by Glen

Lukos Associates, Inc. (GLA), the shallow concrete drainage ditch does not meet the Corps' definition of wetland or other waters of the U.S. because the concrete feature has no soils or vegetation. In addition, the area is excluded from Corps jurisdiction by rule under Section 328.3(b)(3) of Title 33 of the Code of Federal Regulations as "*Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water*". In addition to the concrete feature having no wetland characteristics, it also does not carry relatively permanent flow. (DEIR, p. 4.3-32)

Additionally, the concrete feature is not a wetland under the State Water Regional Control Board (SWRCB)'s definition, and the feature also would not be considered a water of the state. In particular, the concrete feature is not a wetland under the SWRCB's definition which states: (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. The area comprising the concrete feature lacks soil which is assumed in the term "saturation" since concrete cannot become saturated. Moreover, the SWRCB does not consider artificial features to be waters of the state if they were constructed and currently used and maintained primarily for the detention, retention, infiltration, or treatment of stormwater runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program (Procedures, Section II.3.d.iii). The concrete ditch serves these purposes of accommodating stormwater runoff. (DEIR, p. 4.3-33)

In addition, the concrete feature is not a "stream" in accordance with the definitions of a stream in the California Fish and Game Code as the drainage feature does not exhibit a bed, bank, or channel. The feature is an approximately two-inch-deep linearly shaped concrete slab that support no vegetation. As such, the concrete feature is not subject to California Department of Fish and Wildlife (CDFW) jurisdiction under Fish and Game Code Section 1602. (DEIR, p. 4.3-33)

Therefore, the Project would not result in a substantial adverse effect on state or federally protected wetlands during both construction and operational activities. No impact would occur, and mitigation is not required. (DEIR, p. 4.3-33)

3.4.3 THRESHOLD E

Impact Statement: The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

❑ **Findings**

Potential impacts of the Project related to Threshold e are discussed in detail in Section 4.3.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold e; therefore, no mitigation is required.

❑ **Substantial Evidence**

On April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of its Urban Forest Program. This plan addresses City parkway trees. There are currently no parkway trees along the Project's frontage. The Project would not result in an impact to the City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur, and mitigation is not required. (DEIR, p. 4.3-34)

3.4.4 THRESHOLD F

Impact Statement: The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

❑ **Findings**

Potential impacts of the Project related to Threshold f are discussed in detail in Section 4.3.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold f; therefore, no mitigation is required.

❑ **Substantial Evidence**

The Project site is not subject to any Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans. No impact would occur, and mitigation is not required. (DEIR, p. 4.3-34)

3.4.5 CUMULATIVE IMPACTS

Impact Statement: The temporary direct and/or indirect impacts of the Project would not result in significant cumulative impacts related to biological resources.

❑ **Findings**

Potential cumulative impacts of the Project related to biological resources are discussed in detail in DEIR Section 4.3.7. The City finds that development of the proposed Project would not result in significant cumulative impacts related to biological resources; therefore, no mitigation is required.

❑ **Substantial Evidence**

As stated in CEQA Guidelines Section 15130(a)(1), "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts". The phrase "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. (DEIR, p. 4.3-34)

The Project site does not contain any special-status plant species nor does the site have the potential to support such species. Therefore, the Project would not impact any special-status plant and, thus, the Project would have no potential to contribute to a cumulative impact to special-status plant species.

The Project site currently supports approximately just over four acres of open field, previously consisting of maintained turf, that may be used occasionally by raptor species for foraging. Nevertheless, the site does not constitute regionally important foraging habitat for raptors, given the large range (a few to many squire miles depending on the species) required by raptors and limited size of the potential foraging area. Thus, the loss of approximately four acres of potential foraging raptor habitat would not be a significant impact. Additionally, the adjacent and surrounding areas to the Project site including Arbor Park, Navy golf course, Old Ranch Country Club, JFTB and the Seal Beach Naval Weapons Station provide larger (approximately over 5,000 acres combined nearly all of which is undeveloped and includes agricultural lands and wetland habitats) and generally better quality raptor foraging habitat associated with lack of developed areas. (DEIR, pp. 4.3-34 to 4.3-35)

The Project site and surrounding areas consist of mostly developed lands. The Project site is developed and is adjacent to residential and other urban developed areas. An approximately 100-acre solar farm is currently under construction within the JFTB. Although undeveloped land, the site for the solar farm on the JFTB is disturbed with limited habitat capacity or potential. Other future developments relevant to this analysis and within the area, depicted on DEIR Figure 4.0-1, *Cumulative Location Development Map*, include LA 1-4 in Los Alamitos, GG 1-4 in Garden Grove, and SB 1-7 in Seal Beach. These projects are already developed or are proposed for redevelopment and are part of the existing built environment. (DEIR, p. 4.3-35)

Two sensitive (State watch list) animal species, Cooper's hawk and wintering merlin were detected onsite but would not be subject to significant impacts. No sensitive plant species or sensitive habitats were detected onsite. Two CDFW special-status bat species, the western red bat and western yellow bat were detected acoustically offsite within the Navy golf course but did not roost onsite based on focused emergent surveys on the Project site. The Project would not result in an impact to special-status bat species on a project-specific or cumulative level, because the Project site supports limited potential roosting habitat onsite for these two species, the Project will incorporate larger sized box tree species as a project design feature (including the western sycamore and cottonwood trees) that foliage specialist bats prefer and will plant the trees on the fringes of the development adjacent to current open space areas. (DEIR, p. 4.3-35)

One CDFW special-status bird species, the Vermilion flycatcher was not detected on site but is known to breed adjacent to the Project site and environs. The Project will incorporate larger sized box tree species (including the western sycamore) as a project design feature and will plant these trees on the fringes of the development, adjacent to Arbor Park and the Navy golf course (PDF B-1). Additionally, as shown in DEIR Figure 3-18, *Landscape Plan*, and pursuant to PDF B-2, the Project will plant approximately 441 trees onsite (excluding shrubs and ground cover), including the western sycamore *(Platanus racemosa*), paperbark melaleuca (*Melelauca quinquenervia*), olive (Olive sp.), southern magnolia (*Magnolia grandiflora*), Crape myrtle (*Lagerstroemia indica*), Brisbane box (*Lophostemon*

confertus), Australian willow *(Geijera parviflora*), Italian cypress (*Cupressus sempervirens*), yew pine (*Podocarpus macrophyllus*) and other species. When mature, these tree species are expected to provide nesting habitat for numerous nesting bird species, with some potential for the Vermilion flycatcher. Therefore, with the project design features incorporated, no cumulative impacts to these species would occur. (DEIR, p. 4.3-35)

Additionally, other developments would be subjected to regulations related to biological resources such as Migratory Bird Treaty Act (MBTA), California Fish and Game Codes, California Endangered Species Act (CESA), Clean Water Act, and other statutes that protect biological resources. (DEIR, p. 4.3-36)

Given the surrounding built environment, the fact that unbuilt nearby properties include better habitat for species located in the area, the Project would not result in any significant impacts to biological resources, and redevelopment would occur on an already built site; the Project would not result in a cumulative impact to biological resources, nor would any incremental effect of the Project be cumulatively considerable. (DEIR, p. 4.3-36)

The Project would not impact any riparian or sensitive natural communities; therefore, there is no potential for the Project to contribute to a cumulatively considerable impact to these resources. (DEIR, p. 4.3-36)

The Project would not impact any State-protected or federally-protected wetlands. Accordingly, the Project has no potential to contribute to a cumulatively considerable impact to State or federally protected wetlands. (DEIR, p. 4.3-36)

The Project would remove ornamental trees on site that have the potential to support nesting birds protected by federal and State regulations. The Project would not result in the removal of trees off-site or in the surrounding area and would therefore not cumulatively contribute to impacts to nesting birds. Additionally, related projects are required to comply with the MBTA (Mitigation Measure MM 4.3-2), which protects nesting birds. Therefore, the Project would not result in a cumulatively considerable impact to nesting birds. (DEIR, p. 4.3-36)

The Project would not conflict with any local policies or ordinances protecting biological resources. Other development projects in the cumulative study area would be required to comply with applicable local policies and/or ordinances related to the protection of biological resources as a standard condition of review/approval. Because the Project and cumulative development would be prohibited from violating applicable, local policies or ordinances related to the protection of biological resources, a cumulatively considerable impact would not occur. (DEIR, p. 4.3-36)

The Project site is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Because there is no conservation plan applicable to the Project impact area, there is no potential for

the Project to contribute to the violation of a conservation plan. No cumulative impact would occur. (DEIR, p. 4.3-36)

3.5 CULTURAL RESOURCES

Project impacts for Cultural Resources Threshold a does not result in significant impacts and related findings are discussed below.

3.5.1 THRESHOLD A

Impact Statement: The Project would not cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.4.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

Implementation of the Project would require demolition of all structures that are located on the Project site under existing conditions. Because the existing building on site was constructed in 1972, a historical resources evaluation was prepared by LSA Associates to determine the historical significance of the property based on California Register of Historical Resources (CRHR) criteria. (DEIR, p. 4.4-14)

Criterion 1: Is it associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States?
The Southwest Regional Laboratory was part of a post-WWII shift by the federal government to actively support R&D but was not at the forefront of this trend and does not appear to have made any significant contributions to it. Although the 1972 building was the first non-campus facility constructed solely for educational research and development in the nation, no evidence was found that it started a trend for off-campus facilities or that such a trend would be an important historical event. The Project also used an experimental fast-tracking construction process that was intended to be a model for future similar projects, but no evidence was found that this model was employed in subsequent similar projects. For these reasons, the building is not significant under this criterion. (DEIR, p. 4.14-15)

Criterion 2: Is it associated with the lives of persons important to local, California, or national history?

No evidence was found indicating that the building is directly associated with the lives of any person or persons important to local, State, or national history. It is not significant under this criterion. (DEIR, p. 4.14-15)

Criterion 3: Does it embody the distinctive characteristics of a type, period, region, or method or construction, or represent the work of a master, or possess high artistic values?

The existing building retains a high degree of integrity and embodies many of the characteristics of the Corporate International style such as the boxy form, flat roof with no eave, smooth exterior wall surfaces lacking ornamentation and decoration, and the flush metal-framed windows arranged in horizontal bands. It is a nice example of a comparatively modest Corporate International style building, but it does not express the design concepts of the Corporate International style more fully than the many other buildings of its type. Because of the prevalence of outstanding examples of the style, the Southwest Regional Laboratory building does not rise to a level beyond the ordinary. Although it was designed by the master architectural firm Skidmore, Owings & Merrill (SOM), it is not one of the best or most representative examples of the firm's highly awarded work. SOM is credited with solidifying the aesthetic of the Corporate International style. The firm, which has won over 1,700 awards, is especially known for their Corporate International style skyscrapers. Noteworthy historic-period buildings by SOM include the Manhattan House (1951), the National Register-listed Lever House (1952), Inland Steel building (1956), One Chase Manhattan Plaza (1961), One Wilshire (1966), John Hancock Center (1969), and Willis Tower (1973). The design and scale of the Southwest Regional Laboratory building does not reach the same level of exceptionalism as these buildings or many others designed by SOM and the firm does not list the Southwest Regional Laboratory building among its many noteworthy and influential designs. The building does not possess high artistic values because it does not express the design concepts of the Corporate International style more fully than other buildings of its type. For these reasons, it is not significant under this criterion. (DEIR, p. 4.14-15)

Criterion 4: Has it yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation?

This building was constructed in 1972 using common methods and materials and is unlikely to yield any important information to the history of the local area, California, or the nation. It is not significant under this criterion. (DEIR, p. 4.14-16)

Summary

The existing building is not eligible for listing in the CRHR under any criteria and therefore does not qualify as a historical resource as defined by CEQA. No evidence was found that the property has any important associations with significant historical trends, events, or people, and it does not appear to have the potential to yield important historical information. Although it retains a high degree of architectural integrity and was designed by the master architectural firm SOM, it is not a particularly distinctive example of the Corporate International style or an important example of SOM's work. Therefore, the Project would not cause a substantial adverse change in the significance of a historical resource. No impacts would occur, and no mitigation is required. (DEIR, p. 4.14-16)

3.5.2 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to cultural resources for Thresholds a through c.

❑ Findings

Potential cumulative impacts of the Project related to cultural resources are discussed in detail in Section 4.4.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to cultural resources; therefore, no mitigation is required.

❑ Substantial Evidence

The potential for implementation of the Project to contribute to cumulative impacts to historical resources was analyzed in conjunction with other projects located in the immediate vicinity of the Project site. The Project site does not contain historical resources, and there are no related projects in the immediate vicinity that would have an effect on historical resources. Therefore, implementation of the Project has no potential to contribute towards a cumulative impact to significant historical sites and/or resources. (DEIR, p. 4.4-17)

As discussed, implementation of the Project would not impact any known archaeological resources and the likelihood of uncovering previously unknown archaeological resources during Project construction is low due to past grading activities associated with the existing development. Impacts to previously undiscovered subsurface archeological resources are typically site specific from ground disturbing activities at the site and generally do not combine to result in cumulative impacts unless resources are identified immediately adjacent to the Project site. Nonetheless, the potential exists that a significant archaeological resource could be discovered during grading into native soils. There are no related projects in the vicinity that would affect archaeological resources. It should be noted that site-specific archeological resource investigations would be required for other projects before the City would permit ground disturbances or demolition or substantial alteration of existing structures. Such investigations would include some degree of surface-level surveying and identify resources on the affected project sites that are or appear to be eligible for listing on the national or state registers for historic resources. Such investigations would also recommend mitigation measures to protect and preserve cultural resources. Therefore, cumulative impacts to archaeological resources would be less than significant. (DEIR, pp. 4.4-17 to 4.4-18)

Mandatory compliance with the provisions of California Health and Safety Code Section 7050.5 as well as Public Resources Code Section 5097 et seq., would assure that all future development projects within the region treat human remains that may be uncovered during development activities in accordance with prescribed, respectful and appropriate practices, thereby avoiding significant cumulative impacts. (DEIR, p. 4.4-18)

3.6 ENERGY

Project impacts for Energy Thresholds a and b do not result in significant impacts. Findings are discussed below.

3.6.1 THRESHOLD A

Impact Statement: The Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.5.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

Construction

The Project's construction process would consume electrical energy and fuel. Project-related construction would represent a short-term energy demand and would not require on-going or permanent commitment of electricity or fuel resources. Construction of the Project is expected to commence in January 2024 and would last through April 2027. Project construction-related activities are estimated to consume approximately 593,784 kilowatt hours (kWh) of electricity and approximately 188,030 gallons of diesel fuel. Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 90,130 gallons of fuel. Additionally, fuel consumption from construction vendor trips will total approximately 30,928 gallons. Detailed calculations are provided in subsection 4.3 of the Project's Energy Analysis (refer to *Technical Appendix E* of the DEIR). (DEIR, p. 4.5-7)

Construction equipment fuel use would be typical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable California Air Resources Board (CARB) emissions standards. In 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. (DEIR, p. 4.5-7)

Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general. (DEIR, p. 4.5-8)

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel- powered equipment and are enforced by the Air Resources Board (ARB). Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. (DEIR, p. 4.5-8)

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed Project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, construction-related impacts related to electricity and fuel consumption would be less than significant. No mitigation is required. (DEIR, p. 4.5-8)

Operation

Energy consumption in support of or related to Project operations would include transportation fuel demands (fuel consumed by passenger car and truck vehicles accessing the Project site), fuel demands from operational equipment, and operational energy demands (energy consumed by building operations and site maintenance activities). (DEIR, p. 4.5-8)

Transportation Energy

The estimated transportation energy demands are summarized on DEIR Table 4.5-1, *Total Project-Generated Traffic Annual Fuel Consumption*. The Project would result in 9,655,902 annual vehicle miles traveled (VMT) and an estimated annual fuel consumption of 353,819 gallons of fuel. (DEIR, p. 4.5-8)

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other residential, park, and commercial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed., 2021); and CalEEMod. (DEIR, p. 4.5-9)

The Project is located on an infill site that is surrounded by existing urban uses; the existing transportation facilities and infrastructure would provide future residents, visitors, and employees associated with the Project access to a mix of land uses in close proximity to the Project, thus further reducing fuel consumption demand. Additionally, the Project will also be providing a community electric vehicle for use by residents of the affordable housing component (PDF-GHG-3) as well as providing parking and EV infrastructure (PDF-GHG-4) that would further promote fuel efficient vehicles. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy

resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant. (DEIR, p. 4.5-9)

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. The location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations. As such, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary. (DEIR, pp. 4.5-9 to 4.5-10)

Operational Energy Demands

Project building operations would result in the consumption of electricity, which would be supplied to the Project by Southern California Edison (SCE). Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. As summarized on DEIR Table 4.5-2, *Project Annual Operational Energy Demand Summary*, operations for the Project would result in approximately 1,131,132 kWh of electricity annually and would offset the demand through the use of on-site photovoltaic solar power which is expected to generate 1,229,520 kWh of electricity annually (PDF-GHG-1) – which results in a net electricity demand of 98,388 kWh/year of electricity. No natural gas will be used as the Project will be all electric (PDF-GHG-2). (DEIR, p. 4.5-10)

Future development projects would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. The Project would incorporate the PDFs GHG-1 through GHG-4. Therefore, the Project would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.5-10)

CEQA Guidelines Appendix F

An analysis of the factors identified in CEQA Guidelines Appendix F is provided in DEIR Table 4.5-3, *CEQA Guidelines Appendix F Energy Analysis*. As shown, the Project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy

resources, during Project construction or operation; and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.5-11)

The Project includes the following Project Design Features (PDFs) that serve to reduce the Project's impacts.

PDF GHG-1 The Project will include solar photovoltaic panels with the capability to generate up to 1,229,520 kWh/annually.

PDF GHG-2 The Project will be 100% electric and will not include natural gas.

PDF GHG-3 The Project will provide a community electric vehicle for the affordable housing component for residents to drive short distance trips to the local grocery store.

PDF GHG-4 The Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1.

3.6.2 THRESHOLD B

Impact Statement: The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and impacts would be less than significant.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in detail in Section 4.5.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

The following section analyzes whether the Project would conflict with or obstruct applicable plans and regulations for renewable energy or energy efficiency.

Construction

The Project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on- road and off-road diesel-powered equipment and are enforced by the ARB. The Project would be required to comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or

energy efficiency; and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.5-13)

Operation

California's Renewables Portfolio Standard (RPS) establishes a goal of renewable energy for local providers to be 44 percent by 2040. Similarly, the State is promoting renewable energy targets to meet the 2022 Scoping Plan greenhouse gas emissions reductions. The Project would result in approximately 1,131,132 kWh of electricity demand annually and would offset the demand through the use of on-site photovoltaic solar power which is expected to generate 1,229,520 kWh of electricity annually – which results in a net electricity demand of 98,388 kWh/year of electricity. No natural gas will be used as the Project will be all electric. (DEIR, p. 4.5-13)

The Project would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. Additionally, the Project would incorporate project design features PDFs GHG-1 through GHG-4. (DEIR, p. 4.5-13)

City of Los Alamitos General Plan

The Project's consistency with the City's General Plan is shown in DEIR Table 4.5-4, *General Plan Consistency Analysis*. As shown, the Project would not result in any inconsistency with any of the applicable General Plan goals and policies. (DEIR, p. 4.5-14)

Compliance with the aforementioned mandatory measures would ensure that the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.5-14)

3.6.3 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to energy.

❑ Findings

Potential cumulative impacts of the Project related to energy are discussed in detail in Section 4.5.7 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to energy; therefore, no mitigation is required.

❑ **Substantial Evidence**

Cumulative impacts result if the Project, along with cumulative projects, taken together could result in wasteful, inefficient, or unnecessary use of energy. The areas considered for cumulative impacts to electricity and natural gas supplies are the service areas of the SCE and SoCalGas, respectively, described above in Section 4.5.1. (DEIR, p. 4.5-14)

The Project, related projects, and additional forecasted growth in SCE's service area would cumulatively increase the demand for electricity supplies and infrastructure capacity. As with the Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features and comply with applicable regulations including California Green Building Standards Code (CALGreen) and state energy standards under Title 24, which would contribute to minimizing wasteful energy consumption. As such, the Project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of electricity would not be cumulatively considerable and, thus, would be less than significant. (DEIR, p. 4.5-15)

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As with the Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions. Therefore, the Project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and, thus, would be less than significant. (DEIR, p. 4.5-15)

As indicated above, the Project would not conflict with or obstruct a federal or State plan for renewable energy or energy efficiency. The Project and other new development projects within the cumulative study area would be required to comply with all of the same applicable federal, State, and local regulatory measures aimed at reducing fossil fuel consumption and the conservation of energy. Accordingly, the Project would not cause or contribute to a significant cumulatively considerable impact related to conflicts with a State or local plan for renewable energy or energy efficiency. (DEIR, p. 4.5-15)

3.7 GEOLOGY AND SOILS

Project impacts for Geology and Soils Thresholds b and e do not result in significant impacts. Findings are discussed below.

3.7.1 THRESHOLD B

Impact Statement: The Project would not result in substantial soil erosion or loss of topsoil.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 4.6.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

Construction-Related Activities

Redevelopment of the Project site would result in the demolition of all structures on-site and removal of ornamental landscaping. Grading and construction activities would occur that would expose and disturb soils that are currently covered by impervious surfaces and ground covering. Disturbed soils would be subject to potential erosion during rainfall events or high winds due to the removal of stabilizing vegetation and building materials (e.g., existing concrete foundations) and exposure of these erodible materials to wind and water. (DEIR, p. 4.6-9)

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant would be required to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit). The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one (1) acre of total land area. In addition, the Project would be required to comply with the Santa Ana Regional Water Quality Control Board (RWQCB)'s Santa Ana River Basin Water Quality Control Program. (DEIR, pp. 4.6-9 to 4.6-10)

Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for construction-related activities. The SWPPP will specify the Best Management Practices (BMPs) that the Project Applicant will be required to implement during construction activities to ensure that waterborne pollution – including erosion/sedimentation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. In addition, the Project would be required to implement erosion and dust control measures pursuant to South Coast AQMD Rule 403 to minimize water- and windborne erosion. Mandatory compliance with the SWPPP and the erosion control and dust control measures would reduce, prevent, or minimize soil erosion from Project-related construction activities. Therefore, impacts related to substantial soil erosion or the loss of topsoil would be less than significant and no mitigation is required. (DEIR, p. 4.6-10)

Long-Term Operational Activities

Following construction, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces (i.e., building

foundations and paved parking areas). Minimal areas of exposed soil would occur in the Project site's landscaped areas. (DEIR, p. 4.6-10)

The Project Applicant is required to prepare and submit to the City a Project-specific Water Quality Management Plan (WQMP). The Preliminary WQMP is appended to the DEIR (*Technical Appendix I2*) and an updated report was included in the FEIR (*Attachment E*) and has been submitted for City approval. The WQMP is required to identify and implement an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate discharge to surface water from stormwater and non-stormwater discharges. Adherence to the requirements noted in the Project's required WQMP (DEIR *Technical Appendix I2*; FEIR *Attachment E*), and LAMC Chapter 8.44, Stormwater and Urban Runoff Pollution Controls as explained in Section 4.9, would ensure that the Project's potential erosion impacts during operation would be less than significant. No mitigation is required. (DEIR, p. 4.6-10)

3.7.2 THRESHOLD E

Impact Statement: The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

❑ Findings

Potential impacts of the Project related to Threshold e are discussed in Section 4.6.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold e; therefore, no mitigation is required.

❑ Substantial Evidence

The Project would connect to the existing wastewater system. The Project would not utilize septic tanks or alternative wastewater systems. No impact would occur, and no mitigation is required. (DEIR, p. 4.6-12)

3.7.3 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to geology and soils.

❑ Findings

Potential cumulative geology and soils impacts of the Project related to risk of loss due to earthquakes, substantial loss of topsoil, unstable soil, expansive soil or septic tanks are discussed in detail in Section 4.6.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to these topics; therefore, no mitigation is required.

- **Substantial Evidence**

All potential Project-related direct and indirect impacts related to geology and soils would be addressed through mandatory compliance with the California Building Standards Code (CBSC), LAMC, other standard regulatory requirements, and the site-specific recommendations identified in the Geotechnical Report contained within *Technical Appendix F1* of the DEIR. (DEIR, p. 4.6-13)

With the exception of erosion hazards, potential hazardous effects related to geologic and soil conditions addressed under Thresholds a, c, d, and e are unique to the Project site and inherently restricted to the specific property proposed for development. That is, issues including fault rupture, seismic ground shaking, liquefaction, landslides, and expansive soils would involve effects to (and not from) a proposed development project, are specific to conditions on the subject property, and are not influenced or exacerbated by the geologic and/or soil hazards that may occur on other, off-site properties. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no direct or indirect connection to similar potential issues or cumulative effects to or from other properties. (DEIR, p. 4.6-13)

As discussed under Threshold b, regulatory requirements mandate that the Project incorporates design measures during construction and long-term operation to ensure that significant erosion impacts do not occur. Other development projects in the vicinity of the Project site would be required to comply with the same regulatory requirements as the Project to preclude substantial adverse water and wind erosion impacts. Because the Project and other projects within the cumulative study area would be subject to similar mandatory regulatory requirements to control erosion hazards during construction and long-term operation, cumulative impacts associated with wind and water erosion hazards would be less than significant. (DEIR, p. 4.6-13)

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the vicinity of the Project site that have a potential for uncovering paleontological resources. Generally, impacts relating to paleontological resources are site-specific and addressed on a site-by-site basis. Therefore, as discussed under Threshold f, while there is potential for an impact on a specific site, the impact would not ordinarily extend beyond the site or the immediate surrounding area. Additionally, Mitigation Measures MM 4.6-1 through MM 4.6-2 would ensure Project-specific paleontological impacts are reduced to less than significant. There could be circumstances in which a paleontological resource extends over more than one property. Therefore, a cumulative impact could occur to paleontological resources if grading on the Project site in combination with grading activities at an adjacent cumulative project would impact a paleontological resource. However, there are no adjacent cumulative related projects that could potentially combine with the Project to result in impacts to unknown paleontological resources that may lie in the subsurface. Therefore, there would be no cumulative impacts related to paleontological resources. (DEIR, pp. 4.6-13 to 4.6-14)

3.8 GREENHOUSE GAS EMISSIONS

Project impacts for Greenhouse Gas Emissions do not result in significant impacts and related findings are discussed below.

3.8.1 THRESHOLD A

Impact Statement: The Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.7.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

Construction

For construction phase Project emissions, Greenhouse Gas emissions (GHGs) are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the South Coast AQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in DEIR Table 4.7-3, *Amortized Annual Construction Emissions*. (DEIR, p. 4.7-26)

Operation

The annual GHG emissions associated with the operations of the Project would result in direct and indirect emissions of carbon dioxide (CO_2), methane (CH_4), and Nitrous Oxide (N_2O), and would not generate other GHGs of sufficient quantity to affect the analysis. Therefore, this analysis focuses on CO_2, CH_4, and N_2O. (DEIR, p. 4.7-26)
Direct Project-related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from energy source, water usage, and solid waste generation. GHG emissions are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity usage associated with the Project was calculated by CalEEMod using default parameters. Pursuant to project design feature PDF-GHG-1, Project will include the installation of solar, which is expected to generate approximately 1,229,520 kWh per year. (DEIR, p. 4.7-27)

Project-related GHG emissions were quantified with CalEEMod, which relies upon vehicle trip rates and Project-specific land use data to calculate emissions. As shown on DEIR Table 4.7-4, *Project GHG Emissions*, construction and operation of the Project would generate a 2,757.11 Metric Tons of Carbon Dioxide Equivalent per year ($MTCO_2e/yr$); the Project would not exceed the SCAQMD screening

threshold of 3,000 $MTCO_2e$/yr. Thus, impacts would be less than significant and no mitigation is required. (DEIR, p. 4.7-27)

The Project includes the following PDFs that serve to reduce the Project's impacts.

PDF GHG-1 The Project will include solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually.

PDF GHG-2 The Project will be 100% electric and would not include natural gas.

PDF GHG-3 A community electric vehicle for the affordable housing component shall be provided for residents to drive short distance trips to the local grocery store.

PDF GHG-4 The Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1.

3.8.2 THRESHOLD B

Impact Statement: The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in detail in Section 4.7.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

The 2022 Scoping Plan lays out a framework to determine Project-level consistency when there is not a CEQA-qualified Climate Action Plan (CAP) available to tier from. CARB recommends that the first approach for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing. The 2022 Scoping Plan goes on to note that Projects that can demonstrate consistency with the priority areas identified on Table 3 Key Residential and Mixed-Use Project Attributes that Reduce GHGs from the 2022 Scoping Plan would be aligned with the State's priority GHG reduction strategies and would be deemed consistent with the Scoping Plan. As such, these Projects are considered to be consistent with the Scoping Plan or other plans, policies, or regulations adopted for the purposes of reducing GHGs. Therefore, the GHG emissions associated with such projects would result in a less-than-significant GHG impact under CEQA. (DEIR, p. 4.7-28)

The Project's consistency with the Key Residential and Mixed-Use Project Attributes that Reduce GHGs from the 2022 Scoping Plan is summarized in DEIR Table 4.7-5, *Project Consistency With 2022 Scoping Plan Key Residential And Mixed-Use Project Attributes That Reduce GHGs*. As shown, the Project would be consistent with the 2022 Scoping Plan's key residential and mixed-use project attributes to reduce GHGs. As such, the Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan, such as California Code of Regulations (CCR) Title 24 and Energy Code. The Project would not have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Accordingly, impacts are less than significant, and no mitigation is required. (DEIR, p. 4.7-28)

3.8.3 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to greenhouse gases.

❑ Findings

Potential cumulative impacts of the Project related to GHG emissions are discussed in detail in Section 4.7.7 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to these topics; therefore, no mitigation is required.

❑ Substantial Evidence

Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis consistent with the requirements outlined in CEQA Guidelines 15064(h)(3). As discussed, implementation of the Project would comply with the 2022 Scoping Plan and would not result in net annual emissions that exceed the GHG emissions significance threshold of 3,000 MT CO_2e/yr. Therefore, Project-related GHG emissions and their contribution to global climate change would not be cumulatively considerable, and GHG emissions impacts would be less than significant. (DEIR, p. 4.7-31)

3.9 HAZARDS AND HAZARDOUS MATERIALS

Project impacts for Hazards and Hazardous Materials Thresholds a through g do not result in significant impacts. Findings are discussed below.

3.9.1 THRESHOLDS A AND THRESHOLD B

Impact Statement (Threshold a): The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact Statement (Threshold b): The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

❑ Findings

Potential impacts of the Project related to Threshold a and Threshold b are discussed in detail in Section 4.8.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a or Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

Implementation of the Project would result in the demolition of the existing building and surface parking lot and the construction and long-term operation of 246 residential units. In the event that any hazards or hazardous materials were to be present on the Project site or any hazardous materials were to be used or stored on the Project site during construction or long-term operation, the Project's activities would have the potential to expose workers or residents on the site, the public, and/or the environment to a hazardous environmental condition. An evaluation of this potential is provided below. (DEIR, p. 4.8-15)

Potential Hazards in Demolition Materials

The use of asbestos-containing materials (ACM) (a known carcinogen) and lead-based paint (LBP) (a known toxic), both of which are considered hazardous materials, was a common building construction method prior to 1978 and may be present in the existing building. All proposed demolition activities would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of PCBs, ACMs and LBP. (DEIR, p. 4.8-16)

Additionally, the Project is required to comply with South Coast AQMD Rule 1403 (Asbestos Emissions) and Title 17 of the CCR, Division 1, Chapter 8: Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards applies. South Coast AQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Assuming that ACMs are present in the existing structure located on-site, then Rule 1403 requires notification of the South Coast AQMD prior to commencing any demolition activities. Rule 1403 also sets forth specific procedures for the removal of asbestos and requires that an on-site representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of ACM. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing, and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with ACMs. Because future development on the Project site would be required to comply with AQMD Rule 1403 during demolition activities, impacts due to ACMs would be less than significant. (DEIR, p. 4.8-16) (DEIR, p. 4.8-16)

Title 17, CCR, Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, defines and regulates lead-based paint. Any detectable amount of lead is regulated. During the demolition of the existing structure, there is a potential for exposing construction workers to health hazards associated with lead. The Project would be required to comply with Title 17, CCR, Division 1, Chapter 8, which includes requirements such as employer-provided training, air

monitoring, protective clothing, respirators, and handwashing facilities. Mandatory compliance with these requirements would ensure that construction workers and the public are not exposed to significant LBP health hazards or upset during demolition and/or during transport of demolition waste to an appropriate disposal facility and would ensure that impacts related to LBP remain less than significant. (DEIR, p. 4.8-16)

Moreover, EFI prepared a Phase II ESA for the Project site dated September 22, 2022, based on a geological survey and soil sampling conducted on August 16, 2022. Select soil samples were collected and analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), TPH as oil (TPHo), volatile organic compounds (VOCs), PCBs, organochlorine pesticides (OCPs), arsenic, and lead (Pb). Analytical results for PCBs indicated concentrations were not detected above the laboratory reporting limits in any of the soil samples analyzed (refer to Page 4.8-5 of the Draft EIR). However, caulk containing PCBs were used in buildings in the 1950s through the 1970s and may be present in the existing building. Therefore, the Project would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of PCBs including Title 40, Code of Federal Regulations, Part 761. (DEIR, p. 4.8-16, as revised in Section 4.0 of the FEIR)

There is also a potential for mercury containing products at the existing buildings. When a mercury-containing product breaks and the mercury is released, the exposed mercury can evaporate and become an invisible, odorless toxic vapor. Mercury-containing products exhibit hazardous characteristics as described in the California Code of Regulations, Title 22, chapter 11 and are classified as a type of hazardous waste called "universal waste." Universal wastes are hazardous wastes that pose a lower immediate risk to people and the environment when handled properly. Due to this lower risk, universal wastes can be handled and transported under more relaxed rules compared to other hazardous wastes. The Project would be required to comply with all applicable federal, State, and local hazardous materials regulations including California Health and Safety Code Section 25214.8.16 to prevent mercury releases. (DEIR, p. 4.8-16, as revised in Section 4.0 of the FEIR)

Compliance with the above regulatory requirements would ensure that removal of ACMs, or LBPs, PCBs, or mercury would result in a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.8-16, as revised in Section 4.0 of the FEIR)

On-Site Conditions and Impacted Soils

Based on a review of regulatory databases and a site reconnaissance, the Project site does not contain any hazards, nor is the Project site affected by any off-site hazards. The Phase I ESA and Limited Phase II ESA identified no Recognized Environmental Condition (RECs), historical recognized environmental conditions (HRECs), or controlled recognized environmental conditions (CRECs) during the course of the assessment. The potential chemicals of concern detected in the soil in the areas assessed do not indicate that a significant subsurface chemical release occurred. The detected concentrations found during the investigation are considered to be de minimis for the proposed residential redevelopment. Therefore, past and present uses do not represent a significant

environmental concern for the Project site. As a result, implementation of the Project would result in less than significant impacts. No mitigation is required. (DEIR, pp. 4.8-16 to 4.8-17)

Potential Temporary Construction-Related Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the Project site during demolition and construction activities. This heavy equipment likely would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. (DEIR, p. 4.8-17)

This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC), and the Santa Ana RWQCB. With mandatory compliance with applicable hazardous materials regulations, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. A less than significant impact would occur and no mitigation is required. (DEIR, p. 4.8-17)

Impact Analysis for Long-Term Operation

The long-term operation of the proposed Project would not include any components associated with the transport, use, or disposal of hazardous materials beyond those typical of a residential development, which would be conducted in accordance with all applicable local, State, and federal regulations. Operation of the proposed residential uses would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, household cleaners, fertilizers, and pesticides. With mandatory regulatory compliance, the Project would not pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. Based on the foregoing, potential hazardous materials impacts associated with long-term operation of the Project are regarded as less than significant and no mitigation is required. (DEIR, p. 4.8-17)

3.9.2 THRESHOLD C

Impact Statement: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

❑ **Findings**

Potential impacts of the Project related to Threshold c are discussed in Section 4.8.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ **Substantial Evidence**

The Project site is not located within a one-quarter mile of an existing or proposed school. As discussed under Thresholds a and b, construction of the Project would be required to comply with all applicable federal, State, and local laws and regulations and would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. Past and present uses do not represent a significant environmental concern for the Project site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the South Coast AQMD, EPA, DTSC, and the Santa Ana RWQCB. Operation of the proposed residential uses would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, household cleaners, fertilizers, and pesticides. The nearest existing school to the Project site is the Montessori Greenhouse School, located approximately one mile northeast of the Project site. Accordingly, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a one-quarter mile of an existing or proposed school. Thus, no impact would occur, and no mitigation is required. (DEIR, pp. 4.8-17 to 4.8-18)

3.9.3 THRESHOLD D

Impact Statement: The Project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment.

❑ **Findings**

Potential impacts of the Project related to Threshold d are discussed in detail in Section 4.8.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold d; therefore, no mitigation is required.

❑ **Substantial Evidence**

Government Code Section 65962.5 requires DTSC, the State Department of Health Services, State Water Resources Control Board, and the State Department of Resources Recycling and Recovery to maintain a list of hazardous materials sites that fall within specific, defined categories. The Project site is not located on any list of hazardous materials compiled pursuant to Government Code Section 65962.5. As such, no impact would occur, and no mitigation is required. (DEIR, p. 4.8-18)

3.9.4 THRESHOLD E

Impact Statement: The Project site is not within two miles of an airport and the Project site is not identified as within an airport influence area.

❑ Findings

Potential impacts of the Project related to Threshold e are discussed in Section 4.8.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold e; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site falls within the airport planning area of the Los Alamitos JFTB. In 1975 the Orange County Airport Land Use Commission (ALUC) amended the AELUP for the JFTB to protect the public around the JFTB while ensuring operation of the JFTB. The AELUP was most recently amended in 2017, which reflected updates based on changes made to the California Airport Land Use Planning Handbook. The Project site is not located within a Clear Zone or accident potential zone (APZ) (refer to DEIR Figure 4.8-1, *JFTB Impact Zones*). The northwestern vertex of the Project site intersects the JFTB 60-65 A-weighted Decibels (dBA) Community Noise Equivalent Level (CNEL) noise contour. Land uses within the airport planning-area boundaries such as the Project site are required to conform to safety, height, and noise restrictions established in the AELUP for the JFTB. (DEIR, p. 4.8-18)

The maximum building height of the Project is approximately 41 feet. Project site elevations range from 21 feet to 39 feet. The proposed Project would not exceed the established Part 77 Horizontal Surface for the primary JFTB runway of 150 feet above airport elevation. Also, on January 26, 2022, the FAA issued Determinations of No Hazard to Air Navigation (DEIR *Technical Appendix J2*) after its aeronautical study of the Project revealed that the structures would not exceed obstruction standards and would not be a hazard to air navigation. Additionally, as shown in DEIR Figure 4.8-2, *Los Alamitos JFTB Flight Patterns*, the Project site is not located within any of the flight pattern in the JFTB. Buyer awareness is required as part of the City's approval process for the Project. The buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location. Therefore, the City meets the overflight notification requirements as suggested by the Handbook, State law, the AICUZ and AELUP, and the Project would not result in a safety hazard for people residing or working in the Project area. (DEIR, pp. 4.8-18 to 4.8-19)

As discussed in DEIR Section 4.11, *Noise*, based on a review of noise level contours for the JFTB a small portion of the proposed residential uses would be located within the conditionally consistent 60-65 dBA noise contour under projected conditions. Exposure of exterior use areas to noise levels in excess of 70 dBA CNEL would be considered significant, and exposure of residential land uses to noise levels in excess of 65 dBA CNEL would be significant unless noise levels in interior habitable rooms are reduced to 45 dBA CNEL. Typical modern residential construction can achieve a noise level reduction of 25 dBA with windows closed. Thus, with the implementation of PDF N-2 (Refer to DEIR

Section 3.0, *Project Description*, for the discussion of PDF N-2), a windows closed condition was evaluated, which indicates maximum interior noise levels would range from 35 to 40 dBA CNEL from aircraft noise exposure. Therefore, the Project would not result in excessive noise for people residing or working in the Project area. (DEIR, p. 4.8-19)

The currently adopted General Plan contains Policies 1.4, 3.1, 3.5, 3.6, and 3.7 from the Growth Management Element, and Policies 4.1 and 4.6 from the Public Facilities and Safety Element to assure future development will be consistent with the AELUP. Compliance with the policies and land use regulations would further minimize safety hazards for people residing and working near the Los Alamitos JFTB. Refer to DEIR Table 4.10-2, *General Plan Consistency Analysis*, for an analysis of the Project's consistency with the policies above. Thus, impacts would be less than significant and mitigation is not required. (DEIR, p. 4.8-19)

Compliance with FAA Regulation Part 77 Notification Area and Horizontal Imaginary Surface for the Los Alamitos JFTB is provided in Section 4.10, *Land Use and Planning*, of the DEIR. Based on the FAA's Determination of No Hazard to Air Navigation (DEIR *Technical Appendix J2*), the proposed structures do not exceed obstruction standards and would not be a hazard to air navigation. Therefore, no impact would occur. (DEIR, p. 4.8-19)

3.9.5 THRESHOLD F

Impact Statement: The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

❑ Findings

Potential impacts of the Project related to Threshold f are discussed in Section 4.8.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold f; therefore, no mitigation is required.

❑ Substantial Evidence

During construction, the Project would result in roadway improvements along Lampson, including replacement of the existing median curb and construction of the two proposed driveways. Construction on Lampson will require an encroachment permit and approval from the City Engineer Lane closures that may be required for median improvements would be temporary and require a permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. Compliance with LAMC 12.08.200 would ensure safe crossing and access for all vehicle and pedestrians at all times. (DEIR, p. 4.8-21)

The City adopted an Emergency Operations Plan (EOP) in 2015. The EOP identifies the City's emergency planning, organizational structure, and response policies/procedures to natural disasters and incidents of terrorism. The purpose of the EOP is to mitigate the effects of hazards, identify measures to be taken which will preserve life and minimize damage, enhance response capabilities, provide necessary assistance during emergencies, and establish a recovery system in order to return the City to

its normal state of affairs. The City currently does not have any designated evacuation routes, however, the EOP recognizes that during a major evacuation event, all major roadways would be available for evacuation purposes. Implementation of the Project would not result in changes to the existing roadways that would impair or physically interfere with the EOP or evacuation routes. (DEIR, p. 4.8-21)

The Project site does not contain any emergency facilities. During construction and long-term operation, the proposed Project would be required to maintain adequate access for emergency vehicles. The effectiveness of emergency response and firefighting operations is directly related to the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures. In accordance with Orange County Fire Authority (OCFA) Guideline B-09, Fire Master Plans for Commercial & Residential Development, Firesafe Planning Solutions prepared a Fire Master Plan for the Project (see DEIR Figure 4.8-3, *Fire Master Plan*). The Fire Master Plan demonstrates the Project's compliance with the California Fire and Building Codes and other regulations governing water availability for firefighting and emergency access to the Project site, including but not limited to fire access and roadway design, fire lane identification, and access to structures. Accordingly, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan. Thus, impacts would be less than significant and mitigation is not required. (DEIR, p. 4.8-21)

3.9.6 THRESHOLD G

Impact Statement: The Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

❑ Findings

Potential impacts of the Project related to Threshold g are discussed in detail in Section 4.8.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold g; therefore, no mitigation is required.

❑ Substantial Evidence

The City's General Plan identifies very little risk of wildland fire hazards due to the urban nature of Los Alamitos, Rossmoor, and the surrounding communities. The primary fire hazard is urban fires–those that burn in developed areas and include commercial, industrial, and residential structures. The Project would result in the development of the Project site with residential buildings that would remove the vegetation which would reduce the presence of fuel in the event of a wildfire. The proposed residential structures would be designed to comply with State and local fire safety requirements. DEIR Figure 4.8-3, *Fire Master Plan*, demonstrates compliance with all codes and other regulations governing water availability for firefighting and emergency access to the Project site and structures. In addition, the Project site is not located within a very fire hazard severity zone. Therefore, the Project would not expose people or structures, directly, or indirectly, to a risk of loss, injury or death involving wildland fire, and no impact would occur. (DEIR, pp. 4.8-21 to 4.8-22)

3.9.7 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to hazards and hazardous materials.

❑ Findings

Potential cumulative impacts of the Project related to hazards and hazardous materials are discussed in detail in Section 4.8.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to hazards and hazardous materials; therefore, no mitigation is required.

❑ Substantial Evidence

As discussed above under the responses to Thresholds a and b, the Project's construction and operation would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, and disposal of hazardous substances. Such uses also would be subject to additional review and permitting requirements by the Orange County Health Care Agency, Environmental Health Division. Similarly, any other developments in the area proposing the construction of uses with the potential for use, storage, or transport of hazardous materials also would be required to comply with applicable federal, State, and local regulations, and such uses would be subject to additional review and permits from their local oversight agency. Therefore, the potential for release of toxic substances or hazardous materials into the environment, either through accidents or due to routine transport, use, or disposal of such materials, would be less than cumulatively considerable. (DEIR, p. 4.8-22)

As discussed above under Threshold c, no existing or planned schools are located within a one-quarter mile of the Project site, and therefore, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a one-quarter mile of an existing or proposed school, and no impact would occur. Therefore, the Project has no potential to combine with other development projects to result in substantial hazardous materials-related impacts within one-quarter mile of the Project site. (DEIR, p. 4.8-22)

As indicated under Threshold d, the Project site is not listed on any hazardous materials sites lists compiled pursuant to Government Code Section 65962.5; no impact would occur. Because the Project site is not classified as a hazardous materials site, there is no potential for the Project to contribute to, or exacerbate, adverse environmental effects resulting from other hazardous materials sites in the Project vicinity. (DEIR, p. 4.8-22)

As discussed above under Threshold e, the Project would not violate the standards outlined in the Airport Environs Land Use Plan (AELUP) for the Los Alamitos JFTB. Because the Project and cumulative development within the airport planning area are subject to compliance with the policies and land use regulations in the AELUP, the potential for a cumulative impact to occur related to potential safety hazards for people residing and working near the Los Alamitos JFTB would be minimized. (DEIR, p. 4.8-22)

As discussed above under Threshold f, the Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route; therefore, it has no potential to impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan and would result in no impact. Thus, the Project would have no effect on emergency access and there is no potential for the proposed Project to contribute to any cumulative impacts associated with emergency facilities or emergency evacuation routes. (DEIR, p. 4.8-24)

As discussed above under Threshold g, the Project site is not located in an area that is susceptible to wildland fire hazards, and therefore would result in no impact related to significant risk of loss, injury, or death involving wildland fires. As such, the Project would not contribute to any cumulative impact related to wildland fires. (DEIR, p. 4.8-24)

3.10 HYDROLOGY AND WATER QUALITY

Project impacts for Hydrology and Water Quality Thresholds a through e do not result in significant impacts and related findings are discussed below.

3.10.1 THRESHOLD A

Impact Statement: The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.9.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

The Project Applicant would be required to comply with Section 402 of the Clean Water Act, which authorizes the NPDES permit program that regulates point sources of pollution discharging to a water body. The NPDES program would require the Project Applicant and/or construction contractor to prepare a SWPPP and obtain authorization to discharge stormwater under an NPDES construction stormwater permit because the Project would result in construction on a site that is larger than one acre. The Project Applicant also would be required to comply with the California Porter-Cologne Water Quality Control Act (Section 13000 et seq., of the California Water Code), which requires that comprehensive water quality control plans be developed for all waters within the State of California. The Project site is located within the jurisdiction of the Santa Ana RWQCB. (DEIR, p. 4.9-14)

Construction-Related Water Quality Impacts

Construction of the Project would involve demolition, clearing, grading, paving, utility installation, building construction, and landscaping activities, which have the potential to generate silt, debris, organic waste, chemicals, paints, and other solvents; should these materials come into contact with water that reaches the groundwater table or flows off-site, the potential exists for the Project's

construction activities to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during Project construction in the absence of any protective or avoidance measures. (DEIR, p. 4.9-14)

Pursuant to the requirements of the Santa Ana RWQCB and LAMC Chapter 8.44, the Project Applicant would be required to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit). The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one (1) acre of total land area. In addition, the Project Applicant would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP will specify the BMPs that the Project's construction contractors would be required to implement during construction activities to ensure that potential pollutants of concern are prevented, minimized, and/or treated appropriately prior to being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. (DEIR, pp. 4.9-14 to 4.9-15)

Mandatory compliance with the SWPPP would ensure that Project construction does not violate any water quality standards or waste discharge requirements. Therefore, water quality impacts associated with construction activities would be less than significant and no mitigation is required. (DEIR, p. 4.9-15)

Operational Water Quality Impacts

Pursuant to the LAMC Chapter 8.44, the Project Applicant would be required to implement a WQMP to demonstrate compliance with the City's NPDES municipal stormwater permit, and to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters. The WQMP is a site-specific post-construction water quality management program designed to address the pollutants of concern of a development project via BMPs, implementation of which ensures the on-going protection of the watershed basin. The Project's preliminary WQMP is included as *Technical Appendix I2* of the DEIR and an updated report was included in the FEIR (*Attachment E*) and includes both storm drain scenarios. As identified in the Project's preliminary WQMP, the proposed Project is designed to include evapotranspiration, rainwater harvesting BMPs, biotreatment BMPs, non-structural source control BMPs, and structural source control BMPs. The Project site would be divided into seven (7) Drainage Management Areas (DMA). Each drainage area would have an area drain system to convey runoff from landscape and roof drainage along curb inlet Modular Wetlands Systems to intercept surface runoff from surrounding walkways and drive aisles. The area drain system design would be determined during final engineering and would connect directly to the proposed water quality treatment devices. Non-structural source control BMPs include education for property owners, tenants and occupants, activity restrictions, common area landscape management, BMP maintenance, title 22 CCR compliance, uniform fire code implementation, common area litter control, employee training, common area catch basin inspection, and street sweeping private streets and parking lots.

Structural source control BMPs include storm drain system stenciling and signage, trash and waste storage areas, efficient irrigation systems & landscape design, water conservation, smart controllers, and source control. (DEIR, p. 4.9-15)

Based on the foregoing analysis, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during long-term operation. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.9-15)

Groundwater Quality

During soil sampling conducted for the Project, groundwater was encountered at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. Excavation associated with the Project's grading activities have the potential to encounter groundwater. However, the Project would comply with regulatory requirements, including the Construction General Permit which would address potential groundwater quality impacts. Project Construction would not adversely affect groundwater on or off site. (DEIR, pp. 4.9-15 to 4.9-16)

Conclusion

Based on the foregoing analysis, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction or long-term operation. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.9-16)

The Project includes the following PDF that will result in a reduction of the Project's impacts.

PDF HYD-1 The Project will be built such that the finished floor elevation for the onsite buildings is set 1 foot minimum above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements.

3.10.2 THRESHOLD B

Impact Statement: The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the basin.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in detail in Section 4.9.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold b; therefore, no mitigation is required.

- **Substantial Evidence**

According to the Project's Geotechnical Evaluation, groundwater was encountered at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. The Project Applicant does not propose the use of any wells or other groundwater extraction activities. Therefore, the Project would not directly draw water from the groundwater table. (DEIR, p. 4.9-16)

Sources of Orange County Water District (OCWD) groundwater recharge supplies include Santa Ana River – Base Flow and Storm Flow, Santiago Creek – Storm Flow/Santa Ana River, Natural Recharge – Precipitation and subsurface inflow, Recycled water – Groundwater Replenishment System and Water Replenishment District of Southern California and Imported Water – Untreated and Treated. (DEIR, p. 4.9-16)

Development of the Project would increase impervious surface coverage by 48% on the Project site, which would, in turn, reduce the amount of water percolating down into the underground aquifer that underlies the Project site and a majority of the City and surrounding areas (i.e., Orange County Groundwater Basin). The Project site, however, is located in the western portion of the Orange County Groundwater Basin and would not physically impact any of the major groundwater recharge supplies discussed above in the Basin. Additionally, the Project site is not within or a part of a recharge facility for the Orange County Groundwater Basin. Therefore, the Project's reduction in percolation at the site would not impact groundwater recharge supplies. The Project would not result in substantial, adverse effects to local groundwater levels. (DEIR, p. 4.9-16)

Based on the infiltration testing conducted within the Geotechnical Investigation (DEIR *Technical Appendix F1*), the infiltration rates were approximately 0.03 inches per hour and 0.04 inches per hour. Therefore, due to the extremely low measured infiltration rate, low permeability fine-grained soils at depth, shallow groundwater, and site liquefaction potential, infiltration is not feasible at the Project site. Accordingly, buildout of the Project would not interfere substantially with groundwater recharge or impede sustainable groundwater management of the Orange County Groundwater Basin. Based on the foregoing information, the Project would not interfere substantially with groundwater recharge. (DEIR, p. 4.9-16)

For the reasons stated above, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the basin. Impacts would be less than significant, and no mitigation is required. (DEIR, pp. 4.9-16 to 4.9-17)

3.10.3 THRESHOLD C

Impact Statement: The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding

on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in detail in Section 4.9.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ Substantial Evidence

Proposed Storm Drain Facilities

Two stormwater drainage facility plans have been proposed to accommodate stormwater runoff associated with the increase in this amount of impervious surface: on-site storm drain facilities and an alternate off-site storm drain facilities. The analysis below demonstrates that the Project has been designed to capture and treat stormwater runoff such that it would not impact downstream facilities. (DEIR, p. 4.9-17)

Storm Drain Facilities – Preferred Route

The preferred treatment of stormwater runoff for the Project would be conveyance by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include an internal overflow bypass that direct flows via onsite underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows into the existing 18" storm drain pipe at the southwest corner of the site to outlet to the JFTB. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing flows. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will flow onto Lampson Avenue matching historical drainage patterns. (DEIR, p. 4.9-17)

The combined, total 100-year peak flow rate for the Project site is 31.51 cfs under existing conditions. The combined, total 100-year peak flow rate for the Project site is approximately 42.15 cfs under the proposed conditions without improvements. DEIR Figure 4.9-4, *Proposed Conditions Hydrology Map* illustrates the post-development drainage conditions of the Project site. The proposed drainage design would follow the existing drainage pattern with surface flows to on-site drainage facilities that would ultimately outlet into the existing storm drain pipe at the southwest corner of the Project site. The results from the hydrology study demonstrate that the proposed conditions of the Project site of 42.15 cfs would generate a higher peak runoff flowrate than the existing condition of the site of 31.51 cfs. (DEIR, p. 4.9-17, as revised in Section 4.0 of the FEIR)

Due to increased peak runoff flows created from the proposed change in land use and increased impervious coverage by 48%, stormwater would need to be detained and minimized on-site to match existing conditions. To prevent overflow into Lampson Ave, the detention system will be sized to

match the maximum flows conveyed by the outlet pipe, approximately 33,106 cubic feet. In addition, a proposed stormwater pump system with upstream detention storage has been incorporated into the onsite drainage design to provide onsite peak flow and volume detention for the development for all storm events. The pump system will control the outflow discharge rate matching the existing 2-year peak flow at approximately 8.9 cfs. As such, the proposed on-site detention facilities will be designed to detain volumes that would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. As such, downstream facilities would not be hydrologically impacted by the proposed Project. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.9-19)

Alternate Storm Drain Facilities

In the event the preferred route (historical flow across the JFTB) is not available, an alternate treatment of stormwater runoff for the Project would be conveyed to offsite storm drain facilities. DEIR Figure 4.9-5, *Proposed Alternate Conditions Hydrology Map* illustrates the post-development drainage conditions for this drainage and detention alternate. The proposed site's stormwater runoff would be conveyed by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include an internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows onto Lampson Avenue via a parkway culvert. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the pre-development 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the pre-development 25-year storm event in Lampson Avenue, onsite flows would continue pumping to Lampson Avenue normally. (DEIR, p. 4.9-19)

Under the Alternate Storm Drain plan, stormwater will need to be detained and minimized onsite such that Lampson Avenue meets OC Hydrology flooding standards. Onsite and offsite small unit hydrographs were analyzed using AES Rational Method Analysis to identify the time that the flows exceed the allowed offsite 25-year storm event flows to prevent flooding of one travel lane of the half-street per the OC Local Drainage Manual. Approximately 33,106 cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. By matching the maximum flows and providing an additional 20 percent factor of safety for preliminary sizing, approximately 38,800 cf of water would be detained onsite. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed improvements. Additionally, the proposed finished floor elevations for the onsite buildings would be set 1-foot minimum above the 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements. (DEIR, p. 4.9-19, as revised in Section 4.0 of the FEIR)

Storm Drain Facilities Considered but Determined Infeasible

As part of the Project's hydrology analysis, the following drainage designs with different outlet locations were reviewed but found to be infeasible:

1. Construct storm drain pipe under Lampson Avenue to west: The proposed installation of approximately 2,400 feet of 30-inch underground gravity storm drain pipe in Lampson Avenue to directly connect to the closest downstream existing 36-inch storm drain pipe (north of Guava Avenue extended) was found to be infeasible due to conflicts with existing utilities; including existing 16-inch water, 8-inch sewer, and 34-inch gas main. Installing 2,400 feet of force main, as opposed to gravity main, may also create long-term maintenance concerns. In addition, the installation of 2,400 feet of force main is not desirable due to head losses (pressure loss causing a reduction in flow) created by such a long length of pipe.

2. Construct storm drain pipe under Heather Street, Hazelnut Avenue, and Guava Avenue to south and west: Since there is no existing underground storm drain to connect to within Heather Street or Hazelnut Avenue, a new storm drain pipe would need to be extended 3,000 feet through these streets to connect to the existing 36-inch storm drain pipe in Guava Avenue. The existing storm drain system is undersized according to the City of Seal Beach Master Plan of Drainage Update dated August 2008. Future City of Seal Beach capital improvements to the downstream storm drain system are recommended in the Master Plan of Drainage Update at this location, but there is no current timeline to install any capital improvements. Without the capital improvements in place, redirecting stormwater runoff flows from the site to the currently undersized storm drain system in Guava Avenue is infeasible since it would exacerbate the existing flooding condition at this location adjacent to single family homes.

3. Outlet Runoff to Arbor Park to North: Arbor Park is within the JFTB and drains south to the same earthen channel outlet as the Project site. If the proposed flows from the Project are not allowed to outlet to the JFTB at the southwest corner of the site, proposed flows from the Project would not be allowed to outlet to the JFTB to the north of the site either since they are essentially the same outlet location. In addition, the existing site does not flow in the northerly Arbor Park/ JFTB area as the site drains in the southwesterly direction, therefore directing stormwater runoff to the north would change the historic drainage pattern which can potentially cause downstream flooding.

4. Outlet Runoff to Golf Course to East: The golf course to the east is within the JFTB and drains east ultimately to the Bolsa Chica Channel. Discharing to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the Project site; therefore potentially cause downstream flooding. In addition, the golf course and Bolsa Chica Channel are upstream from the site, therefore not feasible due to elevation differences.

5. Construct storm drain pipe under Lampson Avenue to east: Discharging to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the site. Additionally, installation of underground storm drain pipe within Lampson Avenue is infeasible due to conflicts with existing utilities, maintenance concerns, and head losses as described above (see #1). Similarly to item #4, changing the historical drainage pattern may potentially cause unforeseen drainage impacts. (DEIR, p. 4.9-21, as revised in Section 4.0 of the FEIR)

The following analysis evaluates the potential for Project-related development activities to adversely affect water quality or cause or exacerbate local flooding.

Erosion or Siltation On- or Off-site

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site. As discussed in Threshold a, compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP will specify the BMPs that would be required to be implemented during construction activities to ensure that waterborne pollution – including erosion/siltation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. (DEIR, p. 4.9-22)

Mandatory compliance with the SWPPP would ensure that the Project's construction does not violate any water quality standards or waste discharge requirements. Based on the foregoing information, erosion and sedimentation impacts associated with Project construction activities would be less than significant. No mitigation is required. (DEIR, p. 4.9-22)

As discussed under Threshold a, during operation of the Project, the Project Applicant would be required to prepare and implement a WQMP, which is a site-specific post-construction water quality management program that will be implemented to minimize erosion and siltation, pursuant to LAMC Chapter 8.44, Stormwater and Urban Runoff Pollution Controls. The WQMP is required to identify an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges. The WQMP also is required to establish a post-construction implementation and maintenance plan to ensure on-going, long-term erosion protection. Compliance with the WQMP is required as a condition of approval for the Project, as will the long-term maintenance of erosion and sediment control features. Because the Project Applicant would be required to utilize erosion and sediment control measures to preclude substantial, long-term soil erosion and loss of topsoil, Project operation would result in less than significant impacts related to soil erosion and sedimentation. No mitigation is required. (DEIR, p. 4.9-22)

Runoff and Flooding On- or Off-site

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite. (DEIR, p. 4.9-22)

On-Site Storm Drain Facilities

The results from the hydrology report demonstrate that the proposed drainage conditions would generate a higher peak runoff flowrate than the existing conditions on the Project site due to an increase in impervious area and change in land use. The preferred detention facilities would be designed to detain the increased peak flow between the existing outlet pipe flows and proposed conditions. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements. (DEIR, p. 4.9-23)

Alternate Storm Drain Facilities

A second hydrology report was prepared for the alternate stormwater conveyance plan. The results from the report demonstrated that the proposed condition of the alternate would generate a higher 100-year storm event peak runoff flowrate than the existing condition of the site due to an increase in impervious area and change in land use. The proposed underground detention facilities would be designed to detain the increased flows under the proposed conditions, which would be discharged from the site via a pump station at flow rates that would not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements. (DEIR, p. 4.9-23, as revised in Section 4.0 of the FEIR)

Based on the foregoing information, the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.9-23)

Stormwater Drainage System Capacity & Polluted Runoff

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The Project's preferred storm drain system and alternate storm drain system would be sized and designed in accordance with the City's drainage requirements and Orange County Hydrology Manual to ensure that off-site flows are conveyed through the Project site and flows originating off-site are discharged from the site at a volume and rate that can be accommodated by existing and planned downstream storm drain facilities. (DEIR, p. 4.9-23)

As discussed under Threshold a, the Project Applicant would be required to comply with a SWPPP and the Project's WQMP (DEIR *Technical Appendix I2*; FEIR *Attachment E*) which identify required

BMPs to be incorporated into the Project's design and operation to ensure that near-term construction activities and long-term post-development activities of the proposed Project would not result in substantial amounts of polluted runoff. Therefore, with mandatory compliance with the Project's SWPPP and WQMP, the proposed Project would not create or contribute substantial additional sources of polluted runoff, and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.9-23)

Flood Flows

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps identify flood zones and areas that are susceptible to 100-year (1% annual chance of occurrence) and 500-year floods (0.2% annual chance of occurrence). These areas are referred to as Special Flood Hazard Areas and Moderate Flood Hazard Areas respectively. According to FEMA Flood Insurance Rate Map (FIRM) No. 06059C0116J (effective 12/03/2009), the Project site is located within FEMA Flood Zone D. Flood Zone D is correlated with areas with a possible risk of flooding, but the probability has not been determined. Additionally, the City's General Plan identifies the Project site as an undetermined risk area. It should be noted that the Project site is not in proximity to an area within a flood zone. (DEIR, p. 4.9-24)

On-Site Storm Drain Facilities

According to the Hydrology Report, during a peak 100-year storm event, stormwater flows would be detained within the on-site underground detention basin. Detained volumes will be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Additionally, the Project's proposed finished floor elevations would be set at least 1 foot above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection requirements. (DEIR, p. 4.9-24)

Alternate Storm Drain Facilities

According to the Hydrology Report for the alternate stormwater conveyance plan, during a peak 100-year storm event, stormwater flows would be detained with the proposed detention facilities. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed improvements. Additionally, proposed floor elevations for the onsite buildings would be set at least 1 foot above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection requirements. (DEIR, p. 4.9-24)

Moreover, as previously discussed, the Project was designed to maintain the approximate existing drainage pattern to the extent feasible. Accordingly, the Project is not expected to impede flood flows. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.9-24)

3.10.4 THRESHOLD D

Impact Statement: The Project would not result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to inundation.

❑ Findings

Potential impacts of the Project related to Threshold d are discussed in Section 4.9.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold d; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site is located approximately 4.22 miles northeast of the Pacific Ocean; therefore, there is minimal potential for the Project site to be impacted by a tsunami. A seiche occurs when a wave oscillates in lakes, bays, or gulfs as a result of seismic disturbances. The Project site is also not subject to flooding hazards associated with a seiche because there are no large bodies of water within the vicinity of the Project site. Furthermore, as stated above under Threshold c, the Project's storm drainage infrastructure would adequately detain 100-year flows, discharge detained flows at rate that do not exceed existing flows, and the Project's finish floor elevations would be at least 1 foot above the water surface elevation. Accordingly, the Project is not anticipated to risk the release of pollutants due to inundation. Impacts would be less than significant and no mitigation is required. (DEIR, pp. 4.9-24 to 4.9-25)

3.10.5 THRESHOLD E

Impact Statement: The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

❑ Findings

Potential impacts of the Project related to Threshold e are discussed in detail in Section 4.9.6 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold e; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site is located within the jurisdiction of the Santa Ana RWQCB. Project-related construction and operational activities would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan by preparing and adhering to a SWPPP and WQMP. As also discussed in Threshold a above, implementation of the Project would not conflict with or obstruct the Santa Ana River Basin Water Quality Control Plan and impacts would be less than significant. (DEIR, p. 4.9-25)

The Project site is within the Coastal Plain or Orange County Groundwater Basin (Basin 8-1). The Department of Water Resources (DWR) classifies this basin as a medium-priority basin. Under the

Sustainable Groundwater Management Act (SGMA), local agencies are required to form Groundwater Sustainability Agencies (GSAs) for the high and medium priority basins. GSAs develop and implement GSPs to avoid undesirable results and mitigate overdraft within 20 years. The GSA for Basin 8-1 is comprised of OCWD, city of La Habra, and Irvine Ranch Water District. These agencies collaborated and submitted an Alternative to a GSP titled Basin 8-1 Alternative 2022 Update on January 1, 2022, to the DWR (Alternative). This Alternative documents the basin conditions; basin management is based on measurable objectives and minimum thresholds defined to prevent significant and unreasonable impacts on the sustainability indicators defined in the Alternative. (DEIR, p. 4.9-25)

According to the Project's Geotechnical Evaluation, groundwater was encountered at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. The Project Applicant does not propose the use of any wells or other groundwater extraction activities. The Project's potable water would by supplied by Golden State Water Company (GSWC), which relies on the Orange County Groundwater Basin and imported water from the Municipal Water District of Orange County. (DEIR, p. 4.9-25)

The 2021-2029 Housing Element includes the Project site in its housing opportunity sites. The Housing Element concluded that based on the 2020 Municipal Water District of Orange County (MWDOC) Urban Water Management Plan (UWMP) analysis and discussion with the City's water service provider, sufficient water capacity is available to provide water service for additional units constructed to meet the City's Regional Housing Needs Allocation (RHNA) allocation for the planning period. Therefore, the Project would not have the potential to conflict with or obstruct implementation of the Basin 8-1 Alternative. Refer also to DEIR Section 4.17, *Utilities and Service Systems*, for a detailed discussion related to water supply. Impacts would be less than significant and no mitigation is required. (DEIR, p. 4.9-25)

3.10.6 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in cumulatively considerable impacts related to hydrology and water quality.

❑ Findings

Potential cumulative impacts of the Project related to hydrology and water quality are discussed in detail in Section 4.9.7 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to hydrology and water quality; therefore, no mitigation is required.

❑ Substantial Evidence

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects in the vicinity of the Project site and projects located in San Gabriel-Coyote Creek Watershed and the Orange County Groundwater Basin. (DEIR, p. 4.9-26)

Water Quality

Project construction and the construction of other projects in the cumulative study area would have the potential to contribute waterborne pollution, including erosion and siltation, to the San Gabriel-Coyote Creek Watershed. Pursuant to the requirements of the State Water Resources Control Board and the Santa Ana RWQCB, all construction projects that disturb one (1) or more acres of land area are required to obtain coverage for construction activities under the State's General Construction NPDES Permit. In order to obtain coverage, an effective site-specific SWPPP is required to be developed and implemented. The SWPPP must identify potential on-site pollutants and identify an effective combination of erosion control and sediment control measures to reduce or eliminate discharge of pollutants to surface waters. In addition, the Project Applicant and all cumulative developments in the Santa Ana River Basin would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program, which establishes water quality standards for ground and surface waters of the region. Compliance with these mandatory regulatory requirements, would ensure that development projects within the San Gabriel-Coyote Creek Watershed, including the proposed Project, would not contribute substantially to water quality impairments during construction. (DEIR, p. 4.9-26)

Operational activities on the Project site would be required to comply with the Project's WQMP to minimize the amount of waterborne pollution, including erosion and sediment, discharged from the site. Other development projects within the watershed would similarly be required by law to prepare and implement site-specific WQMPs to ensure that runoff does not substantially contribute to water quality violations. Accordingly, operation of the Project would not contribute to cumulatively-considerable water quality effects. (DEIR, p. 4.9-26)

Groundwater Supplies and Management

The Project site does not support infiltration and the Project site is not within and is not a part of a recharge facility for the Orange County Groundwater Basin. Also, as previously noted, implementation of the Project would not result in substantial adverse effects to local groundwater supplies or groundwater recharge. Thus, no component of the Project would obstruct or prevent implementation of the management plan for the Orange County Groundwater Basin and other development projects within the Orange County Groundwater Basin would be prohibited from any activity that would endanger the health and sustainability of the groundwater basin. Based on the lack of impacts to groundwater and compliance with the applicable Orange County Groundwater Basin management plan, cumulative development would not result in a considerable, adverse effect to local groundwater supplies and not conflict with any water quality control plans or sustainable groundwater management plans. (DEIR, p. 4.9-26)

Flooding

Construction of the Project and other development projects within the San Gabriel-Coyote Creek Watershed would be required to comply with federal, State, and local regulations and applicable regional and local master drainage plans in order to mitigate flood hazards both on- and off-site. Compliance with federal, State, and local regulations and applicable drainage plans would require

development sites to be protected from flooding during peak storm events (i.e., 100-year storm) and also would not allow development projects to expose downstream properties to increased flooding risks during peak storm events. In addition, future development proposals within the San Gabriel-Coyote Creek Watershed would be required to prepare hydrologic and hydraulic calculations, subject to review and approval by the responsible City Engineer, to demonstrate that substantial on- and/or off-site flood hazards would not occur. Accordingly, the construction and operation of the Project would not contribute to cumulatively considerable flooding impacts. (DEIR, p. 4.9-27)

3.11 LAND USE AND PLANNING

Project impacts for Land Use and Planning Thresholds a and b do not result in significant impacts. Findings are discussed below.

3.11.1 THRESHOLD A

Impact Statement: The Project would not physically divide an established community.

- ❑ **Findings**

Potential impacts of the Project related to Threshold a are discussed in Section 4.10.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

- ❑ **Substantial Evidence**

The Project involves the redevelopment of a 12.3-acre site with a residential development of 246 units. The Project is consistent with the City's General Plan land use designations and zoning. The Project site is surrounded by Arbor Park to the north, the Navy Golf Course to the east, residential development to the south, and the Los Alamitos JFTB to the west. The proposed residential development is consistent with the surrounding land uses in the area and would not introduce a new use that potentially would separate existing communities through incompatible development (e.g., by limiting access to surrounding areas). For example, the Project would facilitate connections between the existing residential neighborhoods to the south and Arbor Park by providing additional parking for the park, improved sidewalks, signalized pedestrian intersections, and other circulation improvements. Additionally, the proposed Project would be developed within the confines of the Project site and would not introduce new major roadways or other infrastructure improvements that would bisect or transect the surrounding communities. For example, off-site improvements, including the replacement of the existing median curb/landscape and water line extension along Lampson Avenue would all occur within existing right-of-way. Therefore, redevelopment of the Project site would not physically divide an established community. No impact would occur and no mitigation is required. (DEIR, pp. 4.10-9 to 4.10-10)

3.11.2 THRESHOLD B

Impact Statement: The Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 4.10.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

The Project's consistency with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect is discussed below. DEIR Section 4.10.5 includes an analysis of consistency with Southern California Association of Governments (SCAG)'s Connect SoCal, the AELUP for the Los Alamitos JFTB, and the City's General Plan. The Project's consistency with the General Plan Mobility and Circulation Element is also discussed in DEIR Section 4.15, *Transportation*, of the DEIR. (DEIR, p. 4.10-10)

SCAG Connect SoCal

SCAG's Connect SoCal is the SCAG planning document that applies to the Project. Connect SoCal identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. The Connect SoCal goals are meant to provide guidance for considering proposed projects for municipalities throughout the SCAG jurisdictional area. As shown in DEIR Table 4.10-1, *SCAG Connect SoCal Goal Consistency Analysis*, the Project would not conflict with the Connect SoCal goals. Accordingly, the Project would have a less than significant impact and no mitigation is required. (DEIR, p. 4.10-10)

Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base (JFTB) Los Alamitos

The City and the Project site are within the airport planning area of the Los Alamitos JFTB. Land uses within the airport planning-area boundaries are required to conform to four key areas of military airport compatibility including: 1) aviation safety; 2) aircraft noise; 3) aircraft overflight; and 4) airspace protection/height zoning. Section 2.1 of the AELUP describes the standards and criteria adopted by the Airport Land Use Commission for Orange County for establishing planning boundaries. (DEIR, p. 4.10-14)

Safety

As discussed in DEIR Section 4.8, *Hazards and Hazardous Materials*, of the DEIR, the Project site is not located within the clear zones (CZs) or APZ (refer to DEIR Figure 4.8-1, *JFTB Impact Zones*) for the JFTB. Therefore, the Project does not concentrate people in areas susceptible to aircraft accidents. Therefore, the Project would not result in a safety hazard for people residing at the Project site. As such, the Project would not conflict with the safety restrictions established in the AELUP for the JFTB.

Height

The Project site is located within the FAR Part 77 Notification Area and Horizontal Imaginary Surface for the Los Alamitos JFTB. Based on the FAA's Determination of No Hazard to Air Navigation (*Technical Appendix J2* of the DEIR), the Project would not penetrate FAR Part 77 Imaginary

Obstruction Surfaces for JFTB. Determination of No Hazard further determined that the location and height of the Project's proposed buildings would not interfere with the established, or planned, airport flight procedures, patterns, or navigational systems. The FAA further found that the Project would not raise the ceiling or visibility minimums for any existing or planned instrument procedure at the Base. The FAA found that the Project would not result in a loss of airport utility, operational efficiency and capacity and would not reduce the usable length of either Base runway. Further, the Project would not conflict with the visual flight rules (VFR) airspace used for traffic patterns or arrival/departure airspace areas. The FAA Determination of No Hazard stated that marking and lighting of Project structures is not necessary for aviation safety. As such, the Project would not conflict with the height restrictions established in the AELUP for the JFTB. (DEIR, pp. 4.10-15 to 4.10-16)

Noise Standards

The AELUP relies on the 1994 California Army National Guard Installation Compatible Use Zone Study (AICUZ) for noise contours surrounding JFTB. The 1994 AICUZ depicts the Project site outside of the 65 dB CNEL noise contour and between the 60 and 65 CNEL noise contours. The AELUP considers residential land uses "conditionally consistent" with the 60 decibels (dB) CNEL noise contour and recommends sound attenuation to ensure interior CNEL does not exceed 45 dB CNEL and outdoor signage "informing the public of the presence of operating aircraft." The City enforces California Building Code standards for residential construction practices and building materials to ensure that interior noise levels do not exceed 45 dBA. (DEIR, p. 4.10-16)

Although the AELUP considers the Project conditionally consistent with the 60 dB CNEL contour, the CNEL noise contours depicted in the 1994 AICUZ and used by the AELUP are outdated and do not reflect updated noise contour information set forth in the most recent 2020 Noise Assessment completed for the Base. Further, the ALUC estimated the 60 dB CNEL contour in the AELUP using the 1994 AICUZ by extrapolating from the outdated 65 dB CNEL contour "using a logarithmic scaling method and professional acoustical-engineering judgment". This method of extrapolation is both outdated and contrary to the US Department of Defense (DOD) aircraft noise analysis requirements. The US DOD requires the use of the aircraft noise model NOISEMAP to predict community noise exposure. As required by US DOD, the 2020 Noise Assessment for the Base used NOISEMAP to predict community noise exposure. (DEIR, p. 4.10-16)

The 2020 Noise Assessment included a noise analysis of the then-current aircraft operations as the "Baseline" and provided a forecast of additional operations by the California Air National Guard projected over a 10-year period ("Projected" operations). As shown in DEIR Figure 4.11-4, a small portion of the northwest corner of the Project site is within the 60 dB CNEL Projected Noise Contour (based on the 10-year operations forecast) but the remainder of the site remains outside of the 60 dB CNEL noise contour. DEIR Figure 4.11-4 depicts the Project site in relation to the Baseline and Projected noise contours under the 2020 Noise Assessment for the base. (DEIR, pp. 4.10-16 to 4.10-17)

Relative to the 2020 Baseline and Projected noise contours, the entire Project site is located outside of the 65 dB CNEL noise contour, and only a small portion of the Project site would be located within

the 60 to 65 CNEL contour. The remainder of the Project site would be outside the 60 dB CNEL contour. The AELUP considers residential land uses consistent in areas outside the 60 dB CNEL contour and indicates that there are "no special noise reduction requirements." For the small portion of the site within the 60 to 65 CNEL contour, the AELUP indicates that it would be conditionally consistent and recommends sound attenuation to ensure interior CNEL does not exceed 45 dB and outdoor signage. The Project would comply with these recommendations. As stated above, the City enforces California Building Code standards for residential construction practices and building materials to ensure that interior noise levels do not exceed 45 dBA. Indeed, current building codes require construction materials and construction techniques that generally provide a minimum of 20 dB of sound attenuation. Typical building construction would provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (DEIR, p. 4.10-17)

Thus, interior noise for the small portion of the Project site within the 60 to 65 CNEL contour would be less than 45 dB CNEL with 20 dB of noise attenuation from standard construction practices. Interior noise within the rest of the Project site, which is located outside the 60 CNEL contour, would be even lower. Therefore, both the exterior and interior noise levels associated with the Project are consistent with the AELUP, and the Project would not expose people residing or working in the Project area to excessive noise levels from airport or aircraft operations. Impacts would be less than significant and no mitigation is required. (DEIR, p. 4.10-17)

Aircraft Overflight

Arrival and departure corridors used by inbound and outbound aircraft avoid direct overflight of residential areas as much as possible and avoid the Project site (see Figure 11 of *Technical Appendix J1)*. These corridors follow the major highways and streets to blend the majority of overflight noise with the background traffic noise. Navy Golf Course, Old Ranch Country Club and the Base's landside facilities, such as aircraft parking aprons, hangars, offices and roadways, also provide overflight setbacks from residential land uses. The objective is to reduce annoyance and minimize the number of people exposed to excessive noise levels from overflying aircraft. (DEIR, p. 4.10-17)

As noted in the Handbook, "very little guidance exists for limiting people's exposure to overflight." Nonetheless, regular updates to the AICUZ noise and overflight analysis are prepared and provided to members of the community as changes are made over time to the diverse mix of aircraft making use of the Base in its unique role as a "Joint Forces Training" facility. These operations, noise and overflight updates are required by the Department of Defense guidance for Base planning personnel and for dissemination to the public through the AICUZ program. (DEIR, p. 4.10-18)

AELUP Section 2.1.4 provides the ALUC guidance specific to overflight compatibility. The AELUP overflight policies follow State law and the California Airport Land Use Planning Handbook methods of achieving compatibility through buyer awareness and overflight information. The ALUC mandates the State's real estate disclosure provisions requiring buyer and renter notification for new residential land uses within an airport influence area (even if these state laws were to be revised or rescinded). The ALUC also requires that signs providing these disclosures and notices be "prominently posted" in

real estate sales offices and within the new development depicting overflight areas and helicopter traffic patterns. (DEIR, p. 4.10-18)

As identified in the Handbook, the primary overflight strategy is to ensure buyer awareness as opposed to any specific land use restrictions. This buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location. Buyer awareness is required as part of the City's approval process for the Project including the statement below:

> **NOTICE OF AIRPORT.** This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. (DEIR, p. 4.10-18)

With this required notification, the Project is consistent with overflight notification requirements as required by State law provided by the Handbook, State law, the AICUZ and AELUP. (DEIR, p. 4.10-18)

Summary
The Project would not conflict with JFTB AELUP's safety, height, noise, or aircraft overflight criteria, and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.10-18)

City of Los Alamitos General Plan

DEIR Table 4.10-2, *General Plan Consistency Analysis*, provides an analysis of the Project's consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in DEIR Table 4.10-2, the Project would not conflict with any of the applicable General Plan goals and policies. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the City of Los Alamitos General Plan and mitigation is not required. (DEIR, p. 4.10-19)

City of Seal Beach General Plan

DEIR Table 4.10-3, *Seal Beach General Plan Consistency Analysis*, provides an analysis of the Project's consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in DEIR Table 4.10-3, the Project would not conflict with any of the applicable General Plan goals and policies. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the City of Los Alamitos General Plan and mitigation is not required. (DEIR, p. 4.10-33, as revised in Section 4.0 of the FEIR)

3.11.3 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in cumulatively considerable impacts related to land use and planning.

❑ **Findings**

Potential cumulative impacts of the Project related to land use and planning are discussed in detail in Section 4.10.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to land use and planning; therefore, no mitigation is required.

❑ **Substantial Evidence**

This Project, in conjunction with other cumulative related projects would not physically divide an established community. As discussed under Threshold a, the Project would not physically divide an established community because the Project site is currently developed, in an urbanized area and would not introduce new major roadways or other infrastructure improvements that would bisect or transect the surrounding communities. Similarly, the City is primarily built out and there are no cumulative related projects that could combine with the Project that would physically divide an established community. (DEIR, p. 4.10-33)

The Project, in conjunction with other cumulative development in accordance with the City's General Plan, would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As discussed under Threshold b, the Project is consistent with SCAG's Connect SoCal, the City's land use and zoning designations for the Project site and would not conflict with any aspects of the City's General Plan or any other applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating adverse environmental effects. Cumulative development would also be subject to site-specific environmental and planning reviews to ensure consistency with applicable regional and local plans reviewed in this section. Therefore, cumulatively considerable impacts from cumulative projects related to policy consistency would be less than significant. (DEIR, p. 4.10-33)

3.12 MINERAL RESOURCES

Project impacts for Mineral Resources Thresholds a and b do not result in significant impacts and findings are discussed below.

3.12.1 THRESHOLD A

Impact Statement: The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in Section 5.4.2 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

The Project does not conflict with California Legislature's 1975 Surface Mining and Reclamation Act (SMARA), which provides guidelines of the classification and designation of mineral lands. The City of Los Alamitos and its sphere of influence fall within the Mineral Resource Zone-1 (MRZ) and MRZ-4. MRZ-1 represents areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. MRZ-4 indicates areas where available information is inadequate for assignment to any other MRZ zone. Specifically, the Project is within MRZ-1. Accordingly, no impact would occur. (DEIR, p. 5-8)

3.12.2 THRESHOLD B

Impact Statement: The Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 5.4.2 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

There are no locally important mineral resource recovery sites in the City of Los Alamitos or its sphere of influence. As discussed above, no known valuable mineral resources exist on or near the Project site and no mineral resource extraction activities occur on the site. Thus, the proposed Project would not result in the loss of availability of locally-important mineral resources. Accordingly, no impact would occur. (DEIR, pp. 5.8 to 5-9)

3.13 NOISE

Except as indicated, Project impacts for CEQA Noise Thresholds a, b and c do not result in significant impacts and findings are discussed below.

3.13.1 THRESHOLD A

Impact Statement: The Project would not generate a substantial temporary or permanent increase in ambient noise levels during construction or on-site operation, in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.11.7 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold a, for construction or on-site operation; therefore, no mitigation is required for these.

❑ Substantial Evidence

The analysis presented on the following pages summarizes the Project's potential construction noise levels and operational noise levels, including off-site noise that would be generated by Project-related traffic.

Construction Noise

Construction activities on the Project site would proceed in six stages: 1) demolition, 2) site preparation, 3) grading, 4) building construction, 5) paving, and 6) application of architectural coating. Noise generated by the Project construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined could reach high noise levels and would cause a short-term increase in ambient noise levels. The Project's potential construction noise levels at nearby receiver locations are summarized in DEIR Table 4.11-5, *Construction Equipment Noise Level Summary*. (DEIR, p. 4.11-23)

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used to assess the daytime construction noise level impacts based on the FTA's Transit Noise and Vibration Impact Assessment Manual. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. This threshold takes into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses. The construction noise analysis shows that noise impacts at the nearest receiver locations will be less than the daytime 80 dBA L_{eq} significance threshold during Project construction activities. Because the highest construction related noise level is 63.31 dBA Leq at the nearest sensitive receiver, the noise impacts due to Project construction noise are considered less than significant and no mitigation is required. (DEIR, p. 4.11-24)

Operational Noise – Stationary Noise

On-site Project-only operational noise sources are expected to include: roof-top and ground-mounted air conditioning units, parking lot vehicle movements, outdoor activity, and trash enclosure activities. The daytime and nighttime Project operational noise levels at nearby sensitive receptor locations are summarized on DEIR Table 4.11-6, *Project Daytime and Nighttime Operational Noise Levels*. (DEIR, p. 4.11-24)

As shown in DEIR Table 4.11-6, operational noise levels associated with the Project will be less than the City of Los Alamitos's 55 dBA L_{eq} daytime and 50 dBA L_{eq} nighttime exterior noise level standards

at the nearest receiver locations. Therefore, operational noise impacts would be less than significant at the nearest noise-sensitive receiver locations and no mitigation is required. (DEIR, p. 4.11-25)

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by Project operational noise sources. As indicated on Tables 10-5 and 10-6 of the Project's Noise Report (*Technical Appendix K* to this EIR), the Project would generate an unmitigated daytime and nighttime operational noise level increases ranging from less than 0.0 to 1.2 dBA Leq at the nearest receiver locations. Project-related operational noise level increases would be less than significant, and no mitigation is required. (DEIR, p. 4.11-25)

Operational – Off-site Transportation

To assess the off-site traffic CNEL noise level impacts associated with development of the proposed Project, noise level contours were developed based on 4665 Lampson Avenue Traffic Analysis. Noise level contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise level contours were developed for six traffic scenarios based on the Traffic Analysis (DEIR *Technical Appendix N1*): Existing, Existing Plus Project, Opening Year Without and With Project, and General Plan Buildout Without and With Project conditions. (DEIR, p. 4.11-25)

The noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels, which represents worst case conditions. (DEIR, pp. 4.11-25 to 4.11-26)

As shown on FEIR Table 4.11-7, *Existing Off-Site Project-Related Traffic Noise Impacts*, the Existing 2023 with Project will generate a noise level increase of up to 0.3 dBA CNEL on the study area roadway segments. Based on the significance criteria for off-site traffic noise impacts, the Project-related noise level increases are considered less than significant under Existing plus Project conditions at the land uses adjacent to roadways conveying Project traffic. (DEIR, p. 4.11-26, as revised in Section 4.0 of the FEIR)

FEIR Table 4.11-8, *Opening Year Off-Site Project-Related Traffic Noise Impacts*, shows that the Opening Year Project off-site traffic noise level increases of up to 0.2 dBA CNEL. Based on the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated Opening Year Project-related traffic noise levels. (DEIR, p. 4.11-26, as revised in Section 4.0 of the FEIR)

FEIR Table 4.11-9, *General Plan Buildout Off-Site Project-Related Traffic Noise Impacts*, shows that the General Plan Buildout Project off-site traffic noise level with Project increases of up to 0.2 dBA

CNEL. Based on the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated General Plan Buildout Project-related traffic noise levels with the Project. (DEIR, p. 4.11-26, as revised in Section 4.0 of the FEIR)

Based on the significance criteria for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to Project-related traffic noise level increases and off-site traffic related noise impacts would less than significant. No mitigation is required. (DEIR, p. 4.11-26)

The Project includes the following PDFs that will result in a reduction of the Project's impacts.

PDF N-1 Prior to the issuance of occupancy permits, the Project will construct a 7-foot-high noise barrier along Lampson Avenue. The noise control barrier will be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. Since the pad elevations varies, the top of each wall and/or berm combination will be 7' above each applicable pad elevation. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. The noise barrier shall be constructed using the following materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of at least four pounds per square foot;
- Material with sufficient weight per square foot capable of providing a minimum transmission loss of 25 dBA;
- Earthen berm; or,
- Any combination of these construction materials

PDF N-2 To comply with the State of California and City of Los Alamitos 45 A-weighted Decibels (dBA) Community Noise Equivalent Level (CNEL) interior noise standards for residential land use, the Project will provide the following or equivalent noise abatement measures on building plans:

- Windows & Glass Doors: At a minimum the Project will provide windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 27. Additionally, all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos will be provided windows and glass doors that are well-fitted, well-weather-

stripped assemblies with minimum sound transmission class (STC) ratings of 29.

- Doors (Non-Glass): All exterior doors shall be well weather-stripped and have Well-sealed perimeter gaps around the doors are essential to achieve the minimum STC rating.
- Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.
- Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided in compliance with applicable State and local Building Codes (e.g. California Building Code, Chapter 3, R338.3).

3.13.2 THRESHOLD B

Impact Statement: The Project would not generate excessive groundborne vibration or groundborne noise levels.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in detail in Section 4.11.7 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

Construction Analysis

Construction activities on the Project site would utilize equipment that has the potential to generate vibration, such as small bulldozers, large bulldozers, jackhammers, and loaded trucks. Vibration levels at sensitive receptors near the Project site during Project construction are summarized on DEIR Table 4.11-10, *Project Construction Vibration Levels*. At distances ranging from 51 to 5,046 feet from the Project construction activities, construction vibration velocity levels are estimated to range from less than 0.00 to 0.03 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels would be below the building damage thresholds at all receiver locations. Therefore, the Project-related vibration impacts are considered less

than significant during the construction activities at the Project site and no mitigation is required. (DEIR, p. 4.11-30)

Operational Analysis

Under long-term conditions, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration at or beyond the Project site. The Project would not result in the exposure of persons to excessive groundborne vibration or noise levels during long-term operation. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.11-30)

3.13.3 THRESHOLD C

Impact Statement: The Project would not expose people residing or working in the Project area to excessive noise levels due to airport noise.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in Section 4.11.7 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ Substantial Evidence

The Project site is located within the AELUP for JFTB Los Alamitos. An on-site exterior aircraft noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent JFTB Los Alamitos aircraft noise sources in the Project study area, and to identify environmental impacts from the proposed Project and potential noise abatement measures for the proposed Project that would achieve acceptable Project noise levels, if required. (DEIR, p. 4.11-31)

The JFTB Los Alamitos is located adjacent to, and northwest of the Project. DEIR Figure 4.11-4, *APHC 2020 Airport Noise Level Contour Boundaries* shows the Project site in relation to the airport's projected noise level contour boundaries, as provided by the 2020 Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos. As shown on DEIR Figure 4.11-5, *On-Site Aircraft Noise Level Contours*, the northwestern portion of the Project site would locate residential uses between the 60 and 65 dBA CNEL noise level contours. Residential land uses exposed to noise levels less than 60 dBA CNEL are "normally consistent." Residential uses are considered "conditionally consistent" with AELUP Noise limitations, so long as sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations is implemented to ensure that the interior CNEL does not exceed 45 dB. (DEIR, p. 4.11-31)

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction would provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve

interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings. (DEIR, p. 4.11-31)

The Project will provide mechanical ventilation (e.g. air conditioning) in all units. With implementation of PDF-N-2, which includes the use of windows with a STC rating of 29 on all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos, the Project would be designed to achieve a 25 dBA reduction and meet the 45 dBA CNEL interior noise standard. Accordingly, the Project would not expose people residing or working in the Project area to excessive noise levels from airport or aircraft operations, and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.11-31)

3.13.4 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in cumulatively considerable impacts related to noise (construction-related or on-site operational noise).

❑ Findings

Potential cumulative noise impacts of the Project related to construction and on-site operation are discussed in detail in Section 4.11.8 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to noise; therefore, no mitigation is required.

❑ Substantial Evidence

Construction Noise

Construction activities associated with the proposed Project, especially activities involving heavy equipment, could create intermittent periods of noise when construction equipment is in operation and could cause a short-term increase in ambient noise levels. The list of cumulative projects that have the potential to collectively increase noise is provided in Table 4.0-1 and the locations are shown in Figure 4.0-1 in Section 4.0, *Environmental Analysis*, of the DEIR. As shown, there are no on-going or imminent construction projects in the immediate vicinity of the proposed Project site with construction periods that are expected to overlap with the Project. Accordingly, there is no potential for Project-related construction activities to contribute to cumulatively-considerable impacts to sensitive receptor locations. (DEIR, p. 4.11-34)

Operational Noise

The analysis presented under Threshold a addresses the Project's contribution of noise to existing cumulative noise sources (i.e., ambient noise) in the Project area. As described above, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations. (DEIR, p. 4.11-24)

DEIR Table 4.11-11, *Cumulative Project Traffic Noise Increases*, shows that the Project's potential off-site contribution to cumulative traffic noise levels ranges from 0.7 to 1.0 dBA CNEL. Based on the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience cumulatively considerable noise level increases due to Project-related traffic noise level increases and cumulative impacts would be less than significant. (DEIR, p. 4.11-34)

Groundborne Vibration and Noise

During construction, the Project's peak vibration impacts would occur during the grading phase when large pieces of equipment, like bulldozers, are operating on-site. (During the non-grading phases of Project construction, when smaller pieces of equipment are used on-site, the Project's vibration would be minimal.) Vibration effects diminish rapidly from the source; therefore, the only sources of cumulative vibration in the vicinity of the Project site could occur on properties abutting these sites. As described above, there are no known active or pending construction projects abutting the Project site that would overlap with the Project's proposed construction schedule. Accordingly, there is no potential for the Project to contribute to the exposure of persons to substantial temporary groundborne vibration or noise. (DEIR, p. 4.11-34)

Under long-term conditions, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration beyond the Project site. Therefore, Project vibration would not combine with vibration sources from other related projects. The Project would not cumulatively-contribute to the exposure of persons to excessive groundborne vibration or noise levels during long-term operation. (DEIR, p. 4.11-34)

Airport Noise

There are no conditions associated with implementation of the Project that would contribute to airport noise or exposure of additional people to unacceptable levels of airport noise. DEIR Figure 4.11-4, *APHC 2020 Airport Noise Level Contour Boundaries* shows the Project site in relation to the airport's projected noise level contour boundaries, as provided by the 2020 Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos. As shown on DEIR Figure 4.11-5, *On-Site Aircraft Noise Level Contours*, the northwestern portion of the Project site would locate residential uses between the 60 and 65 dBA CNEL noise level contours. As discussed in Threshold c based on the Project's design, the Project would not expose people residing or working in the Project area to excessive noise levels from airport or aircraft operations, and impacts would be less than significant. The Project would not, when combined with related projects, affect airport-related military operations and related noise impacts. Therefore, the Project would not cumulatively-contribute to the exposure of persons residing or working in the Project area to excessive airport-related noise levels. All other development projects within the AELUP for JFTB Los Alamitos would be subject to the compatibility criteria and would be required to comply with statutory and regulatory noise requirements.

3.14 POPULATION AND HOUSING

Project impacts for Populations and Housing Thresholds a and b do not result in significant impacts and findings are discussed below.

3.14.1 THRESHOLD A

Impact Statement: The Project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in Section 4.12.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

The Project would redevelop the Project site, which currently includes a vacant office building, with a residential development consisting of a variety of different product types, including single family detached homes, townhomes, and apartments. The unit mix would include 55 single family detached homes, 114 townhomes, and 76 for rent affordable multi-family apartment units, as well as one market rate manager's apartment unit totaling 246 residential units. The overall density for the Project would be 20 dwelling units per acre. This analysis assesses whether the construction and operation of the Project would induce direct or indirect substantial unplanned population growth. (DEIR, p. 4.12-8)

Construction

The Project would be developed over an approximately 39.5-month construction period. Project construction activities would require contractors and laborers. It is anticipated that general construction labor would be available from the local and regional labor pool and would not result in substantial population growth because the construction workers would commute from their respective homes. Additionally, each construction phase (e.g., demolition, grading, paving, electrical etc.) requires different skills and specialties, which would be needed for the length of time of that phase. Because of that, the Project's construction phases would not result in a long-term increase in employment which could induce substantial unplanned population growth from short-term construction activities. Therefore, the Project would not directly or indirectly induce substantial population growth in the City during construction. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.12-8)

Operation

The Project would result in the development of 246 dwelling units. Assuming an average household size of 2.63, consistent with the household size reported in the City's 2021-2029 Housing Element, the Project would generate approximately 647 new residents in the City. (DEIR, p. 4.12-9)

As shown in DEIR Table 4.12-5, *Estimated Population and Housing in Los Alamitos with Project*, the Project's proposed 246 households and 647 residents were assumed in the growth projections of the City's General Plan. (DEIR, p. 4.12-9)

On February 21, 2023, the City adopted its General Plan Housing Element to reflect the 2021-2029 cycle. As shown in DEIR Table 4.12-4, *City of Los Alamitos Regional Housing Needs Allocation*, the City's RHNA allocation is 769 housing units based on SCAG 6th Cycle Final RHNA Allocation Plan. The Project site is identified within the City's Housing Element as a housing element site with an estimate of 246 units. Development of the Project with a total of 246 units would be consistent with the City's 2021–2029 Housing Element. (DEIR, p. 4.12-9)
The City's General Plan designates the Project site for "Multiple Family Residential-25" land use and the Project site is zoned as "Multi-Family Residential (R-3)." The R-3 zone applies to lots intended to provide multi-family housing. The maximum permitted density is 25 dwelling units per net acre. As discussed above, the Project would include a total of 246 units with an overall density of 20 dwelling units per acre, which is less than the 25 dwelling units per acre allowed by the underlying General Plan and zoning designations. Therefore, the Project would be consistent with the General Plan land use and zoning designation and the associated growth anticipated for the Project site pursuant to the General Plan as amended. (DEIR, p. 4.12-9)

The jobs-housing ratio is a general measure of the number of jobs versus housing in a defined geographical area and the recommended target is 1.0. As shown in DEIR Table 4.12-5, the City is "jobs-rich" and at a ratio of 3.4 jobs/housing, it is currently well above the target ratio. At Project buildout, the Project's addition of 246 units would be expected to beneficially affect the City's jobs-housing balance, by increasing more housing to the City and reducing the jobs-housing ratio from 3.33 to 3.17 at Project buildout (see DEIR Table 4.12-5). (DEIR, p. 4.12-10)

The Project would not result in substantial unplanned growth in the area because: 1) the Project is within the growth projections of the City's General Plan, 2) the planned housing is a requirement of State Housing Law and in response to an existing unmet need for housing, 3) the Project is consistent with the existing General Plan land use and zoning designations, and 4) the Project improves the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Therefore, implementation of the Project would not result in substantial unplanned population growth, and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.12-10)

Indirect Impacts

Implementation of the Project could result in a substantial and unplanned level of growth if it would result in the extension of new roads or other infrastructure that could induce population growth. As detailed in DEIR Section 3.0, *Project Description*, of the DEIR, the Project would not require construction of new roadways but would require connection of utility infrastructure to serve the development. (DEIR, p. 4.12-10)

The Project would not result in the alteration of the segment of Lampson Avenue that abuts the Project site except for the replacement of the existing median curb and construction of the two proposed

driveways shown in DEIR Figure 3-27, *Physical Disturbance Area*. Additionally, it should be noted that a restricted emergency vehicle access point at Lampson Avenue would be provided at the eastern end of the site. Domestic water lanes would be provided as shown in DEIR Figure 3-23, *Utility Plan*. The Project would include a 1,200 feet watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Project would include, at a minimum, an 8" watermain size for the extension. A lift station and force main are proposed at the southeast corner of the Project site (refer to DEIR Figure 3-23). The Project would connect the force main to the existing 8-inch sanitary sewer line at the southeast corner of the site. All connections to existing sanitary sewer lines would be constructed in accordance with City standards. The Project also would involve utility connections to existing facilities to provide electric power and telecommunications services to serve the Project site. (DEIR, p. 4.12-10)

Because all proposed utility infrastructure would connect to existing facilities and would exclusively serve the proposed development and would not increase capacity for other related projects in the area, this Project infrastructure would not indirectly induce substantial unplanned population growth. (DEIR, p. 4.12-10)

Summary

Based on the foregoing analysis, the Project is not expected to be a catalyst for any substantial, unplanned population increases. Based on the foregoing analysis, neither the Project nor any Project-related component would directly or indirectly result in substantial unplanned population growth that would cause a significant impact to the environment. Impacts would be less than significant, and no mitigation is required. (DEIR, pp. 4.12-10 to 4.12-11)

3.14.2 THRESHOLD B

Impact Statement: The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 4.12.5 of the DEIR. The City finds that the development of the proposed Project would not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

Under existing conditions, the Project site is developed with a vacant two-story, 88,000 sf commercial office building and parking lot. The Project site does not contain any existing residential structures. Therefore, implementation of the Project would not displace a substantial number of existing people or housing, but, in fact, would provide additional housing opportunities for the community. As such, the implementation of the Project would not necessitate construction of replacement housing elsewhere. No impacts would occur, and no mitigation is required. (DEIR, p. 4.12-11)

3.14.3 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in cumulatively considerable impacts related to population and housing.

❑ Findings

Potential cumulative population and housing impacts of the Project are discussed in detail in Section 4.12.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to population and housing; therefore, no mitigation is required.

❑ Substantial Evidence

The Project would provide 246 dwelling units, of which 76 would be affordable multi-family for rent apartment units, as well as one market rate manager's apartment unit, in the City of Los Alamitos. The related projects (see DEIR Section 4.0, *Environmental Analysis*, for the related projects list), would result in an increase of 107 residential units, 2,724 square feet of commercial uses, and 5,200 square feet of office uses. As shown in DEIR Table 4.12-6, *Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos*, the related projects' residential uses would generate approximately 281 residents, which when combined with the Project, results in 928 residents. As shown, the Project and related projects would be within the growth projections of the City's General Plan and would improve the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Therefore, the Project with related projects contribution to unplanned housing and population growth would not be cumulatively considerable. Cumulative impacts would be less than significant. (DEIR, pp. 4.12-11 to 4.12-12)

Under existing conditions, there are no existing people or housing located on-site. As such, the Project has no potential to contribute to a cumulatively significant impact associated with the need to construct unplanned housing units. (DEIR, p. 4.12-12)

3.15 PUBLIC SERVICES

Project impacts for Public Services Threshold a does not result in significant impacts and findings are discussed below.

3.15.1 THRESHOLD A

Impact Statement: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection; Police Protection; Schools; Parks; or Other Public Facilities.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in Section 4.13.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

Fire Protection Services

Implementation of the Project would increase the overall demand on fire protection and emergency services in the City. Project buildout would result in an increase of 246 dwelling units and approximately 647 residents. This Project related growth is expected to create the typical range of fire and emergency service calls, and would increase call volumes, which may affect response times for emergency and non-emergency services. (DEIR, p. 4.13-9)

However, considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Per correspondence with the OCFA, there are currently no deficiencies in fire protection service provided to the Project site. Additionally, response times would not decrease to necessitate the construction of a new fire station. In order to maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs. Project development would occur in an area of the City already served by OCFA; therefore, the Project would not result in an expansion of OCFA's service area. In the event of an emergency within the Project site that requires more resources than the primary fire stations that serve the area could provide, OCFA would direct resources to the site from other OCFA stations nearby. (DEIR, p. 4.13-9)

Further, the Project would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirement based upon the tenant type, building size, and building type. Access to and around structures would meet OCFA and CFC requirements. DEIR Figure 4.8-3, *Fire Master Plan*, demonstrates compliance with all codes and other regulations governing water availability for firefighting and emergency access to the Project site and structures. Compliance with OCFA requirements would ensure adequate provision of resources such as access, water mains, fire flows, and fire hydrants. (DEIR, p. 4.13-9)

In order to ensure adequate levels of fire protection service within the City of Alamitos, OCFA typically enters into a Secured Fire Protection Agreement with private developers. As a condition of approval, the Project Applicant is required to enter into a Secured Fire Protection Agreement to provide for fair-share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. OCFA has not indicated the need for a new fire station or expansion of existing facilities due to the Project. The Secured Fire Protection Agreement would ensure that

responses times and service ratios are met due to the implementation of the Project and no new fire station facilities would be required. (DEIR, p. 4.13-9)

Because the Project does not include construction of new fire station facilities and does not generate a need for additional facilities, Project-related impacts to fire protection services would be less than significant and no mitigation is required. (DEIR, p. 4.13-9)

Police Protection Services

Buildout of the Project would increase demands for police protection services in the City. During the construction and operation of the Project, the need for police services is expected to grow due to the increase in population. Crime and safety issues during Project construction may include theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism. After construction, the Project is anticipated to generate a typical range of police service calls as similar developments. (DEIR, p. 4.13-10)

The increase in demands on police services resulting from the implementation of the Project would not adversely impact Los Alamitos Police Department's existing resources. There are currently no staffing or equipment deficiencies in the service area. The increase in potential services needed would not require the construction of a new police station or improvements to the existing station that serves the Project site. Implementation of the Project would result in an increase in calls for service; however, Los Alamitos Police Department has indicated that this increase would not adversely impact Los Alamitos Police Department's existing resources. The existing resources would be adequate to meet the additional demands generated by the Project. The Los Alamitos Police Department has not indicated the need for a new police station or expansion of existing facilities due to the Project. Responses times and service ratios would be met and would not require the construction of new facilities. (DEIR, p. 4.13-10)

Moreover, Project development would result in increased property and, indirectly, sales tax revenue proportionally increasing the City's General Fund revenue, providing funding for police protection services, equipment, and/or personnel. Because the Project does not include construction of new police facilities and does not generate a need for additional facilities, increases in demands for police protection resulting from implementation of the Project impacts would be less than significant. No mitigation is required. (DEIR, p. 4.13-10)

School Services

Project buildout would allow for up to 246 dwelling units, which would result in a population increase of approximately 647 residents. The population would lead to an increase in student population, which in turn may create additional demand for Los Alamitos Unified School District (LAUSD) service and facilities. (DEIR, p. 4.13-10)

Schools serving the Project site include Rossmoor Elementary School, McAuliffe Middle School, and Los Alamitos High School. Student generation rates are used by school districts to estimate the number

of students generated by new development in order to determine whether or not existing school facilities would be adequate for future students. As shown in DEIR Table 4.13-4, *Projected Student Populations*, the Project would generate a total of 135 students (51 students in K-5, 33 students in grades 6-8, and 51 students in grades 9-12). (DEIR, p. 4.13-10)

As shown in DEIR Table 4.13-5, *Projected School Capacity at Project Buildout*, there is adequate capacity to serve the students from the 6-8 and 9-12 grade levels. Based on current enrollment, there is a deficiency of 45 students at the K-5 grade level at Project buildout. However, the District currently has open enrollment which allows students to attend schools other than the school assigned based upon their area of residence. As shown in DEIR Table 4.13-5 there are four other K-5 elementary schools within a 2.5-mile radius of the Project site with a total excess capacity of 62 students and enough excess capacity to serve the Project generated 51 K-5 students. The projected student population is conservative because it represents a snapshot in time. It is unlikely that all students generated by the Project would occur at Project buildout but rather would fluctuate over the life of the Project. (DEIR, p. 4.13-11)

The Project would be required to pay development impact fees to LAUSD under SB 50 for the construction of new schools, which provides full and complete mitigation to school facilities. Development impact fees currently charged by LAUSD for residential uses are $4.79 per sf. Although Project buildout would result in an increase of 135 students, the availability of schools in the area and the payment of impact fees in compliance with SB 50 would address any potential impacts. Therefore, based on the preceding, impacts from implementation of the Project on school services would be less than significant. No mitigation is required. (DEIR, pp. 4.13-11 to 4.13-12)

Parks

As discussed in DEIR Section 4.14, *Recreation*, the additional dwelling units would result in an increase in the number of residents in the City, which could lead to an increase in demand for existing City parks and recreational facilities. Using a conservative figure, the City currently has a total of 58.44 acres of parkland. (DEIR, p. 4.13-12)

The Project would provide a variety of common open space amenities, as well as a variety of privately maintained open space and decks. The Project would provide a total of 58,027 square feet (sf) or 1.33 acres of open space on the Project site, including 16,508 sf of usable common open space and 41,519 sf of private open space (homeowner maintained). Additionally, as shown in DEIR Table 4.14-1, *Existing Parks and Recreation Facilities*, there are a total of 317.49 acres of parks, recreational facilities, and community centers throughout the City that would serve future Project residents. (DEIR, p. 4.13-12)

Development of the on-site open space and amenities have been evaluated throughout the DEIR as part of the Project. The Project would result in an increase in residents; however, the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated. Based on the Project's Parks Impact Analysis (*Technical Appendix M* of the DEIR), there is sufficient capacity at existing neighborhood

parks to accommodate the Project residents. Moreover, the Project Applicant would be required pay in-lieu fees in accordance with the City's park dedication requirements under LAMC Chapter 16.18, Dedication of Land for Park Facilities and Payment of In Lieu Fees. Therefore, impacts would be less than significant. Refer to DEIR Section 4.14, *Recreation*, for further discussion. (DEIR, p. 4.13-12)

Other Public Facilities

Project buildout would increase population onsite by an estimated 647 residents, thus increasing demand for other public facilities, such as library services. Increased demands are expected to most affect the library facilities closest to the Project site – that is the Los Alamitos-Rossmoor Library. According to the administrative manager of the Orange County Public Libraries (OCPL), it is anticipated that the increase in residents may impact service. With the current renovations at the library, however, OCPL does not expect Project buildout to require construction of new or expanded physical library facilities, the construction of which could cause a substantial adverse impact. Although future Project residents would be mainly served by the Los Alamitos-Rossmoor Library, they would have access to all libraries within OCPL's system. Therefore, impacts to library services would be less than significant and no mitigation is required. (DEIR, p. 4.13-12)

3.15.2 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in cumulatively considerable impacts related to public services.

❑ Findings

Potential cumulative public services impacts of the Project are discussed in detail in Section 4.13.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to public services; therefore, no mitigation is required.

❑ Substantial Evidence

This cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development within the providers respective service areas. Residential and employment population increases and associated increases in the demand for public services have been taken into account in long-range planning efforts on behalf of the City and the agencies providing public services to the area. (DEIR, pp. 4.13-12 to 4.13-13)

Fire Protection Services

Future development projects within OCFA's service area would be required to comply with CFC and OCFA regulations and standards to maintain adequate access within the Project site, which further ensures an adequate level of service for fire protection and emergency services to residents, workers, and visitors in the Project site. Future development projects are reviewed by the City and OCFA to ensure compliance with all applicable building code and other code requirements in effect at the time building permits are issued. Additionally, OCFA requires new development (over 50 units) to enter into a Secured Fire Protection Agreement to provide for fair-share funding of capital improvements,

including facilities, equipment, and radio/communications systems. In order to maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs. Secured Fire Protection Agreements with future development would ensure that responses times and service ratios are met due to the implementation of cumulative development within its service area and facilities are upgraded as needed. Similar to the Project, future cumulative development projects would result in increased property and sales tax revenue, which would provide additional funding for any capital improvements necessary to maintain adequate fire protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion of facility improvements, OCFA would be able to ensure that its performance objectives are consistently met. The Project's increased demand for fire protection services, in conjunction with the increased demand for cumulative development pursuant to the City's General Plan, would not result in significant cumulative impacts. (DEIR, p. 4.13-13)

Police Protection Services

Local population growth would result in an increased demand for public services and facilities, including law enforcement. Service providers would continue to evaluate levels of service and potential funding sources to meet demand. The City performs long-range planning for the provisions of public services and facilities based on its growth projections, which are revised over time and includes areas within the City's sphere of influence. Through assessments of the City's capital improvement needs and annual budget review process, police department needs are assessed, and budget allocations are revised accordingly to ensure that adequate levels of police services, including police protection facilities, equipment, and/or personnel, are maintained throughout the City. (DEIR, p. 4.13-13)

The existing resources would be adequate to meet the additional demands generated by any known cumulative developments in addition to the Project (Claborn, 2024). Responses times and service ratios would be met and would not require the construction of new facilities. Increased property and sales tax from future new developments would provide funding for any capital improvements necessary to maintain adequate police protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion or facility improvements, Los Alamitos Police Department would be able to ensure that its performance objectives are consistently met. Furthermore, individual development projects pursuant to the City's General Plan would be reviewed by the City and would be required to comply with the requirements in effect at the time building permits are issued. Therefore, the demand for police services would not be adversely affected by the Project in conjunction with cumulative development pursuant to the City's General Plan. No significant cumulative impacts related to police services are anticipated. (DEIR, pp. 4.13-13 to 4.13-14)

School Services

Cumulative development in the LAUSD service area would increase the student population in LAUSD schools. As shown in DEIR Table 4.12-6, *Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos*, the projected population of the City at Project buildout, combined with related projects in the City, would be 12,922 by 2027, an increase of 1,049 residents over existing. Based on an average student generation factor of 0.7 student per dwelling unit, the cumulative

development, including the Project, would generate a total of approximately 734 students. Based on student enrollment of LAUSD schools, enrollment has decreased by approximately 970 students from 2016 to 2023 (see DEIR Table 4.13-2). Therefore, there is sufficient capacity within LAUSD schools to serve the Project and cumulative development. (DEIR, p. 4.13-14)

The related projects (see DEIR Section 4.0, *Environmental Analysis*, for the related projects list), would result in an increase of 107 multifamily residential units. Based on the student rates in DEIR Table 4.13-4, the related projects would generate a total of 21 students. When combined with the Project's projected 135 students, a total of 156 students would be generated. As shown in DEIR Table 4.13-6, *Projected Cumulative Student Populations*, there is adequate capacity to serve the students at all grade levels. Per discussion with LAUSD, capital improvements, including upgrades or the replacement of existing facilities with new facilities for their continued long-term use, are necessary to adequately serve future enrollment growth at all school levels. With proper planning and appropriate resources, LAUSD will be able to serve all students generated from future cumulative development. (DEIR, p. 4.13-14)

While there is currently available capacity at all grade levels, the cumulative effect of additional projects may increase enrollment beyond capacity. However, the capacity would be mitigated by applying SB 50 developer fees to accommodate new growth. In accordance with SB 50, the State Legislature provided authority for school districts to assess impact fees for both residential and nonresidential development projects to provide these resources. The fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b), are collected by municipalities at the time building permits are issued and conveyed to the affected school district in accordance with a defined fee structure, and the payment of these fees constitutes full mitigation for the impacts generated by new development, per Government Code Section 65995. The Project and cumulative development must pay appropriate impact fees. Implementation of the Project in conjunction with other cumulative development would not result in a cumulative impact to school services. (DEIR, pp. 4.13-14 to 4.13-15)

Parks

As discussed in DEIR Section 4.14, *Recreation*, cumulative development will increase the demand in parks and recreational facilities. Recreational needs of future residents of the Project would add to citywide and regional demand for park and recreational facilities. As discussed in DEIR Section 4.14, *Recreation*, Project impacts to recreation would be less than significant. As shown in DEIR Table 4.14-1, there is a total of 317.49 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 389.02 acres of park and recreational facilities in the City and its Sphere of Influence (SOI). Pursuant to the City's General Plan Update EIR, buildout of the General Plan (14,204 residents in the City and 10,540 residents in Rossmoor) would be accommodated by the existing parkland in the City and its SOI and no significant impacts would occur related to the physical deterioration of recreational facilities. Therefore, with the increase of projected population in 2027 at Project buildout, there is sufficient parkland and recreational facilities to serve City residents. The Project would not cumulatively contribute to deterioration of recreational facilities

or the construction of recreational facilities which might have an adverse physical effect on the environment. (DEIR, p. 4.13-15)

Cumulative development projects would be required to comply with all applicable existing regulations, procedures, and policies that are intended to address impacts to park and recreation facilities. For example, per the City's park dedication requirements under LAMC Chapter 16.18, Dedication of Land for Park Facilities and Payment of In Lieu Fees, all new residential development is required either to dedicate parkland or pay park facilities impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population. Therefore, cumulative impacts related to park and recreational space and facilities would be less than significant. (DEIR, p. 4.13-15)

Other Public Facilities

Cumulative population growth within the service area as a result of the cumulative projects will likely increase the demand on other public facilities, such as library services. Similar to the Project, future residents of development projects within the City may visit the Los Alamitos-Rossmoor Library. However, future residents would have access to all 32 OCPL branch libraries, online resources, and interlibrary loans. Therefore, library capacity would not be significantly impacted, and cumulative Project impacts would be less than significant. (DEIR, p. 4.13-15)

3.16 RECREATION

Project impacts for Recreation Thresholds a and b do not result in significant impacts and findings are discussed below.

3.16.1 THRESHOLD A

Impact Statement: The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in Section 4.14.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

The Project includes a 246-unit residential development on an approximately 12.3-acre lot, which would increase housing capacity and increase population growth in the City of Los Alamitos. The increase of 246 dwelling units would result in a population growth of approximately 647 residents. (DEIR, p. 4.14-8)

There is a total of 316.83 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 351.8 acres to meet the recreational needs of the City's residents. (DEIR, p. 4.14-8)

As shown in DEIR Figure 3-12, *Open Space Plan*, the Project would provide a total of 58,027 square feet (sf) or 1.33 acres of open space in the Project site, including 16,508 sf of usable common open space, 41,519 sf of private open space (homeowner maintained). The usable common open space areas would include amenities such as a tot-lot with rubberized play surface, shade surface with BBQ Island and dining furniture, lawn area with cornhole, ping pong table, and lounge seating with fire-pit. There are also 4,620 sf of multifamily private decks and 5,181 sf of townhomes private decks that would be provided onsite. The Project has been designed with these enhanced recreational amenities to meet the needs of its future residents. (DEIR, p. 4.14-8)

Although the designed neighborhood open space areas are anticipated to meet many of the park and recreation needs of Project residents, Project residents are also anticipated to utilize existing off-site park and recreation facilities in the City of Los Alamitos and nearby Rossmoor and City of Seal Beach Park system. Future residents of the Project site would also have access to (within walking distance) the following public park and recreational facilities, which comprise just over 14 acres of usable parkland and open space:

- Arbor Park, located directly north of the Project site, includes baseball fields leased by LAYB within its approximately 9.60-acre site.

- Arbor Dog Park, located directly north of the Project site, includes a dog park that is currently leased by the City of Seal Beach from the JFTB for its residents within its approximately 1.40-acre site.

- Orville Lewis Park, located approximately 1 mile northwest of the Project site, includes a grass area, baseball backstop, basketball court, play area, barbecue, picnic shelter and tables, and drinking fountain within its approximately 1.65-acre site. (DEIR, pp. 4.14-8 to 4.14-9)

- Heather Park, located approximately 350 feet southwest of the Project site, includes two lit tennis courts, one tot lot/play structure, one swing set, and four picnic tables within its approximately 1.6-acre site. (DEIR, p. 4.14-9)

The Project also includes a dedication or easement for the northerly 10 feet strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 sf of the Project site. (DEIR, p. 4.14-9)

If the Project were to generate park visitors that exceed its carrying capacity, it could result in additional maintenance requirements or physical deterioration of existing parks. Based on the Project's Parks Impact Analysis (*Technical Appendix M* of the DEIR), it is anticipated that a negligible amount of

Project residents will regularly visit parks in close proximity to the Project site specifically, Arbor Park, Arbor Dog Park, and Heather Park. Specifically, a total of 178 Project residents would visit the designed neighborhood open spaces within the Project site and 131 Project residents would visit the Arbor Park, Arbor Dog Park, and Heather Park as the parks they visit most often (*Technical Appendix M* of the DEIR). Project residents would visit (frequent) Arbor Park and Heather Park as follows: approximately 22 users 2 times per week, 18 users once per week, 27 users once or twice per month, 32 users several times per year, and 20 users once or twice per year. (see Table 2, *Technical Appendix M* of the DEIR). Project residents would visit (frequent) Arbor Dog Park at least 147 times at least once per week. (see Table 4, *Technical Appendix M* of the DEIR). (DEIR, p. 4.14-9)

The carrying capacity of the Arbor Park and Heather Park would be 337 visitors and there is no calculation for carrying capacity for Arbor Dog Park since dog parks do not have a calculation for carrying capacity unlike parks. Because the projected number of Project visitors to these parks are well within the carrying capacity, there is sufficient capacity at existing nearby neighborhood parks to accommodate the Project residents. With full occupancy of the Project, the designed neighborhood open spaces within the Project site, the capacity and existing maintenance and usage of existing parks, and the estimated visitation of the Project residents to the existing parks; the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated. (DEIR, p. 4.14-9)

The Project Applicant would be required pay in-lieu fees in accordance with the City's park dedication requirements under Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees) of the City of Los Alamitos Municipal Code. Therefore, implementation of the Project would not result in significant impacts relating to the physical deterioration of recreational facilities and impacts would be less than significant. (DEIR, pp. 4.14-9 to 4.14-10)

3.16.2 THRESHOLD B

Impact Statement: The Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 4.14.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

The Project would include a variety of common open space amenities and private open space areas. The construction of these recreational facilities would occur within the boundaries of the Project site and would be constructed as part of the proposed Project. The Project's construction impacts are analyzed throughout the DEIR and mitigation is incorporated where necessary. As concluded in the DEIR, the Project's construction impacts would be less than significant, in some cases with the

implementation of mitigation. Therefore, impacts associated with the Project's on-site recreational facilities would be less than significant. (DEIR, p. 4.14-10)

Furthermore, per the analysis provided above under Threshold a, development that would be accommodated under the Project would not require the construction of new or the expansion of existing City parks and recreational facilities. Additionally, the Project does not propose to expand any existing recreational facilities. Therefore, implementation of the Project would not result in significant impacts relating to new and/or expanded park and recreational facilities. No mitigation is required. (DEIR, p. 4.14-10)

3.16.3 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in cumulatively considerable impacts related to recreation.

❑ Findings

Potential cumulative recreation impacts of the Project are discussed in detail in Section 4.14.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to recreation; therefore, no mitigation is required.

❑ Substantial Evidence

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the City. (DEIR, p. 4.14-10)

The recreational needs of future residents of the proposed Project would add to citywide and regional demand for park and recreational facilities, which could contribute to a deterioration of recreational facilities. As shown in DEIR Table 4.14-1, there is a total of 316.83 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 351.88 acres of park and recreational facilities in the City and its SOI available to meet the needs of City residents. To determine the cumulative public park and recreational impacts, citywide growth forecasts were considered. As shown in DEIR Table 4.12-6, *Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos*, the projected population at Project buildout, combined with related projects in the City, would be 13,806 by 2027. Pursuant to the City's General Plan Update EIR, Table 5.10-2, the buildout of the General Plan (14,204 residents in the City and 10,540 residents in Rossmoor) would be accommodated by the existing parkland in the City and its SOI and no significant impacts would occur related to the physical deterioration of recreational facilities. Therefore, with the increase of projected population in at Project buildout, there is sufficient parkland and recreational facilities to service city residents. The Project would not cumulatively contribute to deterioration of recreational facilities or the construction of recreational facilities which might have an adverse physical effect on the environment. (DEIR, p. 4.14-10)

Cumulative development projects would be required to comply with all applicable existing regulations, procedures, and policies that are intended to address impacts to park and recreation facilities. For

example, per the City's park dedication requirements under Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees) of the City of Los Alamitos Municipal Code, all new residential development is required either to dedicate parkland or pay park facilities impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population. Therefore, cumulative impacts related to park and recreational space and facilities would be less than significant. (DEIR, p. 4.14-11)

3.17 TRANSPORTATION

Project impacts for CEQA Transportation Thresholds a, c, and d do not result in significant impacts and findings are discussed below.

3.17.1 THRESHOLD A

Impact Statement: The Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

❑ **Findings**

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.15.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ **Substantial Evidence**

The Project's consistency with the City's General Plan Mobility and Circulation is discussed in DEIR Table 4.15-1, *Consistency with the General Plan Mobility and Circulation Element*. As presented therein, the Project would not conflict with applicable General Plan goals and policies. In addition, the Project's consistency with the SCAG's Connect SoCal is discussed in DEIR Section 4.10, *Land Use and Planning* and no conflicts were identified. The Project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.15-9)

3.17.2 THRESHOLD C

Impact Statement: The Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

❑ **Findings**

Potential impacts of the Project related to Threshold c are discussed in detail in Section 4.15.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold c; therefore, no mitigation is required.

- **Substantial Evidence**

During construction, frontage improvements including median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements would be constructed in accordance with City standards. Lane closures that may be required for median improvements would be temporary and require a permit and compliance with Los Alamitos Municipal Code (LAMC) 12.08.200, Safety precautions–Obstruction of traffic. This would ensure safe crossing and access for all vehicle and pedestrians at all times. Therefore, the Project would not substantially increase hazards due to a geometric design feature during construction activities. (DEIR, p. 4.15-16)

There are no incompatible uses such as farm equipment existing or proposed on the Project site. Vehicular access to the Project site would be provided via two driveways along the site's southern boundary on Lampson Avenue. One driveway would be located at the west side which would be the primary apartment entry. The second driveway, which would be the primary neighborhood entry, would be located in the central portion of the site along Lampson Avenue. In addition, the Project would include replacement of the existing median curb/landscape on Lampson Avenue with new median and landscape. (DEIR, p. 4.15-16)

A queuing analysis was performed for the Project driveways on Lampson Avenue under General Plan Buildout with Project traffic conditions in order to ensure that there is adequate and available stacking distance at peak hours and the Project would not create a safety hazard. Table 1-4 of the Project's Traffic Analysis (DEIR *Technical Appendix N1*) presents the queuing analysis summary for the General Plan Buildout with Project traffic conditions. The traffic modeling and signal timing optimization software package SimTraffic has been utilized to assess the queues. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and finetuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. These random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each applicable turn lane. The SimTraffic simulation has been recorded 5 times, during the weekday AM and PM peak hours, and has been seeded for 15- minute periods with 60-minute recording intervals. As a result, no site adjacent queues are anticipated at both driveways under these traffic conditions. The proposed eastbound left turn lane with a minimum of 150-feet of storage at the second driveway (primary neighborhood entry) would sufficiently accommodate the 95th percentile peak hour queues. (DEIR, pp. 4.15-16 to 4.15-17)

Additionally, there are no sharp curves or dangerous intersections proposed that would increase hazards due to geometric design features. The Project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.15-17)

A. Safey Evaluation

A Safety Evaluation was prepared for the Project (see *Attachment H* of the Final EIR) which analyzed collision data, pedestrian and bicycle safety, and site access management (e.g. driveway sight distance,

driveway spacing, project access and queuing, multimodal conflict points, and pedestrian/bicycle connections).

The Project's Traffic Analysis (see *Attachment G* of the Final EIR) evaluated this issue and determined that the primary neighborhood entry is not anticipated to meet peak hour or planning level (daily volume) based traffic signal warrants and no traffic signal at this location is needed or required. Based on the Safety Evaluation and for the reasons summarized below, the Project would not result in a safety impact or substantially increase hazards due to a geometric design feature.

Collision

As discussed in the Safety Evaluation (see *Attachment H* of the Final EIR), collision data was gathered by California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS). The collision data includes 5 years of collision data gathered by CHP staff and members of its allied agencies throughout California (including the City of Los Alamitos). Table 1 of the Safety Evaluation provides a summary of the types of collisions by intersection for eight intersections. Table 2 of the Safety Evaluation provides a summary of the crash rate compared to the statewide average. The results indicated the following:

- **Basswood Street & Lampson Avenue** had a total of 1 reported collision in a 5-year period. The common collision included a sideswipe collision. Sideswipe collisions are commonly caused by failure to yield or impaired/distracted driving. The intersection of Basswood St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Candleberry Avenue & Lampson Avenue** had a total of 1 reported collision in a 5-year period. The common collisions included a broadside collision. Broadside collisions are commonly caused by failure to yield, failure to stop, or impaired/distracted driving. The intersection of Candleberry Av. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Rose Street & Lampson Avenue** had a total of 2 reported collisions in a 5-year period. The common collisions included broadside and overturn collisions. Overturned vehicles are commonly caused by unsafe speeds, improper maneuvers, or loss of vehicle control. The intersection of Rose St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Tulip Street & Lampson Avenue** had a total of 1 reported collisions in a 5-year period. The common collision included a broadside collision. The intersection of Tulip St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

- **Valley View St. & Lampson Avenue** had a total of 14 reported collisions in a 5-year period. The common collisions included rear-end and broadside collisions. Rear-end collisions are commonly caused by failure to yield, failure to stop, or impaired/distracted

driving. The intersection of Valley View St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

The existing crash rates for the study area intersections are lower than the statewide average crash rates. A Project would have the potential to create an increase in collision rate if it introduced a geometric design feature that did not meet safety standards or incompatible uses (e.g. farm equipment). As demonstrated in the analysis below, implementation of Project improvements (within the public right-of-way) per Los Alamitos and Seal Beach standards ensures all that sight distance requirements, pedestrian crossing requirements, and street design requirements are met. Additionally, the Project vehicle mix is consistent with the adjacent land uses, including the residential neighborhood to the south. Therefore, it is not anticipated that the Project will result in a significant change in collision rates or result in an accident rate higher than the statewide average.

Bicycle and Pedestrian Facilities

As discussed in Section 4.7, *Transportation*, of the Draft EIR, existing sidewalks are present on both the westbound and eastbound side of Lampson Avenue, adjacent to the Project site. Crosswalks are present at the intersections of Lampson Avenue/Heather Street and Lampson Avenue/Rose Street (refer to Page 4.15-3 of the Draft EIR). Frontage improvements for the Project would include median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards (refer to Page 3-4 of the Draft EIR).

As discussed in the Safety Evaluation (*Attachment H* of the Final EIR), there are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. In addition, there is a Class I bike/pedestrian path on Seal Beach Boulevard north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project would not remove any existing bike/pedestrian paths and would maintain the existing Class II bike lane on Lampson Avenue along its frontage to maintain bicycle safety. The existing sidewalks adjacent to the Project met design standards and the Americans with Disabilities Act (ADA) standards at the time they were constructed.

As stated, the sidewalks along the Project frontage will be improved as part of the Project. Frontage improvements include sidewalks, driveway modifications to accommodate site access, median modifications, and landscaping improvements as required by City standards. The proposed sidewalk along the Project's frontage on the north side of Lampson Avenue will provide connectivity with proposed sidewalks and paths internal to the Project.

The intersections at Lampson Avenue at Heather Avenue and Lampson Avenue at Rose Avenue are currently signalized and both have pedestrian crosswalks for Lampson Avenue. The wheelchair ramp on the north side of Lampson Avenue at Heather Avenue does not meet current ADA standards. However, the wheelchair ramp on the north side of Lampson Avenue at Rose Avenue does meet ADA standard requirements.

All Project driveways will be designed to meet current City standards and accommodate pedestrian crossing per current ADA standards. These improvements will ensure the Project meets all compliance requirements.

Intersection Sight Distance

Intersection sight distance at the primary neighborhood entry was evaluated by identifying limited use areas pursuant to Orange County Standard Plan 1117 – Intersection Sight Distance. The limited use areas determine the necessary sight distance to allow 7 ½ seconds for the driver on the crossroad (or left turn pocket) to safely cross the main roadway or turn left while the approach vehicle travels at the assumed design speed of the main roadway. All Project driveways are required to meet these sight distance requirements. Exhibit 3 of the Safety Evaluation shows that the primary neighborhood entry will meet the sight distance requirements, and that the Project would not create any new sight distance issues along Lampson Avenue.

Stopping Sight Distance

According to the Highway Design Manual (HDM), stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads when passing sight distance is not economically obtainable. Stopping sight distance also is to be provided for all users, including motorists and bicyclists, at all elements of interchanges and intersections at grade, including private road connections. Lampson Avenue has a posted speed limit of 45 miles per hour (mph). As stated in HDM Table 201, a stopping sight distance of 360 feet is the standard for a design speed of 45 mph. Therefore, the Project does not introduce any new stopping sight distance issues to Lampson Avenue.

On-Site Vehicle Circulation

The Project does not involve freight operations because the Project is a residential project. Since the proposed use is residential, a limited number of trucks would travel to the Project site (e.g. trash trucks, emergency vehicles, delivery vans). Therefore, congestion from freight trucks to and from the Project site would be negligible and there will be no conflicts between freight trucks and passenger vehicles. Attachment D of the Safety Evaluation identifies the on-site circulation for the site. The exhibits identify various vehicle paths (front-loading garbage trucks, fire trucks, delivery trucks, etc.) for various internal drive aisles, which allow for two-way traffic. Access to and from the site will be accommodated via driveways on Lampson Avenue. As shown in Attachment D of the Safety Evaluation, the vehicle turning templates show acceptable turning movements for the various vehicles and trucks anticipated to access the site. Therefore, there will be no conflicts between garbage trucks, fire trucks, and delivery trucks and passenger vehicles.

Conclusion

A review of available collision data indicates that the study area intersections have lower crash rates than the statewide average of intersections with similar configuration and settings. The addition of Project traffic is not anticipated to increase the crash rates by a significant margin. As discussed

throughout this evaluation, the implementation of Project improvements (within the public right of way) per Los Alamitos, Seal Beach, Orange County Public Works, Highway Design Manual (HDM), and American with Disabilities Act (ADA) standards ensures all sight distance requirements, pedestrian crossing requirements, and street design requirements are met. Additionally, the Project TA, *Attachment G* of the Final EIR, indicates the highest peak hour volume along Lampson Avenue at Driveway 2 is 561 vehicles (Refer to Exhibit 3-8 of the TA). The highest Project peak hour volume of 50 vehicles occurs at Driveway 2 in the evening (Refer to Exhibit 4-2 of the TA). The Project contributes 9% of the additional vehicles to the evening peak hour ([50/561]*100=9%). Therefore, the addition of Project-related traffic is not anticipated to cause any new or exacerbate any existing safety deficiencies along Lampson Avenue or in the vicinity of the Project's interface with Lampson Avenue. The City will impose upon the Project a condition of approval that will ensure that the intersection sight distance, pedestrian/bike facilities, and street facilities satisfy CA MUTCD, ADA, City of Los Alamitos, and City of Seal Beach standards.

3.17.3 THRESHOLD D

Impact Statement: The Project would not result in inadequate emergency access.

❑ Findings

Potential impacts of the Project related to Threshold d are discussed in Section 4.15.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold d; therefore, no mitigation is required.

❑ Substantial Evidence

As discussed in DEIR Section 3.0, *Project Description*, the Project includes a fire master plan to ensure proper installation and maintenance of fire access roadways, proper siting of hydrants, adequate water supply, and access to the structures. The Project would be required to comply with all applicable fire codes and ordinances for construction, access, water mains, fire flows, and fire hydrants. The Project would also provide adequate emergency access for emergency vehicles via Lampson Avenue. A restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The effectiveness of emergency response and firefighting operations is directly related to the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures. In accordance with OCFA Guideline B-09, Fire Master Plans for Commercial & Residential Development, Firesafe Planning Solutions prepared a Fire Master Plan for the Project (see DEIR Figure 4.8-3, *Fire Master Plan*). The Fire Master Plan demonstrates the Project's compliance with the California Fire and Building Codes and other regulations emergency access to the Project site, including but not limited to fire access and roadway design, fire lane identification, and access to structures. Compliance with OCFA Guidelines ensures that the Project is designed and constructed to provide adequate emergency access for emergency vehicles. Furthermore, the Project would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirement based upon the tenant type, building size, and building type. Access to and around structures would meet OCFA and

CFC requirements. Furthermore, OCFA submitted conditions of approval that the Project must comply with, ensuring implementation of OCFA standard conditions. Additionally, pursuant to LAMC Section 12.08, the Project would be required to provide adequate emergency access along abutting roadways during temporary construction activities within the public right-of-way. Specifically, the Project's compliance with LAMC 12.08.200 would ensure adequate access for all vehicles during temporary lane closures. (DEIR, p. 4.15-17)

Therefore, the Project would not result in inadequate emergency access and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.15-18)

3.17.4 CUMULATIVE IMPACTS

Impact Statement: The Project would not result in a cumulatively considerable impact related to transportation (conflict with a program, plan, ordinance or policy addressing the circulation system; increase hazards; inadequate emergency access).

❑ **Findings**

Potential cumulative transportation impacts of the Project related to conflicts with a program, plan, ordinance or policy addressing the circulation system; increase in hazards; and inadequate emergency access are discussed in detail in Section 4.15.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to these topics; therefore, no mitigation is required.

❑ **Substantial Evidence**

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development. The analysis under Threshold a indicates that the Project would not conflict with relevant programs, plans, and policies addressing the circulation system. Each related project would also be required to comply with all applicable relevant programs, plans, and policies. Therefore, no cumulative impact would occur. (DEIR, p. 4.15-18)

As discussed under Threshold c and d, implementation of the Project would not result in hazardous conditions or result in inadequate emergency access. Impacts on a cumulative level would also be less than significant. (DEIR, p. 4.15-18)

3.18 TRIBAL CULTURAL RESOURCES

Project impacts for Tribal Cultural Resources Cumulative Impacts do not result in significant impacts and findings are discussed below.

3.18.1 CUMULATIVE IMPACT

Impact Statement: The Project does not have the potential to result in cumulative impacts to tribal cultural resources.

❑ Finding

Potential cumulative impacts of the Project related to tribal cultural resources are discussed in detail in Section 4.16.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to tribal cultural resources; therefore, no mitigation is required.

❑ Substantial Evidence

The potential for Project construction to result in cumulatively-considerable impacts to tribal, religious, and cultural resources were analyzed in conjunction with other projects other projects located in the immediate vicinity of the Project site. Impacts to previously undiscovered subsurface tribal cultural resources are typically site specific from ground disturbing activities and generally do not combine to result in cumulative impacts unless resources are identified immediately adjacent to the Project site. Nonetheless, the potential exists that a significant tribal cultural resource could be discovered during grading into native soils. However, there are no related projects in the vicinity that would affect tribal cultural resources in combination with Project implementation. Therefore, cumulative impacts to archaeological resources would be less than significant. (DEIR, p. 4.16-8)

3.19 UTILITIES AND SERVICE SYSTEMS

Project impacts for Utilities and Service Systems Thresholds a through e do not result in significant impacts and findings are discussed below.

3.19.1 THRESHOLD A

Impact Statement: The Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in Section 4.17.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold a; therefore, no mitigation is required.

❑ Substantial Evidence

Water Facilities

Water service to the Project site would be provided by Golden State Water Company (GSWC). Water demand associated with the Project would consist of interior plumbing devices (i.e., showers, sinks, toilets, faucets), outdoor landscape irrigation, washers, and other uses similar to that of a residential development. Water supply is discussed in detail under Threshold b, below. Based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. The Project would not require the

construction of new or expanded water facilities. The Project would not require the relocation of water facilities. The Project would include the installation of new water lines within the Project site, connecting to existing facilities within Lampson Avenue. The Project would include a 1,200-foot watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Project would include, at a minimum, an 8" watermain size for the extension. These connections would be part of the Project's construction phase, the impacts of which are evaluated throughout the DEIR. As that evaluation demonstrates, the construction of the Project's water lines necessary to serve the Project would not result in any significant physical effects on the environment. Impacts would be less-than-significant, and no mitigation is required. (DEIR, p. 4.17-13)

Wastewater and Wastewater Treatment Facilities

Although the Project site is located in the City of Los Alamitos, wastewater service would be served by the City of Seal Beach. Discussion of the sewer system and its capacity is discussed under Threshold c, below. The Project generated wastewater would be well within the capacity of Reclamation Plant No. 2. and would not require Orange County Sanitation District (OCSD) to build new or expanded wastewater treatment facilities. (DEIR, p. 4.17-13)

The Project would include the installation of an on-site lift station and force main at the southeast corner of the Project site. The Project would include sewer lines within the Project site, connecting to existing facilities within Lampson Avenue. These connections would be part of the Project's construction phase, the impacts of which are evaluated throughout the DEIR. As that evaluation demonstrates, the construction of the Project's sewer lines necessary to serve the Project would not result in any significant physical effects on the environment. Impacts would be less than significant and no mitigation is required. (DEIR, pp. 4.17-13 to 4.17-14)

Stormwater Drainage Facilities

As discussed in DEIR Section 4.9, *Hydrology and Water Quality*, the Project would increase the amount of impervious surface within the Project site. Two stormwater drainage facility plans have been proposed to accommodate stormwater runoff associated with the increase in this amount of impervious surface: an on-site storm drain facilities and an alternate off-site storm drain facilities. (DEIR, p. 4.17-14)

On-Site Storm Drain Facilities

The preferred treatment of stormwater runoff for the Project would be conveyance by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets on-site for water quality treatment. The bio-filtration devices direct flows via onsite underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site would convey flows into the existing storm drain pipe at the southwest corner of the site to match the existing flow pattern. The combined, total 100-year peak flow rate for the Project site is approximately 44.31 cfs under the proposed conditions, which would be a higher

peak runoff flowrate than the existing condition of the site of 40.28 cfs. DEIR Figure 4.9-4, *Proposed Conditions Hydrology Map* illustrates the post-development drainage conditions of the Project site. The proposed drainage design would follow the existing drainage pattern with surface flows to on-site drainage facilities that would ultimately outlet into the existing headwall on the southwest corner of the Project site. (DEIR, p. 4.17-14)

Alternate Off-Site Storm Drain Facilities

In the event the proposed route described above is not available, an alternate treatment of stormwater runoff for the Project would be conveyance to offsite storm drain facilities. DEIR Figure 4.9-5, *Proposed Alternate Conditions Hydrology Map* illustrates the post-development drainage conditions for this drainage and detention alternate. From the detention system, a stormwater sump pump located in the southwest corner of the site will convey flows onto Lampson Avenue through a parkway culvert. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows would continue pumping to Lampson Avenue normally. (DEIR, p. 4.17-14)

With respect to both of these facility designs, no new or expanded off-site storm drain facilities beyond those proposed as part of the Project are required to accommodate stormwater runoff from the Project site. The impacts of these designs are evaluated throughout the DEIR. As that evaluation demonstrates, the construction of the Project's storm drain facilities necessary to serve the Project would not result in any significant physical effects on the environment. Impacts would be less-than-significant, and no mitigation is required. (DEIR, pp. 4.17-14 to 4.17-15)

Dry Utilities

The Project also would involve utility connections to provide electric power and telecommunications services to the Project site. No natural gas would be used as a result of the Project (PDF GHG-2), and as such, use of natural gas is not considered in the EIR analysis. The Project would be served in accordance with the CPUC and Federal Energy Regulatory Commission tariffs. As discussed in DEIR Section 4.5, *Energy*, Project operational energy demands are estimated to be 98,388 kWh/year of electricity which would be supplied by SCE. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration. No new or expanded off-site dry utilities are required to serve the Project, and therefore there would be no impact associated with any such facilities that could cause significant environmental effects. (DEIR, p. 4.17-15)

The installation of the proposed on-site infrastructure improvements would result in physical environmental impacts; however, these impacts have been included in the analyses of construction-related effects presented throughout the DEIR, (e.g., air quality impacts, impacts to biological and cultural resources, water quality impacts, and noise and vibration impacts, etc.). Any applicable Project-specific mitigation measures for construction identified for each topical issue would address potential significant impacts associated with construction and installation of utilities. Therefore,

through consistent implementation of a variety of measures related to construction impacts, no additional impacts related to construction and operation of utility systems would occur. No mitigation is required. (DEIR, p. 4.17-15)

3.19.2 THRESHOLD B

Impact Statement: The Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in Section 4.17.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold b; therefore, no mitigation is required.

❑ Substantial Evidence

As previously discussed, GSWC would provide potable water service to the Project site. According to GSWC's 2020 UWMP, the 2016-2020 average unit demand factors for single family and multi-family are 0.26 and 2.23 acre-feet of water per year (AFY)/Connection, respectively (GSWC, 2021). The Project includes 55 single family detached homes, 114 townhomes, and 76 for rent affordable multi-family apartment units (as well as one market rate manager's apartment unit) within three 3-story structures. The total water demand for the Project would be 50.63 AFY, which is comprised of 43.94 AFY for single family and 6.69 AFY for multi-family. (DEIR, p. 4.17-15)
DEIR Table 4.17-1, *Total Supplies Available to GSWC West Orange through 2045 (AFY)*, presents the supplies available to the West Orange service area through 2045 according to the most recent UWMP from GSWC (adopted July 15, 2021). DEIR Table 4.17-2, *GSWC West Orange Projected Water Demands through 2045*, presents the projected water use through 2045 for the West Orange service area. DEIR Table 4.17-3, *GSWC West Orange Projected Water Supply and Demand through 2024*, presents the projected water supply and demand through 2045 for the West Orange service area. GSWC West Orange service area will only access enough water to meet its needs in any given year. Accordingly, although some of the supplies available to GSWC West Orange service area are shared among three GSWC service areas, GSWC West Orange will not acquire the additional supplies unless they are needed as part of GSWC's regional water management among the three service areas. As such, GSWC West Orange will acquire the total projected supplies as shown in DEIR Table 4.17-2. (DEIR, p. 4.17-16)

Given the difference between GSWC's projected water demand through 2045 and the total water supplies available through 2045, GSWC West Orange's waters supplies would be sufficient for the Project's estimated water demand of 50.63 AFY in normal, single dry years, and five consecutive dry year conditions through 2045. GSWC West Orange service area will only access enough water to meet its needs in any given year. The GSWC 2020 UWMP concluded that it has reliable supplies to meet its retail customer demands in normal, single dry years, and five consecutive dry year conditions through 2045. Groundwater, imported water from MWDOC, and the small amount of recycled water delivered within the service area by the City of Cerritos are all resilient during dry conditions and

GSWC West Orange is therefore not faced with shortages during normal or dry years. (DEIR, p. 4.17-17)

Based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, there would be sufficient water supplies available to serve the Project and impacts would be less than significant. No mitigation is required. (DEIR, p. 4.17-17)

3.19.3 THRESHOLD C

Impact Statement: The Project would result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in Section 4.17.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold c; therefore, no mitigation is required.

❑ Substantial Evidence

Wastewater Facilities

Although the Project site is in the City of Los Alamitos, sanitary sewer services are currently provided by and will be provided by the City of Seal Beach. Per the City of Seal Beach Sewer Master Plan 2018, the City provides sewer service throughout the City in a service area that collects and conveys wastewater from the service area for treatment by the OCSD. (DEIR, p. 4.17-17)

A Sanitary Sewer Analysis (*Technical Appendix O* of the DEIR) was prepared for the Project and investigates the sewer discharge route for the proposed development to the existing sewer mains of three manholes: 1) Basswood and Aster Street (Manhole A-16); 2) Candleberry Avenue and Aster Street (Manhole A-21); and 3) Elder Avenue (Manhole A-25). (DEIR, p. 4.17-17)

1. Basswood and Aster Street (Manhole A-16)

The existing sewer pipes were analyzed per City of Seal Beach Sewer Master Plan 2018 Table ES-1 for a maximum design depth at half-full for pipe sized at 15" or under. Based on the monitoring data collected, existing peak flow for Manhole A-16 at the northern inlet was measured at 0.391 million gallons per day (MGD) (0.6050 cfs), with a max peak depth flow of 4.52 inches (Flow depth to pipe diameter ratio (d/D) = 0.3013). The data shows that the 15" sewer pipe system capacity is capable of maintaining an adequate flow well below 50% of its flow depth capacity with the additional flow from the proposed development. According to the City of Seal Beach Sewer Master Plan 2018, the design

and analysis of collection system pipes is typically based upon the depth of flow to diameter ratio. All new pipe should be designed with a flow depth to pipe diameter ratio less than or equal to 0.5 for 15" and smaller pipes and 0.64 for 18" and larger pipes. The remaining pipeline capacity is reserved for wet weather related inflow and infiltration into the system. Additionally, the area above the water surface helps to keep the sewage aerated, preventing septic conditions, and resulting odors. The peak wet weather depth of flow to pipe diameter ratio should not exceed 0.80. (DEIR, pp. 4.17-17 – 4.17-18)

Based on the proposed development, the Project is estimated to result in a total peak flow output of 49,468 gallons per day (GPD) (0.0765 cfs) of effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent generated by the Project. The Project site would contribute an additional 0.0824 cfs to the trunk main. This would increase the flow depth-to-pipe diameter ratio to become 0.3216, an approximately 6.30 percent increase, which remains below the flow depth to pipe diameter ratio criteria and indicates that the proposed development would not have a significant impact on wastewater capacity. (DEIR, p. 4.17-18)

2. Candleberry Avenue and Aster Street (Manhole A-21)

The existing sewer pipes were analyzed per City of Seal Beach Sewer Master Plan 2018 Table ES-1, for a maximum design depth at half-full for pipe sized at 15" or under and pipes measured 18" or over with a d/D of 0.64. Since this is an elliptical sewer main sized at 17.88" x 17" (H x W), it was treated with the flow depth to pipe diameter ratio design criteria of 0.5 (half full). Based on the monitoring data collected, existing peak flow for Manhole A-21 at the northern inlet was measured at 0.377 MGD (0.5833 cfs), with a max peak depth flow of 5.84 inches (flow depth to pipe diameter ratio (d/D) = 0.3266). The data shows that the sewer pipe system capacity is capable of maintaining an adequate flow well below 50% of its flow depth capacity with the additional flow from the proposed development. The Project is estimated to be a total peak flow output of 49,468 GPD (0.0765 cfs) of effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent from the Project site. The Project is estimated to be a total peak flow output of 49,468 GPD (0.0765 cfs) of effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent from the Project site. The Project site would contribute an additional 0.0824 cfs to the trunk main. This would increase the d/D to become 0.3684, approximately 11.34 percent increase, which remains below the flow depth to pipe diameter ratio criteria and indicates that the proposed development would not have a significant impact on capacity. (DEIR, p. 4.17-18)

3. Elder Avenue (Manhole A-25)

The existing sewer pipes were analyzed per City of Seal Beach Sewer Master Plan 2018 Table ES-1, for a maximum design depth at half-full for pipe sized at 15" or under. Based on the monitoring data collected, existing peak flow for Manhole A-25 at the northern inlet was measured at 0.249 MGD (0.3853 cfs), with a max peak depth flow of 4.75 inches (flow depth to pipe diameter ratio (d/D) = 0.3958). The data shows that the 12" sewer pipe system capacity is capable of maintaining an adequate flow well below 50% of its flow depth capacity with the additional flow from the proposed development. The Project is estimated to be a total peak flow output of 49,468 GPD (0.0765 cfs) of

effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent from the project site. The Project site would contribute an additional 0.0824 cfs to the trunk main. This would increase the d/D to become 0.441, approximately 10.24 increase, which remains below the flow depth to pipe diameter ratio criteria and indicates that the proposed development would not have a significant impact on capacity. (DEIR, pp. 4.17-18 – 4.17-19)

In summary, the results from the Sanitary Sewer Analysis (refer to *Technical Appendix O* of the DEIR) demonstrate that the proposed flows, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems. Based on sewer monitoring data collected in preparation of the Sanitary Sewer Analysis, the sewer systems in all three locations indicated good flow, along with hydraulics and relatively low depths. Wastewater volumes produced by the proposed development would not significantly impact or exceed the existing sewer capacity in the public system, and that the existing sewer system has adequate capacity for the proposed development. Accordingly, impacts would be less than significant and no mitigation is required. (DEIR, p. 4.17-19)

4. Sanitary Sewer Update

A revised Sanitary Sewer Analysis (*Attachment M* of the FEIR) was prepared in response to comment from the City of Seal Beach. A Sewer Demand Memorandum (*Attachment L* of the FEIR) was prepared to address the updates in the sanitary sewer analysis and respond to comments on the DEIR related to the Old Ranch Country Club.

The City of Seal Beach's updated Sewer Master Plan (September 2022) identified the sewer loads for potential development areas within the City of Seal Beach. Those sewer loads are summarized in Table 1 of that Sewer Master Plan. The Old Ranch Country Club is listed as Site B-5, and it is identified as comprising 150 acres, five of which are indicated as "redevelopment area," with a potential for 120 dwelling units and a sewer load of 19,200 gallons per day (gpd).

Since 2022, the proposed development of the Old Ranch Country Club Project has been further refined, and as of January 2023 now includes more than the residential component identified in Table 1 of the Sewer Master Plan. Per the Initial Study dated February 7, 2023, prepared to support the Old Ranch Country Club Specific Plan, the anticipated redevelopment area has increased from 5 acres to approximately 35 acres over the existing site, and includes a 116-unit multi-family housing development, a 51-unit senior housing complex including an approximately 25,340 square foot medical office facility on the ground floor, a 150-key overnight accommodation, an approximately 2,650 square foot relocated maintenance facility, a parking structure, and a new clubhouse pool and associated structures (21,000 square feet) abutting the existing clubhouse.

This more refined development proposal for the Old Ranch Country Club project would result in an increase in the sewer demand by approximately 32,246 gpd, totaling 51,626 gpd (see *Attachment L* of the FEIR).

The revised Sanitary Sewer Analysis, prepared in March 2024 (*Attachment M* of the FEIR), used sewer system model data provided by the City of Seal Beach (AKM's City wide sewer study). The data was based on an area calculation method which indicated there are 16 sewer segments shown to have a d/D level above 0.5. Because the area calculation is used to calculate flows for large areas and is not necessarily representative of actual flows, actual monitored flows were determined and evaluated. Using the actual monitored flows indicated that there are only 7 segments estimated to exceed the City's peak dry weather flows (PDWF) d/D criteria after the proposed project is implemented. The remaining capacity above a PDWF d/D of 0.50 is reserved for wet weather flows. Flows over the d/D criteria range from 0.51 to 0.55 and represent approximately 56% of the pipe's flow capacity, which is well within the capacity of the downstream sewer lines.

No additional pipe segments in the AKM study were found to be undersized. The nine (9) segments that were found to be undersized in AKM's study were determined to be acceptable after analysis using the actual monitored flows. The d/D levels are shown to be higher because the existing segments have flat slopes, ranging from 0.16% - 0.22%. However, the pipe size can handle proposed flow levels, and sewer pipe upgrades are not required.

To evaluate a potential increase in the flow depth to pipe diameter ratio (d/D) based on the increase in total demand associated with the further refined Old Ranch Country Club project and after taking into consideration the amount of sewer discharge associated with the Project, C&V Consulting, Inc. applied the increase in total demand from the further refined Old Ranch Country Club Project to manhole (MH) IDs B03-A14 and B01-A13 through B01-A02A, as shown in *Attachment L* of the FEIR. These manholes and their associated pipeline segments are located downstream of the three manholes that were monitored for the Project and as such include the upstream sewer flows anticipated by the Project and currently existing development. As shown in *Attachment L* of the FEIR, the overall d/D is anticipated to be less than 0.5 for the identified segments with the increased demand added to the system. This means that when the sewer flows from the further refined Old Ranch Country Club Project are added to the sewer flows from the Project based on the downstream monitored manhole flows, the depth of flow to pipe diameter ratio is less than 50%. This in turn means that even with the Old Ranch Country Club Project, the sewer pipe system capacity remains capable of maintaining an adequate flow well below 50% of its flow depth capacity. As such, adequate capacity exists to serve the Project's projected demand in addition to the sewer pipe systems existing commitments, even after taking into account the further refined Old Ranch Country Club project. The anticipated d/D increase determined from the 4665 Lampson Avenue Project plus the Old Ranch Country Club Project is approximately 2.6-3.4%, which is considered negligible.

As a result, the proposed flows from the Project, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems, and that the existing sewer system has adequate capacity for the proposed development. Accordingly, impacts would be less than significant and no mitigation is required.

Wastewater Treatment

The existing residual capacity at OCSD Reclamation Plant No. 2, is approximately 105 mgd. Conservatively assuming that Project generated wastewater would be 100 percent of total water demand, the Project would generate 45,200 gallons per day, which is well within the capacity of Reclamation Plant No. 2. Therefore, the Project would not require OCSD to build new or expanded wastewater treatment facilities, and impacts would be less than significant. No mitigation is required. Moreover, Project generated wastewater would ultimately be treated at one or more of the OCSD wastewater treatment plants. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). This would result in a less than significant impact. (DEIR, p. 4.17-19)

3.19.4 THRESHOLD D

Impact Statement: The Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

❑ Findings

Potential impacts of the Project related to Threshold d are discussed in Section 4.17.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold d; therefore, no mitigation is required.

❑ Substantial Evidence

Solid waste from the City is transported to Frank R. Bowerman Sanitary Landfill in the City of Irvine and the Olinda Alpha Sanitary Landfill near the City of Brea. Both facilities are operated by Orange County Waste and Recycling. The Frank R. Bowerman Sanitary Landfill has a permitted disposal capacity of 11,500 tons per day with a remaining capacity of 205,000,000 cubic yards. The Olinda Alpha Landfill has a permitted disposal capacity of 8,000 tons per day with a remaining capacity of 17,500,000 cubic yards. (DEIR, p. 4.17-19)

Construction-Related Impacts

Waste generated during the construction phase of the Project would primarily consist of discarded materials from the construction of structures, common areas, infrastructure installation, and other Project-related construction activities. Based on the anticipated building square footage of 397,381 s.f. and the US EPA's construction waste generation factor of 4.39 pounds (lbs) per sf for residential-uses, approximately 872 tons of waste would be generated during the building construction phase. The Project's building construction is reasonably expected to occur over a period of approximately 1,031 days (see DEIR Table 3-4, *Estimated Construction Schedule*), which corresponds to approximately 0.85 tons of construction waste generated per day during the building construction phase. Additional waste would be expected from infrastructure installation and other Project-related construction activities. (DEIR, pp. 4.17-19 to 4.17-20)

The two landfills that serve the Project site have a total remaining capacity of 222,500,000 cubic yards and a combined permitted disposal capacity of 19,500 tons per day. The estimated closing date of operation for the Frank R. Bowerman Landfill and the Olinda Alpha Landfill are 2053 and 2036, respectively. Based on the approximate construction waste generated per day, demolition and construction waste generated by the Project is not anticipated to cause these landfills to exceed their maximum permitted daily disposal volume. Furthermore, none of these regional landfill facilities are expected to reach their total maximum permitted disposal capacities during the Project's construction period. In addition, the Project would be required to comply with LAMC Chapter 8.13, Construction and Demolition Waste, which requires the Project Applicant to divert a minimum of 50 percent of the construction and demolition debris resulting from the proposed development in compliance with State and local statutory goals and policies. (DEIR, p. 4.17-20)

Operational-Related Impacts

The Project includes 55 single family detached homes, 114 townhomes, and 76 for rent affordable multi-family apartment units, as well as one market rate manager's apartment unit.. Based on the single-family generation rate of 11.4 pounds per dwelling unit per day, the single family and townhome portion of the Project would generate approximately 1,926.6 pounds of solid waste per day (~0.96 tons per day). Based on the multifamily generation rate of 8.6 pounds per dwelling units per day, the multifamily portion of the Project would generate approximately 662.2 pounds of solid waste per day (~0.33 tons per day). The total solid waste generation of the Project is approximately 1.29 tons per day. (DEIR, p. 4.17-20)

As previously stated, the two landfills have a combined permitted disposal capacity of 19,500 tons per day. The Project's estimated solid waste generation represents approximately 0.007% of the two landfills' capacity and therefore, would not contribute significantly to both of the landfills' daily capacity. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.17-20)

3.19.5 THRESHOLD E

Impact Statement: The Project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

❑ Findings

Potential impacts of the Project related to Threshold e are discussed in detail in Section 4.17.5 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Threshold e; therefore, no mitigation is required.

❑ Substantial Evidence

Federal, State, and local statues and regulations regarding solid waste generation, transport, and disposal are intended to decrease solid waste generation through mandatory reductions in solid waste

quantities (e.g., through recycling and composting of green waste) and the safe and efficient transport of solid waste. The Project would be required to coordinate with the City's solid waste service provider, Universal Waste Systems Inc., to develop a collection program for recyclables, such as paper, plastics, glass, and aluminum, in accordance with local and State programs, including Assembly Bill (AB) 341, Mandatory Commercial Recycling, and the California Solid Waste Reuse and Recycling Act of 1991. (DEIR, p. 4.17-21)

The California Integrated Waste Management Act (AB 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. LAMC Chapter 8.12, Integrated Waste Management, regulates solid waste handling and meets the City's obligations under AB 939. The Project would be required to comply with Chapter 8.12 – Integrated Waste Management and other federal, State, or local regulations related to solid waste management. Therefore, the Project would not conflict with federal, State, or local regulations related to solid waste management. The Project would not have a significant impact related to compliance with regulations addressing the reduction of solid waste generation and disposal. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.17-21)

3.19.6 CUMULATIVE IMPACT

Impact Statement: The Project does not have the potential to result in cumulative impacts to utilities and service systems.

❑ Finding

Potential cumulative impacts of the Project related to utilities and service systems are discussed in detail in Section 4.17.6 of the DEIR. The City finds that the development of the proposed Project would not result in significant cumulative impacts related to utilities and service systems; therefore, no mitigation is required.

❑ Substantial Evidence

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the service area for the respective utility providers or the service area for specific facilities. (DEIR, p. 4.17-21)

As with the Project, individual development projects would require the construction of necessary infrastructure (water and wastewater lines, storm drain facilities, dry utilities, and others) to serve the projects. Each individual development project is subject to review for utility capacity to avoid unanticipated interruption of service or inadequate supplies. Coordination with the utility providers would allow for the provision of utility services to the Project and other developments. The Project and cumulative development is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). The infrastructure needed for the Project would be to the identified construction impact area, and no new or expanded off-site infrastructure is

required for the Project. The environmental impacts associated with the construction of these facilities are addressed throughout the DEIR and would be less than significant. Therefore, the Project would not have a cumulatively considerable contribution to a significant cumulative impact associated with construction of utility infrastructure. (DEIR, p. 4.17-21)

The cumulative area considered for water supply is the GSWC West Orange service area. The 2020 UWMP details current and future water supply in the service area. GSWC West Orange has reliable supplies to meet its retail customer demands in normal, single dry years, and five consecutive dry year conditions through 2045. Its contract water from the Municipal Water District of Orange County coupled with groundwater supplies derived from the Orange County Groundwater Basin are resilient during dry conditions. As such, GSWC West Orange is not faced with shortages during normal or dry years through 2045. Because GSWC West Orange extracts only as much groundwater as is necessary to meet customer demands and has a reliable water purchase agreement with Municipal Water District of Orange County, it is anticipated that supplies and demands are congruent across all the scenarios examined. Because the demand for water services can be met through 2045 with anticipated growth in its service area, cumulative impacts to water supply would be less than significant. (DEIR, pp. 4.17-21 to 4.17-22)

As discussed, based on sewer monitoring data collected in preparation of the Sanitary Sewer Analysis, the sewer systems in all three locations indicated good flow, along with hydraulics and relatively low depths. Wastewater volumes produced by the proposed development would not significantly impact or exceed the existing sewer capacity in the public system, and that the existing sewer system has adequate capacity for the proposed development. As such, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact on wastewater facilities. (DEIR, p. 4.17-22)

The existing residual capacity at OCSD Reclamation Plant No. 2, is approximately 105 mgd. The City of Los Alamitos General Plan Update EIR forecasted that General Plan Buildout would generate approximately 2.4 mgd, well within Reclamation Plant No. 2 treatment capacity. Wastewater generation by the General Plan Update buildout would not require OCSD to build new or expanded wastewater treatment facilities, and cumulative impacts would be less than significant. (DEIR, p. 4.17-22)

AB 341 mandates the reduction of solid waste disposal in landfills (Public Resources Code Section 42649). The solid waste generated by construction and operation of the Project would represent nominal portion of daily disposal capacities at existing landfill facilities. The existing landfill facilities have sufficient daily capacity to handle solid waste during the Project's construction and operation and would not directly result in the need for expanded solid waste disposal facilities. Other cumulative development would be required to comply with applicable local, State, and federal regulations during both construction and long-term operation to reduce solid waste generation. Cumulative impacts associated with solid waste disposal would be considered less than significant. (DEIR, p. 4.17-22)

Other individual development projects would be required to comply with local and State regulations during both construction and long-term operation to reduce solid waste generation. Therefore, the Project would not have a significant cumulative impact related to compliance with regulations addressing the reduction of solid waste generation and disposal. (DEIR, p. 4.17-22)

3.20 WILDFIRE

Project impacts for Wildfire Thresholds a through d do not result in significant impacts and findings are discussed below.

3.20.1 THRESHOLDS A THROUGH D

Impact Statement: The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan; the Project would not, due to slope, prevailing winds, and other factors, exacerbate wildlife risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; the Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.

- ❑ **Findings**

Potential impacts of the Project related to Thresholds a through d are discussed in Section 5.4.3 of the DEIR. The City finds that the development of the proposed Project will not result in significant impacts related to Thresholds a through d; therefore, no mitigation is required.

- ❑ **Substantial Evidence**

According to the California Department of Forestry and Fire Protection's (Cal Fire) Fire and Resources Assessment Program (FRAP), the Project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) and is not within proximity to lands classified as VHFHSZ. There are no lands classified as VHFHSZ within the City. The nearest VHFHSZ is located in the City of Fullerton, approximately 8.8 miles to the northeast. The Project site is located within the limits of the City of Los Alamitos and is not within a State Responsibility Area (SRA), which is the land where the State of California is financially responsible for the prevention and suppression of wildfires. Accordingly, no impact would occur. (DEIR, p. 5-9)

4.0 ENVIRONMENTAL IMPACTS MITIGATED TO A LEVEL OF LESS-THAN-SIGNIFICANT

4.1 BIOLOGICAL RESOURCES

4.1.1 THRESHOLD A

Impact Statement: The Project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

❑ **Findings**

Potential impacts of the Project related to Threshold a are discussed in detail in DEIR Section 4.3.6. The Project does provide limited suitable habitat for nesting birds and common raptor species. Construction activities have the potential to adversely impact nesting birds and raptors and roosting bats. Potentially significant impacts could occur. Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting birds, nesting raptors, and bat roosts prior to site disturbance. If nesting birds or raptors are present on the Project site, mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance. If roosting bats are detected on site outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. If roosting bats are detected onsite during the maternity season, the Project will avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. With implementation of the required mitigation, potential direct and cumulatively considerable impacts to bats would be reduced to below a level of significance. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ **Substantial Evidence**

Direct Impacts to Special-Status Plants

No special-status plants were determined to have potential to occur on the Project site. Therefore, Project temporary-construction related activities would not impact special-status plants. No mitigation is required. Additionally, long-term operation would not impact special-status plants. No mitigation is required. (DEIR, p. 4.3-29)

Direct Impacts to Special-Status Animals

Two special-status animals (State watch list) and Cooper's hawk and merlin (fly over only) were detected on the Project site during the general and focused biological studies. In addition, although the vermilion flycatcher was not detected onsite (foraging or nesting) during the biological studies, the

Project site does provide some suitable habitat for nesting (trees). Should vermilion flycatchers nest on the site during construction, construction activities could adversely impact nesting vermilion flycatchers in the absence of measures to protect the nesting individuals. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, pp. 4.3-29 to 4.3-30)

The Project site is estimated to provide approximately four acres of marginal foraging habitat for sensitive raptor species including the Cooper's hawk, northern harrier, wintering merlin, peregrine falcon, Swainson's hawk, and white-tailed kite as well as other common raptor species that are not identified as special status species. Raptor nesting was not documented during the biological surveys, but the Project site would be expected to support nesting by common raptor species. The Project is not expected to provide suitable nesting raptor habitat for the above-mentioned special-status raptor species due to species specific nesting habitat requirements, and level of existing anthropogenic disturbance from vehicles and people within and immediately adjacent to the Project site. (DEIR, p. 4.3-30)

Moreover, one merlin was observed briefly in March 2022 flying over the southwest corner of the parking lot to the JFTB. However, since the species is a winter resident, no impact is expected. (DEIR, p. 4.3-30)

Given the limited area (approximately four acres) of marginal foraging area, the Project would not result in significant impacts on raptor foraging, including for the special-status raptors noted above. The Project does not exhibit suitable nesting habitat for special-status raptors and there would thus be no significant impacts to nesting habitat for special-status raptors. However, there is a limited potential for nesting common raptor species on the Project site; impacts are potentially significant. (DEIR, p. 4.3-30)

Two sensitive bat species, the western red bat and the western yellow bat were detected foraging offsite within the adjacent Navy golf course. However, no evidence of roosting by any bat species was detected onsite during the four focused bat surveys performed for this analysis. As shown in DEIR Figure 3-18, *Landscape Plan*, (project design feature PDF B-1), the Project will incorporate larger sized box tree species (including the western sycamore) along the fringes of the development, adjacent to open space areas. The planting of trees preferred by bats adjacent to open space areas would minimize potential impacts to roosting bats because it would provide habitat for potential roosting. (DEIR, p. 4.3-30)

Nonetheless, because sensitive bat species were detected adjacent to the Project site and have the limited potential to establish a maternity roost onsite (specifically, the western yellow bat in suitable palm trees), conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, p. 4.3-30)

Direct Impacts to Critical Habitat

Temporary construction-related activities would not impact lands designated as critical habitat by the USFWS. No impact would occur and no mitigation is required. Long-term operation would not impact

lands designated as critical habitat by the USFWS. No impact would occur, and no mitigation is required. (DEIR, pp. 4.3-30 to 4.3-31)

Indirect Impacts to Biological Resources

The Project site is not surrounded by or is adjacent to natural open space; rather, adjacent facilities include Arbor Dog park, Arbor Park and the Navy Golf Course which are recreational facilities subject to regular human uses and associated disturbances. The Project is not expected to result in indirect effects to biological resources as the Project site is currently predominantly developed with existing outdoor lighting in place and the proposed Project would incorporate measures to minimize indirect light spillover into the adjacent areas including Arbor Park, Navy Golf Course, and JFTB. The Project would comply with any applicable lighting plan requirements of the Los Alamitos Municipal Code to ensure that light spillage is reduced to the maximum extent possible. Additionally, the Project's landscaping plan excludes invasive exotic species as listed on the California Invasive Plant Council (Cal-IPC) website. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.3-31)

The Project includes the following Project Design Features (PDFs) that have the effect of minimizing and avoiding environmental impacts.

PDF B-1 Pursuant to Figure 3-18, *Landscape Plan*, the Project will incorporate larger sized box tree species (including the western sycamore and cottonwood trees) that foliage specialist bats prefer and will plant the trees on the fringes of the development, adjacent to open space areas.

PDF B-2 Pursuant to Figure 3-18, *Landscape Plan*, the Project will plant approximately 441 trees onsite (excluding shrubs and ground cover), including the western sycamore (*Platanus racemosa*), paperbark melaleuca (*Melaleuca quinquenervia*), olive (*Olive sp*.), southern magnolia (*Magnolia grandiflora*), Crape myrtle (*Lagerstroemia indica*), Brisbane box (*Lophostemon confertus*), Australian willow (*Geijera parviflora*), Italian cypress (*Cupressus sempervirens*), yew pine (*Podocarpus macrophyllus*) and other species. No plants listed on the California Invasive Plant Council (Cal-IPC) Inventory species will be planted and a list of approved species to planted shall be reviewed by a qualified biologist prior to planting.

The following mitigation measures have been incorporated into the Project:

MM 4.3-1 Vegetation clearing should be conducted outside of the nesting season (February 1 through September 15). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a pre-construction nesting bird survey within three days prior to any disturbance to the Project site. Site disturbance includes disking, demolition activities, vegetation removal and grading. If active nests are identified, the biologist shall establish appropriate avoidance buffers around the nest (based on the species detected), and the buffer areas shall be avoided until the nests are no longer

occupied (through routine nest monitoring by the qualified biologist) and the juvenile birds can survive independently from their nest(s). In addition, if portions of the Project site have not been disturbed within three days after the initial nesting bird survey, additional nesting bird surveys will be conducted (within the nesting bird season, February 1 to September 15) until all portions of the Project site have been disturbed appropriately (as determined by a qualified biologist) as to not provide potential nesting habitat.

MM 4.3-2 If tree removal or ground disturbance occurs during the raptor nesting season (from approximately January 1 to July 31), pre-removal/disturbance surveys shall be conducted by a qualified biologist. The surveys shall include areas of suitable nesting trees within 300-feet from the limits of disturbance (to the extent that access is available). The survey shall be conducted no more than three days prior to disturbance. Should nesting raptors be detected either onsite or offsite, work would be delayed until fledglings have left the nest and area no longer dependent on the nest at which time, work could proceed.

MM 4.3-3 A qualified biologist shall conduct a pre-construction bat roost survey for roosting bats no more than 14 days prior to site disturbance. The pre-construction bat roost survey will consist of a minimum of two bat surveys (conducted consecutively or as determined by the biologist). If roosting bats are detected onsite outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. This may include using mechanical equipment to gently nudge the tree trunk multiple times prior to removal or for palm trees and other species, to de-frond or de-branch the tree using a mechanical lift and gently lower the cut fronds or branches to the ground. Regardless of the method, the fallen tree and/or material will be left undisturbed overnight until at least the next morning to give roosting bats time to exit before site disturbance.

If roosting bats are detected onsite during the maternity season, the Project shall avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. Once the qualified biologist approves removal of the subject roost tree(s), the same tree removal procedures as outlined above shall be implemented prior to tree removal.

Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting birds, nesting raptors, and bat roosts prior to site disturbance. If nesting birds or raptors are present on the Project site, mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance. (DEIR, p. 4.3-38)

If roosting bats are detected on site outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. If roosting bats are detected onsite during the maternity season, the Project will avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. With implementation of the required mitigation, potential direct and cumulatively considerable impacts to bats would be reduced to below a level of significance. (DEIR, pp. 4.3-38 to 4.3-39)

4.1.2 THRESHOLD D

Impact Statement: The Project could potentially interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

❑ Findings

Potential impacts of the Project related to Threshold d are discussed in detail in Section 4.3.6 of the DEIR. The Project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31) and roosting bats including the western red bat and the western yellow bat. Implementation of Mitigation Measure MM 4.3-1 would ensure that pre-construction surveys are conducted for nesting birds protected by State and federal regulations if vegetation is removed from the Project site during the breeding season. If nesting birds are present on the Project site, the mitigation requires avoidance of active bird nests in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential impacts to nesting birds protected by State and federal regulations would be reduced to below a level of significance. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ Substantial Evidence

Temporary Construction-Related Activities

The Project requires removal of existing ornamental trees that have the potential to provide suitable nesting opportunities for nesting birds. Therefore, the Project has the potential to impact active bird nests during construction activities, if vegetation is removed during the nesting season (February 1 to August 31). Construction activities could adversely impact nesting birds in the absence of measures to protect the nesting individuals. Moreover, as discussed above, two sensitive bat species, the western red bat and the western yellow bat were detected foraging offsite within the adjacent Navy golf course. Since sensitive bat species were detected adjacent to the Project site and have the limited potential to establish a maternity roost onsite (specifically, the western yellow bat in suitable palm trees), impacts are potentially significant during breeding season. Therefore, construction-related impacts to nesting birds and roosting bats are considered potentially significant before implementation of mitigation. (DEIR, p. 4.3-33)

Long-Term Operation

The Project site is not located within or part of a wildlife movement corridor. The site is located within the Pacific flyway; however, given the small area of the site, lack of native habitats and levels of disturbance, there is no potential for significant impacts to the Pacific flyaway. The Project site is developed and is adjacent to developed areas that do not contribute to wildlife movement. Therefore, the Project would not substantially interfere with an established migratory wildlife corridor. Additionally, MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in Code of Federal Regulations Title 50 Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. Moreover, California Department of Fish and Game Code Sections 3505, 3503.5, and 3800 prohibit the take, possession, or destruction of birds, their nests or eggs. The Project would be required to comply with existing laws including but not limited to MBTA and California Department of Fish and Game Code Sections 3505, 3503.5, and 3800. Therefore, no impact would occur, and mitigation is not required. (DEIR, pp. 4.3-33 to 4.3-34)

The Project has no area designated or recognized as wildlife nurseries, rookeries, or maternal bat roosts. Therefore, the Project would not impede the use of native wildlife nursery sites. No impact would occur, and mitigation is not required. (DEIR, p. 4.3-34)

Mitigation Measure 4.3-1 (provided above) has been incorporated into the Project.

Implementation of Mitigation Measure MM 4.3-1 would ensure that pre-construction surveys are conducted for nesting birds protected by State and federal regulations if vegetation is removed from the Project site during the breeding season. If nesting birds are present on the Project site, the mitigation requires avoidance of active bird nests in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential impacts to nesting birds protected by State and federal regulations would be reduced to below a level of significance. (DEIR, p. 4.3-39)

4.2 CULTURAL RESOURCES

4.2.1 THRESHOLD B

Impact Statement: The Project has the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

❑ **Findings**

Potential impacts of the Project related to Threshold b (historical resources) are discussed in detail in Section 4.4.5 of the DEIR. No known archaeological resources are present on the Project site. Nonetheless, the potential exists for Project-related construction activities to result in a direct impact to significant subsurface archaeological resources should such resources be discovered during Project-related construction activities. Impacts would be potentially significant and therefore require mitigation. Implementation of Mitigation Measure MM 4.4-1 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during

ground-disturbing activities associated with implementation of the Project. With implementation of the required mitigation, the Project's potential impacts to archaeological resources would be reduced to less than significant. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ Substantial Evidence

The Project site is currently developed. The site was subject to construction and ground-disturbing activities similar to that which would occur under the Project. (DEIR, p. 4.4-16)

BFSA conducted a cultural resources inventory of the Project site, which included a records search through the SCCIC at CSU Fullerton and an intensive pedestrian survey of the site. The survey did not identify any archaeological resources within the property. The Project site is located in an area of Orange County and the City of Los Alamitos that reflects very few recorded cultural resources, due to past agricultural uses and subsequent commercial and residential developments. Most of the recorded resources in the area are associated with historic development of the region. (DEIR, p. 4.4-16)

Given the highly disturbed condition of the Project site and its surroundings, the potential for the Project's construction activities to affect an unidentified archaeological resource is considered low. However, while unlikely, the presence of previously undiscovered subsurface archaeological resources on the Project site remains possible during grading activities in native soils (e.g. previously undisturbed soils due to deeper excavation). The Project would result in grading to depths of 5 feet below existing grades with deeper excavations (8 to 10 feet) for underground utilities or localized removals. The depth of grading for the existing building and improvements are unknown. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, p. 4.4-16)

The following mitigation measure has been incorporated into the Project:

MM 4.4-1 Discovery of Inadvertent Resources. Prior to the issuance of any grading permits, the Project Applicant/Developer shall submit proof that a qualified consulting archaeologist meeting the Secretary of Interior's (36 CFR 61) Professional Qualifications Standards has been retained to conduct periodic spot checks during ground disturbing activities. Spot check should occur at initial ground exposure within the project; upon a 50 percent completion milestone of ground disturbance; upon an 80 percent milestone of ground disturbance; or at any other time determined necessary by the consulting archaeologist. If any potentially historic or archaeological resources are encountered during ground-disturbing activities, the archaeologist shall halt construction work within 50 feet of the find and assess the nature of the find for importance.

1. If the discovery is determined to not be important by the archaeologist (e.g. isolates and clearly non-significant deposits), work will be permitted to continue in the area. If a find is determined to be potentially important by the

archaeologist, the Lead Agency shall be notified, and additional investigation by the archaeologist would be required. Additional investigation work would include scientific recordation and excavation.

2. At the conclusion of ground disturbing activities, the archaeologist shall draft a report detailing the monitoring process and summarize any additional field study and analysis of resources, should any be discovered. The completed report shall be approved by the Planning Department prior to the issuance of an occupancy permit.

3. Excavated finds shall be curated at a repository determined by the archaeologist and approved by the City with verification of curation provided to the City prior to the issuance of an occupancy permit.

Implementation of Mitigation Measure MM 4.4-1 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with implementation of the Project. With implementation of the required mitigation, the Project's potential impacts to archaeological resources would be reduced to less than significant. (DEIR, p. 4.4-20)

4.2.2 THRESHOLD C

Impact Statement: The Project has the potential to disturb human remains, including those interred outside of formal cemeteries.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in detail in Section 4.4.5 of the DEIR. In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, disturbance of the remains would result in a significant impact and therefore require mitigation. Mitigation Measure 4.4-2 will ensure mandatory compliance with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Mandatory compliance with State law would ensure that any discovered human remains are appropriately treated and any potential impacts to human remains, including human remains of Native American ancestry, that may result from development of the Project would be reduced to less than significant. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ Substantial Evidence

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Nevertheless, the limited potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction. (DEIR, p. 4.4-17)

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 "Disturbance of

Human Remains." According to Section 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the Site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. (DEIR, p. 4.4-17)

Given prior ground disturbances at the site, the likelihood of discovering human remains is low. In the unlikely event that human remains are discovered, disturbance would result in a significant impact. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, p. 4.4-17)

The following mitigation measure has been incorporated into the Project:

MM 4.4-2 Discovery of Human Remains. If human burial or skeletal remains are identified during excavation or construction, work in that location shall stop immediately until the find can be properly treated. The construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 "Disturbance of Human Remains." The County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Once the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the Site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants

relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

Mitigation Measure 4.4-2 will ensure mandatory compliance with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Mandatory compliance with State law would ensure that any discovered human remains are appropriately treated and any potential impacts to human remains, including human remains of Native American ancestry, that may result from development of the Project would be reduced to less than significant. (DEIR, p. 4.4-20)

4.3 GEOLOGY AND SOILS

4.3.1 THRESHOLD A

Impact Statement: The Project has the potential to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, and/or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other
ii. substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42).
iii. Strong seismic ground shaking.
iv. Seismic-related ground failure, including liquefaction.
v. Landslides.

❑ **Findings**

Potential impacts of the Project related to Threshold a are discussed in detail in Sections 4.6.5 of the DEIR. The Project is not located on a known earthquake fault but would potentially be subject to strong seismic ground shaking. As structures would be designed to meet or exceed California Building Code (CBC) standards for earthquake resistance, development of the Project would create less than significant impacts related to seismic ground shaking. The Project site is susceptible to liquefaction. A significant impact could occur, and mitigation would be required. Compliance with the recommendations from the Geotechnical Report would reduce the risk of seismic-related ground failure due to liquefaction to less than significant. Mitigation Measure MM 4.6-1 would ensure that that the Project's design professionals and construction contractors implement the recommendations of the Project's Geotechnical Investigation (DEIR *Technical Appendix F1*), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking liquefaction hazards, soil settlement and expansion. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

- ❑ **Substantial Evidence**

Rupture of a Known Earthquake Fault

The Project site is not located within the State of California Earthquake Fault Zone (Alquist-Priolo) and no faults were identified on the site during the site evaluation. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. Therefore, no impacts related to the rupture of a known earthquake fault would occur and no mitigation is required. (DEIR, p. 4.6-8)

Strong Seismic Ground Shaking

Southern California is a seismically active area and properties in the City of Los Alamitos, including the Project site, are subject to periodic ground shaking and other effects from earthquake activity along nearby regional faults. As indicated in the Geotechnical Report (DEIR *Technical Appendix F1*), the Project site is not at an increased risk relative to the surrounding areas. The Project would incorporate the construction recommendations contained with the geotechnical report as required by the LAMC Section 15.04.020. Project-related structures and buildings would be required to be designed and constructed in compliance with the CBC (California Code of Regulations, Title 24, Part 2), which contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the probable strength of ground motion. Therefore, as structures would be designed to meet or exceed CBC standards for earthquake resistance, development of the Project would create less than significant impacts related to seismic ground shaking and no mitigation is required. (DEIR, p. 4.6-8)

Seismic-Related Ground Failure, Including Liquefaction

The subject site is located within a liquefaction hazard zone per the State of California Seismic Hazard Zone for liquefaction potential. Subsurface field data indicates that the site contains isolated sandy layers susceptible to liquefaction interfingered with fine-grained non-liquefiable soils and dense sands. The recent explored groundwater elevation of 11 feet below existing grade and historic high groundwater elevation of 10 feet below existing grade were both used in the liquefaction analysis. Liquefaction potential was evaluated using the procedures outlined by Special Publication 117A and the applicable California Building Code seismic criteria. (DEIR, pp. 4.6-8 to 4.6-9)

Section 4.0 of the Geotechnical Report (DEIR *Technical Appendix F1*) identifies design recommendations to reduce liquefaction impacts to an acceptable level. The recommendations include seismic design parameters for the site, prevention of the intentional infiltration of storm water into subsurface soils and require foundations to be constructed based on the expansion index and shear strength of on-site soils. The estimated seismic settlement can be mitigated by performing the recommended remedial grading and constructing the buildings with the recommended post-tensioned slab and interconnecting isolated pad footings with grade beams. (DEIR, p. 4.6-9)

The Project would be required to be designed and constructed in accordance with applicable seismic safety guidelines, including the standard requirements of the CBSC. Furthermore, as stated in the LAMC Section 15.04.020, the Project would be required to comply with the grading and construction

recommendations contained within the geotechnical report for the Project site to further reduce the risk of seismic-related ground failure due to liquefaction. Implementation of the Project would have the potential to directly or indirectly expose people or structures to substantial hazards associated with seismic-related ground failure and/or liquefaction hazards. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, p. 4.6-9)

Landslides

Slope failures in the form of landslides are common during strong seismic shaking in areas of steep hills. The Project site and surrounding area are generally flat with no significant slopes. The Project site is not located within a landslides zone. Accordingly, no impact related to landslide hazards would occur and no mitigation is required. (DEIR, p. 4.6-9)

The following mitigation measure has been incorporated into the Project:

MM 4.6-1 Prior to the issuance of grading permits, the City of Los Alamitos Public Works & Engineering Department shall verify that all of the recommendations provided in Section 4.0 of the Project's December 21, 2021 "Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California," prepared by LGC Geotechnical, Inc. and included as Technical Appendix F1 to the Project's EIR, are incorporated into the Project's grading and building plans. These recommendations include but are not limited to a) Site Earthwork Considerations; b) Preliminary Foundation Recommendations; c) Site Grading Recommendations; d) Soil Bearing and Lateral Resistance Considerations; e) Lateral Earth Pressures for Retaining Walls Considerations; f) Nonstructural Concrete Flatwork Recommendations; and g) Preliminary Asphalt Concrete Pavement Design Parameters. Alternatively, the Project shall comply with the findings and recommendations of any geotechnical studies that may be required in association with future grading and/or building permits.

Mitigation Measure MM 4.6-1 would ensure that that the Project's design professionals and construction contractors implement the recommendations of the Project's Geotechnical Investigation (DEIR *Technical Appendix F1*), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking liquefaction hazards, soil settlement and expansion. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels. (DEIR, p. 4.6-16)

4.3.2 THRESHOLD C

Impact Statement: The Project has the potential to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

❑ Findings

Potential impacts of the Project related to Threshold c are discussed in detail in Section 4.6.5 of the DEIR. There is no potential for the Project's construction or operation to cause, or be impacted by, on- or off-site landslides or lateral spreading. Potential hazards associated with unstable soils would be precluded through mandatory adherence to the recommendations contained in the site-specific Geotechnical Report during Project construction. Project-related structures and buildings would be required to be designed and built in compliance with the CBC, which requires the Project to implement the recommendations of the site-specific Geotechnical Report. Conservatively, impacts would be potentially significant and therefore require mitigation. Mitigation Measure MM 4.6-1 would ensure that that the Project's design professionals and construction contractors implement the recommendations of the Project's Geotechnical Investigation (DEIR *Technical Appendix F1*), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking liquefaction hazards, soil settlement and expansion. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ Substantial Evidence

Liquefaction

The Project site is susceptible to liquefaction. Project-related structures would be required to be designed and constructed in compliance with the CBC and the recommendations of the Geotechnical Report. The recommendations require foundations to be constructed based on the expansion index and shear strength of on-site soils. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, pp. 4.6-10 to 4.6-11)

Landslide

The Project site and surrounding area are generally flat with no significant slopes. The Project site is not located within a landslides zone. Accordingly, no impact related to landslide hazards would occur and no mitigation is required. (DEIR, p. 4.6-11)

Lateral Spreading

Due to the lack of a nearby "free face" condition and non-continuous nature of the subsurface layers, the potential for lateral spreading is considered very low. Impacts would be less than significant, and no mitigation is required. (DEIR, p. 4.6-11)

Settlement

The underlying soils were found to be generally stiff to very stiff silts and clays. Based on laboratory test data consisting of in-situ moisture content, consolidation tests, and blow counts, fine-grained soils are considered generally normally consolidated. Based upon in-situ testing, visual examination, lab

data, geotechnical evaluation and the proposed corrective grading and fill placement recommendations, static settlement induced by raising grades 1 to 3 feet is estimated to be on the order of 1-inch. The Geotechnical Investigation (DEIR *Technical Appendix F1*) provides standard recommendations for site grading, site preparation, and placement of fill material that would avoid the potential for settlement. The estimated seismic settlement can be mitigated by performing the recommended remedial grading and constructing the buildings with the recommended post-tensioned slab and interconnecting isolated pad footings with grade beams. The recommendations also require isolated pad footings to be interconnected with grade beams. This recommendation would prevent excessive settlement and ensure safety against sliding and overturning. Additionally, the Geotechnical Investigation provides recommendations for soil bearing and lateral resistance which is the amount of load the soil can take without experiencing failure or exceeding the allowable amount of settlement. Prior to mitigation implementing the geotechnical study recommendations, implementation of the Project would have potential impacts related to settlement. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, p. 4.6-11)

Implementation of Mitigation Measure MM 4.6-1 (provided previously) has been incorporated into the Project.

Mitigation Measure MM 4.6-1 would ensure that that the Project's design professionals and construction contractors implement the recommendations of the Project's Geotechnical Investigation (DEIR *Technical Appendix F1*), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking liquefaction hazards, soil settlement and expansion. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels. (DEIR, p. 4.6-16)

4.3.3 THRESHOLD D

Impact Statement: The Project has the potential to be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) and would not create substantial direct or indirect risks to life or property.

❑ Findings

Potential impacts of the Project related to Threshold d are discussed in detail in Section 4.6.5 of the DEIR. The Project site contains soils with low susceptibility to expansion; however, the Geotechnical Report identified recommendations to minimize the impacts of expansive soils. Conservatively, this impact would be potentially significant before implementation of mitigation. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ Substantial Evidence

Based on the results of the Geotechnical Report (*Technical Appendix F1* of the DEIR), site soils are anticipated to have "low" expansion potential. Accordingly, the Project site would not create

substantial direct or indirect risks to life or property associated with the presence of expansive soils. Although the Project site has a low expansion potential, the Geotechnical Investigation provides recommendations for foundations and site improvements, such as flatwork and? Pre-soaking of the subgrade for building slabs to minimize the impacts of expansive soils. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, p. 4.6-12)

Implementation of Mitigation Measure MM 4.6-1 (provided previously) has been incorporated into the Project.

Mitigation Measure MM 4.6-1 would ensure that that the Project's design professionals and construction contractors implement the recommendations of the Project's Geotechnical Investigation (DEIR *Technical Appendix F1*), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking liquefaction hazards, soil settlement and expansion. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels. (DEIR, p. 4.6-16)

4.3.4 THRESHOLD F

Impact Statement: The Project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

❑ Findings

Potential impacts of the Project related to Threshold f are discussed in detail in Section 4.6.5 of the DEIR. The Pleistocene alluvial deposits that underlie the Holocene alluvial deposits have a remote potential to exist at the Project site and have a moderate/undetermined potential to yield paleontological resources. Conservatively, the Project would have the potential to directly or indirectly impact a unique paleontological resource before mitigation. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ Substantial Evidence

The Project would result in grading to depths of 5 feet below existing grades with deeper excavations (8 to 10 feet) for underground utilities or localized removals. The depth of grading for the existing building and improvements are unknown. (DEIR, p. 4.6-12)

A limited subsurface geotechnical evaluation of the Project site consisting of the excavation of seven small-diameter borings ranging in depth from approximately 5 to 46.5 feet below existing ground surface was performed. Undocumented artificial fill, soils native to or near the site, was encountered at depths ranging from 0 to 2.5 feet below existing grade. Quaternary Young Alluvium (Holocene age) was encountered below the undocumented fill (*Technical Appendix F1* of the DEIR). (DEIR, p. 4.6-12)

According to the Paleontological Report (*Technical Appendix F2* of the DEIR), Holocene and late Pleistocene young alluvial deposits were mapped at the Project site in 2016 and the depth of the geologic age transition from Holocene to Pleistocene within the alluvial deposits is unknown. Within Orange County, Holocene-aged alluvial sedimentary deposits are usually geologically too young to produce fossils. Due to the lack of nearby significant fossil localities and young sedimentary deposits, there is a low potential to uncover paleontological resources. However, Pleistocene alluvial deposits underlie the Holocene alluvial deposits at the Project site and are considered to have a moderate/undetermined paleontological potential. (DEIR, p. 4.6-12)

Although the Geotechnical Report did not identify Pleistocene alluvial deposit within any borings on site, the depth to Pleistocene alluvial deposits is unknown. As a result, the Project has a remote potential to encounter paleontological resources during grading activities in native soils. Accordingly, the Project would have the potential to directly or indirectly impact a unique paleontological resource. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, pp. 4.6-12 to 4.613)

The following mitigation measure has been incorporated into the Project:

MM 4.6-2 If paleontological resources are discovered during earth disturbance activities, the discovery shall be cordoned off with a 50-foot radius buffer so as to protect the discovery from further potential damage, and an Orange County Certified Professional Paleontologist shall be consulted to assess the discovery.

If the discovery is determined to be significant by the paleontologist based on the Society of Vertebrate Paleontology guidelines, a monitoring and recovery plan shall be initiated, which will include notification of appropriate personnel involved and monitoring of earth disturbance activities. The monitoring and recovery plan shall include the following requirements.

a. Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist. Monitoring will be conducted full-time in areas of grading or excavation in undisturbed sediments of alluvial deposits.

b. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of fossils in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.

c. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field

number, collector, and date collected. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated and the fossils are removed to a safe place. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.

d. Recovered specimens will be prepared to a point of identification and permanent preservation, including screen-washing sediments to recover small invertebrates and vertebrates.

e. Recovered specimens shall be identified and curated into a professional, accredited public museum / repository with a commitment to archival conservation and permanent retrievable storage (e.g., Orange County [OC] Parks). The paleontological curation program should include a written repository agreement prior to the initiation of monitoring activities. Prior to curation, the lead agency (e.g., the City of Los Alamitos Planning Division) will be consulted on the repository/museum to receive the fossil material.

f. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, will signify satisfactory completion of the project program to reduce impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.

Mitigation Measure MM 4.6-2 would ensure the proper identification and subsequent treatment of any significant paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. With implementation of the required mitigation, the Project's potential impacts to important paleontological resources would be reduced to less than significant. The Project's contribution to cumulative impacts would likewise be reduced to less than significant. (DEIR, p. 4.6-17)

4.4 TRIBAL CULTURAL RESOURCES

4.4.1 THRESHOLD A

Impact Statement: The Project has the potential to cause a substantial adverse change in the significance of a tribal cultural resource.

❑ Findings

Potential impacts of the Project related to Threshold a are discussed in detail in Section 4.16.5 of the DEIR. There is evidence indicating that tribal cultural resources are present on the Project site or have been found previously on the Project site. Project construction activities have the potential to unearth and adversely impact tribal cultural resources that may be buried in native soils at the Project site. Impacts would be potentially significant, and mitigation is required. Implementation of Mitigation Measures MM 4.16-1 through 4.16-3 would ensure the proper identification and subsequent treatment of any significant tribal cultural resources that may be encountered during ground-disturbing activities associated with Project development. With implementation of the required mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less than significant. The City has determined that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the DEIR.

❑ Substantial Evidence

As discussed in DEIR Section 4.4, *Cultural Resources*, there are no historical resources identified within the Project site. Additionally, there are no known tribal cultural resources on the Project site. Because the site is currently developed, due to past grading activities and historic agricultural uses, the potential for the Project's construction activities to affect an unidentified tribal cultural resource is considered low. However, while unlikely, the presence of previously undiscovered subsurface tribal cultural resources on the Project site remains possible during grading activities in native soils (e.g., previously undisturbed soils due to deeper excavation). (DEIR, p. 4.16-7)

As part of the mandatory AB 52 consultation process required by State law, the City sent notification of the Project to Native American tribes with possible traditional or cultural affiliation to the Project area. The City sent notification letters of the proposed Project to the following 14 Native American tribes:

- Gabrielino-Tongva Tribe;
- Juaneno Band of Mission Indians Acjachemen Nation;
- Gabrielino Tongva Indians of California Tribal Council;
- Ewiiaapaayp Band of Kumeyaay;
- Pala Band of Mission Indians;
- Gabrielino/Tongva Nation;
- Campo Band of Diegueno;
- Mesa Grande Band of Diegueno;
- La Posta Band of Diegueno Mission Indians;
- Gabrieleno/Tongva San Gabriel Band of Mission Indians;
- Santa Rosa Band of Cahuilla Indians;
- Gabrieleno Band of Mission Indians – Kizh Nation;
- Manzanita Band of Kumeyaay Nation; and
- Soboba Band of Luiseno Indians. (DEIR, pp. 4.16-7 to 4.16-8)

During the course of the tribal consultation process, the Gabrieleno Band of Mission Indians – Kizh Nation responded to the City's invitation for consultation and provided the City with tribal archive information indicating that tribal cultural resources, as defined in Public Resources Code § 21074, have the potential to exist in the Project area have explained their concerns with specific subsurface ground disturbance activities that have impacted and destroyed their tribal cultural resources in the past. Accordingly, there is potential for significant impacts to occur if tribal cultural resources are inadvertently discovered during grading activities in native soils and mitigation is required. Conservatively, this impact would be potentially significant before implementation of mitigation. (DEIR, p. 4.16-8)

The Project would be required to comply with the following Mitigation Measures:

MM 4.16-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.

1. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

2. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

3. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

4. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written

notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

5. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

MM 4.16-2 Unanticipated Discovery of Human Remains and Associated Funerary Object.

1. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

2. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

3. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).

4. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

5. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the

archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

6. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

MM 4.16-3 Procedures for Burials and Funerary Remains.

1. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

2. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

3. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

4. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

5. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

6. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six

months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

7. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

Implementation of Mitigation Measures MM 4.16-1 through 4.16-3 would ensure the proper identification and subsequent treatment of any significant tribal cultural resources that may be encountered during ground-disturbing activities associated with Project development. With implementation of the required mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less than significant. (DEIR, p. 4.16-12)

5.0 ENVIRONMENTAL IMPACTS THAT REMAIN SIGNIFICANT AND UNAVOIDABLE AFTER MITIGATION

The City finds the Project would result in significant and unavoidable impacts in the following impact categories after implementation of all feasible mitigation measures: Transportation. In accordance with CEQA Guidelines Section 15092(b)(2), the City cannot approve the Project unless it first finds (1) under Public Resources Code Section 21081(a)(3), and CEQA Guidelines Section 15091(a)(3), that specific economic, legal, social technological, or other considerations, including provisions of employment opportunities to highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR; and (2) under CEQA Guidelines Section 15092(b), that the remaining significant effects are acceptable under CEQA Guidelines Section 15093 because the economic, legal, social, technological or other benefits of the proposed Project outweigh its unavoidable adverse environmental effects. Therefore, a statement of overriding considerations has been prepared (see Section 9.0, herein).

5.4 TRANSPORTATION

5.4.1 THRESHOLD B

Impact Statement: The Project would conflict with CEQA Guidelines Section 15064.3, subdivision (b).

❑ Findings

Potential impacts of the Project related to Threshold b are discussed in detail in Section 4.15.5 of the DEIR. The Project would generate VMT per capita exceeding the City's adopted VMT impact threshold of 14.8 by 31.8% in the baseline condition and 27.7% in the cumulative condition. Impacts would be potentially significant and cumulatively considerable. As such, these impacts will require mitigation. Project components and mitigation measures available to reduce VMT include developing pedestrian network improvements and implementing transportation demand management (TDM) measures such as those listed in Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis. To ensure that all feasible mitigation measures were incorporated to reduce VMT impacts, measures identified in the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook were considered. As discussed above, the 2021 CAPCOA Handbook describes methods to reduce VMT. As discussed in Attachment C, VMT Reduction Matrix, of the VMT Report (DEIR *Technical Appendix N2*), all applicable transportation mitigation measures were evaluated to reduce VMT impacts. Even with incorporation of all feasible mitigation measures, impacts would remain significant and unavoidable. As discussed in DEIR Section 4.12, *Population and Housing*, the Project would place housing within a job-rich area. Although there would be a significant and unavoidable impact related to VMT, this is due to the fact that the Project site does not currently have transit or alternative

transportation opportunities and has a higher VMT per capita compared to the County's regional average. Nevertheless, co-locating housing near jobs reduces vehicle travel lengths and associated greenhouse gas emissions caused by long commute distances.

Pursuant to Section 21081(a)(3) of the California Public Resources Code the City has determined that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures and alternatives identified in the EIR.

❑ Substantial Evidence

Vehicle Miles Traveled

Small Project Screening
The Governor's OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (Technical Advisory) indicates that projects generating fewer than 110 daily vehicle trips may be presumed to have a less than significant impact. Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021. The proposed Project is anticipated to generate 1,658 vehicle trip-ends per day, which exceeds the 110 vehicle trips per day threshold. (DEIR, p. 4.15-13)

Map Based Screening
As noted in the Technical Advisory, "residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT." The Orange County Transportation Model (OCTAM) was utilized to obtain the Project's transportation analysis zone (TAZ) existing VMT information. The Project site is in TAZ 634. TAZ 634 has an existing VMT per capita of 22.71. Per the OCTAM model, the County of Orange regional average VMT per capita is 17.42. The Project is not located in a low VMT area because the existing VMT per capita of 22.71 in TAZ 634 is higher than the regional VMT per capita of 17.42. (DEIR, p. 4.15-13)

TPA Screening
The Technical Advisory states that projects located within a Transit Priority Area (TPA), ½ mile of an existing "major transit stop," or an existing stop along a "high-quality transit corridor" will have a less than significant impact on VMT. (DEIR, p. 4.15-13)

Once a project is determined to be within a TPA, the Technical Advisory also recommends consideration of secondary screening checks. For example, a proposed land use project is not eligible for TPA screening if the project meets any of the following sub-criteria:

1) Has a Floor Area Ratio (FAR) of less than 0.75;

2) Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);

3) Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or

4) Replaces affordable residential units with a smaller number of moderate- or high-income residential units. (DEIR, p. 4.15-14)

Utilizing Graphical Information System (GIS) data obtained from SCAG, the Project's location relative to its proximity to TPA area was mapped. The Project is not located within a TPA. (DEIR, p. 4.15-14)

Affordable Residential Development Screening

The Technical Advisory states that "Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT." The Technical Advisory also identifies projects consisting of 100% affordable housing units as eligible for screening. Furthermore "low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available." In areas where existing jobs-housing match is closer to optimal, low-income housing nevertheless generates less VMT than market-rate housing. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. The Project is proposing 77 affordable housing units or 31% of the total 246 dwelling units. As previously discussed, the City of Los Alamitos has not formally adopted thresholds to determine the amount of affordable housing applicable to screening within the City, and in the absence of those thresholds, an affordable housing screening qualification cannot be made. (DEIR, p. 4.15-14)

Local Community Serving Retail Screening

The Technical Advisory identifies local serving retail uses are presumed to have a less than significant impact absent substantial evidence to the contrary. By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. The Project does not propose to develop any local serving retail uses, and therefore the Project is not eligible for screening as a local serving retail use. (DEIR, p. 4.15-14)

Model Based Project Generated VMT

Since the Project does not meet any of the screening criteria used to determine that a land use project is presumed to have less than significant VMT impacts, VMT modeling and analysis was performed. DEIR Table 4.15-2, *Project-Generated VMT Results*, presents the Project's potential VMT. As discussed previously, a VMT impact is considered significant if a residential project generates more than 15% below the existing regional residential VMT per capita. Consistent with the Technical Advisory, project level VMT analysis should evaluate home-based (HB) VMT divided by a project's population. HB VMT is calculated from OCTAM's Production/Attraction (PA) trip matrices and then divided by a project's population to derive the VMT efficiency metric VMT per capita. Productions are land use types that generate trips (residences) and attractions are land use types that attract trips (employment). Productions and attractions are converted from person trips to vehicle trips for the purposes of calculating VMT. (DEIR, p. 4.15-15)

The Project includes 77 affordable housing units, which generate vehicle trips at a lower rate per unit as compared to market rate housing. As the reduction in trips and associated VMT could not be accurately accounted for by the calculations conducted using the OCTAM model, these adjustments are made through calculations as described in the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Specifically, "Land Use – T-4. Integrate Affordable and Below Market Rate Housing"; requires multifamily residential units to be permanently dedicated as affordable for lower income families. The Project's affordable units would reduce its Project generated VMT by 8.87% or 1,226 VMT. Additionally, the Project's parking supply will be limited to 577 parking spaces, which is 12 parking spaces below the 589 parking spaces required by the lead agency. This would reduce project-generated VMT by 0.28% or 39 VMT. This results in a Project generated VMT of 12,559 in the baseline condition and 12,174 in the cumulative condition as shown in DEIR Table 4.15-2. (DEIR, p. 4.15-15, as revised in Section 4.0 of the FEIR)

The Project would generate VMT per capita exceeding the City's adopted VMT impact threshold by 30.1% in the baseline (2022) conditions and 27.0% for long range (2045) conditions. As a result, the Project would result in a significant VMT impact. Mitigation is required. (DEIR, p. 4.15-15)

Transportation demand management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant. The effectiveness of TDM strategies to reduce VMT has been determined based on the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. In addition to specific tenancy considerations, which may affect the effectiveness of TDM measures, land use context is a major factor relevant to the potential application and effectiveness of TDM measures. More specifically, the land use context of the Project is characteristically suburban. The Project's suburban context acts to reduce the range of feasible TDM measures and moderates their potential effectiveness. According to the 2021 CAPCOA Handbook, the maximum effectiveness for the TDM measures under the neighborhood design features is 10%.

Consistent with VMT reduction measures described within CAPCOA, reductions to VMT shall include the strategies identified in Mitigation Measure MM 4.15-1. In addition to Mitigation Measure MM 4.15-1, the Project would provide pedestrian improvements within the development connecting to existing off-site facilities.

MM 4.15-1 Prior to the issuance of certificate of occupancy, the Project Applicant shall provide documentation that it has implemented the CAPCOA strategies identified below. Verification that the CAPCOA strategies were completed shall be verified by the City's Public Works Director.

1. Provide pedestrian and bicycle network improvements within the development connecting to existing off-site facilities, as detailed in Section 3.3.2 of the DEIR.

2. Confirm with the OCTA whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards.
3. Install broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission.

Project components and mitigation measures available to reduce VMT include developing pedestrian network improvements and implementing TDM measures such as those listed in Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis. (DEIR, p. 4.15-20)

To ensure that all feasible mitigation measures were incorporated to reduce VMT impacts, in addition to the TDM measures identified above, all measures identified in the 2021 CAPCOA Handbook were considered. As discussed above, the 2021 CAPCOA Handbook describes methods to reduce VMT. As discussed in Attachment C, VMT Reduction Matrix, of the VMT Report (DEIR *Technical Appendix N2*), all applicable transportation mitigation measures were evaluated to reduce VMT impacts. Even with incorporation of all feasible mitigation measures, impacts would remain significant and unavoidable. (DEIR, p. 4.15-20)

As discussed in DEIR Section 4.12, *Population and Housing*, the Project would place housing within a job-rich area. Although there would be a significant and unavoidable impact related to VMT, this is due to the fact that the Project site does not currently have transit or alternative transportation opportunities and has a higher VMT per capita compared to the County's regional average. Nevertheless, co-locating housing near jobs reduces vehicle travel lengths and associated greenhouse gas emissions caused by long commute distances. (DEIR, p. 4.15-20)

5.4.2 CUMULATIVE IMPACTS

Impact Statement: The Project would result in a cumulative VMT impact since the Project was found to have a significant and unavoidable impact at the project level. The Project would generate VMT per capita exceeding the City's adopted VMT impact threshold of 14.8 by 31.8% in the baseline condition and 27.7% in the cumulative condition.

❑ Findings

Potential cumulative impacts of the Project related to transportation are discussed in detail in Section 4.15-6 of the DEIR. The Project would result in a significant cumulative VMT impact. The Project is required to comply with Mitigation Measure MM 4.15-1, which would reduce impacts to the extent feasible; however, impacts would remain significant and unavoidable. The City finds that the above mitigation measures are feasible, are adopted, and will reduce some of the proposed Project transportation

impacts attributable to trips generated by the proposed Project. However, even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis. Pursuant to Section 21081(a)(3) of the California Public Resources Code, as described below, the City has determined that specific economic, legal, social, technological, or other considerations make infeasible the alternatives and mitigation measures identified in the EIR.

- ❑ **Substantial Evidence**

Pursuant to the City's cumulative VMT threshold, a significant cumulative impact would occur if the Project increased the total regional VMT compared to the cumulative no project condition. The Project is not proposing a general plan amendment nor a change of zone. Since the Project is consistent with the underlaying land use assumptions of the General Plan and Zoning the cumulative no project would be the same as the cumulative with project. Therefore, the cumulative impact would be less than significant. (DEIR, p. 4.15-18).

However, the Project would generate VMT per capita exceeding the regional VMT per capita threshold (15% below the regional average) by 27.0% under long range (2045) conditions. Therefore, although the Project would not exceed the City's adopted cumulative VMT threshold, it would not achieve 15% below the regional VMT per capita threshold under long range (2045) conditions. That said, as noted in the Technical Advisory, "A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa."

Nonetheless, to be conservative given that the Project would not achieve 15% below the regional VMT per capita threshold under long range (2045) conditions, this analysis assumes the Project would result in cumulatively considerable VMT impacts. (DEIR, p. 4.15-18)

6.0 OTHER CEQA CONSIDERATIONS

6.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved with the proposed action should it be implemented (CEQA Guidelines § 15126.2[d]). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any potential environment accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

❑ Finding

The Project's potential to result in significant irreversible environmental changes are discussed in detail in Subsection 5.2 of the DEIR. The Project would not result in significant irreversible environmental changes, as described below. Construction and long-term operation of the Project would be compatible with the existing and planned land uses that surround the Project site and would not result in significant physical environmental effects to nearby properties. Although the Project would cause unavoidable impacts to the environment associated with transportation (VMT), the Project's impact related to VMT would not result in significant irreversible environmental changes. (DEIR, p. 5-2)

❑ Substantial Evidence

One factor in determining whether the Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. (DEIR, p. 5-2)

Natural resources, in the form of construction materials and energy resources would be used in the construction of the Project. The consumption of these natural resources would represent an irreversible change to the environment. However, the development of the Project site as proposed would have no measurable adverse effect on the availability of such resources, including resources that may be nonrenewable (e.g., fossil fuels). Additionally, the Project is required by law to comply with the California Building Standards Code (CALGreen), which would minimize the Project's demand for energy, including energy produced from non-renewable sources. A detailed discussion of energy consumption is provided in DEIR Subsection 4.5, *Energy*, which determined impacts to be less than significant. (DEIR, p. 5-2)

Implementation of the Project would commit the Project site to residential uses for the lifespan of the Project. As demonstrated in the analysis presented throughout DEIR Section 4.0, *Environmental Analysis*, construction and long-term operation of the Project would be compatible with the existing and planned land uses that surround the Project site and would not result in significant physical environmental effects to nearby properties. Although the Project would cause unavoidable impacts to the environment associated with VMT, these effects would not commit surrounding properties to land uses other than those that are present under existing conditions. (DEIR, p. 5-2)

DEIR Subsection 4.8, *Hazards and Hazardous Materials*, provides an analysis of the Project's potential to transport or handle hazardous materials which, if released into the environment, could result in irreversible damage to the environment. As concluded in the analysis, compliance with federal, State, and local regulations related to hazardous materials would be required of all contractors working on the property during the Project's construction and of all users that occupy the Project's buildings. As such, construction and long-term operation of the Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions. (DEIR, p. 5-2)

As discussed under DEIR Subsection 4.5, *Energy*, the Project would not result in a wasteful consumption of energy or the consumption of resources that is not justified. The Project's energy requirements during construction and operation were analyzed in DEIR Section 4.5, *Energy*. As discussed, construction energy use would be typical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards. Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. The Project is located on an infill site that is surrounded by existing urban uses; the existing transportation facilities and infrastructure would provide future residents, visitors, and employees associated with the Project access to a mix of land uses near the Project, thus further reducing fuel consumption and energy demand. Additionally, the Project will be providing a community electric vehicle for use by residents of the affordable housing component (PDF-GHG-3) as well as providing parking and EV infrastructure (PDF-GHG-4) that would further promote fuel efficient vehicles. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations. (DEIR, pp. 5-2 to 5-3)

Because no significant non-renewable resources occur within the Project site, the Project would also not reduce the availability of non-renewable resources associated with long-term operational activities. Accordingly, the Project would not result in a significant, irreversible change to the environment related to energy use. (DEIR, p. 5-3)

6.2 GROWTH-INDUCING IMPACTS

CEQA requires a discussion of the ways in which the Project could be growth-inducing. The State CEQA Guidelines identify a project as growth-inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines § 15126.2 [e]).

❑ Finding

The Project's potential to result in growth-inducing impacts is discussed in detail in Subsection 5.3 of the DEIR. For the reasons described in detail below, the Project will not 1) remove obstacles to growth

because the Project's proposed utility infrastructure, on- and off-site, are designed to accommodate only the proposed development as opposed to widespread, new development; 2) result in the need to expand one or more public services (see Public Services of the DEIR); 3) encourage or facilitate economic effects that could result in other activities that could significantly affect the environment; and 4) involve a precedent setting action that could encourage and facilitate other activities that could significantly affect the environment because there are no proposed changes to the type or location of uses allowed by the General Plan and zoning ordinance. Based on the entire record, the City finds that the Project would not directly or indirectly induce growth in the surrounding area which could result in a significant adverse effect to the environment.

❑ Substantial Evidence

Would this project remove obstacles to growth (e.g., a major expansion of a wastewater treatment plan that may allow for more construction in service areas)?

No. Due to the developed nature of the Project site, the existing structures are currently connected to the existing utility infrastructure beneath Lampson Avenue and generate a demand for utility services. The Project involves the redevelopment of the Project site with residential uses, consistent with the existing land use designation and zone classification for the Project site. The proposed residential uses would be developed in accordance with the City's development standards. Furthermore, the Project accommodates the growth and development anticipated in the City's 2021-2029 Housing Element and would not change existing regulations pertaining to land development. (DEIR, p. 5-4)

The Project does not require the construction or extension of roadways; however, the Project would include the installation of new on-site utility connections to existing utility infrastructure and the construction of approximately 1,200 linear feet of water line off-site within Lampson Avenue to serve the development. The Project would not create major new infrastructure that could result in substantial, unplanned growth because the Project's proposed utility infrastructure, on- and off-site, are designed to accommodate only the proposed development as opposed to widespread, new development. Therefore, the Project is not considered to be growth inducing with respect to the removal of obstacles to growth. (DEIR, p. 5-4)

Would this project tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects?

No. As discussed in DEIR Subsection 4.13, *Public Services*, and 4.14, *Recreation*, the Project would increase the demand for public services (police, fire, schools, libraries, and parks and recreational facilities). The proposed residential use would create the typical range of service calls for police and fire services that occur with this type of use. However, per correspondence with Orange County Fire Authority, Los Alamitos Police Department, Los Alamitos Unified School District, and Orange County Public Libraries (DEIR *Technical Appendix L)*, the Project would not necessitate the unplanned construction of new, or the expansion of existing, public service facilities in order to maintain desired levels of service. Secured Fire Protection Agreements would ensure that response times and service ratios are met within its service area and facilities are upgraded as needed. The existing police services

and resources would be adequate to meet the additional demands generated by the Project. Additionally, funding mechanisms such as a Secured Fire Agreement, the City's General Fund revenue, development impact fees, and in-lieu fees are in place through existing regulations and standard practices to accommodate growth in the City, including the Project. As discussed in DEIR Subsection 4.17, *Utilities and Service Systems*, there is adequate water, wastewater, and storm drain infrastructure and capacity to serve the Project site. This Project would not, therefore, have significant growth-inducing consequences with respect to public services or utilities and service systems. (DEIR, pp. 5-4 to 5-5)

Are there characteristics of the project that encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively? For example, would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

No. A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with the increase in project population and thus reducing or removing barriers to growth. This occurs in suburban or rural areas where population growth results in increased demand for service and commodity markets responding to the new population. This type of growth is, however, a regional phenomenon resulting from the introduction of a major employment center or regionally significant housing project. For example, additional commercial uses may be drawn to the area by the increased number of residents in the area. (DEIR, p. 5-5)

Construction jobs from Project implementation would result in economic growth. During Project construction, a number of design, engineering, and construction-related jobs would be created. However, this would be temporary in nature and would only last until Project construction is completed. Construction impacts including construction worker commute trips and associated impacts were analyzed throughout the DEIR, specifically in Subsections 4.2, *Air Quality*, 4.7, *Greenhouse Gas Emissions*, and 4.11, *Noise*; the Project's impacts analyzed under these environmental topics were determined to be less than significant. (DEIR, p. 5-5)

As further described in DEIR Section 3.0, *Project Description*, the Project is proposing the development of up to 246 new residential units. The Project's proposed 246 households and 647 residents were anticipated by the City's General Plan projections. The City's Housing Element projected an increase of 2,023 people in the next eight years based on the RHNA allocation. The Project site is identified within the City's Housing Element as a housing element site with an estimate of 246 units. Development of the Project with a total of 246 units would be consistent with the City's 2021–2029 Housing Element. Additionally, the City's General Plan designates the Project site for "Multi-Family Residential-25" land use and the Project site is zoned as "Multi-Family Residential (R-3)." The maximum permitted density is 25 dwelling units per net acre and Project's proposed overall density is 20 dwelling units per acre. Therefore, the Project would be consistent with the General Plan land use and zoning designations and anticipated growth. Therefore, implementation of the Project's proposed residential use would support existing uses in the area and would facilitate the growth envisioned in the City's 2021-2029 Housing Element. (DEIR, p. 5-5)

As development occurs onsite, Project residents would seek shopping, entertainment, employment, home improvement, auto maintenance, and other economic opportunities in the surrounding area. Additional commercial uses may be drawn to the area by the increased number of residents in the area. The Project is located near existing employment centers and retail areas, which would help serve the employment and shopping needs of the future residents. According to the General Plan Housing Element, the City is an employment hub and its principal employers, as of 2021 (most current data available) include hospitals, aerospace manufacturers, business services, and restaurant/wholesale trade. DEIR Table 5-1, *City of Los Alamitos Top Employers*, lists the top employers in the City in 2021 and their distances from the Project site. (DEIR, p. 5-6)

There are several existing retail areas near the Project site within the City and surrounding cities (Cypress, Seal Beach, and Garden Grove). The nearest retail areas to the Project site include Old Ranch Town Center located at 12320-12430 Seal Beach Boulevard in the city of Seal Beach approximately 1.04 miles west and The Shops at Rossmoor located at 12501 Seal Beach Boulevard in the city of Seal Beach approximately 1.3 miles west. The Project site is already served by nearby commercial uses. Therefore, the Project's introduction of residents on the Project site would not induce substantial growth in the area. (DEIR, p. 5-6)

Are there characteristics of the project that encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively? For example, would approval of this project involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment?

No. As identified above, there are no proposed changes to the type or location of uses allowed by the General Plan and zoning ordinance. Further, no changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, fire codes) are proposed or required to implement this Project. As identified in EIR Sections 4.1 through 4.17, the Project would be implemented in accordance with applicable regulations and identified mitigation measures, which would ensure there are no conflicts with adopted land development regulations and environmental impacts are minimized to the extent feasible. The Project does not propose any precedent-setting actions that, if approved, would specifically allow, or encourage other projects and resultant growth to occur. Furthermore, the Project is not extending any infrastructure that would facilitate further development. In the event that another property owner were to propose development or redevelopment of a property in the Project vicinity or in any part of the City, that project would require evaluation under CEQA based on its own merits, including an analysis of direct and cumulatively considerable effects. Therefore, approval of the Project would not involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment. (DEIR, pp. 5-6 to 5-7)

7.0 ALTERNATIVES

7.4.1 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected. Factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR include: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid or substantially lessen one or more significant environmental impacts. The Project's significant impact that cannot be mitigated to less than significant are: traffic (VMT).

With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines Section 15126.6(f)(1) provides:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

In determining a range of reasonable alternatives to be evaluated in the EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were rejected because either: 1) they could not accomplish most of the basic objectives of the Project, 2) they would not have avoided or substantially lessened significant adverse environmental impacts, or 3) they were considered infeasible to construct or operate. Alternatives that were considered but rejected are described below.

Alternative Sites

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by developing the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines Section 15126.6(f)(2). In addition, an alternative site need not be considered when implementation is "remote and speculative," such as when the alternative site is beyond the control of a project applicant. (DEIR, p. 6-4)

The Project proposes to redevelop an approximately 12.3-acre site with 246 residential units. Given the size and type of the proposed development, a similarly sized project and land use elsewhere would likely result in the same or similar transportation impacts. However, if the Project was located in a Transit Priority Area (TPA), significant and unavoidable VMT impacts could be eliminated. Currently, there is only one TPA in the City of Los Alamitos that is located at the intersection of Los Alamitos Boulevard and Katella Avenue. This area is currently developed with commercial uses and is not planned for residential uses. This area has a General Plan designation of Commercial and a zoning designation of General Commercial (C-G). A General Plan Amendment and Zone Change would be

required to develop residential uses in this area. Implementing the Project on a different parcel within the TPA would require acquisition of developed property, demolition of existing operational structures, and discontinuing existing land uses, which would likely be disruptive to existing businesses and operations. (DEIR, p. 6-4)

The Project site currently has a General Plan land use designation of "Multi-Family Residential-25" and a zoning designation of R-3 (Multi-Family Residential). The Project is consistent with the General Plan land use and zoning designations, and therefore the Project does not require a general plan amendment or zone change to implement the development. Furthermore, the Project Applicant does not control any other parcels of land in or near the Project site that could be used as an alternative location for the proposed Project. (DEIR, p. 6-4)

Therefore, because an alternative location is not available that would avoid or substantially lessen the significant environmental effects of the Project, and because the Project Applicant does not have control over, and cannot reasonably obtain control over, any other parcels of land in the jurisdiction of the City that could accommodate the Project, an alternative location alternative is not feasible. Accordingly, this alternative is not further considered in the Draft EIR. (DEIR, p. 6-4)

Alternatives to Eliminate or Lessen VMT Impacts

The Project would only result in one significant and unavoidable impact, i.e., impacts related to traffic (VMT) generated by the Project. All other impacts of the Project would be mitigated to less than significant with incorporation of mitigation measures. With the exception of VMT impacts, all environmental impacts of the Project are related to the physical disturbance of the Project site during construction activities and are not specific to the Project itself but are a result of redevelopment of the Project site. In other words, construction-related impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources would occur with any type of redevelopment of the Project site and would result in the need for the same or similar mitigation measures. The only alternative that would eliminate the construction-related biological resources, cultural resources, geology and soils, and tribal cultural resources impacts is the No Project/ No Development Alternative. (DEIR, p. 6-5)

A variety of alternatives were considered that would eliminate or lessen the Project's significant and unavoidable VMT impacts. Pursuant to the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018, projects that meet one of the screening criteria below, would not have a VMT impact. (DEIR, p. 6-5)

- Small Project Screening
- Map Based Screening
- Transit Priority Area (TPA) Screening
- Local Community Serving Project Type Screening

An alternative that meets the Small Project screening criteria would require the Project to generate fewer than 110 daily vehicle trips. In order to meet this criterion, the Project would need to be

significantly reduced to approximately 10 dwelling units, which would not be consistent with the City's General Plan or its Housing Element. As discussed in Section 4.12, *Population and Housing*, the City adopted its General Plan Housing Element to reflect the 2021-2029 cycle on February 21, 2023. The Project site is located within the Multiple-Family Residential-25 General Plan designation, which specifies a density range of 20 to 25 dwelling units per acre. Moreover, the Project site is identified within the City's Housing Element as a housing element site with an estimate of 246 units, which is identified to meet the Regional Housing Needs Allocation (RHNA) target of 769 units citywide. Furthermore, this alternative would not meet any of the Project Objectives. Therefore, this alternative was rejected from further consideration. (DEIR, p. 6-5)

In order to meet the Map Based screening criteria, the Project would need to be relocated into a transportation analysis zone (TAZ) with a low VMT. As discussed in detail above, an alternative location is not feasible because an alternative location is not available that would avoid or substantially lessen the significant environmental effects of the Project, and the Project Applicant does not have control over, and cannot reasonably obtain control over, any other parcels of land in the jurisdiction of the City that could accommodate the Project. Therefore, this alternative was rejected from further consideration. (DEIR, p. 6-5)

In order to meet the TPA screening criteria, the Project would need to be relocated to a TPA. As discussed in detail above, an alternative location is not feasible because there is only one TPA in the City of Los Alamitos that is currently used for commercial uses and not planned residential uses. Therefore, similarly, this alternative was rejected from further consideration. (DEIR, p. 6-5)

In order to meet the Local Community Serving Project Type screening criteria, the proposed land use would need to change from residential to commercial uses. Commercial uses would result in a substantial increase in vehicle trips in comparison to the Project, which would increase air quality, energy, greenhouse gas, and noise impacts. Additionally, this alternative would not meet any of the Project objectives and therefore was rejected from further consideration. (DEIR, p. 6-6)

Based on the preceding, alternatives to eliminate VMT impacts were rejected from further consideration. (DEIR, p. 6-6)

Reduced Density Alternative

The Reduced Density Alternative, which assumes the Project Site is proposed for a 25% reduction in residential units, was considered to analyze an alternative that could potentially accomplish most of the project objectives of the Project and could avoid or substantially lessen one or more of the Project's significant effects. (DEIR, p. 6-6)

Although a Reduced Density Alternative would have the ability to partially meet most of the Project objectives, it was rejected from further consideration because it would not avoid or substantially lessen the Project's significant impacts. More specifically, this alternative would not avoid the Project's significant and unavoidable VMT impacts. VMT impacts are evaluated based on VMT per capita (population). Although the Reduced Density Alternative would reduce vehicle trips and VMT, it would

also result in a proportional reduction in population, resulting in substantially the same VMT per capita and VMT impact as compared to the Project. In other words, because both the numerator and the denominator would be proportionally reduced, the ultimate VMT calculation would be the same as the Project. (DEIR, p. 6-6)

Furthermore, the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021) has been utilized to determine trip reduction measures that may be applicable to the Project (see Attachment C of *Technical Appendix N2* of the DEIR). CAPCOA Land Use Measure T-1 states that VMT reductions can be achieved by a project that is designed with a higher density of dwelling units compared to the average residential density in the U.S. Therefore, pursuant to CAPCOA, a Reduced Density Alternative would not result in a reduction in VMT impacts. (DEIR, p. 6-6)

In addition, as evaluated in this EIR, the Project's significant impacts related to Biological resources, cultural resources, geology and soils, and tribal cultural resources, would be less than significant with implementation of mitigation measures. The Reduced Density Alternative would have similar impacts to the Project related to biological resources, cultural resources, geology and soils, and tribal cultural resource because the development area under the Reduced Density Alternative would be the same. Because the Reduced Density Alternative would not avoid or substantially lessen the Project's significant and unavoidable VMT impacts, it was rejected from further consideration. (DEIR, p. 6-6)

Mixed Use Alterative

The Mixed Use Alternative, which assumes the Project site is proposed for mixed use development (75% residential and 25% commercial), was considered to analyze an alternative that could potentially accomplish most of the project objectives of the Project and that could avoid or substantially lessen one or more of the Project's significant effects. The Mixed Use Alternative would have the ability to partially meet most of the Project objectives (Objectives B, C, and D). However, this alternative would not meet Objective A which is to provide residential development consistent with the City's General Plan, including the 2021-2029 Housing Element, to help meet the City's RHNA requirement due to the reduction in residential units. This is because the Mixed Use Alternative would reduce the ultimate number of housing units constructed. (DEIR, p. 6-7)

Additionally, the Mixed Use Alternative would not be consistent with the existing zoning or General Plan designations. The Project site is zoned as "Multi-Family Residential (R-3)." The R-3 zone applies to lots intended to provide multi-family housing. The City's General Plan designates the Project site for "Multi-Family Residential-25" land use. The "Multi-Family Residential-25" land use designation is defined as "single family detached and attached residences, including all development permitted in other residential categories as well as stacked flats and other building types with 4 or more units. Mixed use or commercial uses are not permitted in these designations. Therefore, a zone change and General Plan Amendment would be required for the Mixed Use Alternative. The City is not required to evaluate alternatives that would not be allowed by the existing zoning because it is remote and speculative. (DEIR, p. 6-7)

In addition, this alternative would not avoid or substantially lessen the Project's significant and unavoidable VMT impacts. VMT impacts are evaluated based on VMT per capita (population). The Mixed Use Alternative would result in a 25% reduction in residential uses to allow for the commercial component. As discussed above under the Reduced Density Alternative, the reduction in residential units would result in a proportional reduction in VMT and population, resulting in substantially the same VMT per capita and VMT impact as compared to the Project. The commercial component of the Mixed Use Alternative could potentially screen out from VMT impacts, meaning that it would be presumed to have less than significant VMT impacts, by adding local serving retail opportunities in an urban area. However, because the residential component would result in the same VMT impact as the Project and the Project site is within an area with higher VMT per capita compared to the County's regional average, this alternative would not avoid or substantially lessen VMT impacts. (DEIR, p. 6-7)

Furthermore, as evaluated in this EIR, the Project's significant impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources, would be less than significant with implementation of mitigation measures. The Mixed Use Alternative would have similar impacts to the Project related to biological resources, cultural resources, geology and soils, and tribal cultural resource because the development area under the Mixed Use Alternative would be the same. Therefore, this alternative was rejected from further consideration. (DEIR, p. 6-7)

7.4.2 ALTERNATIVES UNDER CONSIDERATION

B. No Project/No Development Alternative

- ❑ **Finding**

The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the existing vacant two-story, 88,000 sf commercial office building would remain on the 12.3-acre site. No vehicle trips would be associated with this alternative. Under this alternative, no impact would occur and all significant and unavoidable impacts would be eliminated. However, none of the Project Objectives would be met. Thus, the City finds that each of the reasons set forth below is an independent ground for rejecting the No Project/No Development Alternative, and by itself, independent of any other reason, justifies rejection of the No Project/No Development Alternative, and hereby rejects the No Project/No Development Alternative.

- ❑ **Substantial Evidence**

The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the existing vacant two-story, 88,000 sf commercial office building would remain on the 12.3-acre site. No vehicle trips would be associated with this alternative. Under this Alternative, no improvements would be made to the Project site. This alternative is required by CEQA Guidelines Section 15126.6(e)(3)(B) to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition (as described in DEIR Section 2.0). (DEIR, p. 6-8)

The No Project/No Development Alternative would result in no physical environmental impacts to the Project site. All significant impacts of the Project related to construction activities would be eliminated by the selection of the No Project/No Development Alternative. Additionally, this alternative would eliminate the Project's significant and unavoidable impact related to VMT. However, this alternative would not receive the environmental benefits from the implementation of stormwater drainage and water quality filtration features that would be constructed by the Project. The No Project/No Development Alternative would fail to meet all the Project Objectives, as described in Section 6.1.1. (DEIR, p. 6-13)

C. Maximum Density Allowed Alternative

❑ Finding

The Maximum Density Allowed Alternative considers the development of the Project site consistent with the maximum density allowed under the Multi-Family Residential (R-3) zoning designation, which allows for a maximum permitted density of 25 dwelling units per net acre. Under this alternative, a total of 307 dwelling units would be constructed on the 12.3-acre Project site, resulting in an increase of 61 units. Additionally, no single family detached homes would be constructed under this alternative and the Project would consist, instead, of townhomes and multi-family units. The Maximum Density Allowed Alternative would result in greater impacts related to air quality, energy, GHG emissions, noise (operation), public services, recreation, and utilities and service systems due to the increased residential units and associated vehicular trips. This alternative would result in a new significant and unavoidable impact related to GHG emissions, primarily due to the increased number of mobile sources as compared to the Project. Impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazardous and hazardous materials, hydrology and water quality, land use and planning, population and housing, transportation, and tribal cultural resources would be similar to the Project. Impacts related to transportation (VMT) would be similar to the Project and significant and unavoidable under this alternative. The Maximum Density Allowed Alternative would meet most of the Project's objectives. The City finds that each of the reasons set forth above is an independent ground for rejecting the Maximum Density Allowed Alternative, and by itself, independent of any other reason, justifies rejection of the Maximum Density Allowed Alternative, and hereby rejects the Maximum Density Allowed Alternative.

❑ Substantial Evidence

The Maximum Density Allowed Alternative considers the development of the Project site consistent with the maximum density allowed under the Multi-Family Residential (R-3) zoning designation, which allows for a maximum permitted density of 25 dwelling units per net acre. Under this alternative, a total of 307 dwelling units would be constructed on the 12.3-acre Project site, resulting in an increase of 61 units. Additionally, no single family detached homes would be constructed under this alternative and the Project would consist, instead, of townhomes and multi-family units. The development area and access to the Project site would be the same, with a proportional increase in the number of parking spaces. The Maximum Density Allowed Alternative would generate 1,921 daily trips, including 120 AM peak hour, and 153 PM peak hour trips, resulting in an increase of 263 daily, 8 AM peak hour, and 7 PM peak hour trips compared to the Project. (DEIR, p. 6-13)

The Maximum Density Allowed Alternative would result in greater impacts related to air quality, energy, GHG emissions, noise (operation), public services, recreation, and utilities and service systems due to the increased residential units and associated vehicular trips. This alternative would result in a new significant and unavoidable impact related to GHG emissions, primarily due to the increased number of mobile sources as compared to the Project. Impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazardous and hazardous materials, hydrology and water quality, land use and planning, population and housing, transportation, and tribal cultural resources would be similar to the Project. Impacts related to transportation (VMT) would be similar to the Project and significant and unavoidable under this alternative. The Maximum Density Allowed Alternative would meet most of the Project's objectives, as described in Subsection 6.1.1. However, as compared to the Project this alternative would to a lesser extent meet Objective B–provide a variety of housing types and affordability (for lower income, and above moderate income households) that satisfies the residential market and accommodates increased demand for housing, primarily because the Maximum Density Allowed would eliminate the development of single family homes. (DEIR, p. 6-18)

D. Senior Housing Alternative

❑ Finding

The Senior Housing Alternative considers the development of the Project site with 55 single family detached homes, 114 townhomes, and 77 age-restricted multi-family apartment homes. In other words, this alternative would replace the Project's affordable multi-family units with senior housing. The Senior Housing Alternative would result in reduced impacts related to air quality (operation), energy, GHG emissions, noise (off-site traffic-related), and transportation (VMT) due to the decrease in vehicular trips and trip lengths. However, significant and unavoidable impacts related to VMT would occur with the implementation of this alternative, similar to the Project. Impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazardous and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems would be similar to the Project. The Existing Zoning Alternative would meet some of the Project's objectives (Objectives A, D–E), but would only partially meet Objective B and would not meet Objective C. Thus, the City finds that each of the reasons set forth above is an independent ground for rejecting the Senior Housing Alternative, and by itself, independent of any other reason, justifies rejection of the Senior Housing Alternative, and hereby rejects the Senior Housing Alternative.

❑ Substantial Evidence

The Senior Housing Alternative considers the development of the Project site with 55 single family detached homes, 114 townhomes, and 77 age-restricted multi-family apartment homes. In other words, this alternative would replace the Project's affordable multi-family units with senior housing. Access to the site would be the same as the Project. The Senior Housing Alternative would provide a total of 594 parking spaces, an increase of 20 spaces compared to the Project. Assuming all senior housing for the multi-family component of the Project, the Senior Housing Alternative would generate 1,538 daily trips, including 99 AM peak hour, and 130 PM peak hour trips, resulting in a decrease of 120 daily, 13

AM peak hour, and 10 PM peak hour trips compared to the Project (see *Technical Appendix R* of the DEIR). (DEIR, p. 6-18)

The Senior Housing Alternative would result in reduced impacts related to air quality (operation), energy, GHG emissions, noise (off-site traffic-related), and transportation (VMT) due to the decrease in vehicular trips and trip lengths. However, significant and unavoidable impacts related to VMT would occur with the implementation of this alternative, similar to the Project. Impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazardous and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems would be similar to the Project. (DEIR, pp. 6-23 to 6-24)

The Existing Zoning Alternative would meet some of the Project's objectives (Objectives A, D–E), as described in Subsection 6.1.1, but would only partially meet Objective B and would not meet Objective C, as follows:

- *Objective B–Provide a variety of housing types and affordability (for lower income, and above moderate income households) that satisfies the residential market and accommodates increased demand for housing*. This alternative would only partially meet Objective B because although this alternative would result in units restricted for seniors, it would not result in a variety of affordable housing types for lower income, and above moderate income households.

- *Objective C–Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.* This alternative would not meet this objective because the affordable component would not be comprised of workforce housing, unlike the Project which would provide a range of affordability levels to support middle-income workers seeking to live closer to where they work. (DEIR, p. 6-24)

7.4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the CEQA Guidelines states that, if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. (DEIR, p. 6-24)

The No Project/No Development Alternative has the least impact to the environment because it would not involve any construction activities or residential operations. In addition, it would eliminate a significant unavoidable impact of the Project, VMT. While this alternative would avoid the significant effects of the Project, it would not receive the environmental benefits from the implementation of stormwater drainage and water quality filtration features. Additionally, none of the Project Objectives would be met. (DEIR, p. 6-24)

Pursuant to Section 15126.6(e)(2), since the environmentally superior alternative is the No Project/No Development Alternative, another alternative was selected as the environmentally superior alternative.

The Senior Housing Alternative is environmentally superior to the Project. As shown in DEIR Table 6-1, *Comparison of Alternatives and Project-related Environmental Impacts*, the Senior Housing Alternative would have less impacts under five of the environmental topical areas. The reduction in impacts is due to the fact that the use would generate reduced vehicular trips and trip lengths as compared to the proposed Project, which would result in a reduction in operational-related impacts, including air quality, GHG emissions, energy, noise, and transportation impacts. However, this alternative would still result in significant and unavoidable VMT impacts. DEIR Table 6-2, *Alternatives Attainment of Project Objectives*, identifies the ability of each alternative to meet the fundamental purpose and basic objectives of the Project. The Senior Housing Alternative would meet some of the Project's objectives (Objectives A, D–E), but would only partially meet Objective B and would not meet Objective C. (DEIR, pp. 6-24 to 6-25)

8.0 GENERAL CEQA FINDINGS

8.4.1 RECIRCULATION NOT REQUIRED

The City finds that the DEIR does not require recirculation under CEQA (CEQA Section 21092.1, CEQA Guidelines Section 15088.5).

(a) CEQA requires that the lead agency recirculate an EIR when significant new information is added to the EIR after public notice of its availability has previously been given but prior to its certification. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it; or

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

(c) If the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified.

(d) Recirculation of an EIR requires notice pursuant to Section 15087, and consultation pursuant to Section 15086.

(e) A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.

The FEIR documents changes to the DEIR. The FEIR provides additional analysis that was not included in the DEIR. Furthermore, Responses to Comments contained in the FEIR fully considered and responded to comments claiming that the Project would have significant impacts or more severe impacts not disclosed in the DEIR. Moreover, the Responses to Comments include substantial evidence that none of these comments provided substantial evidence that Project would result in changed circumstances, significant new information, considerably different mitigation measures, or new or more severe significant impacts than were discussed in the DEIR. In addition, CEQA Guidelines

Section 15088.5(b) provides that "recirculation is not required where the new information added to the EIR merely clarifies and amplifies or makes insignificant modifications in an adequate EIR." Recirculation also is not required simply because new information is added to the EIR — indeed, new information is oftentimes added given CEQA's public/agency comment and response process and CEQA's post-DEIR circulation requirement of proposed responses to comments submitted by public agencies.

The City has thoroughly reviewed the public comments received regarding the Project and the DEIR to determine whether any of the public comments provide substantial evidence that would require recirculation of the EIR prior to its adoption.

8.4.2 MITIGATION MONITORING AND REPORTING PROGRAM

To the extent that these Findings conclude that the proposed mitigation measures outlined in herein are feasible and have not been modified, superseded, or withdrawn, the City hereby commits to implementing these measures. These Findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the City approves the proposed project. The mitigation measures that are referenced herein and adopted concurrently with these Findings will be effectuated through the process of construction and implementation of the proposed Project. In accordance with the Requirements of Public Resources Code § 21081.6, the City must adopt the Mitigation Monitoring Program, which is described in full in Section IV of the DEIR and is incorporated herein by this reference. The City reserves the right to make amendments and/or substitutions of mitigation measures if the City determines that the amended or substituted mitigation measure will mitigate the identified potential environmental impacts to at least the same degree as the original mitigation measure, and where the amendment or substitution would not result in a new significant impact on the environment which cannot be mitigated.

8.4.3 CONSIDERATION OF RECORD; INDEPENDENT JUDGMENT

In approving the proposed Project, the City decision-makers have reviewed and considered the DEIR and appendices, the FEIR and appendices, and all other pertinent evidence in the record of proceedings. The Applicant's consultants prepared the screen check versions of the DEIR, FEIR and technical studies. All such materials and all other materials related to the EIR were extensively reviewed and, where appropriate, modified by the Planning Department or other City representatives and/or peer review consultants. As such, the DEIR, FEIR, technical studies, and all other related materials reflect the independent judgment and analysis of the Lead Agency.

9.0 STATEMENT OF OVERRIDING CONSIDERATIONS

Public Resources Code Section 21081(a)(3) and (b), and CEQA Guidelines Section 15093, require the City, acting as the Lead Agency, to balance the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of the Project against its significant and unavoidable adverse environmental impacts and determine whether those benefits of the Project outweigh its significant and unavoidable impacts. If the City finds that these benefits of the Project outweigh its significant and unavoidable adverse environmental impacts, the City may approve the Project.

As set forth in Section 3.0 above, the EIR identified all of the Project's adverse environmental impacts and mitigation measures that would reduce the Project's impacts to less-than-significant level where feasible. As further set forth in Section 5.0, the EIR presents evidence that implementing the Project would cause or contribute to one impact (transportation VMT impact) that would remain significant and unavoidable even after the imposition of all feasible mitigation measures. Finally, as set forth in Section 7.0, herein, there are no feasible alternatives to the Project that would mitigate or avoid the Project's significant and avoidable VMT impact to less-than-significant level while still attaining most of the Project's basic objectives.

Based on the facts presented throughout this document, the EIR, and all other evidence in the record, the City makes the following finding:

As the CEQA Lead Agency for the proposed Project, the City has reviewed the Project description and the alternatives to the Project, as presented in the EIR., The City finds and determines that:

(i) All of the significant impacts of the Project, except for one transportation impact (VMT), will be reduced to less-than significant levels by the mitigation measures described in the Final EIR and approved and adopted by these Findings;

(ii) The City's approval of the Project will result in one significant adverse environmental effect (transportation VMT impact) that cannot be avoided even with the incorporation of all feasible mitigation measures into the Project; and

(iii) All potential adverse environmental impacts and all feasible mitigation measures to reduce the impacts from the Project have been identified in the DEIR, Final EIR and public testimony and there are no other feasible mitigation measures or feasible Project alternatives that would further mitigate or avoid the remaining significant environmental effect. The significant effect related to transportation (VMT) has not been mitigated to a less-than-significant level and is considered significant and unavoidable. Having considered the potential for the Project to cause or contribute to significant and unavoidable adverse impact related to transportation (VMT), the City hereby determines that all feasible mitigation measures have been adopted to reduce or avoid the significant and unavoidable impact identified in the EIR, and that no

additional feasible mitigation or alternatives are available to further reduce or avoid significant impacts.

(iv) Economic, legal, social, technological, and other benefits of the Project outweigh the Project's significant and unavoidable impact and approval of the Project is appropriate.

Despite the significant and unavoidable impact, it is the City's considered judgment that the benefits offered by the proposed 4665 Lampson Avenue Project outweigh its adverse effect. Each of the overriding considerations and Project benefits set forth below separately and individually outweighs the unavoidable adverse environmental effect (VMT) identified in the EIR, and the City therefore finds the impact to be acceptable. Substantial evidence in the record demonstrates that approval and implementation of the Project will provide the benefits listed below. Each of the separate benefits listed below provides a separate and independent ground for the City's decision that the Project's benefits outweigh the significant and unavoidable environmental impact identified in the EIR.

1. The Project Furthers the City's Housing Goals and Contributes to the City's RHNA Requirements in Accordance with State Housing Law

The Project will comply with State Housing Element Law and help the City to meet the City's Regional Housing Needs Allocation (RHNA) target. State Housing Element Law mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for (and do not unduly constrain) housing production. Housing element statutes also require the State Department of Housing and Community Development (HCD) to review local housing elements for compliance with state law and to report their findings to the local government. The City has an identified RHNA of 769 units for the 2021–2029 planning period, distributed among extremely low, very low, low, moderate and above moderate-income categories. The RHNA represents the minimum number of housing units each community is required to provide "adequate sites" for and is one of the primary threshold criteria necessary to achieve approval of the element by the HCD.

As recently recognized by the California Legislature, "California has a housing supply and affordability crisis of historic proportions." (Gov. Code § 65589.5; *see also* Gov. Code §§ 65009 ["The Legislature finds and declares that there currently is a housing crisis in California and it is essential to reduce delays and restraints upon expeditiously completing housing projects"].) In order to alleviate that crisis, the Legislature has taken a number of steps to ensure that local jurisdictions accommodate their share of needed housing, including by requiring that cities adopt—and update according to a fixed schedule—the Housing Element portion of their General Plan, and submit the Housing Element to HCD for review. (Gov. Code § 65585.) Among other things, the Housing Element is required to demonstrate how the city will meet its share of regional housing needs, which is reflected in its RHNA. (Gov. Code § 65583.) If a city does not have adequate sites to accommodate its RHNA, it is required

to rezone sites in order to meet its allocation. (See Gov. Code, § 65583(c)(1)(A); see also Gov. Code, § 65913.1 [requiring cities to "zone sufficient vacant land for residential use"].)

On February 21, 2023, Los Alamitos City Council adopted the comprehensive update of the City's Housing Element for the reporting period of 2021-2029 (Resolution No. 2023-02). The 2021-2029 Housing Element addressed the Housing Element law, the RHNA allocation for the City, and a site inventory to meet the RHNA. Upon adoption of the City's 2021-2029 Housing Element Update, City Council adopted Resolution No. 2023-01 approving General Plan Amendment (GPA) 22-02 to ensure that the zoning code updates in Ordinance 2023-1 will maintain internal consistency with the actions, goals, objectives, and policies of the General Plan and will not create any inconsistencies therein. On March 20, 2023, City Council adopted Ordinance 2023-01 which approved a Multi-Family Residential - 36 Zone (R-4) Zoning District in the City, amended the Town Center Mixed Use Zone, and rezoned certain properties to the R-3 and new R-4 Districts in order to implement the City's RHNA. Following adoption of the resolution and ordinance in connection with the 2021–2029 Housing Element update, the Project site General Plan land use and zoning designations were changed to Multi-Family Residential-25 and Multi-Family Residential-25 Zone (R-3), respectively.

The Project site is identified within the City's 2021-2029 Housing Element as a housing element site with an estimate of 246 total units. Therefore, if approved, the Project would help the City to meet its total RHNA allocation and its affordable housing allocation. The Project would provide 246 units (including 76 affordable), approximately 32% of the City's total RHNA allocation of 769 units and 24.6% of the City's affordable housing allocation.

This would be the first affordable housing Project that the City has approved in approximately 30 years. Several of the Housing Element Policy Programs relate directly to the promotion of affordable housing. Policy actions under Housing Strategy Areas 2, 4, and 5 all help promote affordable housing and ensure that the City meets its RHNA goals. Such programs include Section 8 rental assistance (Policy Action 2.2), affordable housing development assistance (Policy Action 4.1), land subdivisions (Policy Action 4.10), and partnerships and coordination with developers and outside agencies (Policy Action 5.3). Development of the Project with a total of 246 units would be consistent with the City's 2021–2029 Housing Element.

2. The Project would Reduce Commute Travel and In Turn Reduce VMT and GHG Emissions Consistent with SCAG Connect SoCal and the City General Plan Goals and Policies.

The Project will support reduced commute distances. First, the Project will provide that a portion of the affordable units will be given local residency and work preference. In other words, preference will be given to lease a certain number of affordable units to households who are residents of the City or persons employed or that have been offered employment in the City. Second, the Project would improve the City's job housing balance by providing an opportunity for residents to live closer to where they work. As discussed in Section 4.12, Population and Housing of the EIR, the Project would place housing within a job-rich area; co-locating housing near jobs reduces vehicle travel lengths and

associated greenhouse gas emissions caused by long commute distances. Third, developing housing near an established transportation network (I-405, SR-22, and I-605) would reduce commute distances. Fifth, the Project would install broadband infrastructure or other communication technologies that encourage telecommuting and working from home that would reduce vehicle trips and mobile source emissions.

In addition, the Project furthers the City's General Plan Goals and Policies (see Table 4.10-2 of the DEIR) and SCAG Connect SoCal Goals (see Table 4.10-1 of the DEIR). With respect to policies that encourage alternative modes of transportation, the Project would include pedestrian connectivity with existing sidewalks along Lampson Avenue, including an existing signalized pedestrian connection to the south at Rose Street and Lampson Avenue and pedestrian "paseo" connections with Arbor Park and the Arbor Dog Park to the north. A 4-foot-wide community natural colored concrete sidewalk and 6-foot-wide public natural colored concrete sidewalk would be constructed throughout the Project site to link residential neighborhoods to open spaces and amenities. Additionally, the Project would construct frontage improvements along Lampson Avenue, including median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards. Roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with the identified roadway classifications and respective cross-sections in the City of Los Alamitos General Plan Circulation Element. The Project would maintain the existing Class II bike lane on Lampson Avenue along the Project site's frontage to connect to bike lane improvements that are currently ongoing on Lampson Avenue between Basswood Street and Seal Beach Boulevard.

3. The Project Implements Green and Sustainable Building Practices

The Project will be required to be designed and constructed in accordance with the City's zoning ordinance and the California Building Code, including energy and water conservation and reduction standards. Additionally, the Project would exceed energy standards and promote the use of alternative means of transportation through:

- Installation of solar photovoltaic rooftops (generating up to 1,229,520 kWh/annually),
- Use of 100% electricity and no natural gas,
- Preferential parking of fuel-efficient vehicles,
- Installation of EV charging stations,
- Provision of short-term and/or long-term bicycle parking accommodations, and
- Provision of a car share community electric vehicle for the affordable housing development

4. The Project will Provide Community and Social Benefits

- The Project Applicant will be providing additional Community and Social Benefits supporting the City and surrounding community, including but not limited to the following:

- Provision of high quality architectural design and site programming to provide the gold standard for residential product types in the City;

- Dedication or granting of an easement for the northerly 10 feet strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of the Project site. This dedication or grant of easement would support the use of this area for parking after construction of the Project specifically, this area would provide an approximate capacity of 154 to 200 parking spaces to serve the adjacent parks, depending on the ultimate configuration of the parking;

- Provision of on-site amenities for residents, including a tot-lot with rubberized play surface, shade surface with BBQ Island and dining furniture, lawn area with cornhole, ping pong table, and lounge seating with fire-pit;

- Replacement of the existing median curb/landscape on Lampson Avenue with new median and landscaping.

5. The Project Will Provide Economic Benefits

The Project would have a positive net fiscal impact on the City annual General Fund operating budget. The Project would result in monetary contributions to established fee programs including, but not limited to, the Development Impact Fees (DIF) for transportation improvements, and for the Los Alamitos Police Department, City's Public Works and Engineering Department, City's Recreation & Community Services Department, and Orange County Fire Authority and school fees to Los Alamitos Unified School District which will be directed to needed local improvements. Additionally, the Project would increase local and regional tax revenues, including sales and property taxes.

Conclusion

In conclusion, the City finds after consideration of the EIR and the evidence in the record, that each of the specific overriding economic, legal, social, technological and other benefits of the Project as set forth above independently and collectively outweighs the identified significant adverse environmental impact and is an overriding consideration warranting approval of the Project. The City further finds that each of the individual benefits discussed above outweigh the unavoidable adverse environmental effect identified in the EIR and, therefore, finds the impact to be acceptable. The City further finds that each of the benefits listed above, standing alone, is sufficient justification for the City Council to override the unavoidable environmental impact.

The reasons for approval cited above are not unitary, so that even if a court were to conclude that not every reason is supported by substantial evidence, the City determines that each remaining reason standing alone would be sufficient to justify approval of the Project. The substantial evidence supporting the identified benefits can be found in the EIR and the CEQA Findings, above. On the basis of the Findings made in Sections 3.0 through 8.0 included herewith, and the substantial evidence in the

whole record of this proceeding, it is specifically found that there are significant benefits of the Project in spite of its single unavoidable significant impact. It is further found that, as part of the process of obtaining Project approval, all significant effects on the environment from implementation of the Project have been eliminated or substantially lessened where feasible. Any remaining significant effect on the environment found to be unavoidable is found to be acceptable due to the above-discussed specific overriding economic, technical, legal, social and other considerations.

10.0 ADDITIONAL FACTS ON RECORD

10.1 CUSTODIAN OF RECORD

The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720. The custodian for these records is Tom Oliver, Associate Planner. This information is provided in compliance with Public Resources Code Section 21081.6.

Attachment A
Comment Letter 16 Attachments

TETRA TECH

FINAL

Phase I Environmental Site Assessment Report

GSA Southwest Regional Laboratory

4665 Lampson Avenue, Los Alamitos, California 90720
Contract No. GS-00F-168CA/Award No. GS-10F-0076K

Prepared For:

United States General Services Administration

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Tetra Tech Project No: 103G3995003.001
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ACRONYM LIST

ACM	Asbestos-containing materials
AST	Aboveground storage tank
ASTM	ASTM International
AUL	Activity Use Limitation
CA FID UST	California Facility Inventory Underground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
CREC	Controlled Recognized Environmental Condition
CUPA	Certified Unified Program Agency
DRYCLEANER	Dry Cleaning database facility
EDR	Environmental Data Resources, Inc.
ENVIROSTOR	California Department of Toxic Substances Controls Site Mitigation and Brownfields Reuse Program
ESA	Phase I Environmental Site Assessment
FINDS	Facility Master Index
GSA	U.S. General Services Administration
HAZNET	Hazardous Materials Generator
HIST CORTESE	Historical State Water Resource Control Board, Integrated Waste Board, and Department of Toxic Substances Control Sites
HIST UST	Historical underground storage tank
HREC	Historical Recognized Environmental Condition
LBP	Lead-based paint
LLP	Landowner Liability Protection
LUST	Leaking underground storage tank
msl	mean sea level
MWMP	Medical Waste Management Program
NHD	National Heritage Database
NonGen	Non-generator
NRCS	National Resources Conservation Service

NWI	National Wetland Inventory
PCB	Polychlorinated Biphenyls
pCi/L	picoCuries per liter
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
REC	Recognized environmental condition
Site	Southwest Regional Laboratory located at 4665 Lampson Avenue, Los Alamitos, Orange County, California 90720
SLIC	Spills, leaks, investigations, and cleanups
SQG	Small Quantity Generator
SWEEPS UST	Statewide Environmental Evaluation and Planning System Underground Storage Tank
Tetra Tech	Tetra Tech, Inc.
U.S.	United States
USDA	United States Department of Agriculture
US HIST Auto Stat	EDR US Historical Auto Stations
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
UST	Underground storage tank
VCP	Voluntary Cleanup Program
WSS	Web Soil Survey

EXECUTIVE SUMMARY

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Tetra Tech, Inc. (Tetra Tech) has completed a Phase I Environmental Site Assessment (ESA) of the Southwest Regional Laboratory located at 4665 Lampson Avenue, Los Alamitos, California 90720 (Site), for the benefit of the United States (U.S.) General Services Administration (GSA). The project scope-of-work was designed and executed to assess the potential for recognized environmental conditions (RECs) associated with the Site.

The environmental assessment was conducted based on the methods and procedures described in the ASTM International (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13) modified to meet GSA specific standards.

The Site consists of a rectangular parcel totaling approximately 12.367 acres. Based on the Site reconnaissance and information obtained from the Site representatives, the Site is improved with a 2-story, 88,000 square foot commercial building with a parking lot and landscaped areas.

This Phase I ESA identified the following findings at the Site:

- Electricity is supplied to the Site by a utility-owned, pad-mounted transformer observed outside the west wall of the Site building. This transformer was not identified in the previous Phase I ESA dated April 16, 1998 and completed by Tecumsah Professional Associates, Inc.; however, Tetra Tech believes the transformer was present based on the photo documentation in the Phase I ESA report. This transformer may contain PCBs. Other transformers observed within the Site building appeared to be dry-type units; however, no labeling indicating PCB content was observed on the transformers. No evidence of leaks or staining was observed in the vicinity of the pad-mounted transformer, and the transformers at the Site are not anticipated to represent an environmental concern at the Site.
- A 1,500-gallon diesel aboveground storage tank (AST) and associated emergency generator for the used for the cooling tower and to power the building in an emergency was observed during the site reconnaissance within the 1st floor of the Site building. The AST was observed to be enclosed in secondary containment and was reportedly partially full at the time of Site reconnaissance with no visible staining or indication of a release, and the cooling tower was no longer in operation. According to the Site representatives, Mr. Jonathan Mills and Mr. Mark Shegich, the cooling tower had been installed for a former tenant, California State University (CSU) Long Beach, for the purpose of cooling a data laboratory that was once located within the Site building. The emergency generator is serviced by Duthie Power Services on an approximate annual basis. One partially full 55-gallon drum of cooling water treatment was observed during the site reconnaissance. The emergency generator, associated AST, and cooling tower are not anticipated to represent an environmental concern at the Site.

- The Site was identified three times in the Hazardous Materials Generator (HAZNET) database. In 2000, the Site was identified as generating asbestos containing waste with disposal in a landfill. In 2003, the Site was identified as a generator of off-specification, aged or surplus organics with a disposal method identified as transfer station. In 2010, the Site was identified as generating ages or surplus organics with a disposal method identified as other treatment. In 2012, the Site was identified as generating a hazardous waste with a disposal method of storage, bulking, and/or transfer off site with no treatment or recovery. No violations were listed for the Site. Based on the lack of a reported release and regulatory enforcement associated with these listings, the HAZNET databases listings for the Site are not considered a REC.
- At the time of Site reconnaissance, a chemical/wet laboratory was observed within the tenant space occupied by the California Department of Fish and Wildlife. Small amounts of hazardous/flammable materials were observed in containers of 8-ounces or less and one 5-gallon container. Safety Data Sheets were posted within the laboratory space. The California Department of Fish and Wildlife also maintained a dive locker. This locker contained oxygen and nitrox tanks. No leaks or spills were identified in association with these containers or general work inside the laboratory. According to the Site contacts, the lab wastes were disposed of by a third party contractor. Tetra Tech does not consider the use of chemicals in the lab area to be a REC.
- Within the Site building's primary maintenance shop and shipping/receiving area, containers of 5-gallons or less of paints and commercial cleaning products such as soaps and vinegars utilized for the building upkeep were observed. Several 1-quart motor oil containers for small equipment maintenance were stored within cabinets. No leaks or spills were identified in association with these containers inside the maintenance shop. Tetra Tech does not consider the maintenance shop and shipping/receiving area to be a REC.
- Within the Site building's main electrical and emergency generator room, small paint containers containing marking paint or striping paint were observed. No leaks or spills were identified in association with these containers inside the main electrical and emergency generator room. Tetra Tech does not consider the main electrical and emergency generator room to be a REC.
- A 5-gallon bucket of lubricant was observed within the elevator equipment room at the time of the site reconnaissance. No leaks or spills were identified in association with the lubricant container inside the elevator room. Tetra Tech was unable to assess the elevator pit at the time of Site reconnaissance because it was inaccessible. Tetra Tech does not consider the container in the elevator equipment room to be a REC.

1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) was retained by the United States (U.S.) General Services Administration (GSA) to perform a Phase I Environmental Site Assessment (ESA) for the Southwest Regional Laboratory located at 4665 Lampson Avenue, Los Alamitos, California (Site) (Figure 1). Tetra Tech was authorized to conduct this Phase I ESA under the GSA Contract Number GS-00F-168CA and Award Number GS-10F-0076K. Ms. Heidi Yavornicky, a Tetra Tech Environmental Scientist, performed the site visit on September 23, 2015. Access to the Site was granted by the owner representative, Mr. Jonathan Mills, Director of Property and Facilities Management of WestEd and the Facilities Manager, Mr. Mark Shegich. It is Tetra Tech's understanding that the GSA has performed these environmental activities in preparation for potentially transferring the property out of federal ownership.

The purpose of the assessment was to identify potential environmental issues due to current and historical activities conducted on or near the Site and to qualify for a Landowner Liability Protection (LLP) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). During the site inspection, environmental conditions of the Site and neighboring properties were noted. Additional information used to evaluate the Site was obtained from historical and regulatory agency sources. The environmental assessment was conducted based on the methods and procedures described in the ASTM International (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13). Information regarding the site inspection is presented below:

Date of site inspection: September 23, 2015.

Name of Tetra Tech staff that performed site inspection: Ms. Heidi Yavornicky.

Name(s) of Site representatives providing information during site inspection: Mr. Jonathan Mills, Director of Property and Facilities Management of WestEd and owner representative, and Mr. Mark Shegich, Facilities Manager.

At the time of the site inspection, the Site status was: one parcel totaling approximately 12.367 acres. The Site was improved by a 2-story, 88,000 square foot commercial building with a parking lot and landscaped areas at the time of Site reconnaissance.

1.1 LIMITATIONS/RELIANCE

This report was compiled based partially on information supplied to Tetra Tech from outside sources and other information in the public domain. The conclusions and opinions herein are based on the information Tetra Tech obtained in compiling the report. Tetra Tech makes no warranty as to the accuracy of statements made by others that may be contained in the report, nor are any other warranties or guarantees, expressed or implied, included or intended by the report, except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar

circumstances by other professional consultants or firms performing the same or similar services. Because the facts forming the basis for the report are subject to professional interpretation, differing conclusions could be reached. Tetra Tech does not assume responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage. Compliance with submitted recommendations or suggestions does not ensure elimination of hazards or the fulfillment of client's obligations under local, state, or federal laws or any modifications or changes to such laws. None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

Estimates and professional opinions of this potential are based upon information derived from the site reconnaissance and from other activities described herein. The GSA is herewith advised that the conditions observed by Tetra Tech are subject to change. Indicators of the presence of hazardous substances and petroleum products that were not indicated or observable at the time of the most recent site reconnaissance may subsequently become present or observable.

Tetra Tech has generally used the standard of care recommended by Standard E 1527-13 developed by ASTM and modified to meet client specific standards. Because these standards of care only set forth minimums, any additional services and service enhancements that the GSA has authorized are contained in the scope of services.

Representatives for the GSA are the only parties that have been involved in shaping the scope of services needed to satisfactorily manage risks from the GSA's point of view; therefore, the GSA is the only intended beneficiary of this report. Reliance on this report by parties other than the GSA may result in reliance on assumptions whose extent and nature could distort the meaning and impact of the estimates given in this report. As such, no party, except the GSA, should rely upon estimates for the potential of hazardous materials to exist at the Site. With the consent of the GSA, Tetra Tech is available to work with other parties in developing probability estimates, given other parties unique risk management concerns. The guidelines used to define hazardous substances and petroleum products were obtained from the ASTM Standard of Practice E 1527-13. For the purposes of this report, the vicinity of the Site is defined as properties located within an approximately one-eighth mile radius of the Site.

This ESA does not include a radon survey, lead paint sampling, a comprehensive asbestos survey, or wetland delineation. This ESA report is based on information obtained from a variety of usually reliable sources, which are listed in the report. Tetra Tech does not guarantee the authenticity or reliability of the information it has received from outside sources.

This report is not a comprehensive site characterization and should not be construed as such. This report presents opinions that are based on the findings of visually observable on-site and off-site conditions, a review of specific regulatory records and historical sources, and comments made by interviewees. ESAs, by their very nature, are limited. Tetra Tech has endeavored to meet the applicable standard of care and in so doing, is advising the GSA of the ESA limitations. Tetra Tech believes this information is essential to help the GSA identify and manage risks. These

risks can be reduced, but cannot be completely eliminated through additional research. Tetra Tech will, upon request, advise the GSA of the additional research opportunities available, their impact on risk, and their cost.

1.2 PURPOSE

The goal of this ESA is to identify whether recognized environmental conditions (RECs), controlled RECs (CRECs), historical RECs (HRECs), or *de minimis* conditions are present on the Site. RECs are the presence or likely presence of any hazardous substances or petroleum products on a Site under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the Site or into the ground, groundwater, or surface water of the Site. CRECs are the result of a past release of hazardous substances or petroleum products that have been addressed to the satisfaction of the applicable regulatory authority. HRECs are a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The terms include hazardous substances or petroleum products, even under conditions in compliance with laws. The terms are not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies (Section 1.1.1 E 1527-13, ASTM 2013).

2.0 SITE LOCATION AND DESCRIPTION

The Site is located at 4665 Lampson Avenue, Los Alamitos, California (**Figure 1**). **Figure 2** shows the layout of the Site and surrounding areas and **Figure 3** shows an aerial photograph of the Site. Based on communication with the Orange County Assessor, the property is identified with Parcel Number 130-012-35. The owner of the Site is identified as the United States of America. The legal description of the Site is identified as:

ALL THAT CERTAIN PIECE OR PARCEL OF LAND CONTAINING 12.367 ACRES, MORE OR LESS, BEING A PORTION OF SECTION 32, TOWNSHIP 4 SOUTH, RANGE 11 WEST, SITUATE AND LYING IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA.

Table 1 below summarizes information obtained regarding the Site visit. Copies of select Site photographs are included in **Appendix A**.

Table 1: Summary of the Southwest Regional Laboratory Site

Address	Year Built (approx.)	Building Size (square feet)	Lot Size (acre)	Property Description	Occupied
4665 Lampson Avenue	1971	88,000	Approximately 12.367 acres	Commercial building with parking lot and landscaped areas	Yes

The Site consists of approximately 12.367 acres of land developed with an 88,000-square foot commercial building with a parking lot located on the western portion of the Site and landscaped areas located north, east, and south of the Site building. Tetra Tech observed a pad-mounted transformer outside the west wall of the Site building as well as other transformers inside the building. All transformers in the interior of the building were observed to be dry-type. Stormwater drains were observed in the parking lot and an on-site concrete-lined drainage channel was observed on the southern portion of the property, traversing east to west.

2.1 TOPOGRAPHY

According to the United States Geological Survey (USGS) 7.5-minute series, 1981 Los Alamitos, California Topographic Quadrangle Map, the Site is located at approximately 22 feet above mean sea level (msl).

2.2 SURFACE WATER/WETLANDS

The Site was inspected for potential wetlands and water bodies. For purposes of this report, potential wetlands include areas that are saturated with water or covered by shallow water and

support hydrophytic vegetation (cattails, fern, bald cypress, etc.). Wetlands do not include constructed drainage ditches and retention ponds that are maintained for the purpose of stormwater or wastewater control. A wetlands delineation study was not included in the scope-of-work for the Phase I ESA.

Potential wetlands were not observed on the Site. According to the U.S. Fish and Wildlife Service's (USFWS) Online Wetlands Mapper (http://www.fws.gov/wetlands/Data/Mapper.html) and National Wetland Inventory (NWI), the Site is not listed in a Federal or State designated wetland area. The closest wetland is identified approximately 0.06 miles east of the Site associated with a freshwater pond. The Site is not identified in a 100- or 500-year floodplain.

A permanent body of water and/or other standing water was not observed on the Site. The closest major water feature is Bolsa Chica Channel located approximately 0.33 miles east of the Site.

2.3 AREA GEOLOGY AND SOILS

Tetra Tech used Geocheck® - Physical Setting Source Summary, provided by Environmental Data Resources, Inc. (EDR®) and the 2010 Geologic Map of California (State of California Geological Survey), to determine the geology of the area. The Site is identified as overlying marine and nonmarine (continental) sedimentary rocks. The age is described as Pleistocene-Holocene and material description is alluvium, lake, playa, and terrace deposits. Further, the rock type is described as unconsolidated and semi-consolidated and mostly nonmarine (California Geological Survey 2010).

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey (WSS) Orange County and Part of Riverside County, California (http://websoilsurvey.nrcs.usda.gov), native soils in the vicinity of the Site primarily consist of drained Hueneme fine sandy loam. Hueneme find sandy loam is described as poorly drained with a depth to water greater than 80 inches. The soils have a high potential of corrosion to uncoated steel and are not considered hydric (USDA NRCS 2015).

2.4 AREA HYDROLOGY AND HYDROGEOLOGY

According to the California Groundwater Bulletin 118 from the California Department of Water Resources, the Site is underlain by the Coastal Plain of Orange County Groundwater Basin which is bound by the Pacific Ocean to the southwest and by a low topographic divide to the northwest in the proximity of the Orange County and Los Angeles County line. The upper aquifer system is comprised of Holocene alluvium, older alluvium, stream terraces, and upper Pleistocene deposits of the La Habra Formation. Recharge to the upper aquifer system is mostly in the northeast portion of the basin. The middle aquifer system is comprised of lower Pleistocene Coyote Hills and San Pedro Formations which include sand, gravel, and some clay. Recharge is primarily from the Santa Ana River channel to the northeast. The lower aquifer system includes the Upper Fernando Group of upper Pliocene age and is sand and conglomerate.

According to groundwater contour maps provided by the Orange County Water District, groundwater was identified approximately at an elevation of 70 feet below msl (NGVD29) and the groundwater flow direction is reportedly to the southwest to the Pacific Ocean (Orange County Water District, 2014).

3.0 SITE OWNERSHIP AND USE

Information pertaining to the historical nature of the Site was obtained through EDR.

3.1 SITE OWNERSHIP

According to the EDR 1940 Chain of Title reports, included in **Appendix G**, the parcel associated with the Site is currently owned by the United States of America which acquired the property through eminent domain from the Fred H. Bixby Rancho Company. The date that the United States of America obtained ownership was not available. The Orange County Assessor's Office parcel number associated with the Site is 130-012-35.

3.2 SITE USE - HISTORICAL

General information regarding the historical use of the Site was obtained from a review of available historical documents. According to historical information, the Site was undeveloped vacant land prior to the current Site building's construction in 1971.

Historical documents reviewed to gather information about historical site use included:

- Historical aerial photographs;
- Historical topographic maps;
- Historical Sanborn® Fire Insurance Maps;
- Historical City Directories; and,
- Other historical information provided by GSA.

Historical Aerial Photographs

Fifteen (15) aerial photographs of the property dated 1928, 1938, 1947, 1952, 1963, 1972, 1977, 1989, 1990, 1994, 2002, 2005, 2009, 2010, and 2012 were obtained from EDR® (EDR 2015b). Copies of the aerial photographs are included in **Appendix C**. Aerial photographs show that the areas north of the northern adjoining property to the Site were first developed between 1947 and 1952 with what appears to be two airstrips associated with the Los Alamitos Armed Forces Reserve Center. Prior to the 1947 aerial photograph, the Site appears to be undeveloped or agricultural land. Based on the aerial photographs, the Site has been undeveloped land dating to at least 1963. The Site building and associated parking lot to the west in the same configuration as was observed during the Site reconnaissance were first visible in the 1972 aerial photograph.

With exception of the two airstrips located on a property beyond the northern abutter and a residential property adjacent to the south of the Site in the 1928 and 1938 aerial photographs, the surrounding areas in the vicinity of the Site generally appear to be undeveloped land in the 1928

through 1963 aerial photographs. The 1972 aerial photograph shows the Site, and residential developments to the south of the Site with Lampson Road visible to the south of the Site. The 1977 aerial photograph shows the abutting property to the east developed as a golf course. The 1989 aerial shows the abutting property to the north developed as a park. The western abutting properties appear to be cleared with no structures in aerials dating from 1977 to 2012. The surrounding areas of the Site in the 1977 through 2012 aerial photos appear similar to conditions observed during Site reconnaissance in the remaining photos. No RECs were observed in association with the historic use of the Site and surrounding areas during the review of the aerial photographs.

Historical Topographic Maps

Ten (10) historical USGS topographic maps were obtained from EDR® (EDR 2015d). The maps, dated 1896, 1901, 1902, 1935, 1947, 1950, 1951, 1964, 1972, and 1981 are included in **Appendix D**. The maps dated 1896, 1902, and 1947 are USGS 15-minute maps depicting the Downey, California quadrangle; the map dated 1901 is a USGS 60-minute map depicted the Southern California Sheet 1, California quadrangle; the maps dated 1935, 1950, 1964, 1972, and 1981 are USGS 7.5-minute maps depicting the Los Alamitos, California quadrangle; and the map dated 1951 is a USGS 7.5-minute map depicting the Longbeach Vicinity, California quadrangle. The maps indicate that the Site is located at approximately 20 feet above msl. Based on the topographic maps from 1896 through 1947, the Site is depicted as undeveloped land. On the topographic maps from 1950 through 1964, the Site is depicted as undeveloped land on a U.S. Naval Reservation. The Site building is depicted on the 1972 and 1981 topographic maps.

The surrounding areas are depicted as undeveloped areas on the 1894 through 1947 with the U.S. Naval Reservation present beginning in the 1950 topographic maps. The surrounding areas on the 1972 topographic map include residential development to the south of the Site. No RECs were observed in association with the historic use of the Site and surrounding areas during the review of the topographic maps.

Historical Fire Insurance Maps

Historical Fire Insurance Maps were requested from EDR® (EDR 2015c); however, coverage was not available for the Site. The No Coverage notice is included in **Appendix E**.

Historical City Directories

Historical City Directories were obtained from EDR® (EDR 2014e). Cole Information Services and Haines Criss-Cross Directory were searched for the following years: 1971, 1972, 1975, 1980, 1985, 1990, 1995, 1999, 2003, 2008, and 2013, and is included in an EDR summary report in **Appendix F**. The Site address was identified in the 1975, 1980, 1995, 1999, 2003, 2008, and 2013 City Directories searched by EDR®. Details for each year are provided below:

- **1975**: Southwest Regional Laboratory

- **1980**: Southwest Regional Laboratory
- **1985**: Association of California School Administrators, Inc., National Center Building, Provident Credit Union, Southwest Regional Laboratory
- **1990**: Association of California School Administrators, Inc., National Center Building, Southwest Regional Laboratory
- **1995:** Association of California School Administrators Inc., Southwest Regional Labs Education Research & Development, Amanda Titus
- **1999:** Association of California School Administrators Inc., Association of California School Administrators, WestEd
- **2003:** California Department of Fish and Game, Southwest Regional Labs Co., WestEd
- **2008:** Association of California School Administrators Inc., California Department of Fish and Game, California State University, General Services CAL Department, WestEd,
- **2013:** California Department of Fish and Game, James J. Mentas Attorney At Law, State of California, and West Ed

The former Southwest Regional Laboratory identified in the City Directories was an educational research center. The historic use of the Site and surrounding properties, in Tetra Tech's opinion, do not appear to represent RECs for the Site.

3.3 SITE USE - CURRENT

The Site is currently owned by the United States of America. The current site building is used primarily as commercial office space. At the time of the site reconnaissance, there were four building tenants:

- **WestEd (formerly Southwest Regional Laboratory)**: WestEd operates jointly between the Southwest Regional Laboratory and another laboratory and occupies the majority of the building on both the first and second floors. WestEd conducts research and consulting for education improvement.
- **California Department of Fish and Wildlife:** The California Department of Fish and Wildlife became a tenant in 2000 and occupies approximately 11,000 square feet on both the first and second floors. The California Department of Fish and Wildlife also utilizes exterior storage on the northwest corner of parcel primarily for vehicle/vessel storage. The Department maintains a public counter to obtain hunting/fishing permits, utilizes the Site as a field office where illegal game is processed for evidence, and conducts research on local fish in the area using a wet lab. Tested fish is disposed of by grinding and washing down the sink. Small amounts of hazardous/flammable materials were observed in containers of 8-ounces or less and one 5-gallon container. Safety Data Sheets (SDS) were posted within the laboratory space. The California Department of Fish and Wildlife also maintained a dive locker. This locker contained oxygen and nitrox tanks. No leaks or spills were identified in association with these containers or general work inside the laboratory.

According to the Site contacts, the lab wastes were disposed of by a third party contractor. The Department also maintains a dive locker that contains several oxygen and nitrox tanks.

- **James J Mentas Attorney At Law:** The law office of James Mentas occupies approximately 400 square feet on the first floor of the Site building.
- **National Comfort Institute:** This tenant occupies approximately 11,000 square feet on the first floor and is a heating, ventilating, and air condition (HVAC) training school. According to the Site representatives, this tenant recently moved in.

4.0 SITE INSPECTION

Section 4.0 describes general site observations from the September 23, 2015 Site visit. Photographs of selected Site features were taken during the Site visit. Copies of select Site photographs are included in **Appendix A**.

4.1 SITE BUILDINGS AND GROUNDS

The Site is located at 4665 Lampson Avenue in Los Alamitos, Orange County, California (**Figures 1, 2** and **3**). The Site consists of one parcel totaling approximately 12.367 acres. Based on the Site reconnaissance, the Site is improved by an 88,000 square foot commercial building with a parking lot located on the western portion of the Site and landscaped areas located north, east, and south of the Site building. The current site building is used primarily as commercial office space.

4.2 UTILITY AREAS, HEATING, VENTILATING AND AIR CONDITIONING SYSTEM

A central HVAC system with cooling towers/boilers on the second floor were noted during the Site reconnaissance. Potable water is available from Golden State Water and sewer services are available from the Los Alamitos Sewer. Electricity is available via Southern California Edison. In addition, natural gas is provided by the Southern California Gas Company.

4.3 DRYWELLS/STORM DRAINS

No drywells were identified in the vicinity of the Site. Storm drains were identified in the parking lot on the western portion of the Site. No stains or odors were noted during the site reconnaissance. The stormwater flow is directed to the south to an on-site concrete-lined drainage channel that traverses east to west on the southern portion of the property.

4.4 SURFACE WATER, PITS/PONDS/LAGOONS

No surface water bodies, pits, ponds or lagoons were observed on the Site during Site reconnaissance. The closest major water feature is the Bolsa Chica Channel located approximately 0.33 miles east of the Site. A freshwater pond associated with the abutting property's golf course is located approximately 0.06 miles east of the Site. Tetra Tech observed a concrete-lined drainage channel located along the southern boundary of the Site. The drainage channel receives water from the portions of the Site to the north. Stormwater from the Site is discharged to the local publicly-owned treatment works.

Floor drains were observed within the Site building in janitorial closets and in restrooms. No staining or odors were noted during the Site reconnaissance.

4.5 SURFACE STAINING

No staining was observed during the site reconnaissance that would pose a REC to the Site during site reconnaissance.

4.6 STRESSED VEGETATION

Tetra Tech did not observe any areas of dead, distressed, discolored or stained vegetation at the Site property.

4.7 STORAGE TANKS

A 1,500-gallon diesel aboveground storage tank (AST) and associated emergency generator for the used for the cooling tower and to power the building in an emergency was observed during the site reconnaissance. According to the Site representatives, the AST was observed to be enclosed in secondary containment and was reportedly partially full at the time of Site reconnaissance with no visible staining or indication of a release, and the cooling tower was no longer in operation. The cooling tower had been installed for a former tenant, CSU Long Beach, for the purpose of cooling a data laboratory that was once located within the Site building. The emergency generator is serviced by Duthie Power Services on an approximate annual basis. One partially full 55-gallon drum of cooling water treatment was observed during the site reconnaissance. According to historical documentation and interviews with the Site contacts, no underground storage tanks (USTs) were formerly used or associated with the Site. The use of storage tanks at the Site is not considered a REC.

4.8 SITE RECORDS

The Site is currently improved by a 2-story, 88,000-square foot commercial building. Records which were reviewed are discussed in pertinent sections of this report. GSA provided a previous Phase I ESA Report prepared for the Site dated April 16, 1998 by Tecumseh Professional Associates, Inc.

4.9 WASTEWATER

No evidence of mishandling of wastewater was observed at the time of Site reconnaissance. As discussed in Section 4.4, Tetra Tech observed a stormwater drainage channel located along the southern boundary of the Site. The drainage channel receives water from the northern portions of the property.

4.10 ELECTRICAL TRANSFORMERS AND EQUIPMENT

U.S. Environmental Protection Agency (USEPA) Code of Federal Regulations (CFR) Title 40, Part 761, governs the manufacturing, processing and distribution of polychlorinated biphenyls (PCBs). The guideline defines a PCB transformer as any transformer that contains 500 parts per million (ppm) PCBs. PCB-containing electrical equipment is defined as "any electrical equipment including, but not limited to, transformers (including those used in railway locomotives and self-propelled cars), capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable, that contain PCBs at concentrations of 50 ppm and < 500 ppm in the contaminating fluid."

Electricity is supplied to the Site by a utility-owned, pad-mounted transformer observed outside the west wall of the Site building. This transformer was not identified in the previous Phase I ESA dated April 16, 1998 and completed by Tecumsah Professional Associates, Inc.; however, Tetra Tech believes the transformer was present based on the photo documentation in the Phase I ESA report. This transformer may contain PCBs. Other transformers observed within the Site building appeared to be dry-type units; however, no labeling indicating PCB content was observed on the transformers. No evidence of leaks or staining was observed in the vicinity of the pad-mounted transformer, and the transformers at the Site are not anticipated to represent an environmental concern at the Site.

A hydraulic elevator serviced by ThyssenKrupp Elevator was observed in the Site building. No evidence of leaks or staining was observed in the elevator equipment room. The elevator pit was not accessible during Site reconnaissance. The elevator is not anticipated to represent an environmental concern at the Site.

4.11 PESTICIDE AND HERBICIDE USE

Tetra Tech did not observe pesticide or herbicide use or storage at the Site during Site reconnaissance.

4.12 INDOOR AIR

Mold

The Site building was inspected for signs of mold. Evidence of water damage or potential mold was not observed during the Site reconnaissance.

Radon Gas

Radon gas is a colorless, odorless gas that occurs naturally from the breakdown of uranium. Radon can be found in high concentrations where there are soils and rocks containing high levels of uranium, granite, shale or phosphate. In open air or in areas with high air circulation, radon is not considered a health problem. However, in confined spaces (such as poorly ventilated basements), radon can concentrate and become a health hazard.

The USEPA has classified Orange County, California as being located within the USEPA Radon Zone 3, with indoor average radon levels less than 2 picocuries per Liter (pCi/L). Based on information provided by the GSA, radon testing has not been conducted at the Site.

The USEPA Radon residential threshold value for radon in indoor air is 4 pCi/L. According to the EDR report, a total of 34 facilities were tested in the 90720 zip code with each of the facilities under 4 pCi/L. Site-specific radon testing has not been conducted at the Site according to historical information. Based on the results of this testing and the non-residential usage of the Site, radon is not considered a concern for the Site.

Indoor air is not anticipated to be a concern at the Site.

4.13 RADIOACTIVE MATERIALS

GSA personnel and the Site contact were not aware of permitted radiological activities or materials at the Site. No information obtained indicated radioactive material use or storage within the neighboring properties. Therefore, radioactive materials are not a concern associated with this Site.

4.14 ASBESTOS

Asbestos assessment is not in the scope of work or ASTM standard and was not conducted as part of this investigation. However, during the inspection, a limited visual survey for potential asbestos-containing materials (ACMs) was performed. ACMs were used in the construction of new structures prior to 1980, when use gradually was reduced in the United States. Based on the Site building's construction date of 1971, it is Tetra Tech's opinion that suspect asbestos containing material may include floor tiles and mastic, carpet mastic, vinyl baseboard mastic, drywall and or plaster and ceiling tiles. The potential ACMs at the Site appeared to be in good condition at the time of Site reconnaissance.

4.15 LEAD-BASED PAINT

A lead-based paint (LBP) survey was not conducted as of this investigation. LBP is not an ASTM scope item. Tetra Tech did not observe evidence of LBP (as indicated by peeling, chipping, or flaking paint) at the time of the ESA site visit. LBPs were mainly used prior to 1980, when use began to decline in the United States. However, based on the Site building's construction date of 1971, lead-based paint may be present at the Site.

5.0 REGULATORY REVIEW

5.1 RECORDS REVIEW

Various State and Federal lists that identify properties with confirmed or possible contamination, facilities that generate hazardous wastes, sites with USTs, and properties involved in Federal enforcement actions were reviewed to assess the environmental status of the Site. **Table 2** presents a summary of the information provided by EDR® (EDR 2015a) for the Site. The complete Environmental EDR® Report is provided in **Appendix B**.

Table 2. Environmental EDR® Report Summary

Database Reference	EDR®Search Radius (miles)	Site	Surrounding/ Adjoining Properties
NPL	1.00	Not Listed	0 Listed
Proposed NPL	1.00	Not Listed	0 Listed
NPL LIENS	TP	Not Listed	0 Listed
Delisted NPL	1.00	Not Listed	0 Listed
CERCLIS	0.500	Not Listed	0 Listed
FEDERAL FACILITY	0.500	Not Listed	0 Listed
CERC-NFRAP	0.500	Not Listed	0 Listed
CORRACTS	1.000	Not Listed	0 Listed
RCRA-TSDF	0.500	Not Listed	0 Listed
RCRA-LQG	0.250	Not Listed	0 Listed
RCRA-SQG	0.250	Not Listed	0 Listed
RCRA-CESQG	0.250	Not Listed	0 Listed
US ENG CONTROLS	0.500	Not Listed	0 Listed
US INST CONTROL	0.500	Not Listed	0 Listed
LUCIS	0.500	Not Listed	0 Listed
ERNS	TP	Not Listed	0 Listed
SHWS	1.000	Not Listed	1 Listed
SWF/LF	0.500	Not Listed	0 Listed
ENVIROSTOR	1.000	Not Listed	3 Listed
LUST	0.500	Not Listed	2 Listed
INDIAN LUST	0.500	Not Listed	0 Listed
UST	0.250	Not Listed	0 Listed
AST	0.250	Not Listed	0 Listed
INDIAN UST	0.250	Not Listed	0 Listed
FEMA UST	0.250	Not Listed	0 Listed
TANKS	0.250	Not Listed	0 Listed

Database Reference	EDR® Search Radius (miles)	Site	Surrounding/ Adjoining Properties
AUL	0.500	Not Listed	0 Listed
INDIAN VCP	0.500	Not Listed	0 Listed
BROWNFIELDS	0.500	Not Listed	0 Listed
ODI	0.500	Not Listed	0 Listed
DEBRIS REGION 9	0.500	Not Listed	0 Listed
SWRCY	0.500	Not Listed	0 Listed
SLIC	0.500	Not Listed	1 Listed
INDIAN ODI	0.500	Not Listed	0 Listed
HIST LF	0.500	Not Listed	0 Listed
US CDL	TP	Not Listed	0 Listed
SRS	0.500	Not Listed	0 Listed
DEL SHWS	1.000	Not Listed	0 Listed
CDL	TP	Not Listed	0 Listed
US HIST CDL	TP	Not Listed	0 Listed
HMIRS	TP	Not Listed	0 Listed
SPILLS	TP	Not Listed	0 Listed
AGSPILLS	TP	Not Listed	0 Listed
RCRA NonGen/NLR	0.250	Not Listed	1 Listed
DOT OPS	TP	Not Listed	0 Listed
DOD	1.000	Not Listed	2 Listed
FUDS	1.000	Not Listed	0 Listed
CONSENT	1.000	Not Listed	0 Listed
ROD	1.000	Not Listed	0 Listed
UMTRA	0.500	Not Listed	0 Listed
US MINES	0.250	Not Listed	0 Listed
TRIS	TP	Not Listed	0 Listed
TSCA	TP	Not Listed	0 Listed
FTTS	TP	Not Listed	0 Listed
HIST FTTS	TP	Not Listed	0 Listed
SSTS	TP	Not Listed	0 Listed
ICIS	TP	Not Listed	0 Listed
PADS	TP	Not Listed	0 Listed
MLTS	TP	Not Listed	0 Listed
RADINFO	TP	Not Listed	0 Listed
FINDS	TP	Not Listed	0 Listed
RAATS	TP	Not Listed	0 Listed
RMP	TP	Not Listed	0 Listed
MNLS	0.500	Not Listed	0 Listed
DRYCLEANERS	0.250	Not Listed	0 Listed
ENF	TP	Not Listed	0 Listed
HAZNET	TP	3 Listed	0 Listed

Database Reference	EDR®Search Radius (miles)	Site	Surrounding/ Adjoining Properties
AIRS	TP	Not Listed	0 Listed
CA FID UST	0.250	Not Listed	0 Listed
INDIAN RESERV	1.000	Not Listed	0 Listed
HIST UST	TP	Not Listed	0 Listed
US AIRS	TP	Not Listed	0 Listed
SWEEPS UST	0.250	Not Listed	0 Listed
RESPONSE	1.000	Not Listed	1 Listed
CUPA	0.500	Not Listed	0 Listed
HIST CORTESE	0.250	Not Listed	1 Listed
EPA WATCH LIST	TP	Not Listed	0 Listed
US FIN ASSUR	TP	Not Listed	0 Listed
PCB TRANSFORMER	TP	Not Listed	0 Listed
COAL ASH	0.500	Not Listed	0 Listed
COAL ASH DOE	TP	Not Listed	0 Listed
COAL ASH USEPA	0.500	Not Listed	0 Listed
EDR MGP	1.000	Not Listed	0 Listed
EDR US Hist Auto Stat	0.250	Not Listed	0 Listed
EDR US Hist Cleaners	0.250	Not Listed	0 Listed

Notes:

AGSPILLS = Department of Agriculture Spills
AIRS = Permit Contact List
AST = Aboveground Storage Tanks
AUL = Activity Use Limitation Sites
BROWNFIELDS = Petroleum Brownfields Program Sites
CA FID UST = California Facility Inventory UST
CDL = Clandestine Drug Labs
CERCLIS = Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP = CERCLIS No Further Remedial Action Planned
COAL ASH DOE = Steam-Electric Plant Operation Data
COAL ASH USEPA = Coal Combustion Residues Surface Impoundments List
COAL ASH = Coal Ash Disposal Site Listing
CONSENT = Superfund (CERCLA) Consent Decrees
CORRACTS = Corrective Action Report
CUPA = Certified Unified Program Agency Database
Debris Region 9 = Debris Sites
DEL SHWS = Deleted State Hazardous Waste Sites
Delisted NPL = National Priority List Deletions
DOD = Department of Defense Sites
DOT OPS = Incident and Accident Data
DRYCLEANERS = Registered Drycleaning Facilities

EDR MGP = EDR Proprietary Manufactured Gas Plants
EDR US Historical Auto Stat = EDR Exclusive Historic Gas Stations
EDR US Historical Cleaners = EDR Exclusive Historic Dry Cleaners
ENF = Generators Associated with Enforcement Log
ENVIROSTOR = California Department of Toxic Substances Controls Site Mitigation and Brownfields Reuse Program Database
EPA WATCH LIST = EPA Watch List Sites
ERNS = Emergency Response Notification System
FEDERAL FACILITY = Federal Facility Site Information listing
FEMA UST = Underground Storage Tank Listing
FINDS = Facility Index System/Facility Registry System
FTTS-FIFRA/TSCA Tracking System = FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FUDS = Formerly Used Defense Sites
HAZNET = Hazardous Materials Generator
HIST CORTESE = Historical State Water Resource Control Board, Integrated Waste Board, and Department of Toxic Substances Control Sites
HIST FTTS = FIFRA/TSCA Tracking System Administrative Case Listing
HIST LF = Historical Landfill Database
HIST UST = Historical UST Database
HMIRS = Hazardous Materials Information Reporting System
ICIS = Integrated Compliance Information System
INDIAN LUST = Leaking Underground Storage Tanks on Indian Land
INDIAN ODI = Report on the Status of Open Dumps on Indian Lands
INDIAN RESERV = Indian Reservations
INDIAN UST = Underground Storage Tanks on Indian Land
INDIAN VCP = Voluntary Cleanup Priority Listing
LUCIS = Land Use Control Information System
LUST = Leaking Underground Storage Tank Sites
MLTS = Material Licensing Tracking System
NPL LIENS = Federal Superfund Liens
NPL = National Priorities List
ODI = Open Dump Inventory
PADS = PCB Activity Database System
PCB TRANSFORMER = PCB Transformer Registration Database
Proposed NPL = Proposed National Priorities List Sites
RCRA NonGen / NLR = Resource Conservation and Recovery Act - Non Generators
RCRA-CESQG = RCRA-Conditionally Exempt Small Quantity Generator
RCRA-LQG = RCRA-Large Quantity Generators
RCRA-SQG = RCRA-Small Quantity Generators
RCRA-TSDF = RCRA-Treatment, Storage and Disposal
RESPONSE = California Department of Toxic Substances Division Responses
RMP = Risk Management Plans
ROD = Records of Decision
SHWF=State Hazardous Waste Facility
SHWS = Superfund Site Information Listing
SLIC = Spills, Leaks, Investigations and Cleanup
SPILLS = Spills Database
SRS = Site Remediation Section Database
SSTS = Section 7 Tracking Systems
SWEEPS UST = Statewide Environmental Evaluation and Planning System UST

SWF/LF = Permitted Solid Waste Disposal Facilities
SWRCY = Recycling Facilities
TANKS = Petroleum Tank Sites
TP = Target Property
TRIS = Toxic Chemical Release Inventory System
TSCA = Toxic Substances Control Act
UMTRA = Uranium Mill Tailings Sites
US AIRS = Aerometric Information Retrieval System Facility Subsystem
US CDL = Clandestine Drug Labs
US ENG CONTROLS = Engineering Controls Sites List
US HIST CDL = National Clandestine Laboratory Register
US INST CONTROL = Sites with Institutional Controls
US MINES = Mines Master Index File
UST = Underground Storage Tank Database

5.1.1 SITE

The Site was identified three times in the Hazardous Materials Generator (HAZNET) database. In 2000, the Site was identified as generating asbestos containing waste with disposal in a landfill. In 2003, the Site was identified as a generator of off-specification, aged or surplus organics with a disposal method identified as transfer station. In 2010, the Site was identified as generating ages or surplus organics with a disposal method identified as other treatment. In 2012, the Site was identified as generating a hazardous waste with a disposal method of storage, bulking, and/or transfer off site with no treatment or recovery. No violations were listed for the Site. Based on the lack of a reported release and regulatory enforcement associated with these listings, the HAZNET databases listings for the Site are not considered a REC.

5.1.2 SURROUNDING AREAS

Nine (9) sites were identified on State or Federal database lists searched by EDR within their respective search radii. The facilities' listings included two Department of Defense (DOD) sites; one state Hazardous Waste Site (SHWS) facility; one Spills, Leaking, Investigation, and Cleanup (SLIC) facility; three California Department of Toxic Substances Controls Site Mitigation and Brownfields Reuse Program (ENVIROSTOR) facilities; two Leaking Underground Storage Tank (LUST) facilities; a RCRA-NonGenerator (NonGen) facility; one Historical State Water Resource Control Board, Integrated Waste Board, one state RESPONSE hazardous waste site, and one Department of Toxic Substances Control Sites (HIST CORTESE) facility within the regulatory search limits for each database. The facilities of concern are discussed below and on the following pages:

- Seal Beach Naval Weapons Station is located in the inferred downgradient direction, approximately 0.633 mile south of the Site and is listed as a Navy DOD facility. No other information was provided in the EDR Report regarding this property. Based on this property's distance, Orange County groundwater flow direction to the southwest away from the Site, and downgradient location, this property is not considered a REC.
- Los Alamitos Armed Forces Reserve Center is located less than 1/8th mile from the Site and listed as an Army DOD facility. No other information was provided in the EDR Report

regarding this property. Topographic maps reviewed for the Site indicate that the Site prior to development was once along the southern boundary of the Los Alamitos Armed Forces Reserve Center. Based on a review of historical documentation and the lack of environmental database listing for this property in the EDR Report, this property is not considered a REC.

- David Rutledge (4533 Hazelnut, Seal Beach, CA) is a residence located approximately 0.101 mile southwest of the Site. This property is listed in 1987 in the RCRA-NonGenerator (NonGen) facility database as a transporter of hazardous waste with no violations identified. Based on the regulatory status of the property with no identified releases and reported groundwater flow direction to the southwest, the facility is not considered a REC.
- Bolsa Chica Channel Dewatering (5250 Lampson Avenue, Garden Grove, CA) is located approximately 0.358 mile east of the site and is listed in the SLIC database. The status of this listing is listed as case closed as of Mjimmarch 23, 2009. The material released is listed as a solvent and potentially impacted groundwater and soil. Based on the regulatory status of the closed SLIC listing with a documented responsible party and distance from the Site, Bolsa Chica Channel Dewatering facility is not considered a REC.
- Jerry Giragossian and ARCO #3015 (5262 Lampson Avenue) is located 0.365 mile east of the Site and is listed in the LUST database twice and in the HIST CORTESE database once. The EDR report indicates that this property is a gasoline fueling station. Based on the regulatory status of the closed LUST listings and distance, the Jerry Giragossian/ARCO #3015 facility is not considered a REC. A description of each listing is provided below:
    - Jerry Giragossian (5262 Lampson Avenue). The EDR report indicates that the case opened on December 22, 1987 when a leak of solvents/gasoline was identified and potentially affected the aquifer used for drinking water supply. Remediation consisted of excavation and was conducted in July 1988 and September 1999, site assessment activities took place from 1988 through 2001 and quarterly monitoring reports were required from July 2002 through January 2004. An enforcement action took place in February 2004 and the case was closed in December 22, 2004.
    - ARCO #3015 (5262 Lampson Avenue). The EDR report indicates that the case opened on March 31, 1988 for a release of solvents discovered during tank closure activities. The abatement method implemented included excavation of impacted soil and disposal off site at an approved site. The case closure date is listed as December 22, 2004. During investigation of the UST release, impacts of chlorinated hydrocarbon levels were identified at the property which were perhaps attributable to a nearby drycleaner. The listing indicated further investigation was required and a search for the responsible party would be conducted. No additional information was provided in the HIST CORETESE database.
- Naval Air Station Los Alamitos facility is located 0.616 mile north-northwest of the Site and is listed in the ENVIROSTOR database. The status is listed as inactive and in need of evaluation as of July 1, 2005. No additional information was provided. Based on the

regulatory status of the facility and distance, Naval Air Station facility is not considered a REC.

- Los Alamitos RAD Bomb/Score Site is located approximately 0.616 mile north-northwest of the Site and is listed in the ENVIROSTOR database as a military facility with a status listed as closed and in need of evaluation as of July 1, 2005. The database listing indicates that this property may have potential contaminants of concern (COCs) of explosives. Based on the distance and closed status of this facility, this property is not considered a REC.
- Joint Forces Training Base, Building 34 (4250 Constitution Avenue) is located approximately 0.874 mile north-northwest of the Site and is listed in the ENVIROSTOR and state RESPONSE databases within the specified search radii. According to the ENVIROSTOR database listing, this property's past uses included fire training areas, small arms firing range and potential COCs included munitions debris. This property has a listed status of "no further action" as of February 3, 2010. The EDR report indicates that a Preliminary Endangerment Assessment Report was completed in April 1995, a Removal Action Completion Report was completed in February 1996, an Action Memorandum was issued in April 1997, and a Preliminary Assessment/Site Inspection Report was completed in September 2008. According to the EDR Report, in September 2008, the California Department of Toxic Substances agreed with the Army's determination that no further evaluation was required unless new information indicating that the decision was not appropriate became available. Based on the distance from the Site, and the property's site status of "no further action", this property is not considered a REC.

The EDR database report indicates one orphan facility was identified. Tetra Tech reviewed the orphan information and the address listed is located more than 3 miles west of the Site and based on distance, is not considered a REC to the Site.

5.2 LOCAL RECORDS

Tetra Tech contacted the Orange County Fire Authority and the Orange County Health Department via telephone and facsimile on October 6, 2015, to request copies of environmental records and permits related to the Site. The Orange County Health Department indicated they did not have records for the Site on October 19, 2015. The Orange County Fire Authority indicated they did not have records for the Site on December 14, 2016. Tetra Tech also accessed California's State Water Resources Control Board GeoTracker database on October 6, 2015 to assess if the Site or adjacent properties were listed in their database of environmental data for regulated sites. No listings existed for the Site and adjacent properties.

According to the EDR LienSearch™ report, no environmental liens or activity use limitations (AUL) are associated with the Site.

6.0 ADJACENT AND NEIGHBORING PROPERTIES

Section 6.0 provides information on the history of neighboring properties to identify potential environmental impacts to the site.

6.1 NEIGHBORING PROPERTIES - CURRENT

The Site's property is bound by the Arbor Park and Arbor Dog Park to the north with the Los Alamitos Joint Forces Training Base beyond; to the east by a Navy Golf Course; to the south by Lampson Avenue with single-family residential properties beyond; and to the west by the Los Alamitos Joint Forces Training Base. No environmental concerns were observed on neighboring properties at the time of the Site reconnaissance.

6.2 NEIGHBORING PROPERTIES - HISTORICAL

With exception of the two airstrips located on a property beyond the northern abutter, the neighboring properties in the vicinity of the Site appear to be undeveloped land in the 1928 through 1963 aerial photographs. The 1972 aerial photograph shows the Site, and residential developments to the south of the Site with Lampson Road visible to the south of the Site. The 1977 aerial photograph shows the abutting property to the east developed as a golf course. The 1989 aerial photograph shows the abutting property to the north developed as a park. The western abutting properties appear to be cleared with no structures in aerial photographs dating from 1977 to 2012. The surrounding areas of the Site in the 1977 through 2012 aerial photographs appear similar to conditions observed during Site reconnaissance in the remaining aerial photographs. Historical aerial photographs and topographic maps are included in **Appendices C** and **D**, respectively. No historical environmental concerns were noted for the neighboring properties.

7.0 HAZARDOUS MATERIALS AND WASTE MANAGEMENT

7.1 HAZARDOUS MATERIALS

At the time of Site reconnaissance, a chemical/wet laboratory was observed within the tenant space occupied by the California Department of Fish and Wildlife. Small amounts of hazardous/flammable materials were observed in containers of 8-ounces or less and one 5-gallon container. Safety Data Sheets were posted within the laboratory space. The California Department of Fish and Wildlife also maintained a dive locker. This locker contained oxygen and nitrox tanks. No leaks or spills were identified in association with these containers or general work inside the laboratory. According to the Site contacts, the lab wastes were disposed of by a third party contractor. This locker contained oxygen and nitrox tanks.

Within the Site building's primary maintenance shop and shipping/receiving area, containers of 5-gallons or less of paints and commercial cleaning products such as soaps and vinegars utilized for the building upkeep were observed. Several 1-quart motor oil containers for small equipment maintenance were stored within cabinets.

Within the Site building's main electrical and emergency generator room, small paint containers containing marking paint or striping paint were observed.

An approximate 1,500-gallon diesel AST enclosed in secondary containment and a cooling tower was observed within the Site building in a 1st floor room adjacent to the Site building's main electrical and emergency generator room. According to the Site representatives, Mr. Jonathan Mills and Mr. Mark Shegich, the cooling tower was not in use and had been installed for a previous tenant, CSU Long Beach for cooling of a former data laboratory. One partially full 55-gallon drum of cooling water treatment was observed.

A 5-gallon bucket of lubricant was observed within the elevator room at the time of the site reconnaissance.

7.2 HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT

At the time of Site reconnaissance, one 55-gallon drum of PCB-containing ballasts were observed within the Site building's primary maintenance shop and shipping/receiving area. No landfills or dumps were observed at the Site. Tetra Tech does not consider waste management at the Site to be a concern.

8.0 USER PROVIDED ENVIRONMENTAL INFORMATION AND INTERVIEWS

The objective of the interviews is to obtain information concerning RECs in connection with the Property. This information was obtained verbally, as indicated below.

8.1 INTERVIEW WITH OWNER OR REPRESENTATIVE

Tetra Tech interviewed Mr. Jonathan Mills, the owner representative and representative for the site building occupant WestEd.

According to Mr. Mills, he was not aware of (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the Site; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the Site, or (3) any notices from any government entity regarding any possible violations of environmental laws or possible liability relating to hazardous substances or petroleum products.

8.2 INTERVIEW WITH PAST OCCUPANTS

Past occupants were not readily available for interview. Based on site operations and review of regulatory data, Tetra Tech does not consider this data gap a REC for the Site.

8.3 INTERVIEW WITH ADJACENT PROPERTY OWNERS

Tetra Tech attempted to speak with neighboring property owners and or operators during Site reconnaissance; however, the neighboring property owners were not readily available or unwilling for interview during the time of the site reconnaissance. Tetra Tech does not consider this data gap a REC for the Site.

8.4 USER PROVIDED INFORMATION

The GSA provided a copy of a Phase I Environmental Site Assessment conducted at the Site property for WestEd dated April 16, 1998 and completed by Tecumsah Professional Associates, Inc. Tetra Tech performed a review of this document which did not identify RECs for the Site. A copy of this document can be found in **Appendix H**.

9.0 DEVIATIONS

There were no deletions or deviations from ASTM E 1527-13 with the exception of the following:

- Interviews with previous land owners were not conducted.
- Time gaps of more than 5 years were noted in available historical information.
- The elevator pit was inaccessible during the time of site reconnaissance.

Tetra Tech does not believe that the identified deviations impact our ability to render an opinion regarding potential RECs, CRECs, HRECs, or *de minimis* conditions for the Site.

10.0 CONCLUSIONS AND RECOMMENDATIONS

Tetra Tech has performed this Phase I ESA in conformance with the scope and limitations of the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13) for the property located at 4665 Lampson Avenue in Los Alamitos, Orange County, California. This assessment has revealed the following findings that relate to potential for contamination or liability in connection to the Site.

10.1 CONCLUSIONS

The Phase I ESA identified the following findings at the Site:

- Electricity is supplied to the Site by a utility-owned, pad-mounted transformer observed outside the west wall of the Site building. This transformer was not identified in the previous Phase I ESA dated April 16, 1998 and completed by Tecumsah Professional Associates, Inc.; however, Tetra Tech believes the transformer was present based on the photo documentation in the Phase I ESA report. This transformer may contain PCBs. Other transformers observed within the Site building appeared to be dry-type units; however, no labeling indicating PCB content was observed on the transformers. No evidence of leaks or staining was observed in the vicinity of the pad-mounted transformer, and the transformers at the Site are not anticipated to represent an environmental concern at the Site.
- A 1,500-gallon diesel aboveground storage tank (AST) and associated emergency generator for the used for the cooling tower and to power the building in an emergency was observed during the site reconnaissance within the 1st floor of the Site building. The AST was observed to be enclosed in secondary containment and was reportedly partially full at the time of Site reconnaissance with no visible staining or indication of a release, and the cooling tower was no longer in operation. According to the Site representatives, Mr. Jonathan Mills and Mr. Mark Shegich, the cooling tower had been installed for a former tenant, California State University (CSU) Long Beach, for the purpose of cooling a data laboratory that was once located within the Site building. The emergency generator is serviced by Duthie Power Services on an approximate annual basis. One partially full 55-gallon drum of cooling water treatment was observed during the site reconnaissance. The emergency generator, associated AST, and cooling tower are not anticipated to represent an environmental concern at the Site.
- The Site was identified three times in the HAZNET database. In 2000, the Site was identified as generating asbestos containing waste with disposal in a landfill. In 2003, the Site was identified as a generator of off-specification, aged or surplus organics with a disposal method identified as transfer station. In 2010, the Site was identified as generating ages or surplus organics with a disposal method identified as other treatment. In 2012, the Site was identified as generating a hazardous waste with a disposal method of storage, bulking, and/or transfer off site with no treatment or recovery. No violations were listed for the Site.

Based on the lack of a reported release and regulatory enforcement associated with these listings, the HAZNET databases listings for the Site are not considered a REC.

- At the time of Site reconnaissance, a chemical/wet laboratory was observed within the tenant space occupied by the California Department of Fish and Wildlife. Small amounts of hazardous/flammable materials were observed in containers of 8-ounces or less and one 5-gallon container. Safety Data Sheets were posted within the laboratory space. The California Department of Fish and Wildlife also maintained a dive locker. This locker contained oxygen and nitrox tanks. No leaks or spills were identified in association with these containers or general work inside the laboratory. According to the Site contacts, the lab wastes were disposed of by a third party contractor. Tetra Tech does not consider the use of chemicals in the lab area to be a REC.
- Within the Site building's primary maintenance shop and shipping/receiving area, containers of 5-gallons or less of paints and commercial cleaning products such as soaps and vinegars utilized for the building upkeep were observed. Several 1-quart motor oil containers for small equipment maintenance were stored within cabinets. No leaks or spills were identified in association with these containers inside the maintenance shop. Tetra Tech does not consider the maintenance shop and shipping/receiving area to be a REC.
- Within the Site building's main electrical and emergency generator room, small paint containers containing marking paint or striping paint were observed. No leaks or spills were identified in association with these containers inside the main electrical and emergency generator room. Tetra Tech does not consider the main electrical and emergency generator room to be a REC.
- A 5-gallon bucket of lubricant was observed within the elevator equipment room at the time of the site reconnaissance. No leaks or spills were identified in association with the lubricant container inside the elevator room. Tetra Tech was unable to assess the elevator pit at the time of Site reconnaissance because it was inaccessible. Tetra Tech does not consider the container in the elevator equipment room to be a REC.

10.2 RECOMMENDATIONS

Based on the conclusions outlined above, Tetra Tech makes the following recommendations to the GSA for consideration with respect to the Site:

- No further action is recommended in association with the transformer located at the Site.
- No further action is recommended in association with the chemical storage containers at the Site.
- No further action is recommended in association with the emergency generator and associated AST at the Site.
- General housekeeping activities should be maintained in the wet laboratory, maintenance shop, and emergency generator rooms.

- No further action is recommended in association with the HAZNET database listings associated with the Site.

10.3 LIMITATIONS

The conclusions of the report are professional opinions based solely upon visual site observations, and interpretations of analyses as described in this report. The opinions presented within this report apply to the site conditions existing at the time of the investigations, and interpretation of current regulations. Therefore, opinions and recommendations provided within this report might not apply to future conditions that may exist at the Site.

The resumes of the environmental assessor who conducted the site reconnaissance and prepared the report and the resume of the environmental professional who oversaw completion of this work are provided in **Appendix I**. We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 CFR 312.10 of this part. We have the specific qualifications based on education, training, and experience to assess a Site of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in general conformance with the standards and practices set forth in 40 CFR Part 312 and attest to the completeness and accuracy of the information contained in this report.

Site Assessor



Ms. Heidi Yavornicki

Report Author



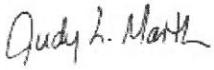
Ms. Michelle Nolte

Technical Reviewer



Mr. Jimmy Kehs

Quality Control Coordinator



Ms. Judy L. Marth, CHMM

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USGS. 2013. Nat (National Heritage Dataset [NHD]) Viewer. US Geological Survey: Reston, VA. http://viewer.nationalmap.gov/viewer/nhd.html. Accessed 6 October 2015.

FIGURES

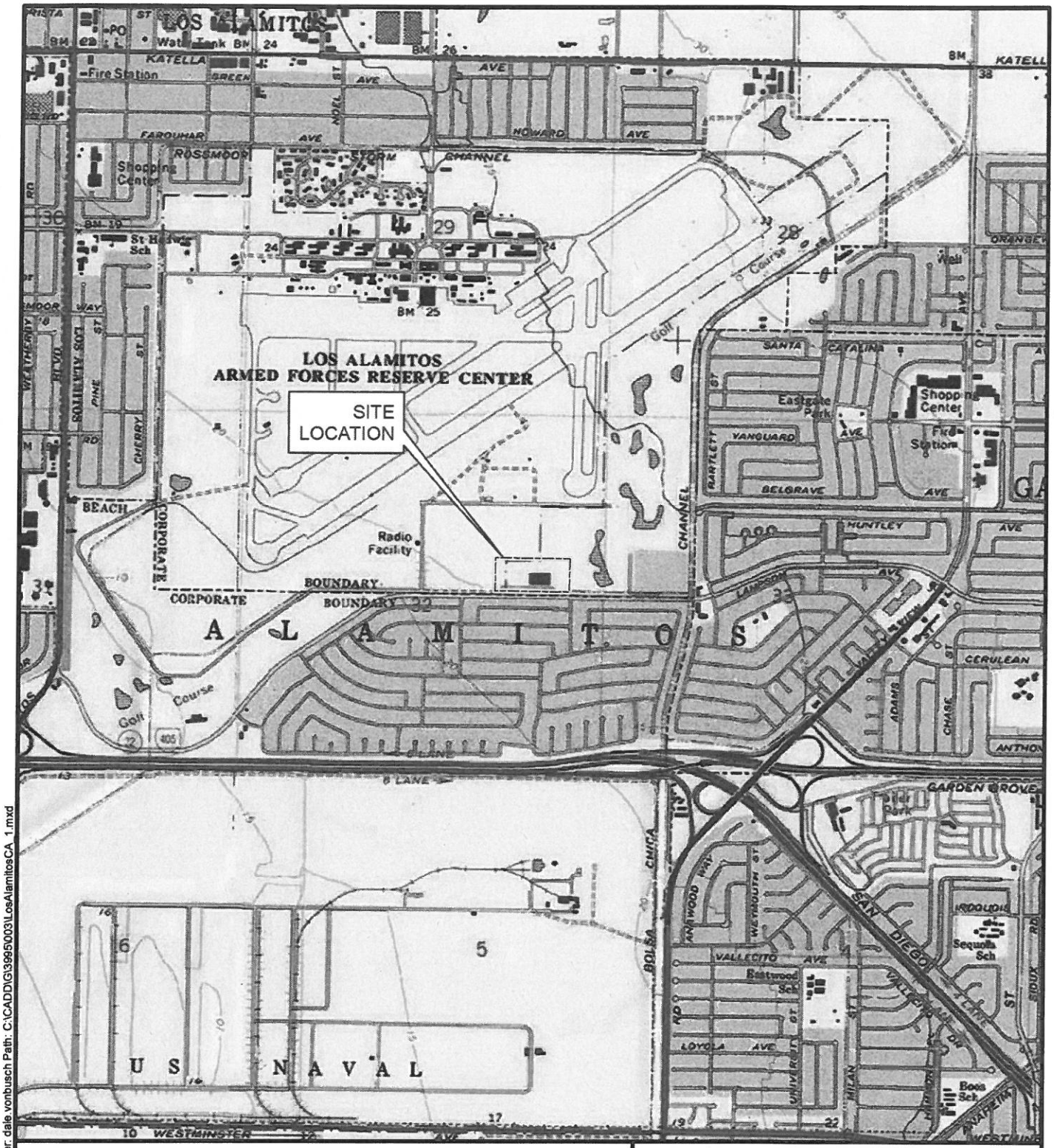


FIGURE 1
SITE LOCATION MAP

SOUTHWEST REGIONAL LABORATORY
4665 LAMPSON AVENUE
LOS ALAMITOS, CALIFORNIA

GSA

TETRA TECH

Legend
Approximate Property Boundary
S Storage
A Cooling Tower/Diesel AST
E Electrical/Emergency Generator
T Transformer
0 100 200
Feet
N
S
E
W
SOURCE: BING MAPS HYBRID IMAGERY, 2010-2012.
Date Saved: 10/21/2015 10:47:38 PM User: dale.vonbusch Path: C:\CADD\G3995003\LosAlamitosCA_2.mxd
FIGURE 2
SITE LAYOUT MAP
SOUTHWEST REGIONAL LABORATORY
4665 LAMPSON AVENUE
LOS ALAMITOS, CALIFORNIA
GSA
TETRA TECH
bing
Hazelnut Ave
Rose St
Single Family Residential
Ironwood Ave
Lampson Ave
Lampson Ave
Atrium
A
E
T
S
S
S
Navy Golf Course
Arbor Dog Park
Arbor Park
Joint Forces Training Base



Date Saved: 10/21/2015 10:49:27 PM User: dale.vonbusch Path: C:\CADD\G\3995003\LosAlamitosCA_3.mxd

Legend

Approximate Property Boundary

N
W E
S

0 250 500
Feet

SOURCE: BING MAPS HYBRID IMAGERY, 2010-2012.

FIGURE 3
AERIAL PHOTOGRAPHY

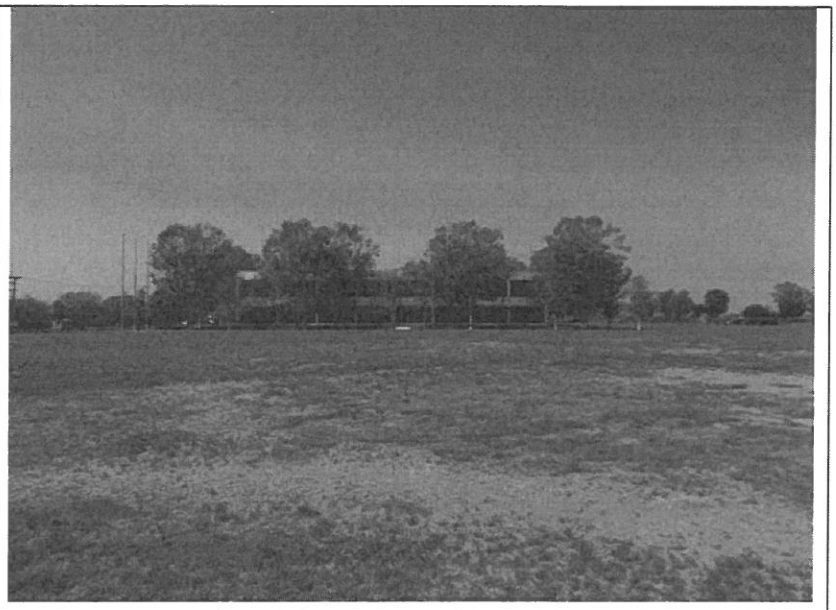
SOUTHWEST REGIONAL LABORATORY
4665 LAMPSON AVENUE
LOS ALAMITOS, CALIFORNIA

GSA

TETRA TECH

APPENDIX A:
PHASE I ESA SITE PHOTOGRAPHS

Attachment A
Phase I ESA Site Photographs
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California
Project No. 103G3995003.001

Photo: 1 **Description:** View of the Site building from northeast corner along the southern exterior wall.	
Photo: 2 **Description:** View of the Site from east to west.	

Tetra Tech, Inc.

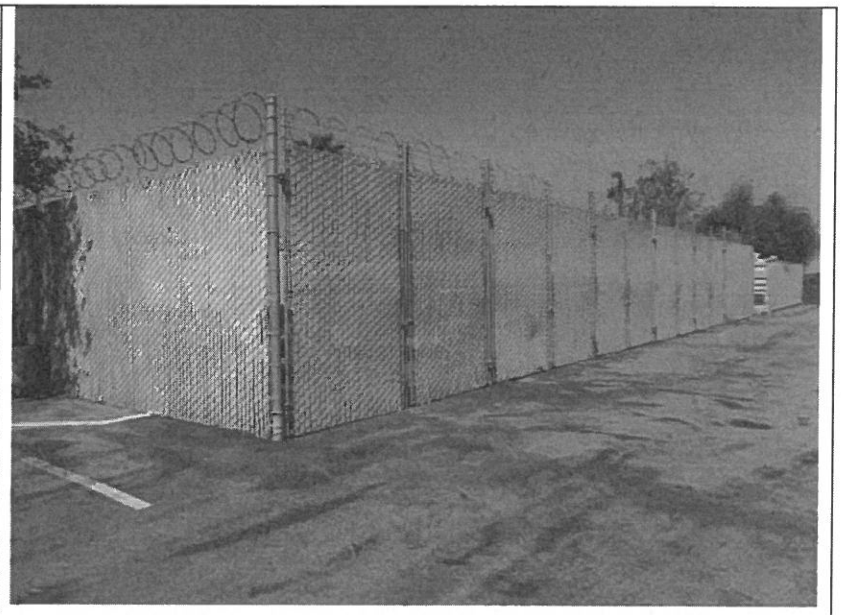
Taken by Heidi Yavornicky on September 23, 2015

Attachment A
Phase I ESA Site Photographs
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California
Project No. 103G3995003.001

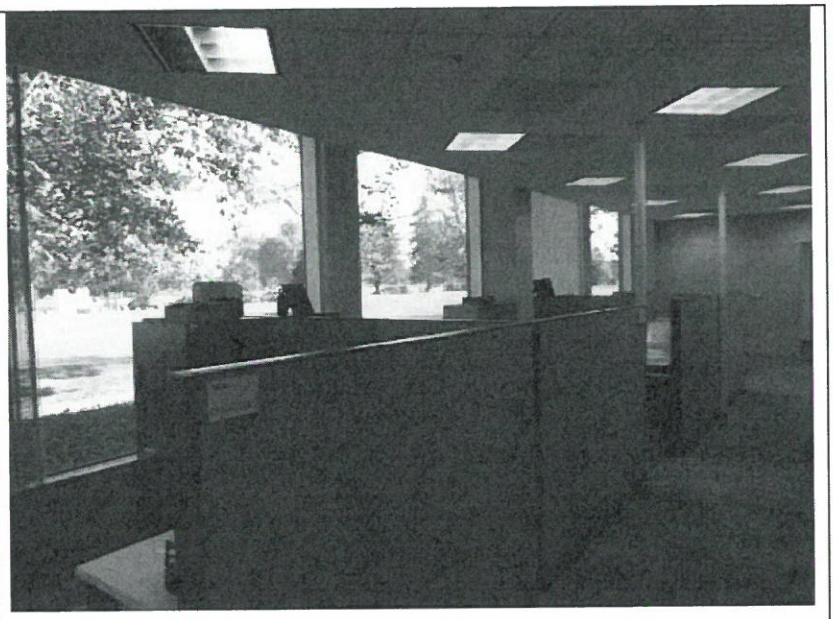
Photo: 3 **Description:** View of parking lot on western portion of Site; view from southeast corner of parking lot to northwest.	
Photo: 4 **Description:** View of a stormwater concrete-lined channel and associated drain; traverses east to west on southern portion of Site.	

Taken by Heidi Yavornicky on September 23, 2015

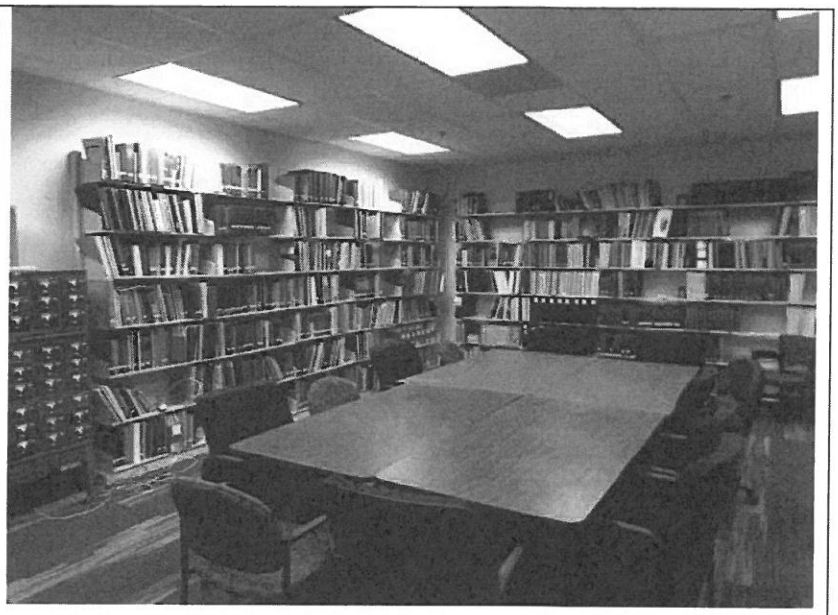
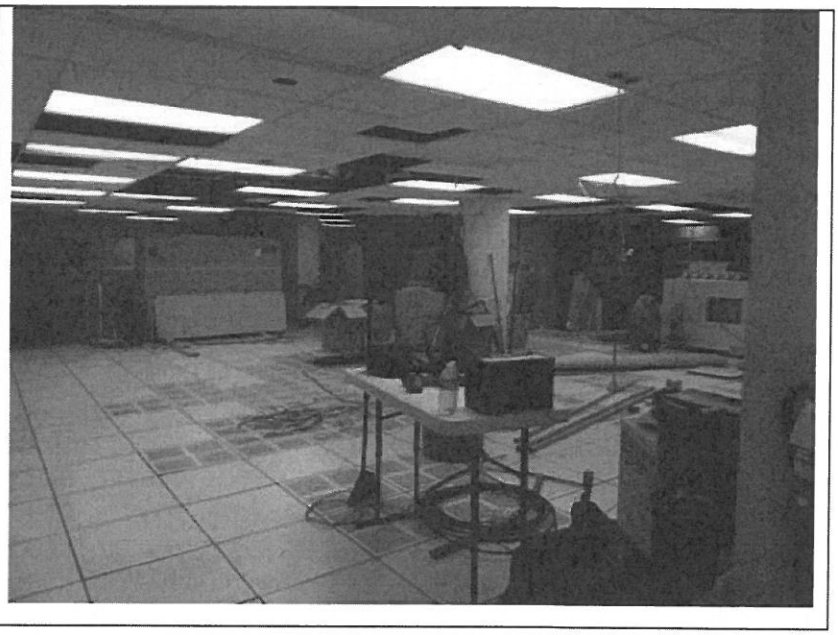
Attachment A
Phase I ESA Site Photographs
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California
Project No. 103G3995003.001

Photo: 5 **Description:** View of exterior vehicle/vessel storage on the northwest corner of the Site, facing northwest.	
Photo: 6 **Description:** View of the utility-owned, pad-mounted transformer outside the west exterior wall of the property building, facing southeast.	

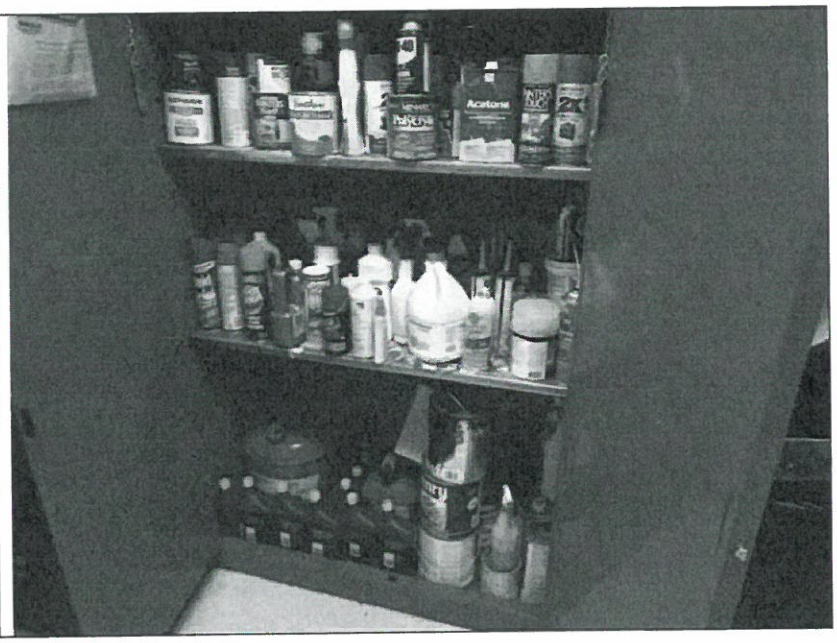
Attachment A
Phase I ESA Site Photographs
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California
Project No. 103G3995003.001

Photo: 7 **Description:** View of building interior; view of one of two rooms occupied by Attorney James Mentas.	
Photo: 8 **Description:** View of building interior; view of typical WestEd office space.	

Attachment A
Phase I ESA Site Photographs
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California
Project No. 103G3995003.001

Photo: 9 **Description:** View of building interior; California Department of Fish and Wildlife Library.	
Photo: 10 **Description:** View of building interior; classroom instruction space for National Comfort Institute.	

Attachment A
Phase I ESA Site Photographs
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California
Project No. 103G3995003.001

Photo: 11 **Description:** View of the 1,500-gallon diesel aboveground storage tank (AST) and associated emergency generator located in the western portion of the building.	
Photo: 12 **Description:** View of one of two hazardous materials cabinets inside the shipping/receiving room of the Site building.	

Attachment A
Phase I ESA Site Photographs
GSA Southwest Regional Laboratory
4665 Lampson Avenue, Los Alamitos, California
Project No. 103G3995003.001

Photo: 13 **Description:** View of a 55-gallon drum labeled "Ballasts containing polychlorinated biphenyls (PCBs)" inside the shipping/receiving room of the Site building.	
Photo: 14 **Description:** View inside California Department of Fish and Wildlife - chemical/wet laboratory fume hood and hazardous/flammable materials cabinet.	

APPENDIX B:
ENVIRONMENTAL DATA RESOURCES, INC. REPORT WITH GEOCHECK

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Inquiry Number: 4405855.2s
September 09, 2015

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	27
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

4665 LAMPSON AVENUE
LOS ALAMITOS, CA 90720

COORDINATES

Latitude (North):	33.7820000 - 33° 46' 55.20"
Longitude (West):	118.0495000 - 118° 2' 58.20"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	402829.8
UTM Y (Meters):	3738286.2
Elevation:	24 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5633745 LOS ALAMITOS, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120505
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
4665 LAMPSON AVENUE
LOS ALAMITOS, CA 90720

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CAL DEPT OF FISH & G	4665 LAMPSON AVE STE	HAZNET		TP
A2	WESTED	4665 LAMPSON AVE	HAZNET		TP
A3	1X S W R L	4665 LAMPSON AVE	HAZNET		TP
Reg	SEAL BEACH NAVAL WEA		DOD	Same	3342, 0.633, South
Reg	LOS ALAMITOS ARMED F		DOD	Same	1 ft.
4	DAVID RUTLEDGE	4533 HAZELNUT	RCRA NonGen / NLR, FINDS	Lower	532, 0.101, SW
B5	BOLSA CHICA CHANNEL	5250 LAMPSON AVE	SLIC	Higher	1892, 0.358, East
B6	JERRY GIRAGOSSIAN	5262 LAMPSON AVE	LUST, HIST UST	Higher	1925, 0.365, East
B7	ARCO #3015	5262	LUST, HIST CORTESE	Higher	1925, 0.365, East
C8	NAS LOS ALAMITOS		ENVIROSTOR	Higher	3250, 0.616, NNW
C9	LOS ALAMITOS RAD BOM		ENVIROSTOR	Higher	3250, 0.616, NNW
10	JOINT FORCES TRAININ	4250 CONSTITUTION AV	RESPONSE, ENVIROSTOR, LUST, MCS	Higher	4614, 0.874, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
CAL DEPT OF FISH & G 4665 LAMPSON AVE STE LOS ALAMITOS, CA 90720	HAZNET GEPAID: CAL000248737	N/A
WESTED 4665 LAMPSON AVE LOS ALAMITOS, CA 90720	HAZNET GEPAID: CAL000348685	N/A
1X S W R L 4665 LAMPSON AVE LOS ALAMITOS, CA 90720	HAZNET GEPAID: CAC000089381	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

EXECUTIVE SUMMARY

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database

SWRCY	Recycler Database
HAULERS	Registered Waste Tire Haulers Listing
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
ODI	Open Dump Inventory
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	National Clandestine Laboratory Register
HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	Clandestine Drug Labs

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
HIST UST	Hazardous Substance Storage Container Database
CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
Orange Co. Industrial Site	List of Industrial Site Cleanups
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System

EXECUTIVE SUMMARY

COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
FINDS..... Facility Index System/Facility Registry System
CA BOND EXP. PLAN..... Bond Expenditure Plan
Cortese..... "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings..... CUPA Resources List
DRYCLEANERS..... Cleaner Facilities
EMI..... Emissions Inventory Data
ENF..... Enforcement Action Listing
Financial Assurance..... Financial Assurance Information Listing
HWP..... EnviroStor Permitted Facilities Listing
HWT..... Registered Hazardous Waste Transporter Database
MINES..... Mines Site Location Listing
MWMP..... Medical Waste Management Program Listing
NPDES..... NPDES Permits Listing
PEST LIC..... Pesticide Regulation Licenses Listing
PROC..... Certified Processors Database
Notify 65..... Proposition 65 Records
UIC..... UIC Listing
WASTEWATER PITS..... Oil Wastewater Pits Listing
WDS..... Waste Discharge System
WIP..... Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, and dated 08/03/2015 has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOINT FORCES TRAININ Status: No Further Action Facility Id: 30490037	***4250 CONSTITUTION AV***	***NNW 1/2 - 1 (0.874 mi.)***	***10***	***20***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 08/03/2015 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAS LOS ALAMITOS Facility Id: 80000646 Status: Inactive - Needs Evaluation		NNW 1/2 - 1 (0.616 mi.)	C8	18
LOS ALAMITOS RAD BOM Facility Id: 80000425 Status: Inactive - Needs Evaluation		NNW 1/2 - 1 (0.616 mi.)	C9	19
JOINT FORCES TRAININ Facility Id: 30490037	***4250 CONSTITUTION AV***	***NNW 1/2 - 1 (0.874 mi.)***	***10***	***20***

EXECUTIVE SUMMARY

Status: No Further Action

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 06/15/2015 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JERRY GIRAGOSSIAN Status: Completed - Case Closed Global Id: T0605900647	***5262 LAMPSON AVE***	***E 1/4 - 1/2 (0.365 mi.)***	***B6***	***13***
ARCO #3015 Facility Status: Case Closed Global ID: T0605900647	***5262***	***E 1/4 - 1/2 (0.365 mi.)***	***B7***	***17***

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 06/15/2015 has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOLSA CHICA CHANNEL Facility Status: Completed - Case Closed Facility Status: Closed Global Id: SLT8R1144151	5250 LAMPSON AVE	E 1/4 - 1/2 (0.358 mi.)	B5	12

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/10/2015 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DAVID RUTLEDGE	***4533 HAZELNUT***	***SW 0 - 1/8 (0.101 mi.)***	***4***	***11***

EXECUTIVE SUMMARY

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SEAL BEACH NAVAL WEA		S 1/2 - 1 (0.633 mi.)	0	10
LOS ALAMITOS ARMED F		0 - 1/8 (0.000 mi.)	0	10

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

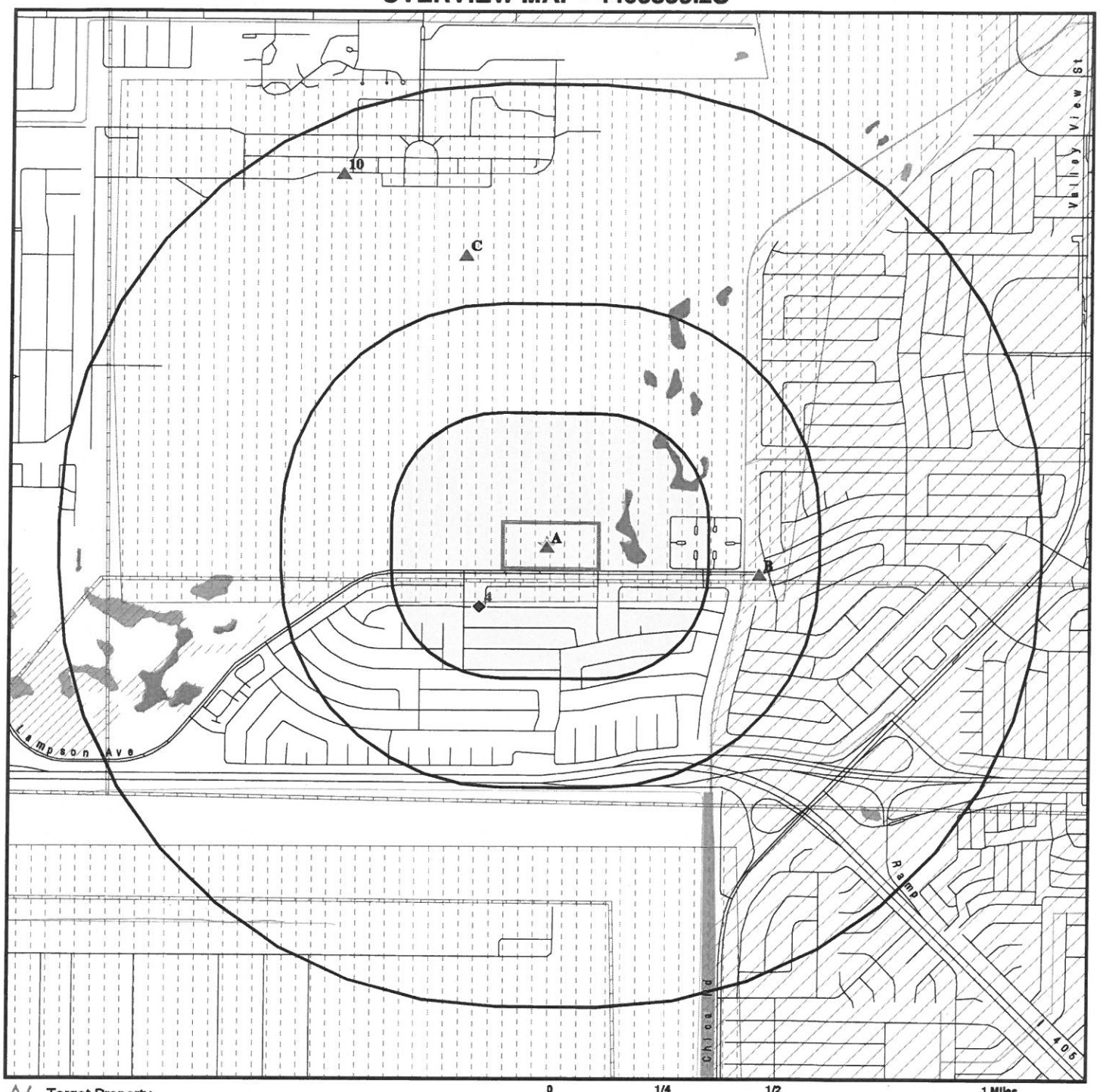
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARCO #3015	***5262***	***E 1/4 - 1/2 (0.365 mi.)***	***B7***	***17***
Reg Id: 083000820T				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
	CDL

OVERVIEW MAP - 4405855.2S



0 1/4 1/2 1 Miles

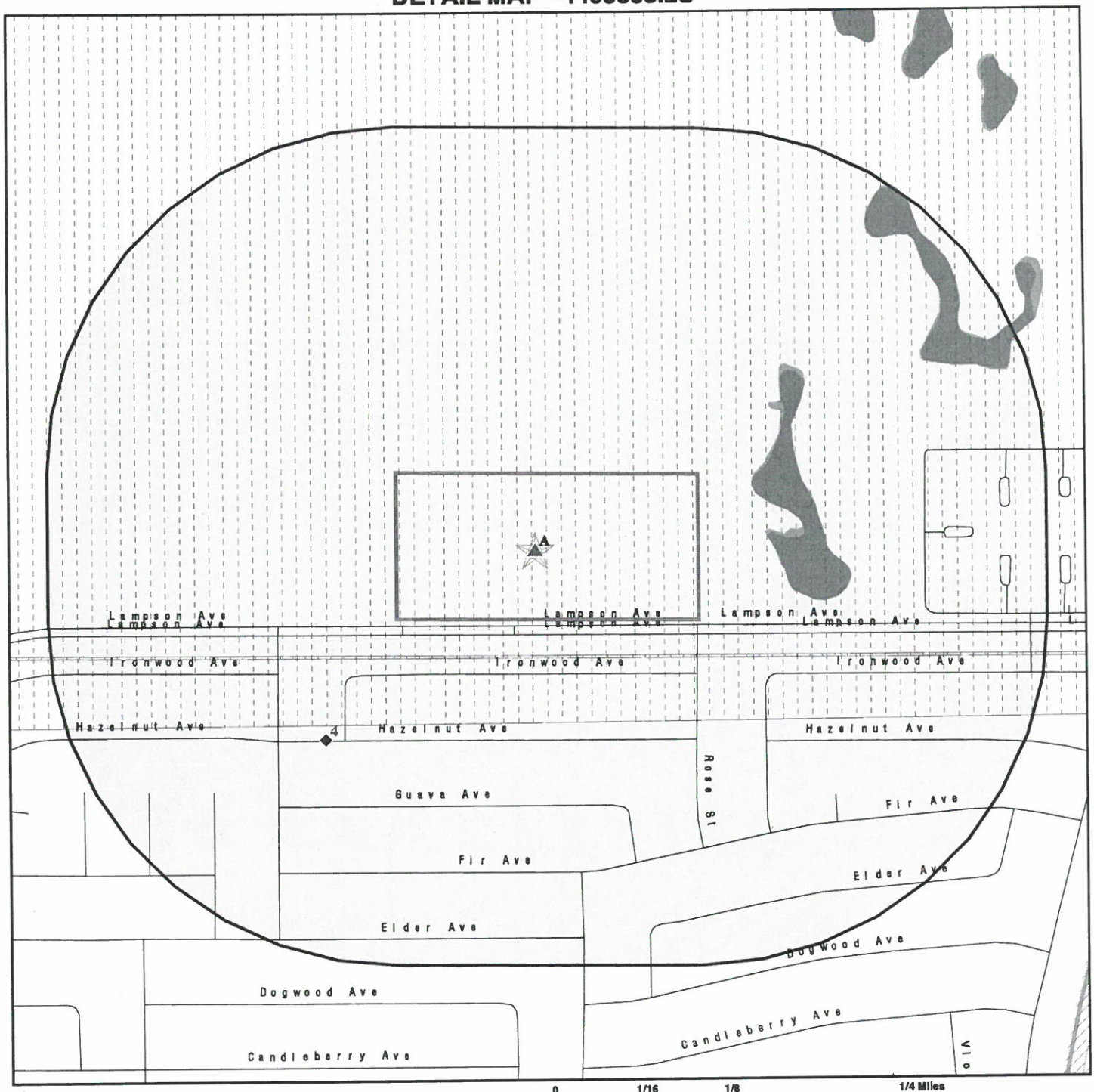
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Southwest Regional Laboratory	CLIENT: Tetra Tech EMI
ADDRESS: 4665 Lampson Avenue Los Alamitos CA 90720	CONTACT: Jimmy Kehs
LAT/LONG: 33.782 / 118.0495	INQUIRY #: 4405855.2s DATE: September 09, 2015 1:30 pm

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DETAIL MAP - 4405855.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos CA 90720 LAT/LONG: 33.782 / 118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY #: 4405855.2s DATE: September [illegible] 2015 1:31 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	1	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	3	NR	3
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	2	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	1	NR	NR	1
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
Orange Co. Industrial Site	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		1	0	0	1	NR	2
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	3	NR	NR	NR	NR	NR	3
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		3	2	0	4	5	0	14

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property
CAL DEPT OF FISH & GAME
4665 LAMPSON AVE STE C
LOS ALAMITOS, CA 90720

HAZNET **S113118205**
N/A

Site 1 of 3 in cluster A

Actual:
24 ft.

HAZNET:

envid:	S113118205
Year:	2003
GEPAID:	CAL000248737
Contact:	RAYMOND MICHALSKI
Telephone:	3108332166
Mailing Name:	Not reported
Mailing Address:	4665 LAMPSON AVE STE C
Mailing City,St,Zip:	LOS ALAMITOS, CA 90720
Gen County:	Not reported
TSD EPA ID:	CAD982444481
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Transfer Station
Tons:	0.01
Facility County:	Orange

A2
Target
Property
WESTED
4665 LAMPSON AVE
LOS ALAMITOS, CA 90720

HAZNET **S113467624**
N/A

Site 2 of 3 in cluster A

Actual:
24 ft.

HAZNET:

envid:	S113467624
Year:	2012
GEPAID:	CAL000348685
Contact:	MARK SHEGICH
Telephone:	5627995113
Mailing Name:	Not reported
Mailing Address:	4665 LAMPSON AVE
Mailing City,St,Zip:	LOS ALAMITOS, CA 907205199
Gen County:	Orange
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0495
Facility County:	Orange

envid:	S113467624
Year:	2012
GEPAID:	CAL000348685
Contact:	MARK SHEGICH
Telephone:	5627995113
Mailing Name:	Not reported
Mailing Address:	4665 LAMPSON AVE
Mailing City,St,Zip:	LOS ALAMITOS, CA 907205199
Gen County:	Orange
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery

Map ID
Direction
Distance
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

S113467624

WESTED (Continued)

(H010-H129) Or (H131-H135)
Tons: 0.005
Facility County: Orange

envid: S113467624
Year: 2012
GEPAID: CAL000348685
Contact: MARK SHEGICH
Telephone: 5627995113
Mailing Name: Not reported
Mailing Address: 4665 LAMPSON AVE
Mailing City,St,Zip: LOS ALAMITOS, CA 907205199
Gen County: Orange
TSD EPA ID: CAD982444481
TSD County: San Bernardino
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery
(H010-H129) Or (H131-H135)
Tons: 0.0858
Facility County: Orange

envid: S113467624
Year: 2010
GEPAID: CAL000348685
Contact: MARK SHEGICH
Telephone: 5627995113
Mailing Name: Not reported
Mailing Address: 4665 LAMPSON AVE
Mailing City,St,Zip: LOS ALAMITOS, CA 907205199
Gen County: Not reported
TSD EPA ID: CAD982444481
TSD County: Not reported
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Other Treatment
Tons: 0.033
Facility County: Orange

A3
Target Property

1X S W R L
4665 LAMPSON AVE
LOS ALAMITOS, CA 90720

HAZNET S112837063
N/A

Site 3 of 3 in cluster A

Actual: 24 ft.

HAZNET:
envid: S112837063
Year: 2000
GEPAID: CAC000089381
Contact: WILLIAM HEIN
Telephone: 2135987661
Mailing Name: Not reported
Mailing Address: 4665 LAMPSON AVE
Mailing City,St,Zip: LOS ALAMITOS, CA 907200000
Gen County: Not reported
TSD EPA ID: CAD009007626
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 0.08

1X S W R L (Continued) **S112837063**

Facility County: Orange

envid: S112837063
Year: 1999
GEPAID: CAC000089381
Contact: ASBESTOS
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 4665 LAMPSON AVE
Mailing City,St,Zip: LOS ALAMITOS, CA 907200000
Gen County: Not reported
TSD EPA ID: Not reported
TSD County: Not reported
Waste Category: Invalid waste code
Disposal Method: Disposal, Land Fill
Tons: 25.2840
Facility County: Orange

DOD Region South 1/2-1 3342 ft. **SEAL BEACH NAVAL WEAPONS STATION** **DOD** **CUSA143790 N/A**

SEAL BEACH NAVAL WEAPONS (County), CA

DOD:
Feature 1: Navy DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Seal Beach Naval Weapons Station
Name 2: Not reported
Name 3: Not reported
State: CA
DOD Site: Yes
Tile name: CAORANGE

DOD Region < 1/8 1 ft. **LOS ALAMITOS ARMED FORCES RESERVE CENTER** **DOD** **CUSA143754 N/A**

LOS ALAMITOS ARMED FORCES (County), CA

DOD:
Feature 1: Army DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Los Alamitos Armed Forces Reserve Center
Name 2: Not reported
Name 3: Not reported
State: CA
DOD Site: Yes
Tile name: CAORANGE

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
4 SW < 1/8 0.101 mi. 532 ft.	**DAVID RUTLEDGE 4533 HAZELNUT SEAL BEACH, CA 90740**	**RCRA NonGen / NLR FINDS**	**1000247683 CAD981623259**

Relative: Lower

Actual: 23 ft.

RCRA NonGen / NLR:

Date form received by agency:	02/27/1987
Facility name:	DAVID RUTLEDGE
Facility address:	4533 HAZELNUT SEAL BEACH, CA 90740
EPA ID:	CAD981623259
Mailing address:	HAZELNUT SEAL BEACH, CA 90740
Contact:	ENVIRONMENTAL MANAGER
Contact address:	4533 HAZELNUT SEAL BEACH, CA 90740
Contact country:	US
Contact telephone:	(714) 841-6130
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	DAVID RUTLEDGE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

DAVID RUTLEDGE (Continued) **1000247683**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002727522

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

B5 **BOLSA CHICA CHANNEL DEWATERING** **SLIC** **S105015207**
East **5250 LAMPSON AVE** **N/A**
1/4-1/2 **GARDEN GROVE, CA**
0.358 mi.
1892 ft. **Site 1 of 3 in cluster B**

Relative:
Higher

Actual:
24 ft.

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 03/23/2009
Global Id: SLT8R1144151
Lead Agency: SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number: Not reported
Latitude: 33.7809308462648
Longitude: -118.041679859161
Case Type: Cleanup Program Site
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: SLT8R114
File Location: Not reported
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 8:
Type: Soil and Groundwater
Facility Status: Closed
Staff: Kamron Saremi, Tel 909-782-4303, SLIC
Substance: SOLVENT
Lead Agency: Regional Board
Location Code: Not reported
Thomas Bros Code: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B6	**JERRY GIRAGOSSIAN**	**LUST**	**U001577141**
East	**5262 LAMPSON AVE**	**HIST UST**	**N/A**
1/4-1/2	**GARDEN GROVE, CA 92641**		
0.365 mi.			
1925 ft.	**Site 2 of 3 in cluster B**		

Relative:
Higher

Actual:
24 ft.

LUST:

Region:	STATE
Global Id:	T0605900647
Latitude:	33.7810512
Longitude:	-118.0409747
Case Type:	Not reported
Status:	Completed - Case Closed
Status Date:	12/22/2004
Lead Agency:	Not reported
Case Worker:	VJB
Local Agency:	Not reported
RB Case Number:	083000820T
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	* Solvents, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900647
Contact Type:	Regional Board Caseworker
Contact Name:	VALERIE JAHN-BULL
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	vjahn-bull@waterboards.ca.gov
Phone Number:	9517824903

Global Id:	T0605900647
Contact Type:	Local Agency Caseworker
Contact Name:	KEVIN LAMBERT
Organization Name:	ORANGE COUNTY LOP
Address:	1241 E DYER ROAD SUITE 120
City:	SANTA ANA
Email:	klambert@ochca.com
Phone Number:	7144336261

Status History:

Global Id:	T0605900647
Status:	Completed - Case Closed
Status Date:	12/22/2004

Global Id:	T0605900647
Status:	Open - Case Begin Date
Status Date:	12/22/1987

Global Id:	T0605900647
Status:	Open - Remediation
Status Date:	09/29/1999

Global Id:	T0605900647

JERRY GIRAGOSSIAN (Continued) **U001577141**

Status: Open - Site Assessment
Status Date: 03/31/1988

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 06/20/1988

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 07/20/1988

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 08/22/1988

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 10/01/1988

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 11/01/1988

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 02/10/1989

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 06/01/2001

Global Id: T0605900647
Status: Open - Site Assessment
Status Date: 07/15/2001

Regulatory Activities:
Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 02/03/2004
Action: Staff Letter

Global Id: T0605900647
Action Type: RESPONSE
Date: 07/30/2002
Action: Monitoring Report - Quarterly

Global Id: T0605900647
Action Type: Other
Date: 12/22/1987
Action: Leak Reported

Global Id: T0605900647
Action Type: RESPONSE
Date: 01/31/2003
Action: Monitoring Report - Quarterly

Global Id: T0605900647

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

JERRY GIRAGOSSIAN (Continued) **U001577141**

Action Type: RESPONSE
Date: 03/15/2004
Action: Other Report / Document

Global Id: T0605900647
Action Type: RESPONSE
Date: 01/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 12/22/2004
Action: Closure/No Further Action Letter

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 12/13/2004
Action: File review

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 02/28/2003
Action: * No Action

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 02/03/2004
Action: Notification - Proposition 65

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 03/04/2004
Action: * No Action

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 02/03/2004
Action: Notification - Fee Title Owners Notice

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 01/29/2003
Action: * No Action

Global Id: T0605900647
Action Type: ENFORCEMENT
Date: 09/07/2004
Action: File review

Global Id: T0605900647
Action Type: RESPONSE
Date: 03/31/2003
Action: Monitoring Report - Quarterly

Global Id: T0605900647
Action Type: REMEDIATION
Date: 07/20/1988

JERRY GIRAGOSSIAN (Continued) **U001577141**

Action: Excavation

HIST UST:

Region:	STATE
Facility ID:	00000026713
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	0000000000
Owner Name:	ARCO PETROLEUM PRODUCTS CO.
Owner Address:	515 SOUTH FLOWER STREET
Owner City,St,Zip:	LOS ANGELES, CA 90071
Total Tanks:	0005
Tank Num:	001
Container Num:	0000000001
Year Installed:	1972
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10
Tank Num:	002
Container Num:	0000000002
Year Installed:	1968
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10
Tank Num:	003
Container Num:	0000000003
Year Installed:	1968
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10
Tank Num:	004
Container Num:	0000000004
Year Installed:	1968
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	0000240
Leak Detection:	Stock Inventor, 10
Tank Num:	005
Container Num:	0000000005
Year Installed:	Not reported
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	WASTE OIL

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number

JERRY GIRAGOSSIAN (Continued) **U001577141**

Container Construction Thickness: 0000093
Leak Detection: Stock Inventor

B7 **ARCO #3015** **LUST S101299630**
East **5262** **HIST CORTESE N/A**
1/4-1/2 **GARDEN GROVE, CA 92645**
0.365 mi.
1925 ft. **Site 3 of 3 in cluster B**

Relative: **Higher**

Actual: **24 ft.**

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000820T
Local Case Num:	87UT201
Case Type:	Aquifer affected
Substance:	Solvents
Qty Leaked:	Not reported
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street:	MANLEY
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	Other Source
Global ID:	T0605900647
How Stopped Date:	Not reported
Enter Date:	3/31/1988
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	3/31/1988
Discover Date:	Not reported
Enforcement Date:	Not reported
Close Date:	12/22/2004
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	7/15/2001
Date Remediation Plan Submitted:	9/29/1999
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	3/31/1988
GW Qualifies:	<
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Yes
Oversite Program:	LUST
Latitude:	33.7810512
Longitude:	-118.0409747
MTBE Date:	6/2/2000
Max MTBE GW:	.5
MTBE Concentration:	1
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	Not reported
Staff:	VJJ

ARCO #3015 (Continued) **S101299630**

Staff Initials:	SAS
Lead Agency:	Regional Board
Local Agency:	30000L
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: EXTREMELY HIGH CHLORINATED HC LEVELS. MAYBE DERIVED FROM A NEARBY DRY CLEANER. FURTHER INVESTIGATION/REMEDIATION REQUIRED. DETERMINING RESPONSIBLE PARTY FOR CHLORINATED HYDROCARBONS.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000820T

C8
NNW
1/2-1
0.616 mi.
3250 ft.

Relative:
Higher

Actual:
26 ft.

NAS LOS ALAMITOS **ENVIROSTOR** **S107736812**
N/A

LOS ALAMITOS, CA

Site 1 of 2 in cluster C

ENVIROSTOR:

Facility ID:	80000646
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	72
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	33.79166
Longitude:	-118.0527
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799F593900
Alias Type:	Federal Facility ID
Alias Name:	J09CA1044
Alias Type:	INPR
Alias Name:	80000646
Alias Type:	Envirostor ID Number

Map ID Direction Distance Elevation	Site	MAP FINDINGS	Database(s)	EDR ID Number EPA ID Number

NAS LOS ALAMITOS (Continued) **S107736812**

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

C9 **LOS ALAMITOS RAD BOMB/SCORE SITE** **ENVIROSTOR** **S107737117**
NNW **N/A**
1/2-1 **LOS ALAMITOS, CA**
0.616 mi.
3250 ft. **Site 2 of 2 in cluster C**

Relative:
Higher

Actual:
26 ft.

ENVIROSTOR:

Facility ID:	80000425
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	72
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	33.79166
Longitude:	-118.0527
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	Explosives (UXO, MEC
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799F557100
Alias Type:	Federal Facility ID
Alias Name:	J09CA0561
Alias Type:	INPR
Alias Name:	80000425
Alias Type:	Envirostor ID Number

LOS ALAMITOS RAD BOMB/SCORE SITE (Continued) **S107737117**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	02/24/1993
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

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10 NNW 1/2-1 0.874 mi. 4614 ft.

Relative: Higher

Actual: 25 ft.

JOINT FORCES TRAINING BASE, LOS ALAMITOS - BLDG 34
4250 CONSTITUTION AVE
LOS ALAMITOS, CA 90720

RESPONSE ENVIROSTOR LUST MCS **S106387296 N/A**

RESPONSE:

Facility ID:	30490037
Site Type:	State Response
Site Type Detail:	FUDS
Acres:	1549
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Sue Hakim
Supervisor:	Robert Senga
Division Branch:	Cleanup Cypress
Site Code:	400332
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	72
Senate:	34
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	02/03/2010
Restricted Use:	NO
Funding:	DERA
Latitude:	33.79916
Longitude:	-118.0547
APN:	NONE SPECIFIED
Past Use:	FIRE TRAINING AREAS, FIRING RANGE - SMALL ARMS ETC...
Potential COC :	Munitions Debris (MD Lead Aminodinitrotoluene 1,3,5-Trinitrobenzene Trinitrophenylmethylnitramine 2,4,6-Trinitrotoluene Zinc
Confirmed COC:	30051-NO 32000-NO 30580-NO 30581-NO 30582-NO 30594-NO 30013-NO 31000-NO
Potential Description:	SOIL
Alias Name:	ARMED FORCES RESERVE CENTER LOS ALAMITOS
Alias Type:	Alternate Name
Alias Name:	LOS ALAMITOS AFRC
Alias Type:	Alternate Name
Alias Name:	110033606774

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

JOINT FORCES TRAINING BASE, LOS ALAMITOS - BLDG 34 (Continued) **S106387296**

Alias Type: EPA (FRS #)
Alias Name: T0605900553
Alias Type: GeoTracker Global ID
Alias Name: T0605900572
Alias Type: GeoTracker Global ID
Alias Name: T0605901297
Alias Type: GeoTracker Global ID
Alias Name: T0605911429
Alias Type: GeoTracker Global ID
Alias Name: T0605912556
Alias Type: GeoTracker Global ID
Alias Name: T060592093
Alias Type: GeoTracker Global ID
Alias Name: T0605926698
Alias Type: GeoTracker Global ID
Alias Name: T0605960022
Alias Type: GeoTracker Global ID
Alias Name: T0605969865
Alias Type: GeoTracker Global ID
Alias Name: T060653541
Alias Type: GeoTracker Global ID
Alias Name: CA8572890517
Alias Type: HWTS Identification Code
Alias Name: 400332
Alias Type: Project Code (Site Code)
Alias Name: 30490037
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SITE9
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 04/21/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/15/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/27/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 09/03/2008
Comments: DTSC agreed with the reports recommendation of Interim Site Evaluation Accomplished for the Phelan Small Arms Range and the range ineligibility for the active army military munitions response program. Furthermore, DTSC agrees with the Armys conclusions and recommendation statement that to the best of our knowledge, the Army has determined that no further evaluation will be taken unless information indicating that this decision was not appropriate becomes

JOINT FORCES TRAINING BASE, LOS ALAMITOS - BLDG 34 (Continued) **S106387296**

available.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Facility ID:	30490037
Status:	No Further Action
Status Date:	02/03/2010
Site Code:	400332
Site Type:	State Response
Site Type Detailed:	FUDS
Acres:	1549
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Sue Hakim
Supervisor:	Robert Senga
Division Branch:	Cleanup Cypress
Assembly:	72
Senate:	34
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	33.79916
Longitude:	-118.0547
APN:	NONE SPECIFIED
Past Use:	FIRE TRAINING AREAS, FIRING RANGE - SMALL ARMS ETC...
Potential COC:	Munitions Debris (MD Lead Aminodinitrotoluene 1,3,5-Trinitrobenzene Trinitrophenylmethylnitramine 2,4,6-Trinitrotoluene Zinc
Confirmed COC:	30051-NO 32000-NO 30580-NO 30581-NO 30582-NO 30594-NO 30013-NO 31000-NO
Potential Description:	SOIL
Alias Name:	ARMED FORCES RESERVE CENTER LOS ALAMITOS
Alias Type:	Alternate Name
Alias Name:	LOS ALAMITOS AFRC
Alias Type:	Alternate Name
Alias Name:	110033606774
Alias Type:	EPA (FRS #)
Alias Name:	T0605900553
Alias Type:	GeoTracker Global ID
Alias Name:	T0605900572
Alias Type:	GeoTracker Global ID
Alias Name:	T0605901297
Alias Type:	GeoTracker Global ID
Alias Name:	T0605911429
Alias Type:	GeoTracker Global ID
Alias Name:	T0605912556
Alias Type:	GeoTracker Global ID

JOINT FORCES TRAINING BASE, LOS ALAMITOS - BLDG 34 (Continued) **S106387296**

Alias Name: T060592093
Alias Type: GeoTracker Global ID
Alias Name: T0605926698
Alias Type: GeoTracker Global ID
Alias Name: T0605960022
Alias Type: GeoTracker Global ID
Alias Name: T0605969865
Alias Type: GeoTracker Global ID
Alias Name: T060653541
Alias Type: GeoTracker Global ID
Alias Name: CA8572890517
Alias Type: HWTS Identification Code
Alias Name: 400332
Alias Type: Project Code (Site Code)
Alias Name: 30490037
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SITE9
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 04/21/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/15/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/27/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 09/03/2008
Comments: DTSC agreed with the reports recommendation of Interim Site Evaluation Accomplished for the Phelan Small Arms Range and the range ineligibility for the active army military munitions response program. Furthermore, DTSC agrees with the Armys conclusions and recommendation statement that to the best of our knowledge, the Army has determined that no further evaluation will be taken unless information indicating that this decision was not appropriate becomes available.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

JOINT FORCES TRAINING BASE, LOS ALAMITOS - BLDG 34 (Continued) **S106387296**

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083003835T
Local Case Num:	Not reported
Case Type:	Aquifer affected
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	GETTYSBERG
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Corrosion
Leak Source:	Piping
Global ID:	T0605912556
How Stopped Date:	10/15/1987
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	10/1/1987
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	10/2/1989
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	4/17/1997
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	DOD
Latitude:	33.7940899
Longitude:	-118.0578713
MTBE Date:	12/16/1999
Max MTBE GW:	9.7
MTBE Concentration:	1
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	C
Staff:	JCB
Staff Initials:	SAS
Lead Agency:	Regional Board
Local Agency:	30000L
Hydr Basin #:	COASTAL PLAIN OF ORA
Beneficial:	MS_T
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	SITE COVERED BY DVPE SYSTEM INSTALLED FOR BLDG 35 RELEASE

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

JOINT FORCES TRAINING BASE, LOS ALAMITOS - BLDG 34 (Continued) **S106387296**

MCS:

Global Id:	T0605912556
Latitude:	33.79421
Longitude:	-118.0571
Case Type:	Military UST Site
Status:	Open - Remediation
Status Date:	06/15/2007
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Caseworker:	PAH
Local Agency:	Not reported
RB Case Number:	083003835T
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Aquifer used for drinking water supply
EDR Link ID:	T0605912556
Potential Contaminants of Concern:	Gasoline, Diesel
Site History:	Building 34 is located in the south-central area of the base. It is the fire station on Enterprise Avenue. Building 35 is located to the west. Building 34 and 35 are in Area of Concern (AOC) 6. Historically six underground storage tanks (USTs) were associated with Building 34. March to May 1994, USTs, two fuel dispensing islands, and 225 cubic yards of petroleum-impacted soil were removed from this release site. June 1990, Site Inspection (SI) reported floating petroleum fuel above groundwater at this site and total petroleum hydrocarbon (TPH) soil concentrations ranging from 86.4 to 26,000 milligrams per kilogram. Four GW monitoring wells were constructed from soil borings. March 1992, SI-Phase II reported groundwater (GW) contaminant concentrations of: 3,350 parts per billion (ppb) benzene (B); 4,430 ppb toluene; 570 ppb ethylbenzene; and 18,000 ppb total xylenes (X). July 1992, additional investigation report GW contaminant concentrations of: 340,000 ppb TPH; 6,300 ppb B; 18,000 ppb T; 36,000 ppb E, 21,400 ppb total X. The Remedial Investigation/Feasibility Study (RI/FS) was initiated in September of 1997. The RI utilized a phased approach to provide flexibility, increased efficiency, and effectiveness of data collection. The report also includes interim remedial actions, human health risk assessment, and recommendations for future actions. During the Phase I RI GW samples were collected from five boring locations at depths of 20-, 40-, and 60- feet below ground surface (bgs). Samples were analyzed for: TPH gasoline and diesel range (TPHg or d), volatile organic compounds (VOCs, analysis includes BTEX), pesticides, and polychlorinated biphenyl. The Draft Final RI/FS Report was issued in February of 2007. In 2002, ten soil sample were collected for human health risk assessment and analyzed for TPH, VOCs and methyl tert-butyl ether. July 1997, an interim remedial action dual phase vapor extraction system was constructed at Building 35. The system included GW/vapor extraction wells placed east of Building 35 to intercept and treat the Building 34 diffused GW plume. This extraction network was upgraded in 2002 all extraction wells were equipped with down-hole pumps. By 2009, twelve monitoring wells were located at Building 34. From September 2006 through March 30, 2007 at trailer mounted vapor and GW treatment system was operated at the site. Treated GW was stored on site and then transferred to the Building 35 treatment system for discharge. May 2007, applications of oxygen release compound (ORC) were performed utilizing direct push injection methods in 44 locations with a treatment zone of 10 to 30 feet bgs. A total of 5,650 pounds of ORC Advanced was applied to the

JOINT FORCES TRAINING BASE, LOS ALAMITOS - BLDG 34 (Continued) **S106387296**

saturated subsurface. Following the in situ GW treatment a long-term GW monitoring program was implemented.

Click here to access the California GeoTracker records for this facility:

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
GARDEN GROVE	S107539189		LEGACY STES/12550 LAMPSON AVE.		CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/26/2015 Source: EPA
Date Data Arrived at EDR: 04/08/2015 Telephone: N/A
Date Made Active in Reports: 06/22/2015 Last EDR Contact: 07/09/2015
Number of Days to Update: 75 Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing
A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015 Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015 Telephone: 703-603-8704
Date Made Active in Reports: 06/11/2015 Last EDR Contact: 07/10/2015
Number of Days to Update: 64 Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013 Source: EPA
Date Data Arrived at EDR: 11/11/2013 Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014 Last EDR Contact: 05/29/2015
Number of Days to Update: 94 Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013 Source: EPA
Date Data Arrived at EDR: 11/11/2013 Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014 Last EDR Contact: 05/29/2015
Number of Days to Update: 94 Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2015
Next Scheduled EDR Contact: 12/14/2015
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2015
Next Scheduled EDR Contact: 12/14/2015
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 63

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/03/2015
Date Data Arrived at EDR: 08/04/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/03/2015
Date Data Arrived at EDR: 08/04/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/17/2015
Date Data Arrived at EDR: 08/18/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 16

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/18/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 03/17/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 52

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 04/30/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 53

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 24

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/10/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 19

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 27

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 03/17/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 52

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/06/2015
Date Data Arrived at EDR: 05/19/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 34

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 04/30/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 53

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 10/01/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 36

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/03/2015
Date Data Arrived at EDR: 08/04/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/08/2015
Date Data Arrived at EDR: 06/09/2015
Date Made Active in Reports: 07/10/2015
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/22/2015
Date Data Arrived at EDR: 06/24/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/24/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 47

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/28/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 8

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/03/2015
Date Data Arrived at EDR: 08/04/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 30

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/18/2015
Number of Days to Update: 8

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/11/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

DEED: Deed Restriction Listing
Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/08/2015
Date Data Arrived at EDR: 06/09/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 35

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/09/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 07/28/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 6

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/28/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: State Water Quality Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 09/18/2014
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 07/08/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/09/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/25/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 110

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/12/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Annually

RMP: Risk Management Plans

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/31/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/12/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/07/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/07/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 07/22/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 40

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 07/22/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 40

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/22/2015
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/14/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 91

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2015
Next Scheduled EDR Contact: 12/14/2015
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2015
Date Data Arrived at EDR: 02/27/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 26

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 18

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 02/18/2015
Date Data Arrived at EDR: 02/20/2015
Date Made Active in Reports: 03/12/2015
Number of Days to Update: 20

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 03/25/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 34

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/25/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 05/13/2015
Number of Days to Update: 12

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 08/03/2015
Date Data Arrived at EDR: 08/06/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/24/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/17/2015
Date Data Arrived at EDR: 08/18/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 16

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/14/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/19/2014
Number of Days to Update: 35

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/28/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 8

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/28/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/13/2015
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/07/2015
Date Data Arrived at EDR: 06/09/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 35

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/09/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/18/2015
Date Data Arrived at EDR: 05/20/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/07/2015
Date Data Arrived at EDR: 06/10/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 34

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/15/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 27

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 11/19/2014
Date Data Arrived at EDR: 12/15/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 45

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/19/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/21/2015
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/05/2015
Number of Days to Update: 12

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 08/10/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/21/2015
Date Data Arrived at EDR: 07/22/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 12

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa Facility List

Date of Government Version: 06/05/2015
Date Data Arrived at EDR: 06/09/2015
Date Made Active in Reports: 07/10/2015
Number of Days to Update: 31

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 11/20/2014
Date Data Arrived at EDR: 11/24/2014
Date Made Active in Reports: 01/07/2015
Number of Days to Update: 44

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 07/15/2015
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 17

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/11/2014
Date Data Arrived at EDR: 06/13/2014
Date Made Active in Reports: 07/07/2014
Number of Days to Update: 24

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 08/10/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/03/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 05/20/2015
Date Data Arrived at EDR: 08/03/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 31

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 7

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 08/03/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/13/2015
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 20

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 07/06/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/04/2015
Date Data Arrived at EDR: 08/07/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 27

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/24/2015
Next Scheduled EDR Contact: 12/07/2015
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 08/11/2015
Date Data Arrived at EDR: 08/14/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 20

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INYO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/19/2015
Date Data Arrived at EDR: 06/18/2015
Date Made Active in Reports: 07/22/2015
Number of Days to Update: 34

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/26/2015
Date Data Arrived at EDR: 05/28/2015
Date Made Active in Reports: 06/15/2015
Number of Days to Update: 18

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 08/11/2015
Date Data Arrived at EDR: 08/14/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 20

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 33

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/10/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 07/21/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 13

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/21/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2015
Date Data Arrived at EDR: 07/27/2015
Date Made Active in Reports: 08/10/2015
Number of Days to Update: 14

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015
Date Data Arrived at EDR: 01/29/2015
Date Made Active in Reports: 03/10/2015
Number of Days to Update: 40

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/15/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/03/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 16

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/27/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/03/2015
Date Data Arrived at EDR: 06/04/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 32

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/15/2015
Number of Days to Update: 17

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 10/08/2014
Date Data Arrived at EDR: 10/22/2014
Date Made Active in Reports: 12/15/2014
Number of Days to Update: 54

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 07/06/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/22/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/05/2015
Number of Days to Update: 10

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 06/01/2015
Date Data Arrived at EDR: 06/03/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 33

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/30/2015
Date Data Arrived at EDR: 07/07/2015
Date Made Active in Reports: 07/16/2015
Number of Days to Update: 9

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 06/03/2015
Date Data Arrived at EDR: 06/04/2015
Date Made Active in Reports: 07/22/2015
Number of Days to Update: 48

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/10/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 24

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2015
Date Data Arrived at EDR: 05/12/2015
Date Made Active in Reports: 06/08/2015
Number of Days to Update: 27

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/06/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/11/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 23

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/11/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

PLACER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/01/2015 Source: Placer County Health and Human Services
Date Data Arrived at EDR: 07/07/2015 Telephone: 530-745-2363
Date Made Active in Reports: 08/05/2015 Last EDR Contact: 06/22/2015
Number of Days to Update: 29 Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/15/2015 Source: Department of Environmental Health
Date Data Arrived at EDR: 07/17/2015 Telephone: 951-358-5055
Date Made Active in Reports: 08/03/2015 Last EDR Contact: 06/22/2015
Number of Days to Update: 17 Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/15/2015 Source: Department of Environmental Health
Date Data Arrived at EDR: 07/17/2015 Telephone: 951-358-5055
Date Made Active in Reports: 08/03/2015 Last EDR Contact: 06/22/2015
Number of Days to Update: 17 Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/07/2015 Source: Sacramento County Environmental Management
Date Data Arrived at EDR: 07/24/2015 Telephone: 916-875-8406
Date Made Active in Reports: 08/03/2015 Last EDR Contact: 07/22/2015
Number of Days to Update: 10 Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/07/2015 Source: Sacramento County Environmental Management
Date Data Arrived at EDR: 07/27/2015 Telephone: 916-875-8406
Date Made Active in Reports: 08/03/2015 Last EDR Contact: 07/22/2015
Number of Days to Update: 7 Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/30/2015
Date Data Arrived at EDR: 07/07/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 7

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/10/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2014
Date Data Arrived at EDR: 11/21/2014
Date Made Active in Reports: 12/29/2014
Number of Days to Update: 38

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/03/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 10

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/22/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/10/2015
Number of Days to Update: 15

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 07/22/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 12

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/15/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/10/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 06/10/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/10/2015
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/10/2015
Date Data Arrived at EDR: 08/14/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 20

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/07/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 05/22/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/08/2015
Number of Days to Update: 13

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/22/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/12/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/10/2015
Number of Days to Update: 24

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SOLANO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015
Date Data Arrived at EDR: 06/24/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 20

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015
Date Data Arrived at EDR: 06/30/2015
Date Made Active in Reports: 07/07/2015
Number of Days to Update: 7

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 06/22/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 18

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2015
Date Data Arrived at EDR: 07/07/2015
Date Made Active in Reports: 07/14/2015
Number of Days to Update: 7

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/05/2015
Date Data Arrived at EDR: 06/09/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 27

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/05/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 07/13/2015
Date Data Arrived at EDR: 07/28/2015
Date Made Active in Reports: 08/03/2015
Number of Days to Update: 6

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/24/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 08/17/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 17

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 07/29/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 36

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/27/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/27/2015
Date Data Arrived at EDR: 06/17/2015
Date Made Active in Reports: 07/06/2015
Number of Days to Update: 19

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/17/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 07/08/2015
Date Data Arrived at EDR: 07/13/2015
Date Made Active in Reports: 07/22/2015
Number of Days to Update: 9

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 07/06/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Annually

YUBA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/04/2015
Date Data Arrived at EDR: 08/07/2015
Date Made Active in Reports: 09/03/2015
Number of Days to Update: 27

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/18/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/06/2015
Date Made Active in Reports: 08/24/2015
Number of Days to Update: 18

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/06/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/11/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Telephone: 281-546-1505
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: 800-823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SOUTHWEST REGIONAL LABORATORY
4665 LAMPSON AVENUE
LOS ALAMITOS, CA 90720

TARGET PROPERTY COORDINATES

Latitude (North):	33.782 - 33° 46' 55.20"
Longitude (West):	118.0495 - 118° 2' 58.20"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	402829.8
UTM Y (Meters):	3738286.2
Elevation:	24 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5633745 LOS ALAMITOS, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

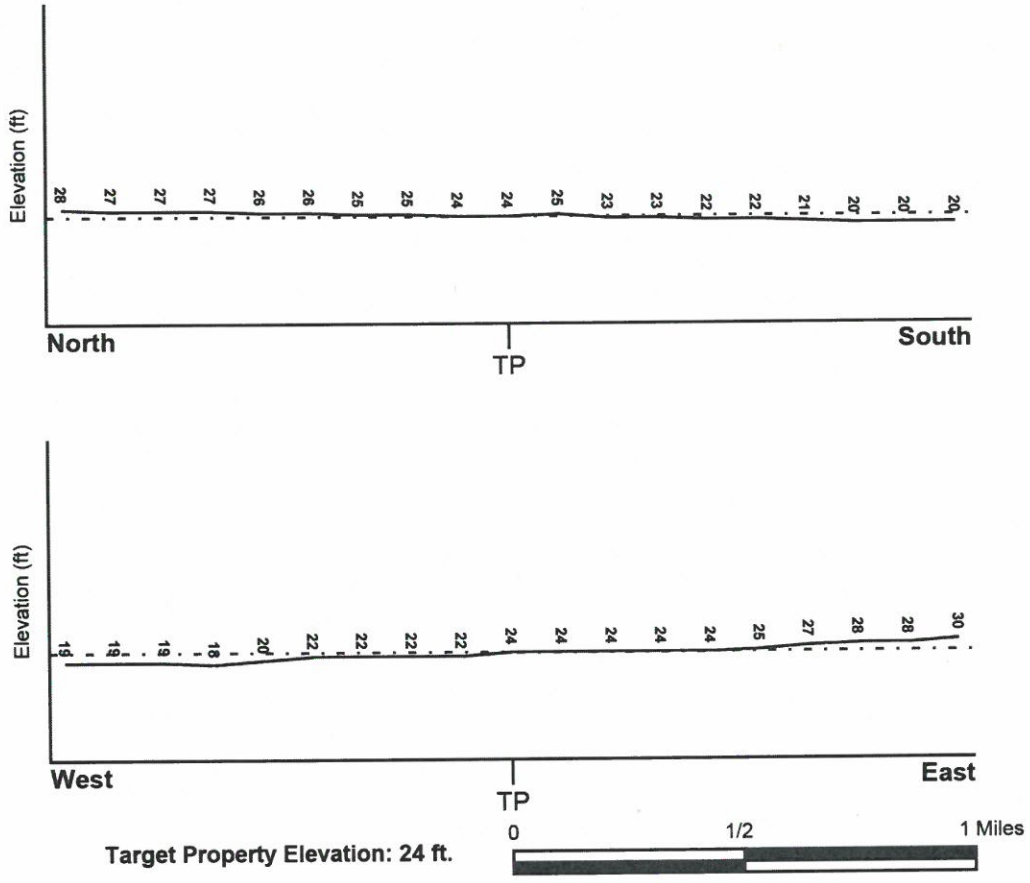
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
ORANGE, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06059C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LOS ALAMITOS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
11	1/2 - 1 Mile WSW	Varies

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

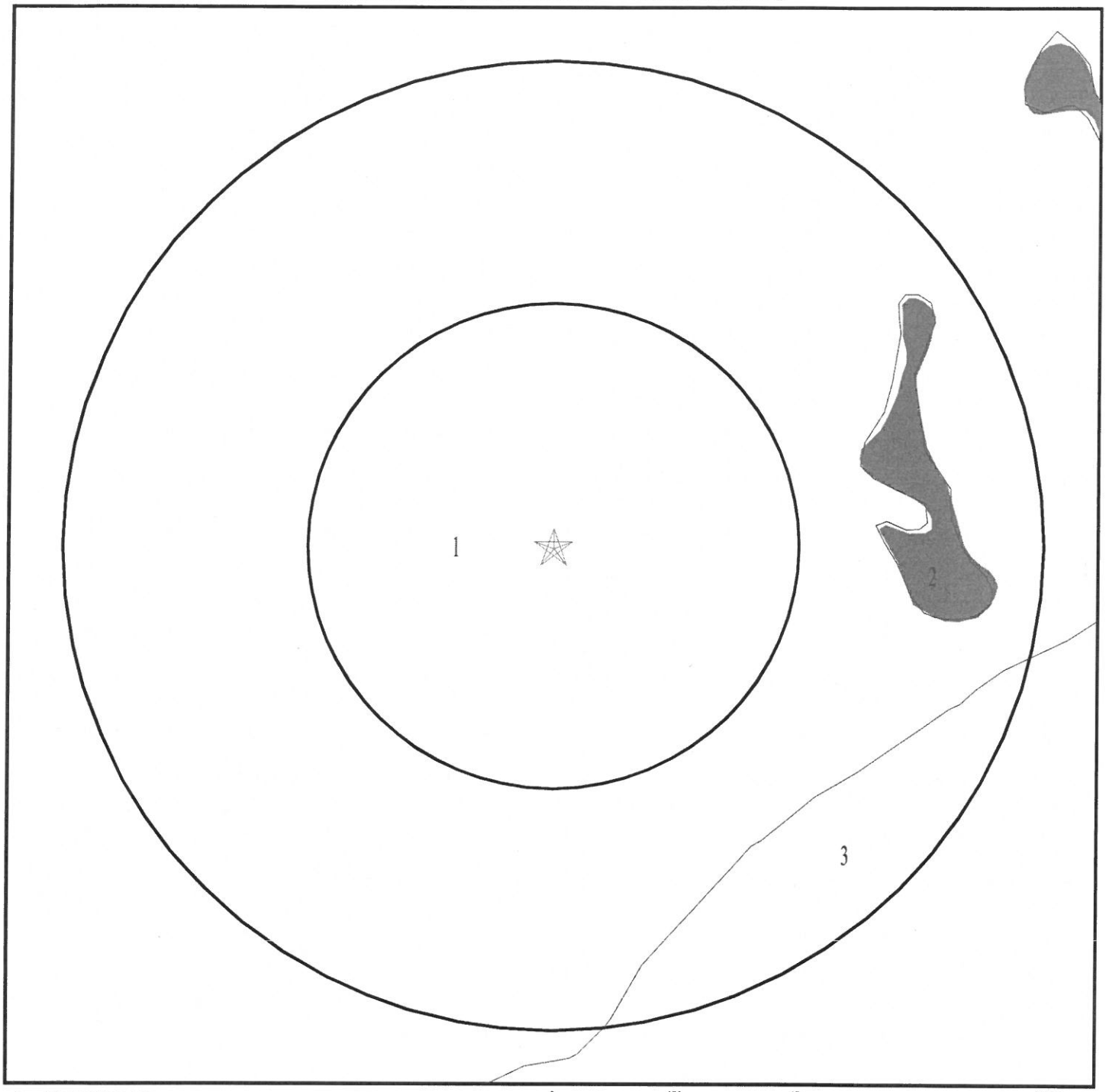
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4405855.2s



☆ Target Property
SSURGO Soil
Water

SITE NAME: Southwest Regional Laboratory	CLIENT: Tetra Tech EMI
ADDRESS: 4665 Lampson Avenue Los Alamitos CA 90720	CONTACT: Jimmy Kehs INQUIRY #: 4405855.2s
LAT/LONG: 33.782 / 118.0495	DATE: September 09, 2015 1:31 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: HUENEME

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	27 inches	fine sandy loam	Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 7.4
2	27 inches	59 inches	stratified sand to silt loam	Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: Water

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: BOLSA

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	68 inches	silty clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A6	USGS40000138072	1/2 - 1 Mile SE
B7	USGS40000138122	1/2 - 1 Mile East
B8	USGS40000138121	1/2 - 1 Mile East
13	USGS40000138073	1/2 - 1 Mile SW
C18	USGS40000138035	1/2 - 1 Mile SE
19	USGS40000138018	1/2 - 1 Mile SSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

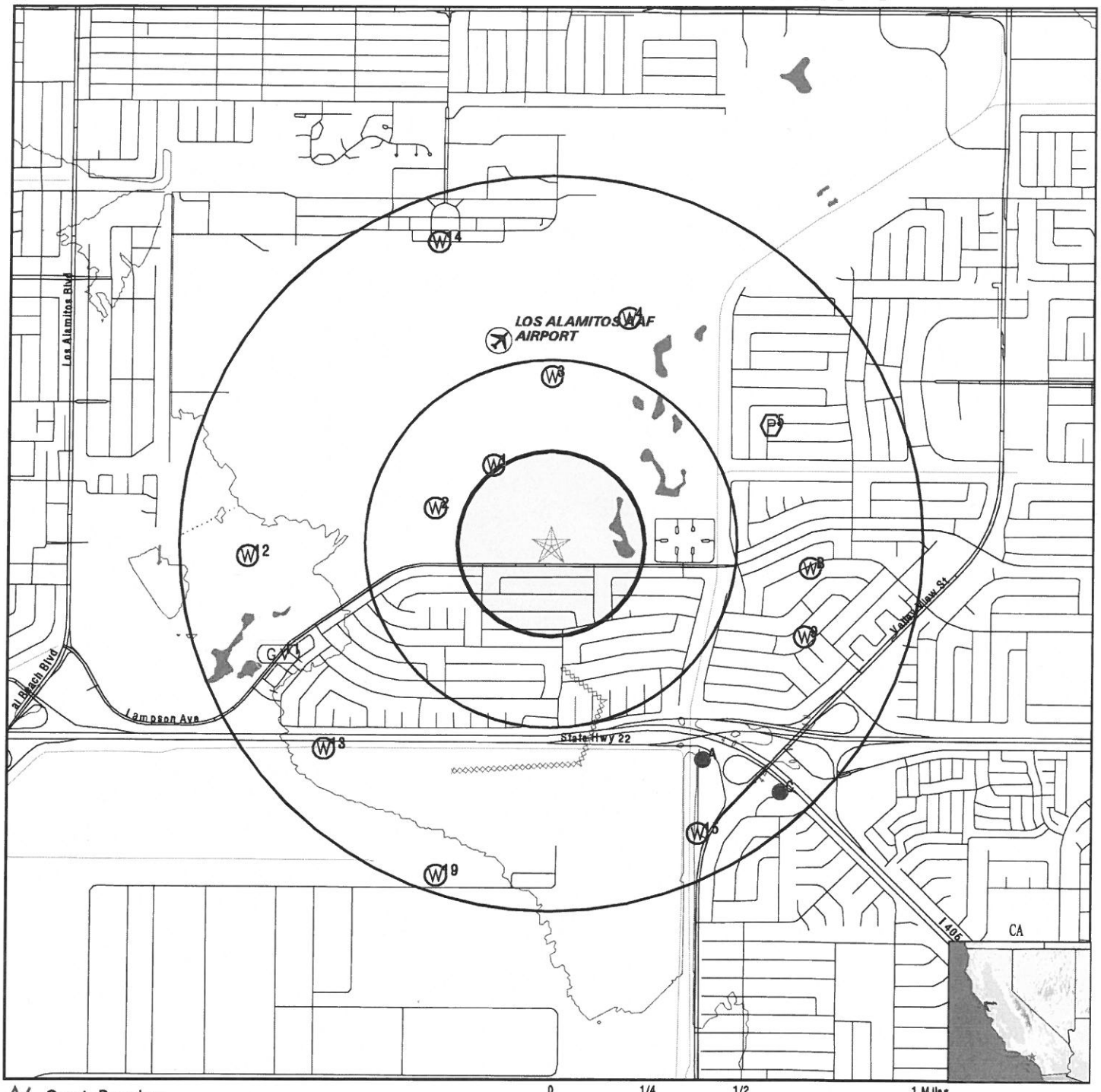
MAP ID	WELL ID	LOCATION FROM TP
5	CA3900721	1/2 - 1 Mile ENE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CADW60000021621	1/4 - 1/2 Mile NW
2	CADW60000015293	1/4 - 1/2 Mile WNW
3	CADW60000021617	1/4 - 1/2 Mile North
4	CADW60000000203	1/2 - 1 Mile NNE
9	5275	1/2 - 1 Mile ESE
A10	CADW60000021863	1/2 - 1 Mile SE
12	CADW60000021622	1/2 - 1 Mile West
14	CADW60000021616	1/2 - 1 Mile NNW
15	6317	1/2 - 1 Mile SSE
C16	6312	1/2 - 1 Mile SE
C17	CADW60000007519	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 4405855.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Southwest Regional Laboratory	CLIENT: Tetra Tech EMI
ADDRESS: 4665 Lampson Avenue Los Alamitos CA 90720	CONTACT: Jimmy Kehs
LAT/LONG: 33.782 / 118.0495	INQUIRY #: 4405855.2s DATE: September 09, 2015 1:31 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database	EDR ID Number

1
NW
1/4 - 1/2 Mile
Higher

CA WELLS **CADW60000021621**

Objectid:	21621
Latitude:	33.7851
Longitude:	-118.0522
Site code:	337851N1180522W001
State well numbe:	04S11W32G002S
Local well name:	"
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange
Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000021621

2
WNW
1/4 - 1/2 Mile
Lower

CA WELLS **CADW60000015293**

Objectid:	15293
Latitude:	33.7834
Longitude:	-118.0549
Site code:	337834N1180549W001
State well numbe:	04S11W32F000S
Local well name:	"
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange
Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000015293

3
North
1/4 - 1/2 Mile
Higher

CA WELLS **CADW60000021617**

Objectid:	21617
Latitude:	33.7886
Longitude:	-118.0495
Site code:	337886N1180495W001
State well numbe:	04S11W29R001S
Local well name:	"
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange

Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000021617

4
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000000203**

Objectid:	203
Latitude:	33.7909
Longitude:	-118.0459
Site code:	337909N1180459W001
State well numbe:	04S11W28N001S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange
Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000000203

5
ENE
1/2 - 1 Mile
Higher

FRDS PWS **CA3900721**

Epa region:	09	State:	CA
Pwsid:	CA3900721		
Pwsname:	WOODBRIDGE MOBILE ESTATES		
City served:	Not Reported	State served:	CA
Zip served:	Not Reported	Fips county:	06077
Status:	Active	Pop srvd:	110
Pwssvcconn:	37	Source:	Groundwater
Pws type:	CWS	Owner:	Private
Contact:	C/O CHILA PROPERTIES		
Contactor gname:	WOODBRIDGE MOBILE ESTATES		
Contact phone:	Not Reported	Contact address1:	5392AMY AVE
Contact address2:	Not Reported	Contact city:	GARDEN GROVE
Contact state:	CA	Contact zip:	92845
Activity code:	A		

Location Information:

Name:	WOODBRIDGE MOBILE ESTATES		
Pwstypcd:	CWS	Primsrccd:	GW
Popserved:	110		
Add1:	5392AMY AVE		
Add2:	Not Reported		
City:	GARDEN GROVE	State:	CA
Zip:	92845	Phone:	Not Reported
Cityserv:	Not Reported	Cntyserv:	San Joaquin
Stateserv:	CA	Zipserv:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcement Information:
Violation id: 95V0001 Orig cd: F
Enf fy: 2000 Enf act date: 04/04/2000
Enf act detail: St Compliance achieved Enf act cat: Resolving

Enforcement Information:
Violation id: 1100016 Orig cd: S
Enf fy: 2011 Enf act date: 07/01/2011
Enf act detail: St Compliance achieved Enf act cat: Resolving

Enforcement Information:
Violation id: 1100016 Orig cd: S
Enf fy: 2011 Enf act date: 07/01/2011
Enf act detail: St Violation/Reminder Notice Enf act cat: Informal

Enforcement Information:
Violation id: 1000014 Orig cd: S
Enf fy: 2010 Enf act date: 07/01/2010
Enf act detail: St Compliance achieved Enf act cat: Resolving

Enforcement Information:
Violation id: 0900015 Orig cd: S
Enf fy: 2010 Enf act date: 08/01/2010
Enf act detail: St Public Notif requested Enf act cat: Informal

Enforcement Information:
Violation id: 0900015 Orig cd: S
Enf fy: 2010 Enf act date: 08/01/2010
Enf act detail: St Public Notif requested Enf act cat: Informal

Enforcement Information:
Violation id: 0900013 Orig cd: S
Enf fy: 2009 Enf act date: 07/01/2009
Enf act detail: St Compliance achieved Enf act cat: Resolving

Enforcement Information:
Violation id: 0700012 Orig cd: S
Enf fy: 2007 Enf act date: 07/01/2007
Enf act detail: St Compliance achieved Enf act cat: Resolving

Enforcement Information:
Violation id: 0500011 Orig cd: S
Enf fy: 2005 Enf act date: 07/01/2005
Enf act detail: St Compliance achieved Enf act cat: Resolving

Enforcement Information:
Violation id: 0500010 Orig cd: S
Enf fy: 2005 Enf act date: 12/01/2004
Enf act detail: St Public Notif requested Enf act cat: Informal

Enforcement Information:
Violation id: 0200009 Orig cd: S
Enf fy: 2002 Enf act date: 07/01/2002
Enf act detail: St Compliance achieved Enf act cat: Resolving

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcement Information:

Violation id:	0200008	Orig cd:	S
Enf fy:	2002	Enf act date:	03/31/2002
Enf act detail:	St Compliance achieved	Enf act cat:	Resolving

Enforcement Information:

Violation id:	0200008	Orig cd:	S
Enf fy:	2002	Enf act date:	01/11/2002
Enf act detail:	St Violation/Reminder Notice	Enf act cat:	Informal

Enforcement Information:

Violation id:	0200007	Orig cd:	S
Enf fy:	2002	Enf act date:	01/11/2002
Enf act detail:	St Violation/Reminder Notice	Enf act cat:	Informal

Enforcement Information:

Violation id:	0100006	Orig cd:	S
Enf fy:	2001	Enf act date:	07/01/2001
Enf act detail:	St Compliance achieved	Enf act cat:	Resolving

Enforcement Information:

Violation id:	0100005	Orig cd:	S
Enf fy:	2001	Enf act date:	05/01/2001
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Enforcement Information:

Violation id:	0000004	Orig cd:	S
Enf fy:	2000	Enf act date:	09/01/2000
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Enforcement Information:

Violation id:	0000003	Orig cd:	S
Enf fy:	2000	Enf act date:	08/01/2000
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Enforcement Information:

Violation id:	0000002	Orig cd:	S
Enf fy:	2000	Enf act date:	02/10/2000
Enf act detail:	St Public Notif received	Enf act cat:	Informal

Enforcement Information:

Violation id:	0000002	Orig cd:	S
Enf fy:	2000	Enf act date:	03/01/2000
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

Enforcement Information:

Violation id:	0000001	Orig cd:	S
Enf fy:	2000	Enf act date:	02/10/2000
Enf act detail:	St Public Notif received	Enf act cat:	Informal

Violations Information:

Violoation id:	95V0001	Orig cd:	F
State:	CA	Viol fy:	1993
Contamcd:	5000		
Contamnm:	Lead and Copper Rule		
Viol code:	51		
Viol name:	Initial Tap Sampling for Pb and Cu		
Rule code:	350		
Rule name:	LCR		
Violmeasur:	0	Unitmeasur:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

State mcl:	0	Cmpbdt:	07/01/1993
Cmpedt:	04/04/2000		

Violations Information:

Violoation id:	1100016	Orig cd:	S
State:	CA	Viol fy:	2011
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2011
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	1000014	Orig cd:	S
State:	CA	Viol fy:	2009
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2009
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0900015	Orig cd:	S
State:	CA	Viol fy:	2010
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	22		
Viol name:	MCL, Monthly (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	08/01/2010
Cmpedt:	08/31/2010		

Violations Information:

Violoation id:	0900013	Orig cd:	S
State:	CA	Viol fy:	2008
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2008
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0700012	Orig cd:	S
State:	CA	Viol fy:	2006
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2006
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0500011	Orig cd:	S
State:	CA	Viol fy:	2005
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2005
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0500010	Orig cd:	S
State:	CA	Viol fy:	2004
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	22		
Viol name:	MCL, Monthly (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	12/01/2004
Cmpedt:	12/31/2004		

Violations Information:

Violoation id:	0200009	Orig cd:	S
State:	CA	Viol fy:	2002
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2002
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0200008	Orig cd:	S
State:	CA	Viol fy:	2000
Contamcd:	5000		
Contamnm:	Lead and Copper Rule		
Viol code:	51		
Viol name:	Initial Tap Sampling for Pb and Cu		
Rule code:	350		
Rule name:	LCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported

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State mcl:	Not Reported	Cmpbdt:	04/01/2000
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0200007	Orig cd:	S
State:	CA	Viol fy:	2000
Contamcd:	5000		
Contamnm:	Lead and Copper Rule		
Viol code:	51		
Viol name:	Initial Tap Sampling for Pb and Cu		
Rule code:	350		
Rule name:	LCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	04/01/2000
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0200006	Orig cd:	S
State:	CA	Viol fy:	2001
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2001
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0100006	Orig cd:	S
State:	CA	Viol fy:	2001
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2001
Cmpedt:	Not Reported		

Violations Information:

Violoation id:	0100005	Orig cd:	S
State:	CA	Viol fy:	2001
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	22		
Viol name:	MCL, Monthly (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	05/01/2001
Cmpedt:	05/31/2001		

Violations Information:

Violoation id:	0000004	Orig cd:	S
State:	CA	Viol fy:	2000
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	23		
Viol name:	Monitoring, Routine Major (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	09/01/2000
Cmpedt:	09/30/2000		

Violations Information:

Violoation id:	0000003	Orig cd:	S
State:	CA	Viol fy:	2000
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	22		
Viol name:	MCL, Monthly (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	08/01/2000
Cmpedt:	08/31/2000		

Violations Information:

Violoation id:	0000002	Orig cd:	S
State:	CA	Viol fy:	2000
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	22		
Viol name:	MCL, Monthly (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	03/01/2000
Cmpedt:	03/31/2000		

Violations Information:

Violoation id:	0000001	Orig cd:	S
State:	CA	Viol fy:	2000
Contamcd:	3100		
Contamnm:	Coliform (TCR)		
Viol code:	21		
Viol name:	MCL, Acute (TCR)		
Rule code:	110		
Rule name:	TCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	02/01/2000
Cmpedt:	02/29/2000		

PWS ID: CA3900721
Date Initiated: Not Reported Date Deactivated: Not Reported
PWS Name: WOODBRIDGE MOBILE ESTATES
GARDEN GROVE, CA 92645

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Addressee / Facility: System Owner/Responsible Party
CHILA PROPERTIES CORP
5392 AMY AVENUE
GARDEN GROVE, CA 92645

Facility Latitude: 33 47 12
Facility Longitude: 118 02 18
City Served: Not Reported
Treatment Class: Untreated
Population: 110

PWS currently has or had major violation(s) or enforcement: YES

VIOLATIONS INFORMATION:

Violation ID:	9300001	Source ID:	Not Reported	PWS Phone:	Not Reported
Vio. beginning Date:	07/15/93	Vio. end Date:	07/31/93	Vio. Period:	001 Months
Num required Samples:	Not Reported	Number of Samples Taken:		Not Reported	
Analysis Result:	Not Reported	Maximum Contaminant Level:		Not Reported	
Analysis Method:	Not Reported				
Violation Type:	MCL, Monthly (TCR)				
Contaminant:	COLIFORM (TCR)				
Vio. Awareness Date:	083093				

ENFORCEMENT INFORMATION:

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0000001	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Acute (TCR)		
Complperbe:	2/1/2000 0:00:00		
Complperen:	2/29/2000 0:00:00	Enfdate:	2/10/2000 0:00:00
Enf action:	State Public Notif Received		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0000002	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	3/1/2000 0:00:00		
Complperen:	3/31/2000 0:00:00	Enfdate:	2/10/2000 0:00:00
Enf action:	State Public Notif Received		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0000002	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	3/1/2000 0:00:00		
Complperen:	3/31/2000 0:00:00	Enfdate:	3/1/2000 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0000003	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	8/1/2000 0:00:00		
Complperen:	8/31/2000 0:00:00	Enfdate:	8/1/2000 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0000004	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Routine Major (TCR)		
Complperbe:	9/1/2000 0:00:00		
Complperen:	9/30/2000 0:00:00	Enfdate:	9/1/2000 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0100005	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	5/1/2001 0:00:00		
Complperen:	5/31/2001 0:00:00	Enfdate:	5/1/2001 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0100006	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2001 0:00:00		
Complperen:	7/1/2001 0:00:00	Enfdate:	7/1/2001 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0200008	Contaminant:	LEAD & COPPER RULE
Viol. Type:	Initial Tap Sampling for Pb and Cu		
Complperbe:	4/1/2000 0:00:00		
Complperen:	3/31/2002 0:00:00	Enfdate:	1/11/2002 0:00:00
Enf action:	State Violation/Reminder Notice		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0200008	Contaminant:	LEAD & COPPER RULE
Viol. Type:	Initial Tap Sampling for Pb and Cu		
Complperbe:	4/1/2000 0:00:00		
Complperen:	3/31/2002 0:00:00	Enfdate:	3/31/2002 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0200009	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2002 0:00:00		
Complperen:	7/1/2002 0:00:00	Enfdate:	7/1/2002 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0500010	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	12/1/2004 0:00:00		
Complperen:	12/31/2004 0:00:00	Enfdate:	12/1/2004 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	0500011	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2005 0:00:00		
Complperen:	7/1/2005 0:00:00	Enfdate:	7/1/2005 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA3900721
Pwsname:	WOODBRIDGE MOBILE ESTATES		
Retpopsrvd:	110	Pwstypecod:	C
Vioid:	95V0001	Contaminant:	LEAD & COPPER RULE
Viol. Type:	Initial Tap Sampling for Pb and Cu		
Complperbe:	7/1/1993 0:00:00		
Complperen:	4/4/2000 0:00:00	Enfdate:	4/4/2000 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	0		

System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Acute (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	2/1/2000 0:00:00 - 2/28/2000 0:00:00		
Violation ID:	0000001		
Enforcement Date:	2/10/2000 0:00:00	Enf. Action:	State Violation/Reminder Notice

System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Acute (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	02/01/00 - 02/28/00		
Violation ID:	0000001		
Enforcement Date:	02/10/00	Enf. Action:	State Violation/Reminder Notice

System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	3/1/2000 0:00:00 - 3/31/2000 0:00:00		
Violation ID:	0000002		
Enforcement Date:	3/1/2000 0:00:00	Enf. Action:	State Public Notif Received

ENFORCEMENT INFORMATION:

System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	3/1/2000 0:00:00 - 3/31/2000 0:00:00		
Violation ID:	0000002		
Enforcement Date:	2/10/2000 0:00:00	Enf. Action:	State Violation/Reminder Notice
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	03/01/00 - 03/31/00		
Violation ID:	0000002		
Enforcement Date:	02/10/00	Enf. Action:	State Violation/Reminder Notice
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	03/01/00 - 03/31/00		
Violation ID:	0000002		
Enforcement Date:	03/01/00	Enf. Action:	State Public Notif Received
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	08/01/00 - 08/31/00		
Violation ID:	0000003		
Enforcement Date:	08/01/00	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	8/1/2000 0:00:00 - 8/31/2000 0:00:00		
Violation ID:	0000003		
Enforcement Date:	8/1/2000 0:00:00	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	09/01/00 - 09/30/00		
Violation ID:	0000004		
Enforcement Date:	09/01/00	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	9/1/2000 0:00:00 - 9/30/2000 0:00:00		
Violation ID:	0000004		
Enforcement Date:	9/1/2000 0:00:00	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	5/1/2001 0:00:00 - 5/31/2001 0:00:00		
Violation ID:	0100005		
Enforcement Date:	5/1/2001 0:00:00	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	05/01/01 - 05/31/01		
Violation ID:	0100005		
Enforcement Date:	05/01/01	Enf. Action:	State Public Notif Requested

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ENFORCEMENT INFORMATION:

System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2001 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	0100006		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2001 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	0100006		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	4/1/2000 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	0200007		
Enforcement Date:	1/11/2002 0:00:00	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	04/01/00 - 12/31/25		
Violation ID:	0200007		
Enforcement Date:	01/11/02	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2002 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	0200009		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2002 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	0200009		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	12/01/04 - 12/31/04		
Violation ID:	0500010		
Enforcement Date:	12/01/04	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	12/1/2004 0:00:00 - 12/31/2004 0:00:00		
Violation ID:	0500010		
Enforcement Date:	12/1/2004 0:00:00	Enf. Action:	State Public Notif Requested
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	07/01/05 - 07/01/05		
Violation ID:	0500011		
Enforcement Date:	07/01/05	Enf. Action:	State Compliance Achieved

ENFORCEMENT INFORMATION:

System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2005 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	0500011		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2000-04-04		
Violation ID:	95V0001		
Enforcement Date:	2000-04-04	Enf. Action:	State Compliance Achieved
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2000-04-04		
Violation ID:	95V0001		
Enforcement Date:	2000-04-04	Enf. Action:	State Compliance Achieved
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	07/01/93 - 04/04/00		
Violation ID:	95V0001		
Enforcement Date:	04/04/00	Enf. Action:	State Compliance Achieved
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31		
Violation ID:	95V0001		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	7/1/1993 0:00:00 - 4/4/2000 0:00:00		
Violation ID:	95V0001		
Enforcement Date:	4/4/2000 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2015-12-31		
Violation ID:	99V0001		
Enforcement Date:	2000-04-04	Enf. Action:	State Compliance Achieved
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2015-12-31		
Violation ID:	99V0001		
Enforcement Date:	2000-04-04	Enf. Action:	State Compliance Achieved
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	10/19/1999 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	99V0001		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ENFORCEMENT INFORMATION:

System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	10/19/1999 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	99V0001		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2015-12-31		
Violation ID:	99V0001		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	WOODBRIDGE MOBILE ESTATES		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2015-12-31		
Violation ID:	99V0001		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

CONTACT INFORMATION:

Name:	WOODBRIDGE MOBILE ESTATES	Population:	110
Contact:	C/O CHILA PROPERTIES	Phone:	Not Reported
Address:	5392AMY AVE		
Address 2:	GARDEN GROVE		
	CA, 92		

A6
SE
1/2 - 1 Mile
Higher

FED USGS **USGS40000138072**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334626118023101		
Monloc name:	005S011W05A001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070201	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7739053
Longitude:	-118.04284	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	21.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	140
Welldepth units:	ft	Wellholedepth:	140
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1928-09-01	8.00	

B7
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000138122**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334652118021501		
Monloc name:	004S011W33F001S		
Monloc type:	Well		
Monloc desc:	NAWQA DATA ENTRY COM.+ VER.9-25-2000 SNHAMLIN		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7810028
Longitude:	-118.0374583	Sourcemap scale:	24000
Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	24
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Quaternary Alluvium		
Aquifer type:	Unconfined single aquifer		
Construction date:	19991117	Welldepth:	23.5
Welldepth units:	ft	Wellholedepth:	23.5
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2000-08-01	6.46	

B8
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000138121**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334652118021401		
Monloc name:	004S011W33L001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7811111
Longitude:	-118.0372222	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	25
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19640609	Welldepth:	864
Welldepth units:	ft	Wellholedepth:	1000
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

9
ESE
1/2 - 1 Mile
Higher

CA WELLS **5275**

Water System Information:

Prime Station Code:	04S/11W-33L01 S	User ID:	TEE
FRDS Number:	3010062006	County:	Orange
District Number:	08	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Treated
Source Lat/Long:	334642.3 1180212.4	Precision:	100 Feet (one Second)
Source Name:	WELL 016 - TREATED		
System Number:	3010062		
System Name:	City of Garden Grove		
Organization That Operates System:	13802 NEWHOPE GARDEN GROVE, CA 92642		
Pop Served:	151807	Connections:	33251
Area Served:	GARDEN GROVE		
Sample Collected:	06-APR-11	Findings:	518. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06-APR-11	Findings:	8.
Chemical:	PH, LABORATORY		
Sample Collected:	06-APR-11	Findings:	175. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	06-APR-11	Findings:	175. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06-APR-11	Findings:	200. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	06-APR-11	Findings:	61.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	06-APR-11	Findings:	11.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06-APR-11	Findings:	36.1 MG/L
Chemical:	SODIUM		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06-APR-11	Findings:	2.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06-APR-11	Findings:	26.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06-APR-11	Findings:	0.47 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06-APR-11	Findings:	3.9 UG/L
Chemical:	ARSENIC		
Sample Collected:	06-APR-11	Findings:	20.2 UG/L
Chemical:	MANGANESE		
Sample Collected:	06-APR-11	Findings:	306. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06-APR-11	Findings:	0.7 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	06-APR-11	Findings:	3.61 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	06-APR-11	Findings:	1.23 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06-APR-11	Findings:	4.59 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	06-APR-11	Findings:	0.76 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	03-APR-13	Findings:	440. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	02-APR-14	Findings:	. 518. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02-APR-14	Findings:	. 7.9
Chemical:	PH, LABORATORY		
Sample Collected:	02-APR-14	Findings:	. 178. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02-APR-14	Findings:	. 217. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02-APR-14	Findings:	. 203. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	02-APR-14	Findings:	. 62.5 MG/L
Chemical:	CALCIUM		
Sample Collected:	02-APR-14	Findings:	. 11.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02-APR-14	Findings:	. 35.5 MG/L
Chemical:	SODIUM		
Sample Collected:	02-APR-14	Findings:	. 2.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02-APR-14	Findings:	. 27.6 MG/L
Chemical:	CHLORIDE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	02-APR-14	Findings:	. 0.47 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02-APR-14	Findings:	. 3.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	02-APR-14	Findings:	. 116. UG/L
Chemical:	IRON		
Sample Collected:	02-APR-14	Findings:	. 23. UG/L
Chemical:	MANGANESE		
Sample Collected:	02-APR-14	Findings:	. 51.9 UG/L
Chemical:	ALUMINUM		
Sample Collected:	02-APR-14	Findings:	. 330. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02-APR-14	Findings:	. 2.03 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-APR-14	Findings:	. 0.6 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	02-APR-14	Findings:	. 460. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	02-APR-14	Findings:	. 6.5 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	02-APR-14	Findings:	. 2.01 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02-APR-14	Findings:	. 0.61 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	02-APR-14	Findings:	. 4.17 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	02-APR-14	Findings:	. 1.14 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	02-APR-14	Findings:	. 1.11 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	02-APR-14	Findings:	. 0.3 PCI/L
Chemical:	URANIUM MDA95		
Sample Collected:	02-APR-14	Findings:	. 0.378 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	02-APR-14	Findings:	. 0.215 PCI/L
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.		
Sample Collected:	02-APR-14	Findings:	. 0.418 PCI/L
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Sample Collected:	01-APR-15	Findings:	. 2.14 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-APR-15	Findings:	. 480. UG/L
Chemical:	NITRATE + NITRITE (AS N)		

A10
SE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000021863**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Objectid:	21863
Latitude:	33.7731
Longitude:	-118.0419
Site code:	337731N1180419W001
State well numbe:	05S11W04D002S
Local well name:	"
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange
Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000021863

11
WSW
1/2 - 1 Mile
Lower

AQUIFLOW **52036**

Site ID:	083001080T
Groundwater Flow:	Varies
Shallow Water Depth:	4
Deep Water Depth:	11
Average Water Depth:	Not Reported
Date:	04/16/1995

12
West
1/2 - 1 Mile
Lower

CA WELLS **CADW60000021622**

Objectid:	21622
Latitude:	33.7815
Longitude:	-118.0637
Site code:	337815N1180637W001
State well numbe:	04S11W32G003S
Local well name:	"
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange
Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000021622

13
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40000138073**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334626118033301		
Monloc name:	005S011W06A001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070106	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7739054
Longitude:	-118.060063	Sourcemap scale:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	975
Welldepth units:	ft	Wellholedepth:	1030
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1928-09-01	0.00	

14
NNW
1/2 - 1 Mile
Higher

CA WELLS **CADW60000021616**

Objectid:	21616
Latitude:	33.7939
Longitude:	-118.0548
Site code:	337939N1180548W001
State well numbe:	04S11W29L003S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange
Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000021616

15
SSE
1/2 - 1 Mile
Lower

CA WELLS **6317**

Water System Information:

Prime Station Code:	05S/11W-05H01 S	User ID:	TEE
FRDS Number:	3010041002	County:	Orange
District Number:	08	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	334614.5 1180230.8	Precision:	100 Feet (one Second)
Source Name:	BOLSA CHICA WELL		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 3010041
System Name: City of Seal Beach
Organization That Operates System:
211 Eighth Street
Seal Beach, CA 90740
Pop Served: 25098 Connections: 5038
Area Served: SEAL BEACH

Sample Collected:	24-JAN-12	Findings:	395. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	24-JAN-12	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	24-JAN-12	Findings:	148. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	24-JAN-12	Findings:	181. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	24-JAN-12	Findings:	107. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	24-JAN-12	Findings:	33.3 MG/L
Chemical:	CALCIUM		
Sample Collected:	24-JAN-12	Findings:	5.7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	24-JAN-12	Findings:	48.5 MG/L
Chemical:	SODIUM		
Sample Collected:	24-JAN-12	Findings:	1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	24-JAN-12	Findings:	12.9 MG/L
Chemical:	CHLORIDE		
Sample Collected:	24-JAN-12	Findings:	0.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	24-JAN-12	Findings:	233. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-DEC-13	Findings:	391. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	30-JAN-14	Findings:	. 391. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	30-JAN-14	Findings:	1.33 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	30-JAN-14	Findings:	. 0.497 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	30-JAN-14	Findings:	2.39 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	30-JAN-14	Findings:	0.883 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	30-JAN-14	Findings:	1.11 PCI/L
Chemical:	GROSS ALPHA MDA95		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	30-JAN-14	Findings:	0.3 PCI/L
Chemical:	URANIUM MDA95		
Sample Collected:	30-JAN-14	Findings:	. 0.2 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	30-JAN-14	Findings:	. 0.137 PCI/L
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.		
Sample Collected:	30-JAN-14	Findings:	. 0.363 PCI/L
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Sample Collected:	02-FEB-15	Findings:	. 388. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02-FEB-15	Findings:	. 8.
Chemical:	PH, LABORATORY		
Sample Collected:	02-FEB-15	Findings:	. 151. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02-FEB-15	Findings:	. 184. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02-FEB-15	Findings:	. 104. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	02-FEB-15	Findings:	. 31.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	02-FEB-15	Findings:	. 6. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02-FEB-15	Findings:	. 44.1 MG/L
Chemical:	SODIUM		
Sample Collected:	02-FEB-15	Findings:	. 1.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02-FEB-15	Findings:	. 12.1 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02-FEB-15	Findings:	. 0.42 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02-FEB-15	Findings:	. 228. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

C16
SE
1/2 - 1 Mile
Higher

CA WELLS **6312**

Water System Information:

Prime Station Code:	05S/11W-02Q06 S	User ID:	TEE
FRDS Number:	3010064015	County:	Orange
District Number:	08	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Inactive Untreated
Source Lat/Long:	334620.7 1180217.7	Precision:	100 Feet (one Second)
Source Name:	WELL OC-02 - INACTIVE		
System Number:	3010064		
System Name:	City of Westminster		
Organization That Operates System:	8200 Westminster Boulevard Westminster, CA 92683		
Pop Served:	82536	Connections:	19572
Area Served:	WESTMINISTER		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
C17 **SE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADW60000007519**

Objectid:	7519
Latitude:	33.7722
Longitude:	-118.039
Site code:	337722N1180390W001
State well numbe:	05S11W04D001S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	30
County name:	Orange
Basin code:	'8-1'
Basin desc:	Coastal Plain Of Orange County
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000007519

	Database	EDR ID Number
C18 **SE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000138035**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334620118021401		
Monloc name:	005S011W04D001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070201	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7722386
Longitude:	-118.0381176	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19500101	Welldepth:	510
Welldepth units:	ft	Wellholedepth:	528
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

	Database	EDR ID Number
19 **SSW** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000138018**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334608118031401		
Monloc name:	005S011W05F001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070201	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7689055
Longitude:	-118.0547849	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	16.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	120
Welldepth units:	ft	Wellholedepth:	120
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
90720	34	0

Federal EPA Radon Zone for ORANGE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ORANGE COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.763 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C:
AERIAL PHOTOGRAPHS

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

The EDR Aerial Photo Decade Package

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Inquiry Number: 4405855.12
September 11, 2015

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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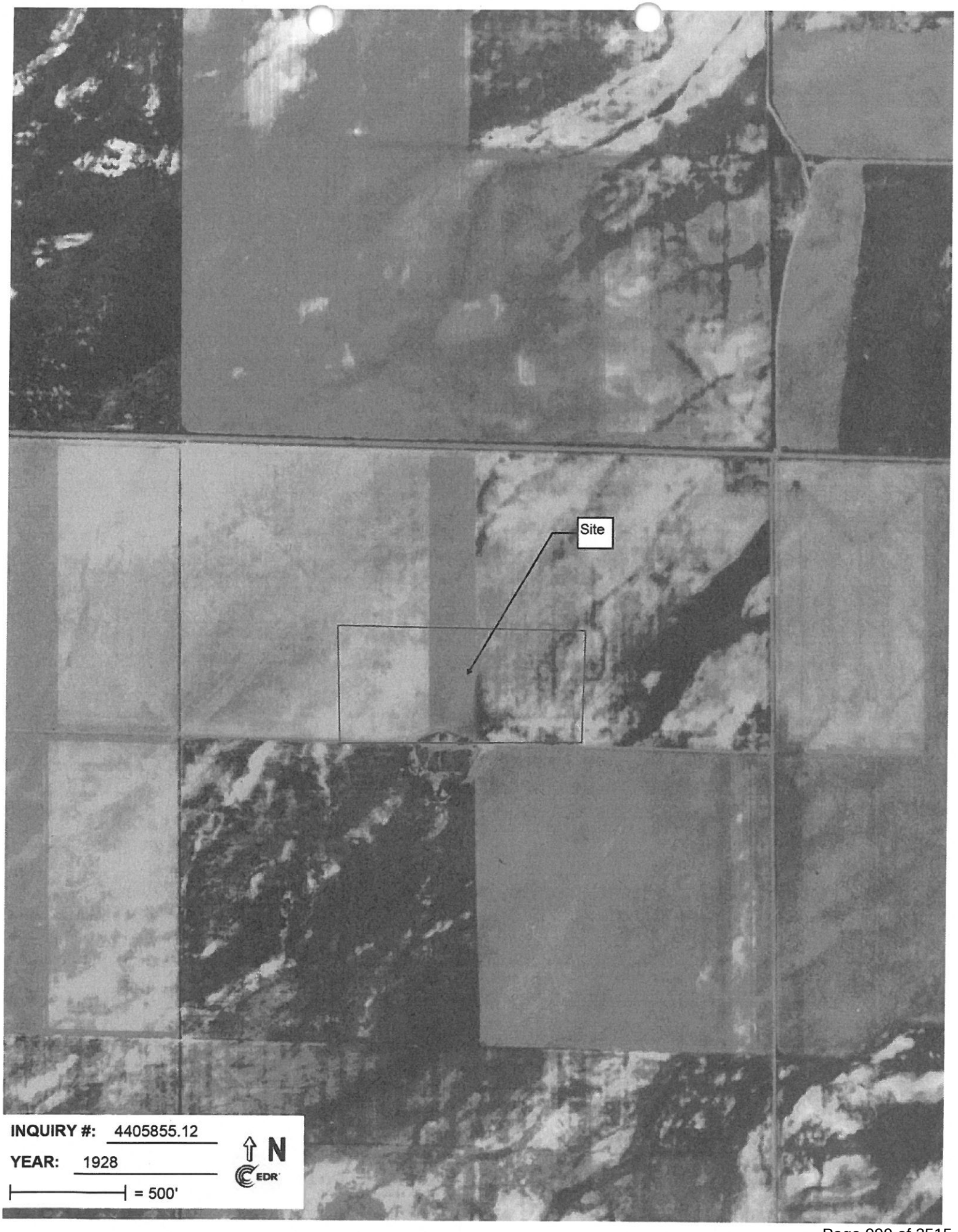
Date EDR Searched Historical Sources:

Aerial Photography September 11, 2015

Target Property:

4665 Lampson Avenue
Los Alamitos, CA 90720

Year	Scale	Details	Source
1928	Aerial Photograph. Scale: 1"=500'	Flight Year: 1928	USGS
1938	Aerial Photograph. Scale: 1"=500'	Flight Year: 1938	USGS
1947	Aerial Photograph. Scale: 1"=500'	Flight Year: 1947	Fairchild
1952	Aerial Photograph. Scale: 1"=500'	Flight Year: 1952	USGS
1963	Aerial Photograph. Scale: 1"=500'	Flight Year: 1963	USGS
1972	Aerial Photograph. Scale: 1"=500'	Flight Year: 1972	USGS
1977	Aerial Photograph. Scale: 1"=500'	Flight Year: 1977	EDR Proprietary Brewster Pacific
1989	Aerial Photograph. Scale: 1"=500'	Flight Year: 1989	USGS
1990	Aerial Photograph. Scale: 1"=500'	Flight Year: 1990	USGS
1994	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1994	USGS/DOQQ
2002	Aerial Photograph. Scale: 1"=500'	Flight Year: 2002	USGS
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	USDA/NAIP
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	USDA/NAIP
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	USDA/NAIP
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	USDA/NAIP


Site
INQUIRY #: 4405855.12
YEAR: 1928
= 500'
N
EDR

Site
INQUIRY #: 4405855.12
YEAR: 1938
= 500'
N
EDR



INQUIRY #: 4405855.12

YEAR: 1947

= 500'

N

EDR

INQUIRY #: 4058855.12
YEAR: 1952
N
EDR
= 500'
Site



INQUIRY #: 4405855.12

YEAR: 1963

= 500'

N

EDR

INQUIRY #: 4405855.12
YEAR: 1972
= 500'
N
EDR
Site


Site
INQUIRY #: 4405855.12
YEAR: 1977
= 500'
N
EDR

[redacted]

INQUIRY #: 4405855.12

YEAR: 1989

N EDR

= 500'


Site
INQUIRY #: 4405855.12
YEAR: 1990
= 500'
N
EDR

INQUIRY #: 4058855.12
YEAR: 1994
= 500'
N
EDR
Site
LOS ALAMITOS



INQUIRY #: 4405855.12

YEAR: 2002

= 500'

N

EDR

INQUIRY #: 4405855.12
YEAR: 2005
= 500'
N
EDR
Site
LOS ALAMITOS


Site
INQUIRY #: 4405855.12
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 4405855.12
YEAR: 2010
= 500'
N
EDR
Site


Site
INQUIRY #: 4405855.12
YEAR: 2012
= 500'
N
EDR

APPENDIX D:
HISTORICAL TOPOGRAPHIC MAPS

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Inquiry Number: 4405855.4
September 09, 2015

EDR Historical Topographic Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

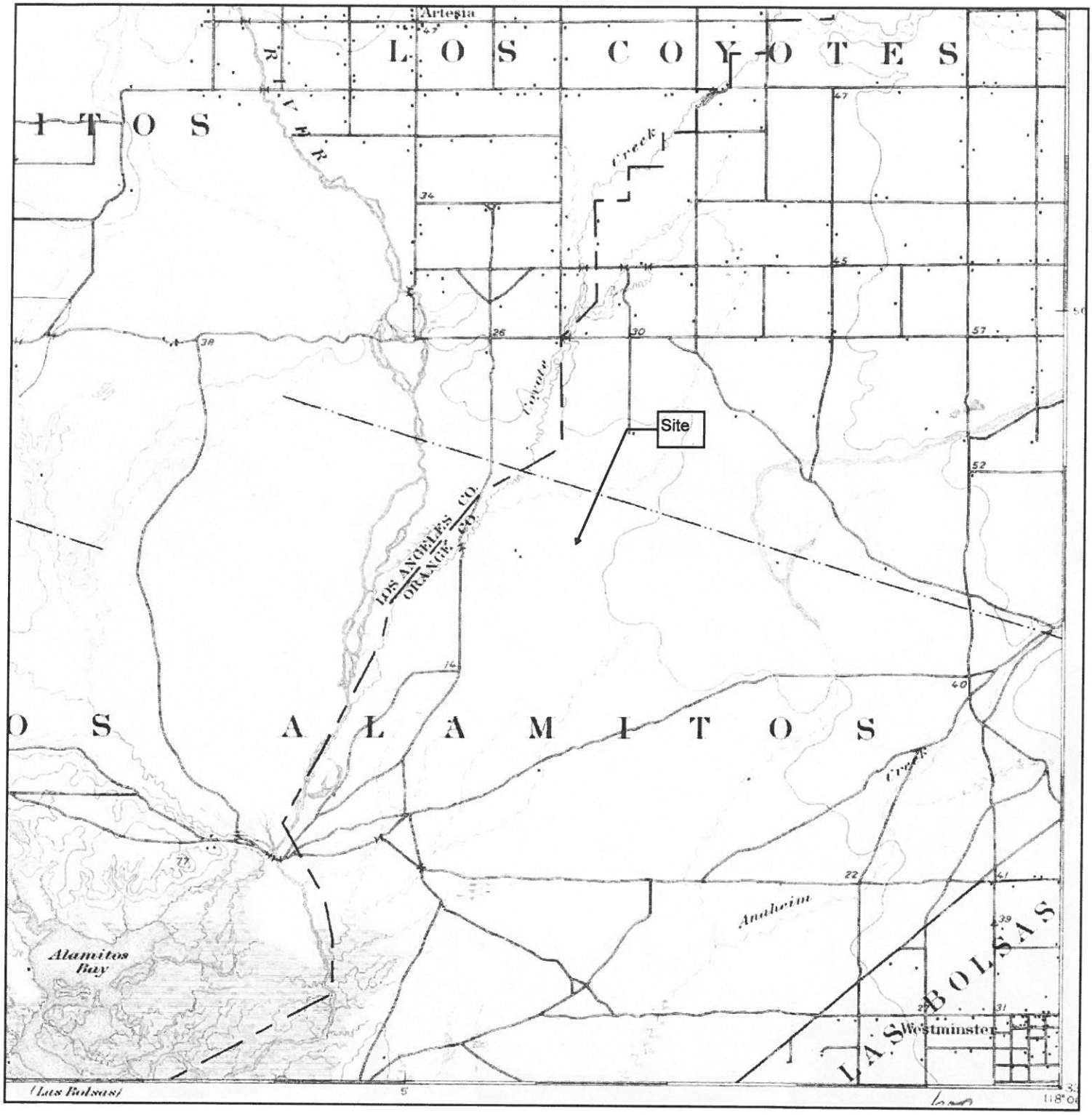
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Historical Topographic Map

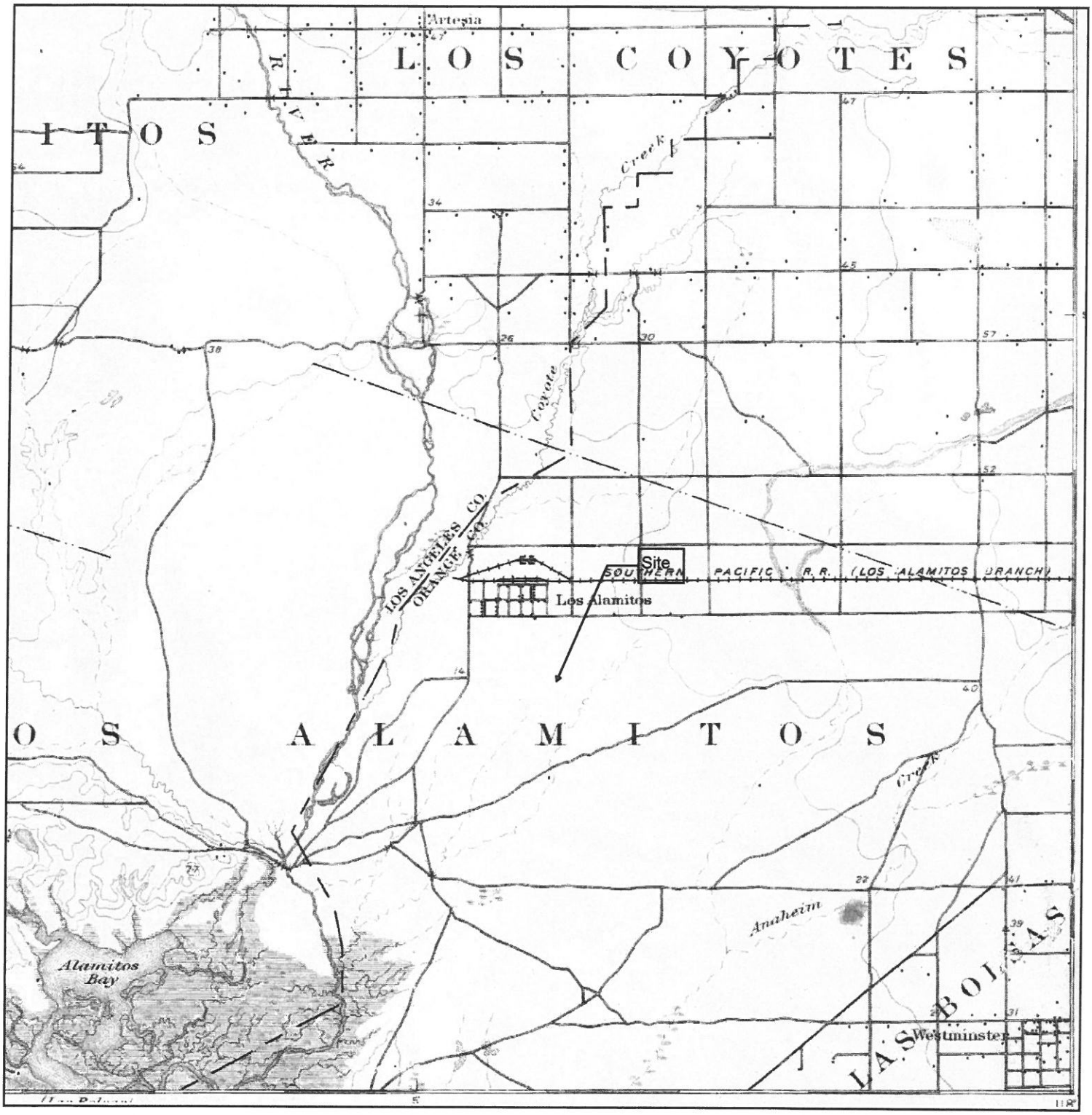


N	TARGET QUAD NAME: DOWNEY MAP YEAR: 1896 SERIES: 15 SCALE: 1:62500	SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos, CA 90720 LAT/LONG: 33.782 / -118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY#: 4405855.4 RESEARCH DATE: 09/09/2015

N	TARGET QUAD NAME: SOUTHERN CA SHEET 1 MAP YEAR: 1901 SERIES: 60 SCALE: 1:250000	SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos, CA 90720 LAT/LONG: 33.782 / -118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY#: 4405855.4 RESEARCH DATE: 09/09/2015

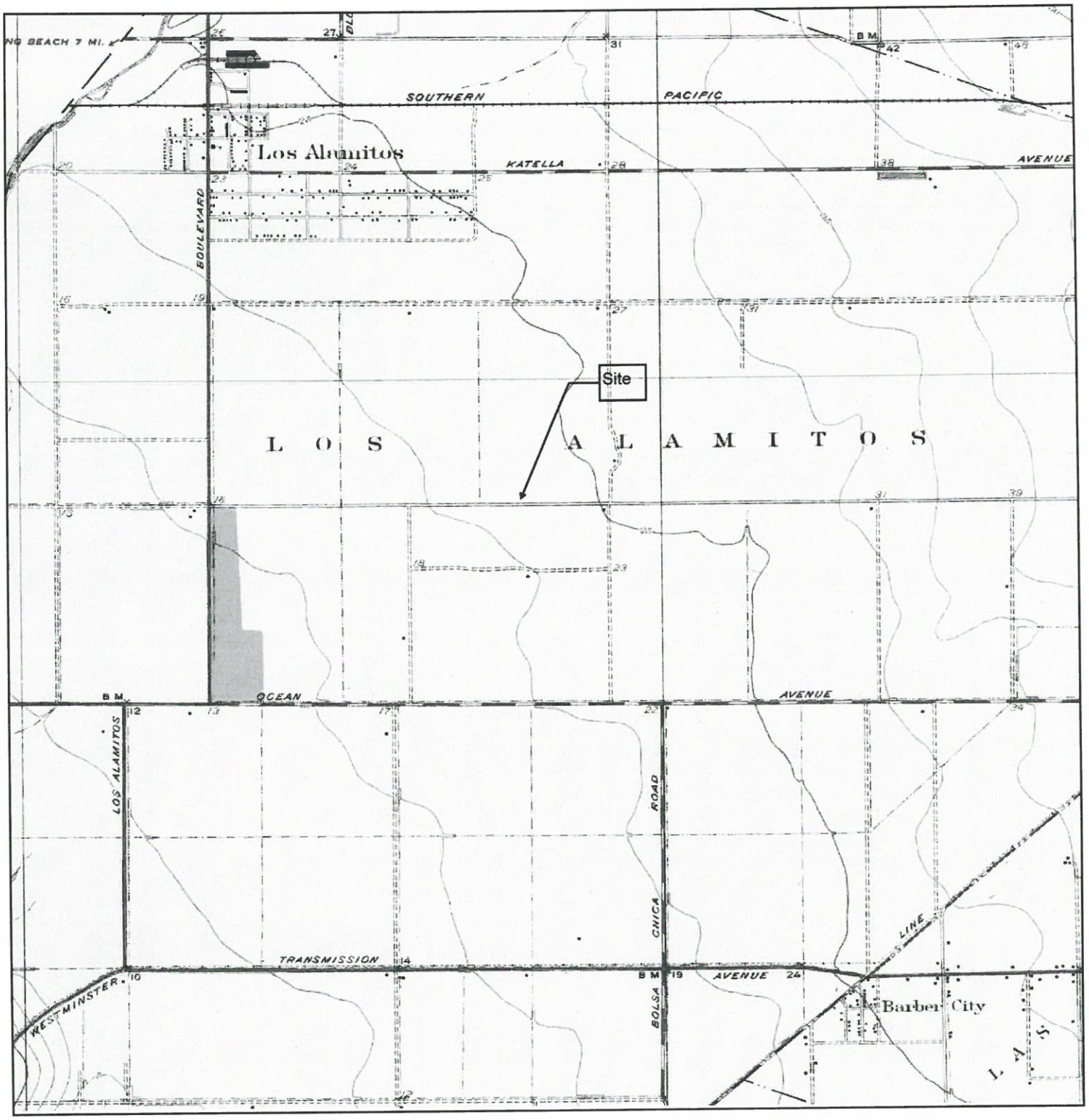
Historical Topographic Map

Historical Topographic Map



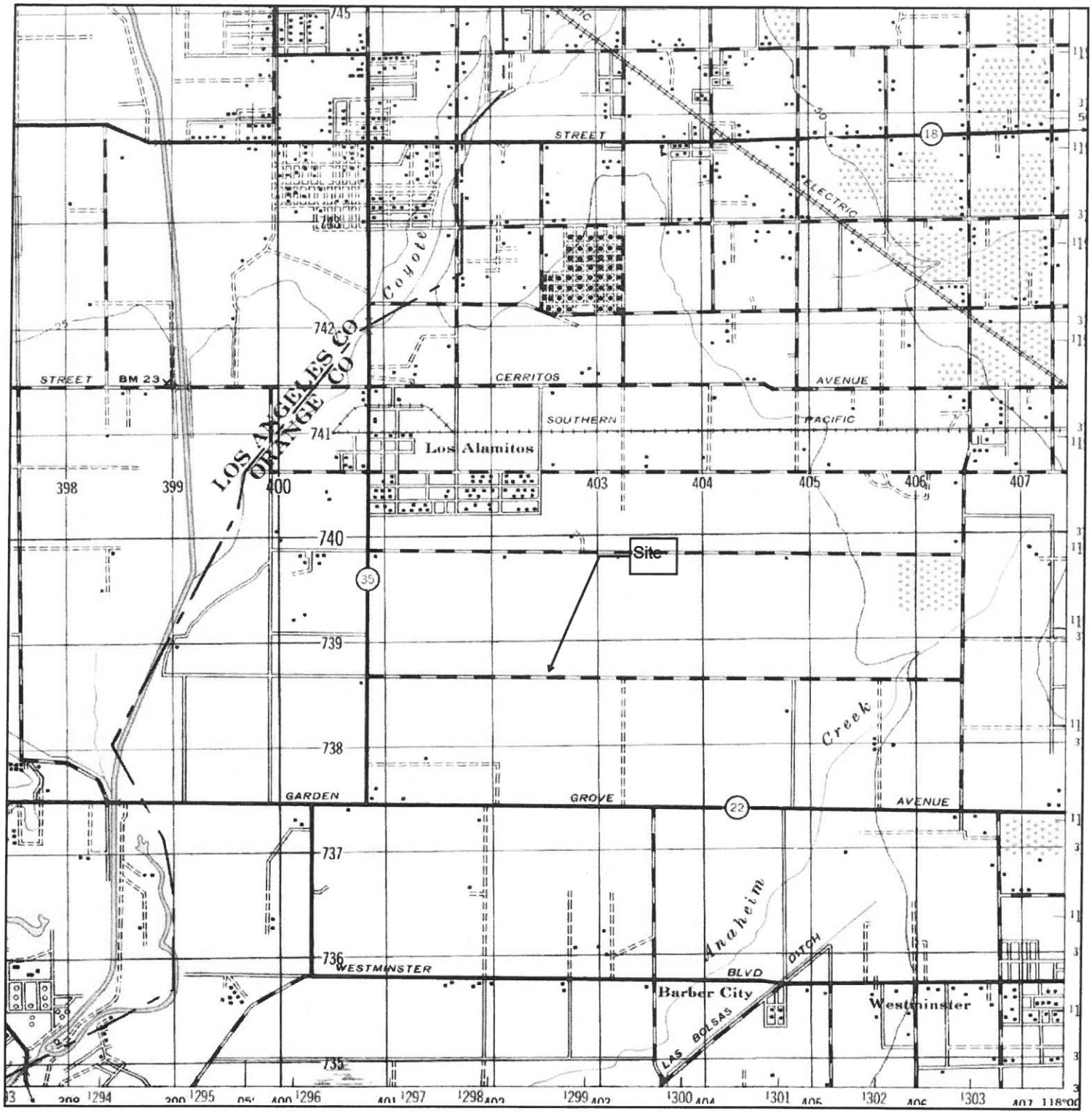
N	TARGET QUAD NAME: DOWNEY MAP YEAR: 1902 SERIES: 15 SCALE: 1:62500	SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos, CA 90720 LAT/LONG: 33.782 / -118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY#: 4405855.4 RESEARCH DATE: 09/09/2015

Historical Topographic Map



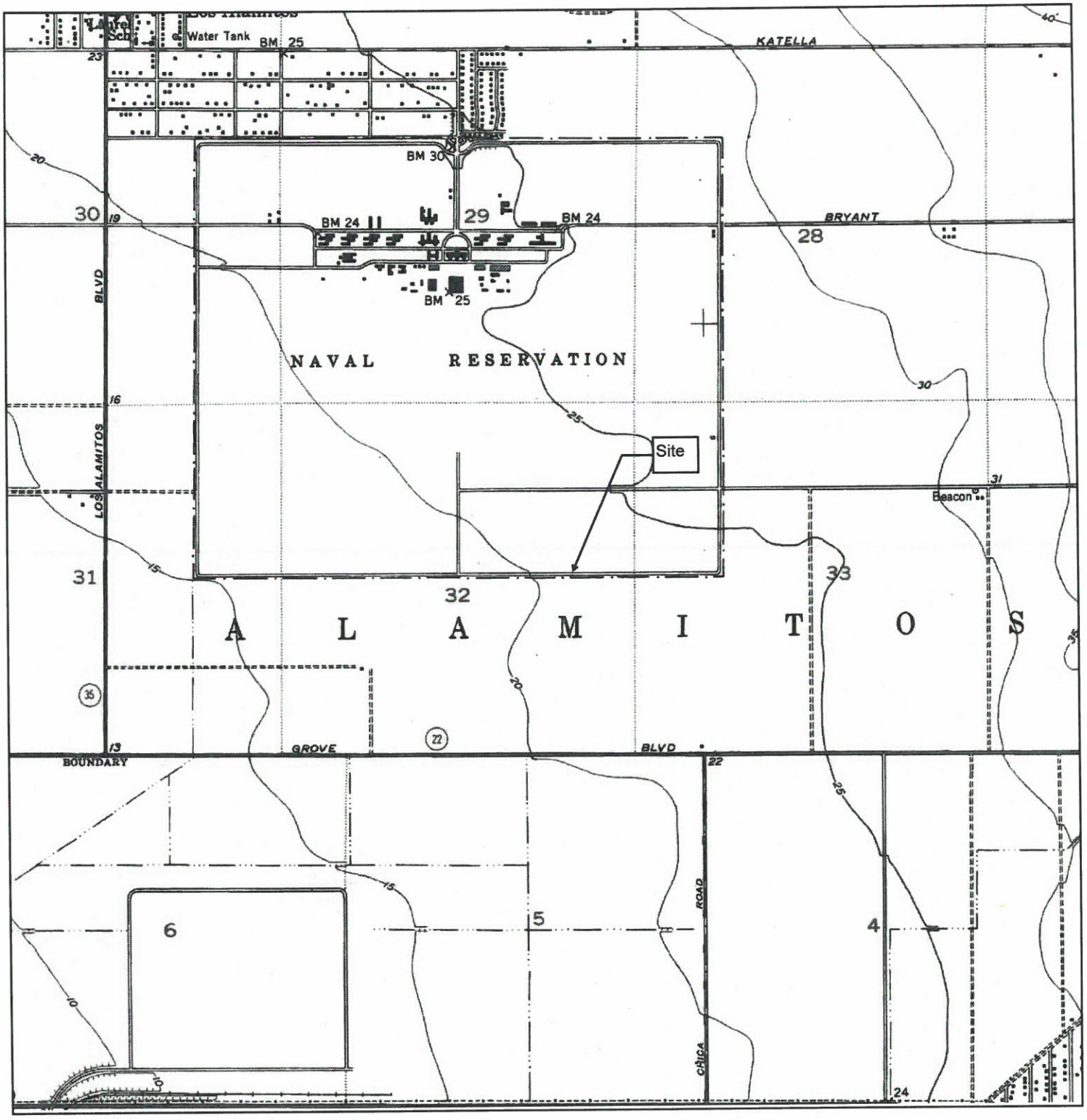
N	TARGET QUAD NAME: LOS ALAMITOS MAP YEAR: 1935 SERIES: 7.5 SCALE: 1:31680	SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos, CA 90720 LAT/LONG: 33.782 / -118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY#: 4405855.4 RESEARCH DATE: 09/09/2015

Historical Topographic Map



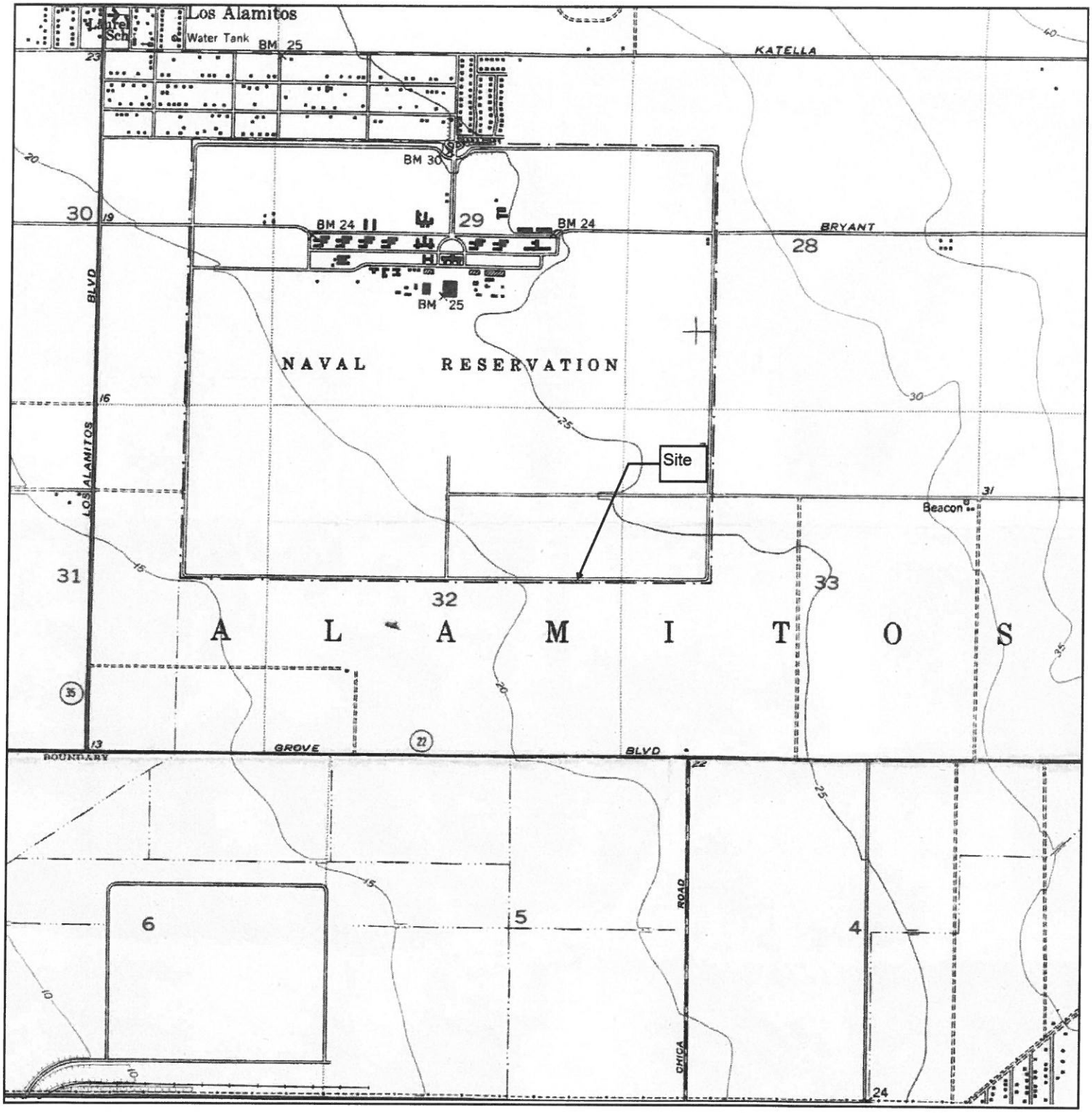
N	TARGET QUAD NAME: DOWNEY MAP YEAR: 1947 SERIES: 15 SCALE: 1:50000	SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos, CA 90720 LAT/LONG: 33.782 / -118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY#: 4405855.4 RESEARCH DATE: 09/09/2015

Historical Topographic Map



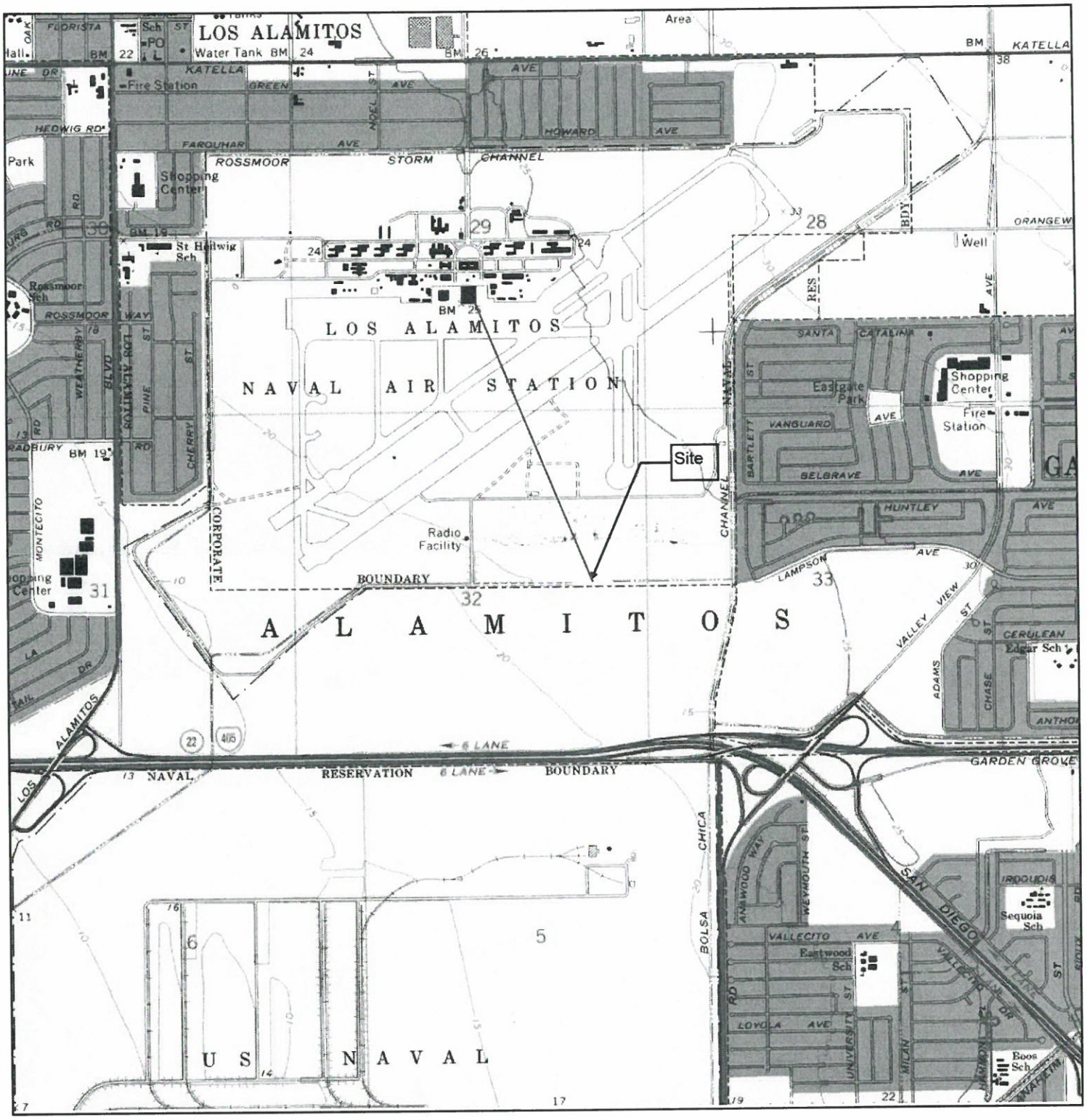
N	TARGET QUAD		SITE NAME:	Southwest Regional Laboratory	CLIENT:	Tetra Tech EMI
	NAME:	LOS ALAMITOS	ADDRESS:	4665 Lampson Avenue Los Alamitos, CA 90720	CONTACT:	Jimmy Kehs
	MAP YEAR:	1950	LAT/LONG:	33.782 / -118.0495	INQUIRY#:	4405855.4
	SERIES:	7.5			RESEARCH DATE:	09/09/2015
	SCALE:	1:24000				

Historical Topographic Map



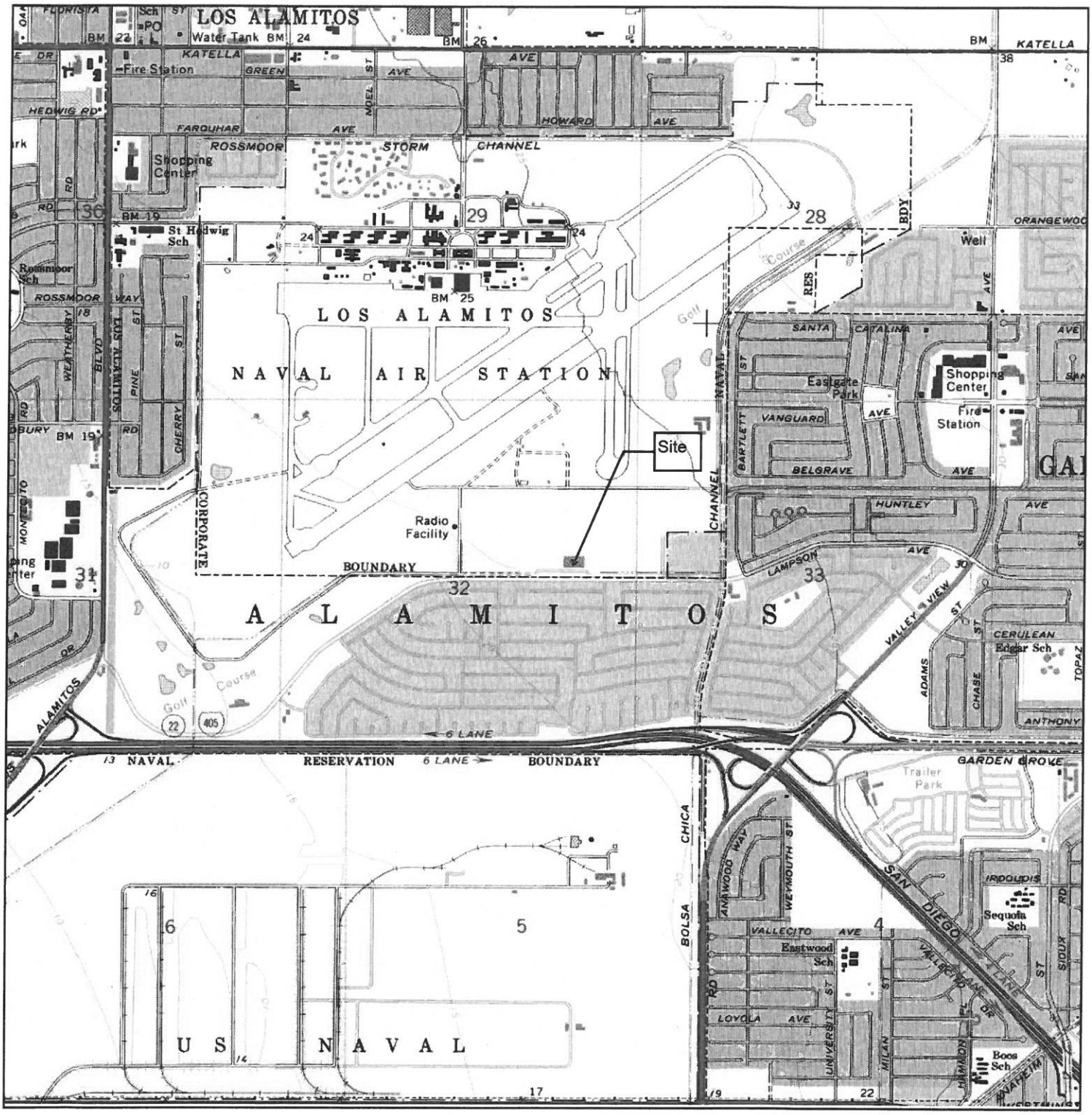
N	TARGET QUAD		SITE NAME:	Southwest Regional Laboratory	CLIENT:	Tetra Tech EMI
	NAME:	LONGBEACH VICINITY 1OF3	ADDRESS:	4665 Lampson Avenue Los Alamitos, CA 90720	CONTACT:	Jimmy Kehs
	MAP YEAR:	1951	LAT/LONG:	33.782 / -118.0495	INQUIRY#:	4405855.4
	SERIES:	7.5			RESEARCH DATE:	09/09/2015
	SCALE:	1:24000				

Historical Topographic Map



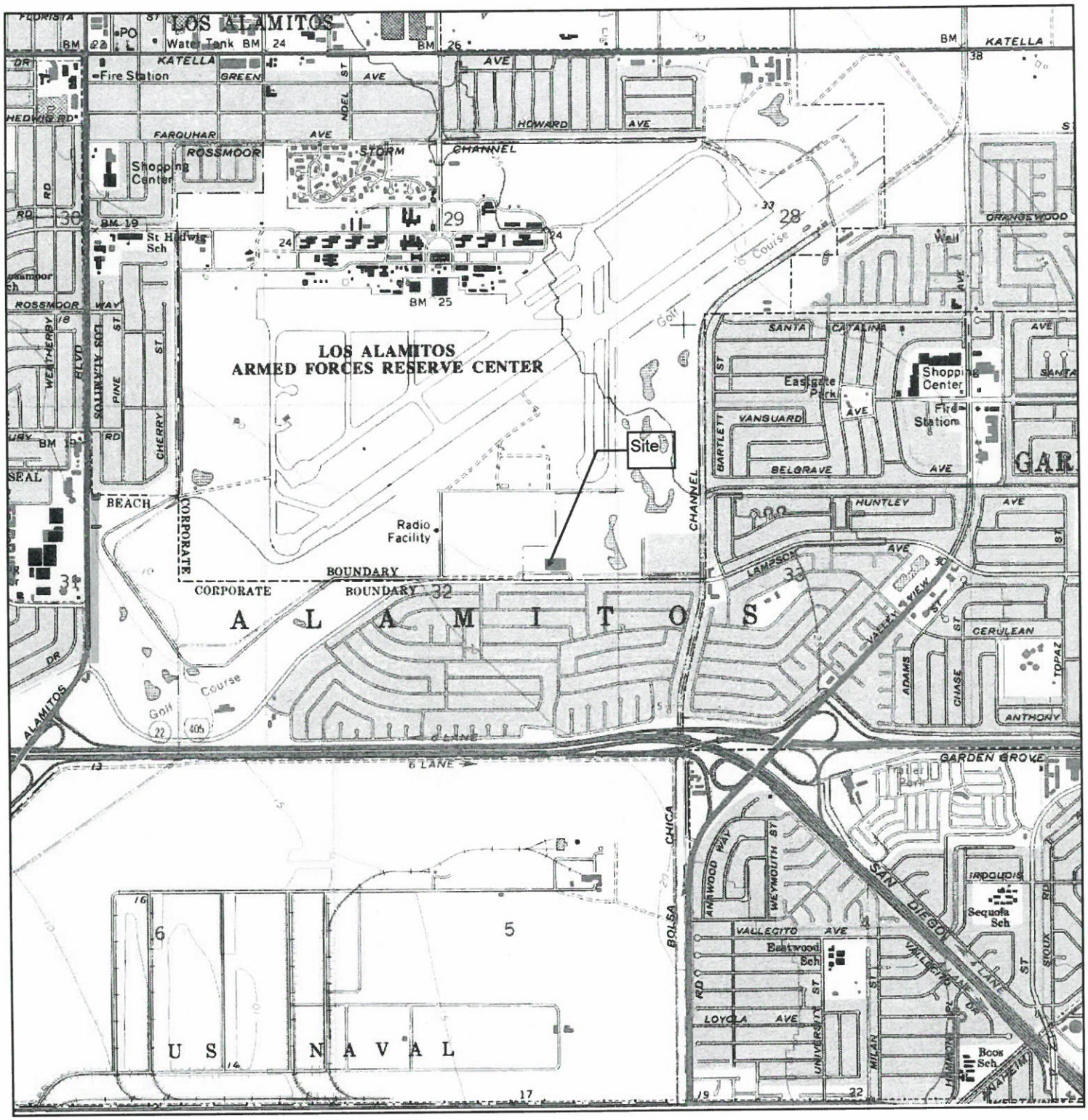
N	TARGET QUAD NAME: LOS ALAMITOS MAP YEAR: 1964 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos, CA 90720 LAT/LONG: 33.782 / -118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY#: 4405855.4 RESEARCH DATE: 09/09/2015

Historical Topographic Map



N	TARGET QUAD			
	NAME:	LOS ALAMITOS		
	MAP YEAR:	1972		
	PHOTOREVISED FROM :	1964		
	SERIES:	7.5		
	SCALE:	1:24000		
	SITE NAME:	Southwest Regional Laboratory	CLIENT:	Tetra Tech EMI
	ADDRESS:	4665 Lampson Avenue Los Alamitos, CA 90720	CONTACT:	Jimmy Kehs
	LAT/LONG:	33.782 / -118.0495	INQUIRY#:	4405855.4
			RESEARCH DATE:	09/09/2015

Historical Topographic Map



N	TARGET QUAD NAME: LOS ALAMITOS MAP YEAR: 1981 PHOTOREVISED FROM :1964 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Southwest Regional Laboratory ADDRESS: 4665 Lampson Avenue Los Alamitos, CA 90720 LAT/LONG: 33.782 / -118.0495	CLIENT: Tetra Tech EMI CONTACT: Jimmy Kehs INQUIRY#: 4405855.4 RESEARCH DATE: 09/09/2015

APPENDIX E:
CERTIFIED SANBORN MAP REPORT

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Inquiry Number: 4405855.3
September 09, 2015

Certified Sanborn® Map Report

9/09/15

Site Name:
Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Client Name:
Tetra Tech EMI
45610 Woodland Road, Suite
Sterling, VA 20166

EDR Inquiry # 4405855.3

Contact: Jimmy Kehs

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Tetra Tech EMI were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: Southwest Regional Laboratory
Address: 4665 Lampson Avenue
City, State, Zip: Los Alamitos, CA 90720
Cross Street:
P.O. # 103G3995003
Project: Southwest Regional Laboratory
Certification # 8CF5-4844-9655

Sanborn® Library search results
Certification # 8CF5-4844-9655

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX F:
HISTORICAL CITY DIRECTORIES

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Inquiry Number: 4405855.5
September 11, 2015

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☐	Cole Information Services
2008	☑	☐	Cole Information Services
2003	☑	☐	Cole Information Services
1999	☑	☐	Cole Information Services
1995	☑	☐	Cole Information Services
1990	☑	☐	Haines Criss-Cross Directory
1985	☑	☐	Haines Criss-Cross Directory
1980	☑	☐	Haines Criss-Cross Directory
1975	☑	☐	Haines Criss-Cross Directory
1972	☑	☐	Haines Criss-Cross Directory
1971	☑	☐	Haines Criss-Cross Directory

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FINDINGS

TARGET PROPERTY STREET

4665 Lampson Avenue
Los Alamitos, CA 90720

Year	CD Image	Source
LAMPSON AVE		
2013	pg A2	Cole Information Services
2008	pg A24	Cole Information Services
2003	pg A50	Cole Information Services
1999	pg A73	Cole Information Services
1995	pg A96	Cole Information Services
1990	pg A112	Haines Criss-Cross Directory
1990	pg A113	Haines Criss-Cross Directory
1985	pg A114	Haines Criss-Cross Directory
1985	pg A115	Haines Criss-Cross Directory
1985	pg A116	Haines Criss-Cross Directory
1980	pg A117	Haines Criss-Cross Directory
1980	pg A118	Haines Criss-Cross Directory
1980	pg A119	Haines Criss-Cross Directory
1980	pg A120	Haines Criss-Cross Directory
1975	pg A121	Haines Criss-Cross Directory
1975	pg A122	Haines Criss-Cross Directory
1975	pg A123	Haines Criss-Cross Directory
1972	pg A124	Haines Criss-Cross Directory
1971	pg A125	Haines Criss-Cross Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2013

1	24 7 EMERGENCY TOWING
	24 7 EMERGENCY TOWING
	GARDEN GROVE FLORIST & GIFTS
	TOWING
1190	TRUNG NHAN
3805	OLD RANCH COUNTRY GOLF CLUB
3840	MICHAEL MANCINI
3845	OLD RANCH COUNTRY CLUB & TENNIS CLUB
3850	CATHERINE VINCI
	SUNRISE OF SEAL BEACH
	VIRGINIA HAACK
3900	SEAL BEACH TENNIS CENTER
3901	OLD RANCH COUNTRY CLUB LLC
4000	MUSTANG MARKETING INCORP
	NIRVIAR CORP
4665	CALIF STATE DEPT OF FISH & GAME
	JAMES J MENTAS ATTORNEY AT LAW
	STATE OF CALIFORNIA
	WEST ED
5001	VERNON SMYTHE
5011	MICHAEL JENKINS
5021	D LANE
5031	JANICE MIKLAS
5041	PATRICIA LICATA
5141	GARY SUTTON
5151	KRISHNAN VENKATESHWARAN
5161	BARBARA SWINEHART
5171	RICHARD QUINN
5181	RONALD DEHERTOGHE
5230	LAMPSON LIQUOR
5234	YOUR CLEANERS
5238	WEEDS & CO
5244	24 HOUR 7 DAYS GARDEN GROVE LOCKSMIT
	A BITE OF JERSEY
5246	QUILT CUPBOARD THE
5247	GIBSON BRUCE W DDS
5249	JOANNA T VOGEL ATTORNEY AT LAW
	LEVIN & LEVIN LAW OFFICES
	LEVIN NANCY ATTY
5250	CENTURY 21 EXCLUSIVE
5253	SCHNEEKLUTH CLARK DDS MS
5256	BLUE MOON BOUTIQUE
5260	SPECTRUM HAIR
5871	JIFFY STOP MARKET
5877	BEYOND MASSAGE
5885	AUDREY ANDRADE
	AUDREY L ANDRADE DDS
5891	HAIR ARTISTS
6800	DAVID DUNLOP
6803	YARED TEFERAWORK

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 2013 (Cont'd)

6810	JOHN OKUDA
6820	KENNETH KIRSCHKE
6830	TUNG LEE
6840	NANCY TOLBERT
6850	LACY LAMAR
6851	PACIFICA HIGH SCHOOL STUDENT ACTIVIT
6860	OCCUPANT UNKNOWN
6864	FERNE QUARANTA
6868	OCCUPANT UNKNOWN
6872	ASAD BAWA
7042	Q ROWNE INC
7050	EMPIRE PLUMBING
	EMPIRE PLUMBLING HEATING & AIR CONDI
7100	UMPCO INC
7131	SOUTH COAST SEAFOODS CO INC
7180	LEES SANDWICHES
7261	CUSTOM FAB INC
7274	CONTAINER SUPPLY CO
	STERLING SLEEP
7340	THREE DOTS
7391	UNICORN DELIVERY
7425	OTHER SIDE OF KYOTO THE
7431	VELOTERA SERVICES
7439	DIAMOND DRAPERY
7465	MY GEAR STORE INC
7490	CONTAINER SUPPLY COMPANY INC
7571	C R & R INCORPORATED 7571
7690	CNC ELECTRIC SUPPLY
7700	AL DRISCOLL
	ASHLEY ANDREWS
	B C M SALES CORP
	BARBARA MORRISON
	BERNARD SAYONE
	BEVERLEY FRITZ
	BEVERLY CORDARO
	BILL NELSON
	CANDY ROBLES
	CARNET PETRONIO
	CAROLYN CARPENTER
	CATHERINE HALL
	CHARLES MEEKS
	CHRISTINA DICKINSON
	DAVID NEFF
	DELORES KUNTZ
	DENISE LHOMMEDIEU
	DIANE FISCHER
	DON CORNELIUS
	DOROTHY BEER
	DOROTHY SULSER
	EDIE MEHL

Target Street	Cross Street	Source
✔	-	Cole I[illegible]mation Services

LAMPSON AVE 2013 (Cont'd)

7700	ELVIN GABEL
	ESTELENA HARPER
	FERNE HOGAN
	FRANK BONIELLO
	FRED BEATTY
	FRED REINEKE
	GARY HEINLEN
	HERMAN KEMPEMA
	HOWARD MANDELL
	HUONG HAN
	IN CHO
	IVY KREUZ
	JAMYE WHITE
	JANET MALTBY
	JEAN GERING
	JIM KALB
	JOEL SELLERS
	JOHN BERNARDINO
	JOHN SAYONE
	JOYCE DAVIS
	JUDITH ERICKSON
	KELLI ALVARADO
	KEN SHUTE
	KENNETH PLUZDRAK
	LANNY YAKEL
	LEO SAAVEDRA
	LESLIE ALBERTS
	LILA BAUM
	LINDA SOLIS
	LORETTA GLUCK
	LUCY AGINS
	MARILYN KIM
	MARTIN BASON
	MARY VERONEE
	MICHELLE MOORE
	NGHIA TRAN
	NORMA CUPP
	PHILIP ESHELMAN
	RACHEL HOWARD
	RICHARD CHEN
	RICHARD HOCKETT
	RICHARD SANCHEZ
	RICHARD WALLACE
	RITA CARLSON
	ROBERT MCHARGUE
	ROBERT OLSZEWSKI
	ROBERT YBARRA
	RONALD KELLY
	ROSE VESELY
	ROSEMARY AGAMY

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 2013 (Cont'd)

7700	ROY CORNELIUS
	ROY STRATTON
	RUSSELL NAPOLITANO
	RYAN NYBERG
	S THIPHAVONG
	SAM GLORIOSO
	SANDRA REDING
	SANTO RANDAZZO
	SHIZU VINCENT
	SONJA HOFLAND
	STEPHEN BEAR
	SUZANNE ERNST
	TERESA BLACKBURN
	THELMA STEELE
	THOMAS MAURER
	THOMAS WOOD
	TRAN VAN
	VELBA DILL
	VIRGINIA HOPPER
	WARREN HAYNER
	WAYNE MADSEN
	WILLIAM COLLIER
	WILLIAM SACHSE
	WOODROW REED
7887	ANA CORTEZ
	ANH HUYNH
	ANTOINETTE ASSALI
	BENNY NGO
	BRIAN RINGEL
	CANDIDO RODRIGUEZ
	CORDELLA CABADA
	CUONG HOANG
	DAN CHU
	DANNY DUONG
	DEBBY ORDWAY
	DENNY TRAN
	DWIGHT ZIEGLER
	EDGAR MONTIEL
	EDGAR TELLEZ
	EDWARD HIEBER
	EDWARD MEDRANO
	ELIZABETH DO
	ERNESTINIA ESPITIA
	FRANCISCO RAMIREZ
	GABRIEL LANDAVERDE
	GABRIEL PAREJA
	GARDEN TERRACE MOBILE PARK
	GEORGE FRANCONE
	GREGORIO GONZALEZ
	HARRY COLLINS

LAMPSON AVE 2013 (Cont'd)

7887	HIEP DANG
	HUGO GALEANA
	JAMES HISEY
	JOHNNY VO
	JOSE MONLLOR
	JUAN SEPULVEDA
	JUAN TAPIA
	JUDITH DOCKRELL
	KENIA ABREGO
	KIM MONEY
	KRISSY SOLON
	LATDA VONGPHAYBOUN
	LEONARDO BANUELOS
	LETICIA AGUILAR
	LETICIA MONTUFAR
	LOUIS ALCARAZ
	LUZ MURILLO
	MARCOS MACEDO-GONZALEZ
	MARIA ARIAS
	MARIA IBANEZ
	MARIA PARRALES
	MARIA QUINTANILLA
	MARIO CHAVEZ
	MARLENE SORIANO
	MARTIN PINA
	MARTIN ROBIDEAU
	MILTON SOTO
	MINHTAM BUI
	MYONG YUN
	NAMSUK CHO
	NHI VO
	NICOLE AYNALBEIE
	PATRICIA SANDI
	RAFAEL LAZCANO
	RITA LAPIERRE
	ROBIN CASPER
	ROGELIO ARZATE
	RONALD LERETTE
	ROSE BLANDO
	ROSEMARY CONNELL
	SANDRA CALLAHAN
	SANDRA GONZALEZ
	SHERWOOD ROSEDAHL
	SI NGUYEN
	SON DO
	THANH NGUYEN
	THICH PHUNG
	TIM CUMMINS
	TIM QUICK
	TOM KASSUBA

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2013 (Cont'd)

7887	VALDEZ SOLORIO
	VERONICA JUAREZ
	VIET HA
	ZION ORPAZ
7907	PRAPAI WANLARBKAM
7932	ALFRED MORENO
	ANGELIC CALDERON
	ANGELIC HERRERA
	ANNA GONZALEZ
	BEATRIZ BRAVO
	BONG YEO
	CARLOS CORNEJO
	DAWN PETRUNA
	DEBORAH SMITH
	DERRYL ICAMEN
	DIANE HUDDLESTON
	ELOY CHAIREZ
	GONZALEZ DOMINGUEZ
	JACQUELINE STONE
	KIKUE CROFT
	LIN CARD
	LORETTA SMITH
	MARK GARRARD
	MICHAEL MOATS
	MYLOAN TRAN
	OLGA LACAU
	PATRICK RILEY
	ROMEO LANCIN
	RYAN SAULUS
	SERGIO BARTOLO
	SOONKI HONG
	SYLVIA BLUM
	THELMA ONEAL
	TRACY SHAUGHNESSY
	VENUS GADSDEN
	VU MAI
	YONG KIM
7972	ADOLFO DELGADO
	AGUSTIN VILLANUEVA
	ALEJANDRO TENORIO
	ALTON GRUN
	ANGELICA PATLAN
	EZEQUIEL ESCUTIA
	FRANK LUJAN
	HECTOR MUNOZ
	JAIME ORTEGA
	JOCELYN CIUDADANO
	JUAN VASQUEZ
	KRYSTLE ANAYA
	LANG LE

LAMPSON AVE 2013 (Cont'd)

7972	LAURA BORCH
	LINDA HERRON
	MARIA TORRES
	MARLA ZWONITZER
	MARY CABRERA
	MELANIE CHAN
	MELISSA LENAHAN
	MICHEAL MEDINA
	ORLANDO TERAN
	PINE VILLAGE
	RAUL ARIAS
	REINA LINARES
	THUY PHAN
	VICTOR NORIEGA
	VICTORIA SARGENT
	WARDEH QASQAS
	WILLIAM CASTILLO
8050	LOCKSMITH
	SUBWAY SANDWICHES
	TWENTYFOUR HOURS LOCKSMITH
	WHAT A LOT A PIZZA
8054	COSMO HAIR & NAIL SPA
8056	EYE CANDY AQUARIUMS
8058	DIAMOND SEAFOOD PALACE
8061	ANTHONY VO
8063	HAI THAI
8065	LIEN PHU
8067	PATRICK NGO
8069	LOC NGUYEN
8071	PETER NGUYEN
8081	JOE DELIO
8091	OCCUPANT UNKNOWN
8100	XPRESS LUBE
8141	ERIN DONICA
	JUAN JUAREZ
	ROBERT ASHLEY
8151	ANGELICA BRAVO
	JILL WEDGE
	JOYCE APPLEBAUM
	NAGIA ETERBEL
8171	BRIAN FLEMING
	CHERYL BACHMAN
	CRYSTAL TORRES
	DEMOND HAMPTON
	KATHERINE LE
	KIMBERLY MORGAN
	ROLANDO TUPAZ
	SHELLY PALDINO
	TRAVIS GILMORE
8221	VINH LO

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2013 (Cont'd)

8222	OCCUPANT UNKNOWN
8225	OCCUPANT UNKNOWN
8231	ANDY NGUYEN
8232	NORMAN NARITOKU
8235	PHILLIP NGUYEN
8241	JOCELYN BAHIT
8251	QUOC LE
8279	OCCUPANT UNKNOWN
8281	CARMELO ANTOLIN
8295	TINA NGUYEN
8301	SANDRA ROJAS
8331	CHON MINH
	CHUONG DANG
	DAYNE ODONNAL
	DORIAN APARTMENTS
	EMILIO SALGADO
	HOANG PHAM
	HUONG LY
	JOE MALONEY
	JOSE CARDENAS
	LUIS RODRIGUEZ
	MARY PASION
	TONY NGUYEN
	TRANG TRAN
8362	MARK REGAN
8372	NHUOC CHANG
8392	ALICE PRINCE
8412	PHAN TRUONG
8422	WILLIAM TONKIN
8442	JUDITH TESKE
8515	TERESA HURTADO
8525	QUY DOAN
8545	LOC NGO
	TUNG NGUYEN
8552	SUH MOON PRESBYTERIAN CHURCH
8555	GIAH MARI
	KEVIN TRAN
8565	GEORGE TESKE
8572	TRUNGHAU NGUYEN
8592	OCCUPANT UNKNOWN
8602	ROBERT WOCHNER
	STEVE MILLINGTON
8611	KIM TRAN
8620	ALAN PIERSON
	GERARDO RAMIREZ
	MARIA VELASQUEZ
8622	OCCUPANT UNKNOWN
	WAYNE INFANGER
	WOODFORD WILKERSON
8642	DEBORAH SUMMERS

LAMPSON AVE 2013 (Cont'd)

8642	ERIK LUU
8652	SHAWNA BATEMAN
8654	MICHAEL OBRIEN
8671	NGOC TRAN
8672	OCCUPANT UNKNOWN
	THU NGUYEN
8673	NGUYET TRAN
8675	MIGUEL CASTILLO
8677	KOBEY DINH
8682	VIET NGUYEN
8722	ISMAEL GUILLEN
8762	SANDRA DIAMOND
8782	GARDEN GROVE PRESBYTERIAN CHURCH
8802	NANCY MELLO
8821	TRUNG LONHAT
8841	ERIC CHANG
	XUAN TRINH
8845	AGUS URIP
	DAO PHAM
	DUSTIN LAM
	ETELVINA ARROYO
	KYUNG YANG
	NGOC LE
	OSCAR DIAZ
8851	HELENA PHAN
	PHAT DIEP
	SOO KI
8852	THI LETUYET
8855	CHANG CHOI
	YONG KIM
8861	THANHTHAO TRAN
	TIMOTHY BRYANT
8865	ANDY VELARDE
	EDWARD WHANG
	JUPITER PAINTING CO
	MY PHAM
	RICHARD TRAN
	TAN HO
	THANG NGUYEN
	YONG BUCVKENBERGER
	YOUNG LEE
8873	CHANG LEE
8882	HENRY AIHARA
8921	SON TRINH
9002	OCCUPANT UNKNOWN
9011	EFRAIN AVILA
	JOSE CUENCA
9015	JIM LEE
	SUY VU
	THAO LUU

LAMPSON AVE 2013 (Cont'd)

9021	HAI DOUNG
9031	FELICITAS EGGLESTON
9033	DANIEL LIM
9035	LAN MITSUHASHI
9037	JOHN ALLARD
9039	JOSE ENRIQUEZ
9041	JOHTHON KIRKMAN
9042	HINH VUONG
9043	RONALD CONWAY
9045	EDWIN GREENWALT
9049	HYOWAN MYUNG
9051	OCCUPANT UNKNOWN
9053	JOZSEF MALMOS
9062	VALERIE NGUYEN
9071	OCCUPANT UNKNOWN
9081	PETER BICKNELL
9082	MINH CAO
9091	OCCUPANT UNKNOWN
9092	OCCUPANT UNKNOWN
9101	PHIEN NGUYEN
9105	HEE PARK
9109	TONY CHEN
9111	LYNN LUNDEEN
9115	HOANG NGUYEN
9121	MICHAEL DAO
9122	JAMES AGATEP
9131	IELIU TJIA
9141	YEN LE
9142	JUAN HUERTA
9151	KEVIN BICKNELL
9161	MICHAEL TULLY
9162	WILLIAM MORRIS
9171	WILLIAM HALL
9173	SANG NGUYEN
9175	BINH PHAM
9177	TONG DU
9181	ALLEN BRYANT
9182	LINH LE
9191	JEHOVAHS WITNESS
	JEHOVAHS WITNESSESGARDEN GROVE
	JEHOVAHS WITNESSESWESTMINSTER
9202	MICHAEL MYERS
9252	OCCUPANT UNKNOWN
9262	DIANA NINH
9272	HARRY NGUYEN
9282	MIGUEL ELIAS
9292	CHRIS COMPTON
9302	MARCOS TINOCO
9312	JAMES STULTS
9332	TIEN NGUYEN

LAMPSON AVE 2013 (Cont'd)

9342	MARTIN ROJAS
9362	JEFF TRAN
9402	ANDREW TRUONG
9512	LARRY CONNER
9521	DEEANN REYNA
9522	PHILIP HOANG
9531	CHAD PIPPIN
9542	DONG CHO
9552	DELMER FARMER
9561	ROY SHIN
9571	KHAI NGUYEN
9591	MARK PINKSTON
9601	ANDERSON NGUYEN
9621	DARRELL MACDUFF
9641	CYNTHIA SELBY
9661	TOM NGUYEN
9671	OCCUPANT UNKNOWN
9691	RUDY TOMANENG
9701	KONRAD MAYA
9721	FRANK MARCARIO
9731	WILLIAM YOUNG
9752	ROGELIO GONZALEZ
9797	PATRICK CATLIN
9811	JACK REIHING
9812	VICENTE FAMADOR
9821	JULIUS CABALLERO
9841	LE NGUYEN
9851	KEVIN NGUYEN
9852	TOMMY TUGGLE
9871	GARDEN GROVE PLUMBING
	HOA TRAN
9881	JAMES OKAZAKI
9901	THANG HOANG
9911	JOO BYUNG
9941	YEN VU
10031	ADDICTION TREATMENT CENTER
10035	A 1 PAINTING CONCEPTS INC
10042	CENTURY 21 NEWTEK REALTY & NEWTEK MO
10051	PATHFINDER HEALTH
10055	APPLE PHARMACY
10065	NORA DELA ROSA BEAUTY SKIN CARECENTE
10071	ADAM JUAREZ
	BRIAN HO
	CHI HUYNH
	DIANA MORALES
	HECTOR SANDOVAL
	JUAN GONZALEZ
	JUAN SANCHEZ
	JUAN VINALAY
	LU VO

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2013 (Cont'd)

10071	LYDIA ZAMBRANO
	MARIA TAPIA
	MARIA VIGIL
	MIGDALIA DANIEL
	MIGUEL ARCOS
	NHAN TRUONG
	OMAR VASQUEZ
	REYNA LOPEZ
	RUTH MOLINA
	TINA LEE
	TRO DO
	TUYET NGUYEN
	VANESSA BUENROSTRO
10101	TRUNG LETUAN
10102	HENRY STOKES
10103	TINH TRAN
10105	KRUIZER KELLEY
10107	CHI LE
10109	DOMINIC NGO
10113	TRUNG DANG
10115	OCCUPANT UNKNOWN
10117	LISA NGUYEN
10119	HIEN HOANG
	OCCUPANT UNKNOWN
10121	HOAN NGUYEN
	THUTRANG DINH
10141	GARDEN GROVE MONTESSORI ACADEMY
10171	OCCUPANT UNKNOWN
10181	LAM NGUYEN
10182	OCCUPANT UNKNOWN
10191	GUERRERO SANCHEZ
	RAFAEL DIAZ
	ROBERTA GEARIN
	VICTOR IBANEZ
	VICTOR IDANEZ
10192	CHARLES KEMP
10201	CONRAD FERNANDEZ
10211	AN LE
	TAM NGUYEN
	TINH BUU
10221	C FUENTES
	JOEL VILLATORO
	PAUL KANGAS
	RONALD KRESS
	VIRGINIA BOOTH
10231	KEVIN KEIM
	MIGUEL GONZALEZ
	PILAR GALLARDO
	THANH NGUYEN
10232	MINH NGUYEN

LAMPSON AVE 2013 (Cont'd)

10241	LORENA ROSALES
	ROBERT CANTU
10281	OCCUPANT UNKNOWN
10301	SEAN BUSBY
10312	ALMA ALVAREZ
10321	PAUL LUU
10332	CONCEPCION ALZAGA
	HERIBERTO GALAVIZ
	KHOA NGUYEN
	RAMIRO ACEVEDO
10351	RAMON BALTAZAR
10352	ALEJANDRA VALERO
	ANTONIO OLIVARES
	ARMANDO VELASQUEZ
	LEYDI TELLEZ
	MARIA CALDERON
	MARIA GUDIEL
	MIRIAM ALCOCER
	SONIA ZAVALA
	YOLADA DOMINGUEZ
10361	TRUC TANG
10362	BERTHA AVELINO
	GLORIA MONTANEZ
	JOSEPH HOKE
	MARIA AGUIRRE
	PORFIRIO SALMERON
	TODD BUCKMASTER
10372	ADRIANA RIOS
	ERANDI LEZAMA
	FRANCISCO LEYVA
	GABRIELLA VALENCIA
	JULIO RAMIREZ
	MARIA OZUNA
	RAFAELA NARANJO
	VICTOR VILLAFANE
10381	ROBERT EMANUEL
10392	ANDRES MEDINA
	HERIDERTO REYNOSO
	REBECA BARRIOS
	RODOLFO ESCOBAR
	RODOLFO VALENZUELA
10401	JAMES STICKLER
10411	TOMAS SALGADO
10412	CRISTINA LEONARDO
	FELIPE VARGAS
	GABRIEL ESCOBAR
	MARIA MARTINEZ
10421	RUTH VINCENT
10422	CATARINO MENDOZA
	HERNAN VALDEZ

Target Street	Cross Street	Source
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LAMPSON AVE 2013 (Cont'd)

10431	CIRILO CASTRO
10442	ARTURO BECERRA
	AZUCENA SIERRA
	CARMEN GIRON
	ESMERALDA DEALBA
	EZEQUIEL REVELES
	FORTUNATO SALGADO
	GERARDO AGUILAR
	GUSTAVO CERVANTES
	HELADIO BARRIOS
	JOSE HERNANDEZ
	MARIA CALDERON
	MONICA DUARTE
	NOE BARRERA
	RAUL QUIROZ
	SANTOS PERALTA
	SANTOS RAMOS
	TANIA LOPEZ
	VICTORIA QUEBRADO
10451	NANCY NGUYEN
10501	THAO DUONG
10502	NANCY LEE
10521	OCCUPANT UNKNOWN
10522	ANH CHAU
10531	PEDRO LEVARIO
10532	GERARDO FALCON
10542	OCCUPANT UNKNOWN
10551	OCCUPANT UNKNOWN
10552	JOHN LE
10562	BRYAN BRADLEY
10582	JOE ADKISON
10592	JOSEPH LEONG
10602	MANUEL CERON
10612	NHO NGHE
10622	AXEL VICKERS
10632	JOSE CAMACHO
10642	RICHARD CARPIO
10661	BARBARA OUGHTON
10662	JOAQUIN AGUIRRE
10671	OCCUPANT UNKNOWN
10672	JOHN THORNTON
10681	HUNG HUYNH
10682	DANIELA SUCIU
10691	JIMMY CARRILLO
10692	STEVEN TRAN
10701	KEVIN HUA
10712	RAFAEL MARTI
10721	MARTINA RAUD
10722	PAUL PHAN
10750	EVANGELICAL FORMOSAN CHURCH OF ORANG

LAMPSON AVE 2013 (Cont'd)

10771	OCCUPANT UNKNOWN
10773	OCCUPANT UNKNOWN
10781	CHRIS VANDEVER
10782	DANIEL ESPINOZA
	ERIC GOLDBAUM
	ERNEST LOPEZ
	HYUN NOH
	JAMIE IBARRA
	JENNIFER HERNANDEZ
	JUANITA CISNEROS
	LISA NOSKEY
	MELANIE WINSCHER
	MIGUEL GARCIA
	RAMIREZ VERA
	ROGELIO MERCADO
	SUSANA GRENNON
	TERE SANCHEZ
10783	DAVID ROSE
10785	AARON LARGE
10791	ALICIA GUTIERREZ
	CARMEN LIBREA
	LEMARY VU
10842	DIANE TRAN
10851	DR WALTER C RALSTON INTERMEDIATE SC
10852	THUY HA
10862	LONG DINH
	MAI NGUYEN
	MIRIAM VASQUEZ
	STEPHANIE VILLALOBOS
	THI NGUYEN
10872	HOA HOANG
	LUU TRAN
10882	OCCUPANT UNKNOWN
10892	OCCUPANT UNKNOWN
10894	RICHARD TRAN
10895	HUNG NGUYEN
10896	NGOC LAM
10898	DAT LAM
10900	OCCUPANT UNKNOWN
10902	TRAI NGUYEN
10912	TRUNG TRAN
10918	FRANK MANZI
10922	JOYCE BRITTAIN
10928	JAMES OCONNOR
10932	MONG HUYNH
10934	LAN NGUYEN
10938	WILLIAM THOMPSON
10942	MARK NGO
11041	RAFAEL VILLALOBOS
11042	MAN TRAN

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2013 (Cont'd)

11051	CAROL LEWIS
11052	VIC NGUYEN
11061	JOANNE BUI
11101	OCCUPANT UNKNOWN
11111	SPARLIN SYPHERD
11162	JOHN LOGAN
11182	ANTONIO GARCIA
	JOSH CERVANTES
	RAPHAEL MENDOZA
11191	RICHARD SKINNER
11192	NEAL LYON
11202	ROSIE ONEILL
11206	DELIA RIVAS
11222	DAVE LAMPEY
11232	A S I LANDSCAPE SERVICE
	OCCUPANT UNKNOWN
11242	HENRY NGUYEN
	HOAN DUONG
	TAM LE
11252	ANDREW LE
	EDUARDO DESANTOS
	KEVIN DONG
	THANH TRUONG
11262	JAYSON RODECKER
11272	DAVID MAITEN
11281	GILBERT HRUSCHKA
11282	MANUEL GUTIERREZ
11292	DAVID COLES
11294	JEFFREY GROVES
11296	OCCUPANT UNKNOWN
11302	JOHN HOLM
11311	OCCUPANT UNKNOWN
11322	RANDY SCHLOE
11332	DOMINGA AGUINAGA
11371	TIMOTHY VO
11381	WILLIAM MYERS
11390	ADRIAN DANILA
	ALMA MENDOZA
	CANH NGUYEN
	COLEMAN LIPPERMAN
	DEBBY DIPALMA
	EDUARDO GASPARRI
	EMILY BAILEY
	FIDEL CASTILLO
	JAMES ROUDON
	JIM HODGES
	PALMA DI
	RAFAEL RIVERA
	ROBERT CARRETERO
	ROQUE REYES

LAMPSON AVE 2013 (Cont'd)

11390	RYAN HORNER
	SAMUEL WONG
	WILL GALWAY
11401	TAN NGUYEN
11421	THOMAS DEVINE
11441	DONALD KERNS
11450	ABBAS ALI
	ALEX CARRILLO
	ANNA LAGAHIT
	BEN BUTTELING
	CHARLES GOH
	DANIEL TRUDELL
	ELVIA RAMIREZ
	FLOR LAM
	GILBERT QUINTERO
	JASON HOULE
	JAVIER ROCHA
	JESSICA STEWART
	JOAN BRENNAN
	JOE OTERO
	JOSH JONES
	KATHLEEN ODRANE
	KIMBERLY PEREZ
	LAMPSON VILLAGE APARTMENTS
	LOLA MARTINEZ
	MAGDY SORIAL
	MARIO AVALOS
	MAX PONCE
	MEGAN POCKETT
	MICHAEL ANDERSON
	MIKE HERWIG
	OLGA PASSUNI
	PHILIP HANKS
	RANDOLPH CASTRO
	RITA MAZUR
	ROSA GONZALEZ
	SANDY FOSTER
	SANTIAGO SEVERIANO
	SCOTT TANZA
	TAMMY SELLERS
11461	NGOC TRAN
11512	HIEP TRAN
11571	KAYE MONACHELLI
11582	ROGER GWYNN
11591	T VANLE
11602	JIMMY WARD
11611	ROBERT DAVIS
11612	CHHAVY CHAN
11616	KIM CONSTANTINE
11622	MICHAEL HO

Target Street	Cross Street	Source
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LAMPSON AVE 2013 (Cont'd)

11642	KIM NGUYEN
11662	CHOI JOHN B REV
	JOHN CHOI
11672	RYAN VANCE
11692	DOANLD TRUBIROHA
11701	GERALD MAJER
11712	NHAN VUONG
11714	OCCUPANT UNKNOWN
11732	KYUNG LIM
11771	OCCUPANT UNKNOWN
11791	OCCUPANT UNKNOWN
11801	RAFAEL GARCIA
11811	EILEEN BRUNING
11821	OCCUPANT UNKNOWN
11831	LYLE JOHNSON
11841	UYEN VO
11851	PHUOC PHAN
11871	TUAN NGUYEN
11881	LOUIS FLORES
11891	PAUL HOIR
11892	MARIA WATTY
11902	TODD FLEWITT
11911	RANDALL COLEY
11921	JACK AIELLO
11931	ALI IBRAHIM
11951	JULIO ROJAS
11971	JORGE MARTINEZ
12171	NGUYEN VAN
12232	SHIRLYNN VUONG
12241	TUNG LAM
12251	PATRICIA HOLGIN
12252	LUIS MADRIGAL
12262	MICHAEL SMITH
12271	DAVID DEMARCO
12272	DAVID SERBER
12281	MARCELO AYALA
12291	GILBERT MARTINEZ
12301	UMAR BONG
12312	FONG CHANG
12321	ANDRES MAGDALENO
12331	TEODORO PEREZ
12332	OCCUPANT UNKNOWN
12352	DONALD KING
12361	SANTIAGO GOMEZ
12362	FLOR CANSECO
12371	YESENIA AYALA
12381	MARISELA BARRON
12391	GLORIA HASSMAN
12399	ANDREA JUAREZ
12422	VERONICAS HAIR DESIGN

LAMPSON AVE 2013 (Cont'd)

12432	TATIANAS TAMALES
12441	MARIA AGUILAR
12442	AAA FOOD STORE LLC
12511	IGNACIO ANGEL
12531	HERMINIO SANCHEZ
12550	AMERICAS BEST VALUE INN RESERVATIO
	LEGACY INN & SUITES
12551	OCCUPANT UNKNOWN
12560	NORNG SOKHA
12571	BENITO GARCIA
12581	MICHAEL LOPEZ
12582	AMANDA GUILLEM
12601	TERRY KING
12602	CHARLES BARLING
12612	JAMES BOWEN
12621	SE BAEK
12631	PHU DOAN
12632	BOB BOUNHEUANG
12651	JIM ORTIZ
12652	JOSH JAIMES
12661	ARMAND RANGEL
12662	WILLIAM KODY
12671	OAI NGUYEN
12672	MANUEL MARTINEZ
12691	HECTOR GOMEZ
12701	OCCUPANT UNKNOWN
12702	MINH TRAN
12711	LORI FARRELL
12712	MAGDALENA MARTINEZ
12742	ANAHEIM SEVENTH BRANCH
	THE CHURCH OF JESUS CHRIST OF LATTER
12872	WALLY NGUYEN
12882	RANDY BLEVINS
12892	MUOI VO
12902	STEPHEN WORLEY
13061	ALBERT URIBE
	ANTONIO ZEPEDA
	ARACELI GUINTO
	ARIEL CHAVEZ
	ARNULFO LOZA
	ARRON LOPEZ
	BLANCA ARCINIEGA
	CARLOS CARRILLO
	CITY VILLAS APARTMENTS
	CLAUDIA GONZALEZ
	CORNEJO IRMA
	DAILANN EDGAR
	DAVID FALCIONI
	DIANA THOMAS
	DMITRI OKHOTSKI

Target Street	Cross Street	Source
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LAMPSON AVE 2013 (Cont'd)

13061	DOMINGO PEREZ
	EDGAR ROSALES
	EMILY BASTIDA
	ERENDIDA GUERRA
	ERNESTINA RIVAS
	FABIOLA OLVERA
	GABRIEL ORTIZ
	GERARDO EQUIHUA
	GREG HERNANDEZ
	GUADALUPE ARENAS
	GUADALUPE ARENIA
	GWEN FERNANDEZ
	HONG WILLIAMS
	IVAN BRITO
	JACK FISHER
	JAMAICA GRACIELA
	JESUS ALCAZAR
	JOHN SIMONS
	JOSE ZARAGOZA
	JOSHUA MATUA
	JUAN AYALA
	KARINA DELACRUZ
	KEVIN GUYN
	LILIANA ARIZMENDI
	LUIZ MENDOZA
	LYSSA LIU
	MARBELLA LORENZO
	MARIA ABARCA
	MARIA ALVAREZ
	MARIA ARGUIDE
	MARIA CALDERON
	MARIA MOSSON
	MARIA SILVA
	MARIA SOTO
	MARIBEL GRAJEDA
	MARISOL CARRERO
	MARTHA ALKADY
	MATT MCGOWAN
	MAURY HOPKINS
	MILAGROS RARAS
	NICHOLAS RARIDON
	PENNY ROBERTSON
	PENNY SCHMITZ
	RAFAEL FRAGA
	RIANNA CROCKER
	ROBERTO CORONA
	RODOLFO GAMBOA
	ROGELIO HERRERA
	RUBEN MACALMA
	SANDRA GARCIA

LAMPSON AVE 2013 (Cont'd)

13061 SANTIAGO SANCHEZ-MEND
SONIA PEREZ
VICTOR MATA
YOVANNA MUNDO
13181 ACEVEDO NUNEZ
ALEX JANOWSKI
ALFONSO VELASCO
ALFREDO PEREZ
ALLISON LAMADRID
AMANDA EDWARDS
ANTHONY DAVIS
ANTONIO TORRES
BENITO GAMBINO
BRAD TAYLOR
DAVID CASTRO
DIEGO FIGUEROA
ELIAS HERRERA
ELIDIO SALGADO
GILBERTO VELASCO
GLENHAVEN MOBILODGE
HUMBERTO GLORIA
HUMBERTO RAMIREZ
ISIDRO SANDOVAL
JAMES HELMAN
JAN WEAKLEY
JASON ADAM
JESUS PINEDA
JOEL COLCHADO
JORGE PERALTA
JOSE GONZALEZ
JOSE JIMENEZ
JOSE NAVARRO
JOSE SANCHEZ
JUANITA LUCERO
JULIO ALVAREZ
KIMBERLY JENSEN
LINA ALMAZAN
LORENZO PONCE
LUIS VILLA
MAGDALENA HERRERA
MARIA HERNANDEZ
MARIA RIOS
MARIO RODRIGUEZ
MARTA MONROY
MARTHA HERNANDEZ
MIGUEL LUCERO
MURIEL HENSHAW
PEDRO FLORES
PHUNG NGUYEN
PHUONG LE

LAMPSON AVE 2013 (Cont'd)

13181	PRICILIANO DELACRUZ
	PRISCILIAN CRUZ
	QUANG TON
	REBECCA MUNOZ
	RICARDO LOPEZ
	RICARDO SANCHEZ
	RUBEN VARGAS
	SANDRA MARTINEZ
	STANLEY MAGILL
	SUZANNA LOMELI
	THUAN DANG
	TINH TRUONG
	TOM PHAN
	TOMASA GONZALEZ
	VINCE REAL
	VU CHU
	WILLIAM JOHNSON
13321	ORANGE CHILDREN & PARENTS TOGETHER I
	ORANGE UNIFIED SCHOOL DISTRICT
	PWCI
13382	PHUONG NGUYEN
13392	ANTHONY GUTIERREZ
13402	VINCENT MARROZZO
13422	NESTOR HERNANDEZ
13442	HAI NGUYEN
13462	JOHN WIETOR
13482	BENITO YU

LAMPSON AVE 2008

3845	OLD RANCH GOLF PRACTICE CENTER
3850	JOHN W SCALES
	JOYCE ROBBINS
	SUNRISE INDEPENDENT & ASSISTED LIVIN
3900	SEAL BEACH TENNIS
3901	OLD RANCH COUNTRY CLUB
	SEAL BEACH TENNIS CENTER
4000	CASTLE AUTO SERVICE
	COLLEGE PARK MOBILE
	NIRVIAR CORP
	SEAL BEACH VALERO
4665	ASSN OF CA SCHOOL ADMINISTRATORS INC
	CA DEPT OF FISH & GAME
	CALIFORNIA STATE UNIVERSITY
	GENERAL SERVICES CAL DEPT
	WEST ED
	WESTED
5001	SMYTHE & ASSOCIATES
	VERNON SMYTHE
5011	MICHAEL JENKINS
5021	E LANE
5031	JANICE MIKLAS
5041	PATRICIA LICATA
5141	GARY SUTTON
5151	BILL DUBIN TAX & ACCOUNTING SERVICES
	W DUVIN
5161	BARBARA SWINEHART
5171	OCCUPANT UNKNOWN
5181	OCCUPANT UNKNOWN
5234	YOUR CLEANERS
5238	WEEDS CO
5244	GENNAROS PIZZA
	NACHO MAMAS INC
	PASTA GROTTO INC
5246	THE QUILT CUPBOARD
5247	BRUCE W GIBSON DDS
	GOFORTH JAMES D DDS
5250	EXCLUSIVE PROPERTY & INVESTMENTS
5251	RICHARD LEVIN
5253	CLARK E SCHNEEKLUTH DDS
5256	PIECES OF YOU
	SHEAR EXPRESSION
5871	JIFFY STOP MARKET
5877	3RD DEGREE RC HOBBIES
5885	AUDREY ANDRADE
	AUDREY L ANDRADE DDS
5887	CUTTING PLACE THE FAMILY SHOP
5891	CHEM CHRISTINA HAIR ARTISTS
	HAIR ARTISTS
6800	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2008 (Cont'd)

6803	YARED TEFERAWORK
6820	KENNETH KIRSCHKE
6830	EVA CHANG
6840	KEVIN LITTLEFIELD
6850	JOSE VILLASANA
6851	GARDEN GROVE UNIFIED SCHOOL DST
6860	RUBEN MORA
6864	FERNE QUARANTA
6868	JUAN MADRIGAL
6872	KHURSHEED BAWA
7050	EMPIRE
	EMPIRE PLUMBING HEATING & AIR CONDIT
7100	UMPCO INC
7131	SOUTH COAST SEAFOODS CO INC
7180	COMMUNITY ACTION PARTNERSHIP
7261	CUSTOMFAB INC
	JCPENNEY
7274	AMERICAN PACIFIC PLASTIC FABRICATORS
	STERLING SLEEP
7340	DOT DOT DOT INC
	THREE DOTS INC
7425	OTHER SIDE OF KYOTO THE
7571	MEAD PRODUCTS
	MEADWESTVACO CORP
7700	A ERNST
	ADRIANNA LIPPER
	AUGUST BARONI
	BERNARD SAYONE
	BEVERLEY FRITZ
	BUSCH CARR & MCADOO
	CAROL NEWTON
	CAROL ZEIGLER
	CATHERINE HALL
	CHARLES VANHOUTEN
	CHARLES VINCENT
	DARRELL CLARK
	DAVE GILLESPIE
	DELORES KUNTZ
	DIANE FISCHER
	DOROTHY BEER
	DOROTHY SULSER
	DUANE HAY
	EDIE MEHL
	EDITH ALVIDREZ
	EDWARD COMEAU
	ELLEN WALLACE
	ELVIN GABEL
	EUNICE VANHOOSER
	FRANCES BECK
	FRANK BONIELLO

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2008 (Cont'd)

7700	GARY HEINLEN
	GENE BOYER
	GLORIA FRANZKE
	GUY MESSINA
	HAROLD CALE
	HELEN DRISCOLL
	I CHO
	IVY KREUZ
	JANE PAINTON
	JANICE WINN-SHILLING
	JEAN GERING
	JIM KALB
	JOHANNES KLAAUNER
	JOHN BERNARDINO
	JOSE CASARIN
	JOSEPHINE TAUSCHER
	JUDITH ERICKSON
	JUDYS BOYS HANDYMAN
	KARYN MYERS
	KATHY DAVIS
	KENNETH LICHT
	KIM ROBERTS
	LANNY YAKEL
	LAURIE MARSH
	LEO SAAVEDRA
	LEONARD TROUSIL
	LESLIE ALBERTS
	LILA BAUM
	LISA KILKER
	MAGIC LAMP MOBILEHOME CLUB
	MARILYN KIM
	MARY HARRINGTON
	MARY HARTUNG
	MARY VERONEE
	MAURICE FORD
	N NGUYEN
	NGHIA TRAN
	NORMA CUPP
	NORMAN VIGNA
	PAT HALL
	PAUL ANDREWS
	PAUL GOUDIE
	PAULA WIGINGTON
	RACHEL HOWARD
	RICHARD HOGAN
	RICHARD SANCHEZ
	RITA CARLSON
	ROBERT BABCOCK
	ROBERT EDDY
	ROBERT FOSSUM

LAMPSON AVE 2008 (Cont'd)

7700	ROBERT MCHARGUE
	ROBERT OLSZEWSKI
	ROBERT YBARRA
	RON TAYLOR
	RONALD KELLY
	ROY CORNELIUS
	ROY STRATTON
	SAM GLORIOSO
	SANTO RANDAZZO
	SEAN HUGHES
	SHERRY LAVERTU
	SHIRLEY HARRIS
	SITTISAK LAOHAVANICH
	SONJA HOFLAND
	STUART RICHARDS
	TERESA BLACKBURN
	THELMA STEELE
	THOMAS MAURER
	THOMAS WOOD
	TIFFANY HAMM
	VELVA DILL
	WANDA LUNN
	WARREN HAYNER
	WAYNE MADSEN
	WILLIAM HOPPER
	WILLIAM PETERSON
	WILLIAM SACHSE
	WINIFRED BORGHETTI
	WOODROW REED
7887	AN VU
	ANA CORTEZ
	ANGELA MORENO
	APOLONIO PEREZ
	BRIAN HUYNH
	CHRISTINE GIST
	CONNIE ROACH
	CUONG HOANG
	DAN CHU
	DAVID BINGHAM
	DAVID STRASBURY
	DEBBY ORDWAY
	DENNY TRAN
	DIANNE ERMER
	DIEM NGUYEN
	DINA VALADEZ
	DUYEN HO
	EDWARD LORD
	EUFEMIA CABADA
	EUFEMIA CAVADA
	EVELIA MOSQUEDA

LAMPSON AVE 2008 (Cont'd)

7887 EVELYN CALLAHAN
FRANCISCO PARTIDA
FRANCISCO RAMIREZ
GABRIEL MENDOZA
GABRIEL PAREJA
GARDEN TERRACE MOBILE PARK
GEORGE FRANCIONE
GLORIA DITMAR
HAI VO
HARRY COLLINS
HIEP DANG
HOANG PHAN
HUGO GALEANA
ISABEL ALCARAZ
JACK ORMSBY
JACKIE NGUYEN
JAMES HISEY
JAMES KIRKLAND
JOHN HOFF
JUDITH DOCKRELL
KENNETH SHAFFER
KHANH DO
KYEONGIM CHO
LEONARDO BANUELOS
LILY PHAM
MARIA ARIAS
MARIA QUINTANILLA
MARTHA HARTSOCK
MARTIN PINA
MONG CAO
MOS GEORGETA
MYONG YUN
NHI VO
NICOLE AYNALBEIE
OKYUNG MOON
OLGA SIMONS
PATRICIA SANDI
RAFAEL LAZCANO
ROBIN CASPER
ROGELIO ARZATE
ROSARIO RAMIREZ
RUBISELA VALDEZ
RYAN NGUYEN
SERGIO RAMIREZ
SHERWOOD ROSEDAHL
SHIGEYOSHI YAMAGATA
SI NGUYEN
SURIYA SIRIYOTIN
TAI LUU
TERESA BELTRAN

Target Street	Cross Street	Source
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LAMPSON AVE 2008 (Cont'd)

7887	THANH NGUYEN
	THICH PHUNG
	TIMOTHY QUICK
	TOSHIKO ALLMON
	TUIN NGUYEN
	VICTOR BOLO
	VICTOR SANDOVAL
	WILLIAM POMEROY
	YVONNE TAPIA
	ZION ORPAZ
7907	PRAPAI WANLARBKAM
7932	ANNA GONZALEZ
	AYMAN ABUMOSTAFA
	BEATRIZ CHAIREZ
	BICH NGUYEN
	BLANCA SWINGROVER
	CLYDE PRYOR
	D HOZAN
	DAVID HICKS
	ERNIE CHAVEZ
	FAN ZHANG
	HOANG NGUYEN
	JEANETTE GRANT
	JENNIFER SMALL
	KAORI HAMANA
	LAURA BONDIO
	LORETTA SMITH
	MINH HOANG
	MOC NGUYEN
	NICOLAE BANU
	PATRICK RILEY
	REGENA SINCLAIR
	SADRUDDIN LAKHANI
	SAM KIM
	SHEREEN HUSSEINI
	SHIN AHN
	SOONKI HONG
	STACIE CROZON
	SYLVIA BLUM
	UYEN TRAN
7972	AARON WASHINGTON
	ALEJANDRA SANTANA
	ALEX GARCIA
	ARTURO CARRANZA
	BETTY BEARD
	CLAUDIA CERVANTES
	EM CHAN
	ERYKA COVINGTON
	FRANK LUJAN
	HARTVILLE CHOCOLATE FACTORY INC

LAMPSON AVE 2008 (Cont'd)

7972	JEFFERSON NGO
	JENNIFER DANIELS
	JESUS HERNANDEZ
	JOCELYN CIUDADANO
	JOHN WILLIAMS
	KIM NGUYEN
	KWANG KIM
	L LEE
	LILIA RAVADAN
	LYNDA ALCANTAR
	LYNN HERRON
	MARTHA RIVERA
	MELISSA LENAHAN
	MICHEAL MEDINA
	MIRNA GARCIA
	ORLANDO TERAN
	PINE VILLAGE
	QUANG TRAN
	RUBEN VIVES
	SAUL VALENZUELA
	TEMEKIA NEWCHURCH
	TYRONE DAVIS
	VIRGINIA WIESEN
8022	WAYNE INFANGER
8050	SUBWAY SANDWICH & SALADS
8054	COSMO HAIR & NAIL SALON
	UNIQUECUTS
8056	EYE CANDY AQUARIUMS
	TROPICAL FISH
8058	NUMBER ONE TO GO RESTAURANT
8061	ANTHONY VO
8063	KAROLYN DILLER
8065	OCCUPANT UNKNOWN
8067	PATRICK NGO
8069	YEN NGUYEN
8071	DARIO TORRES
8081	JOHN DEANGELO
8091	EVA DAUSEL
8101	LAMPSON GROVE DAY SCHOOL
8141	CARRIE ALONZO
	DONALD BOYD
	KRISTINE NGUYEN
	LINDA CURRY
	MAY PERINO
	MICHAEL GIMA
	TODD MAYES
8151	JILL WEDGE
	MICHELE GAMPON
	MOHAMMED TAREELL
	PAULINA TUPAZ

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 2008 (Cont'd)

8171	CRYSTAL TORRES
	EALEEN MARCHIAN
	MEGAN PANGAN
8211	GARDEN GROVE UNIFIED SCHOOL DISTRICT
8221	VINH LO
8222	OCCUPANT UNKNOWN
8225	RICK TRAN
8231	ANDY NGUYEN
8232	NORMAN NARITOKU
8235	OCCUPANT UNKNOWN
8241	FRANK BAHIT
8251	DAVID LEE
8279	RAFAEL T R LANDSCAPING & GARDE
8281	CARMELO ANTOLIN
8295	MICHELLE PARK-UNCAPHER
8301	CHUNG TRUONG
	MINH LE
	QUYNH LUC
8331	BHAGAT SINGH
	CHUONG DANG
	DORIAN APARTMENTS
	ESPERANZA GARCIA
	JEET GIRAN
	JENNY NGO
	JOE MALONEY
	LAVERNE CHONG
	LUCINA AQUINO
	MICHAEL HUA
	MINH THICH
	MYONH SEO
	PAUL CATRINESCU
	RODOLFO RECINOS
	SANTOS RODRIGUEZ
	SUNRISE SEAGULL PRODUCTIONS INC
	T SKY COMMUNICATIONS
	THINH TRAN
	THUONG NGUYEN
	TIEN LE
	TUAN PHAM
	TUNG PHAM
8362	MILDRED ALLEN
8372	JOE HENSON
8392	ALICE PRINCE
8412	PHAN TRUONG
8422	KIDS 1ST
	WILLIAM TONKIN
8442	JUDITH TESKE
8515	AD & LEON CONSTRUCTION
	JOSE SALAS
	MARIA VELEZ

LAMPSON AVE 2008 (Cont'd)

8525	SON NGUYEN
	TUAN TRAN
8535	JENNIE BUI
	PHUONG NGUYEN
	SALLY HUYNH
	WILLIAM NGYEN
8545	LOC KHUAT
	TUNG NGUYEN
8552	ORANGE COUNTY CHRISTIAN CHURCH
8555	MAIHOA KHUAT
	THANH TRAN
	XUAN VU
8565	HOUNG NGUYEN
	JULIE GAMBOA
8572	QUAN NGUYEN
8575	MARK BATES
	SHIRO NISHIDA
8585	RALPH MARSH
8592	CESAR REGINO
	WHITE GABLES LODGE
8602	LINDA WOCHNER
	MARK HINRICHS
	STEVE MILLINGTON
	W LEMONS
8611	THANH VU
8620	GLEN SMITH
	MARIA PEREZ
	MARIA VELASQUEZ
8622	ALAN PIERSON
	JODY CARD
	OCCUPANT UNKNOWN
8642	DY YEK
	JASON CASTRO
	KATHERINE HAYES
	LARRY PARKER
	PATRICK MCCORMICK
8652	MI OBRIEN
8654	OCCUPANT UNKNOWN
8671	NGOC TRAN
8672	OCCUPANT UNKNOWN
	THUY NGUYEN
8673	BAO PHAM
	HYUN LEE
	LIZETH CATALAN
	NGUYET TRAN
8675	IRIS SALAZAR
	LINDA VU
	SUONG HUYNH
8677	TAM HUYNH
	TUONG PHAN

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2008 (Cont'd)

8682	VIET NGUYEN
8722	ISMAEL GUILLEN
8762	TERRILL SMOAK
8782	FREE WILL BAPTST CH GARDEN GROVE
	GARDEN GROVE FWB CHURCH
	NEW BEGINNING CHURCH OF ORANGE
	NEW BGNNING FRE WLL BAPTIST C
8802	OCCUPANT UNKNOWN
8821	NHAT LO
8841	ERIC CHANG
	LANG TRINH
	PAUL SHIROMA
8845	CHANG CHOE
	FASTTRACKSHUTTLE
	IN KIM
	LUC HINH
	OSCAR DIAZ
	SOO PANG
	TRUNG NGUYEN
8851	BINH PHAN
	JEONG LIM
	PHAT DIEP
	SOO KI
8852	QUA LE
8855	CALIFORNIA NATIVE LANDSCAPING
	CHRIS LEE
	RICHARD SON
	SOOK SONG
8861	HONG TRAN
	NGUYEN TRINH
	TIMOTHY BRYANT
8865	ANDRES VELARDE
	DUAN LE
	EDWARD WHANG
	ERIC LE
	HARRISON LE
	IG LEE
	JUPITER PAINTING CO
	RICHARD TRAN
	YONG BUCVKENBERGER
8873	CHANG LEE
8892	HENRY AIHARA
8921	SON TRINH
8931	TUYEN PHAM
9002	PETE VIRGA
	VIRGA CONSTRUCTION
9011	JOSE CUENCA
	MINH TRAN
9015	SUY VU
	T LUU

LAMPSON AVE 2008 (Cont'd)

9021	HUY NGUYEN
	TRISTEN PETERS
	TRUNG HUA
9022	GEORGIA MILLER
9031	FELICITAS EGGLESTON
9033	TIM GEHLE
9035	HOANG PHAM
9037	ROGER ALLARD
9039	BERNARD FARRELL
9041	TED MCKIE
9042	HINH VUONG
9043	RONALD CONWAY
9045	EDWIN GREENWALT
9047	GARY PETERSON
9048	SALLY HUYNH
9049	NICK MATISEVICH
9051	KENNETH LEE
9053	STEPHANIE MAGGIANI
9062	TUAN NGUYEN
9071	DENISE BICKNELL
9081	OCCUPANT UNKNOWN
9082	KEVIN MICHAELS
9091	OCCUPANT UNKNOWN
9092	OCCUPANT UNKNOWN
9101	DUY TRAN
9105	HEE PARK
9109	VINH TRUONG
9111	LYNN LUNDEEN
9115	MIKE NGUYEN
9121	MICHAEL DAO
9131	SOEN TJIA
9141	YEN LE
9142	JESUS GOMEZ
9151	OCCUPANT UNKNOWN
9161	JOHN TULLY
9162	WILLIAM MORRIS
9171	RD CONNELL CONTRACTING CORP
	RICHARD CONNELL
9173	SANG NGUYEN
9175	MICHELLE NGO
9177	TONG DU
9181	ALBERT NORMANDIN
9182	BRYAN SEVILLANA
9191	KINGDOM HALL CHURCH
9202	MICHAEL MYERS
9222	OCCUPANT UNKNOWN
9252	OCCUPANT UNKNOWN
9262	DIANA NINH
9282	SAUL ELIAS
9284	PATTYS PUMPKINS & TREES

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 2008 (Cont'd)

9292	BRIDGEWAY INTERNATIONAL
	CHRIS COMPTON
9302	MARCOS TINOCO
9312	EMILY STULTS
	STULTS PHOTOGRAPHY
9331	OCCUPANT UNKNOWN
9332	SON DOAN
9342	MARTIN ROJAS
9362	DUNG DANG
9402	ANDREW TRUONG
9512	LARRY CONNER
	LARRY CONNER MASONRY
9521	OCCUPANT UNKNOWN
9522	PHILIP HOANG
9531	OCCUPANT UNKNOWN
9542	DONG CHO
9552	OCCUPANT UNKNOWN
9561	ROY SHIN
9571	ALEX ORTEGA
9591	MARK PINKSTON
9601	YOUNG YUM
9621	MELVA WATSON
9631	PATRICIA HUNTER
9641	CYNTHIA SELBY
9661	TOMMY NGUYEN
9671	JOANE TA
9691	AVELINA CUMBIS
9701	KONRAD MAYA
9721	FRANK MARCARIO
9731	WILLIAM YOUNG
9752	ROGELIO GONZALEZ
9797	PATRICK CATLIN
9811	JACK REIHING
9812	VICENTE FAMADOR
9821	MARILOTA CABALLERO
9841	HIGGS JAMES
	JAMES HIGGS
	SYLVIA MONTOYA
9851	KEVIN NGUYEN
9852	TOMMY TUGGLE
9871	JULIUS ARGUMEDO
	MIKE SAULS GARDEN GROVE PLUMBING
	SAULS PLUMBING
9881	JAMES OKAZAKI
9901	MINH HUYNH
	T H HANDYMAN
9911	JEANIE FRANCIS
9931	DISTRIBUTORS OF MELALEUCA
	OCCUPANT UNKNOWN
9941	ELIZABETH CABANAS

LAMPSON AVE 2008 (Cont'd)

9961	OCCUPANT UNKNOWN
10029	K HANDY PAINTING
10039	CM PLUMBING
10041	NORA DELA ROSA BEAUTY SKIN CARE
10042	CENTURY 21 NEWTEK REALTY
10049	MARGOS HAIR SALON
10051	LULUS PARTY SUPPLY & GIFT
10061	SUPERIOR LEARNING CENTER
10071	ADAM JUAREZ
	ALEJANDRO HUIMANI
	ANDRE DESBIENS
	AUDREY GORDON
	CHI HUYNH
	CINTHYA SANDOVAL
	CURTIS GRIEDER
	DANIEL BARRON
	DAVID RODRIGUEZ
	DIANA DUONG
	DILRUBA RAHMAN
	EDGAR MONZON
	HIEN NGUYEN
	HOA NGO
	HOANG LE
	JAFAR SHAHWAN
	JESUS GALICIA
	JOHNNIE VUONG
	JUAN GONZALEZ
	JUDY SRABIAN
	MARIA PONCE
	MARQUIS APARTMENTS
	MOHAMED MOUSTAKIB
	MYRA VELAZQUEZ
	NHAN TRUONG
	OMAR VASQUEZ
	PENNY BAGGET
	SAIDUR RAHMAN
	SATELLITE MANAGEMENT CO
	TAN HO
	THUVIENVIETNAM CO
	TINA LEE
	TRO DO
	TUAN TO
	VAN TRAN
10101	TUAN LE
10102	HENRY STOKES
10103	TINH TRAN
10105	VAN TRUONG
10107	LU VO
10109	CHARLIE TRAN
10113	NANCY NGUYEN

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 2008 (Cont'd)

10115	OCCUPANT UNKNOWN
10117	CHAU LAM
10119	TU VO
10121	HOAN NGUYEN
	OCCUPANT UNKNOWN
	THUTRANG DINH
10141	KIDS KLUB ACADEMY
10171	ARTURO SAUZE
10181	EDWIN STUDHOLME
10182	BOBBY WALL
10191	MICHAEL MENOU
	ROBERTA GEARIN
10192	CHARLES KEMP
10201	CONSTANCE FERNANDEZ
	SARA MARIN
10211	AMANDA PRITCHETT
	KHANH DOAN
	LORENA CASTANEDA
10221	MARTIN GONSALEZ
	RONALD AGEE
10231	AMY HERNANDEZ
	DIANNE GONZALEZ
10232	MINH NGUYEN
10241	ROBERT FRAME
	SHARON ENGEL
10281	KEITH LEACH
10301	SEAN BUSBY
10321	GREGG WHITE
10332	CONCEPCION ALZAGA
	HIEN LE
	IRVING WEISER
	L LEHUONG
	MUOI NGUYEN
	SAM HO
	SON DANG
	TAI TRUONG
10351	RAMON BALTAZAR
10352	ARELI LUNA
	JESUS ESCOBAR
	JOSE BETANCOURT
	LEYDI TELLEZ
	LOLILA FAALIGA
	LUIS RIOS
	MARTHA MERCADO
	MIRIAM ALCOCER
	OLIVIA DELGADO
	REBECA BARRIOS
10361	NGOAN NGUYEN
10362	ANGELA FLORES
	BERTHA ABELINO

LAMPSON AVE 2008 (Cont'd)

10362	CLARA LOPEZ
	EDUARDO OLMOS
	EULOGIO MORALES
	IGNACIO MONTANEZ
	JOSHUA HOKE
	JOVITA VAZQUEZ
	MARIA AGUIRRE
	MARIA DELGADO
	MARIANO ARANO
	MIGUEL BENITEZ
10371	CECELIWIL SARNO
10372	ALMA GONZALEZ
	FILIBERTA BAILON
	FRANCISCO LEYVA
	JUANA GARCIA
	JULIO RAMIREZ
	MIGUEL MIRANDA
	PAULA SANCHEZ
	RAFAELA NARANJO
	REYES RIOJA
10381	RONALD JACK
10392	ANDRES MEDINA
	ARMANDO VELASQUEZ
	EUGENE GOLDSMAN
	HERIDERTO REYNOSO
	MARGARITO OLIVARES
	MARIA TAPIA
10401	JAMES STICKLER
10411	TOMAS SALGADO
10412	AGUSTIN VALERO
	GILBERTA VERGARA
	JOSE VASQUEZ
	LAZARO PERALTA
	LINO ESCOBAR
	MARGARITA ESCOBAR
	MARIA MERANDA
	MARIA SANCHEZ
	RAYMOND REISS
	RODOLFO ESCOBAR
10421	RUTH VINCENT
10422	CLAUDIA VALENZUELA
	CRISTINA MENDOZA
	ESPERANZA ARCEO
	GUADALUPE ESCOBAR
	HERNAN VALDEZ
	JUAN ALCAZAR
	MARIO BENITEZ
	TINA NGUYEN
	VICTOR BUSTAMANTE
10431	CIRILO CASTRO

Target Street	Cross Street	Source
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LAMPSON AVE 2008 (Cont'd)

10442	ALBERTO LAREDO
	ALFREDO ESCOBAR
	ARTURO BECERRA
	AZUCENA CIERRA
	CASIMIRO MORA
	CORTES ALVAREZ
	EVANGELINA DIAZ
	GERARDO AGUILAR
	HUGO AGUILAR
	JAIME LAVELLE
	JAVIER ESTRADA
	JOANA MACEDA
	JORGE SALGADO
	LAU LAMAS
	LEOCADIO PERALTA
	LUCILA SIERRA
	MARIA CANO
	ORLANDO HERNANDEZ
	RAUL QUIROZ
	RODOLFO VALENZUELA
	RODRIGO ALVAREZ
	ROSA LOPEZ
	SANDRA NILA
	SANTOS PERALTA
	SANTOS RAMOS
	SERGIO PACHECO
	VICTOR SALGADO
10451	QUYEN HO
10501	M JIMENEZ
10502	ARSTIC VISION
	NANCY LEE
	SIMLOGICO
10522	MARCIAL AGUILAR
10531	PEDRO LEVARIO
10532	GERARDO FALCON
10542	OCCUPANT UNKNOWN
10551	TRACY MCFARLAND
10552	RENE VALERO
10562	HAROLD ESTABROOK
10582	JOE ADKISON
10592	MANUEL LEONG
10602	MARIA CERON
10612	NHO NGHE
10622	AXEL VICKERS
10632	JOSE CAMACHO
10661	HARRY COUGHTON
10662	JOAQUIN AGUIRRE
10671	MALCOLM DIKE
10672	JOHN THORNTON
10681	TAM PHAM

LAMPSON AVE 2008 (Cont'd)

10682	DANIELA SUCIU
10691	AMELIA CARRILLO
10692	STEVEN TRAN
10701	KEVIN HUA
10712	RAFAEL MARTI
10721	ANGEL CHAVEZ
	CHAVEZ STEEL
10722	OCCUPANT UNKNOWN
10732	OCCUPANT UNKNOWN
10750	EVANGELICAL FORMOSAN CHURCH
10771	ERICK WILLIAMS
10773	REBECCA REYES
10781	JOAN VANDEVER
10782	ANDREW NGUYEN
	DEBBIE MCCART
	HA BUI
	HYO SHIN
	HYUN NOH
	IGNACIO ARIAS
	JAMIE IBARRA
	JAMIE ORRELL
	JON SUTHERLIN
	JULIA GOMEZ
	KATRINA LOPEZ
	KEVIN FLORES
	KHANH LE
	LARA LEE
	LEOBARDA ABARCA
	MANUEL SALAZAR
	MELANIE WINSCHER
	NGOC LEYEN
	OROPEZ DAVA
	PHONG NGIEM
	RANDY HOKE
	RENEE LEVY
	RITA MAGDALENO
	ROGELIO MERCADO
	SHAUN WEBB
	SOPHORN KRAUT
	STEVEN HUA
	VICTOR SOTELO
	VIRGINIA SCHWANER
10783	DAVID ROSE
10785	SCOTT HUBBARD
10791	MICHELLE NGUYEN
10842	DIANE TRAN
10851	GARDEN GROVE UNIFIED SCHOOL DST
	RALSTON INTERMEDIATE SCHOOL
10852	THUY HA
10862	THANH HUYNH

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 2008 (Cont'd)

10862	THI NGUYEN
10872	LOAN TRAN
	MEN DO
	NATHAN NGUYEN
10882	FRANCES LANCASTER
10890	OCCUPANT UNKNOWN
10894	OCCUPANT UNKNOWN
10895	HUNG NGUYEN
10896	NGOC NGUYEN
10898	DAT LAM
10900	OCCUPANT UNKNOWN
10902	DO LAC
	HOANG DO
	JORGE CARRIERA
	VUI NGUYEN
10912	TRUNG TRAN
10918	OCCUPANT UNKNOWN
10924	MYRTLE MOORE
10928	JAMES OCONNOR
10934	RACHELLE DEAN
10938	OCCUPANT UNKNOWN
10942	JOYCE BRITTAIN
11041	RAFAEL VILLALOBOS
11042	DANIEL ENRIQUEZ
11051	CAROL LEWIS
11052	OCCUPANT UNKNOWN
11061	CHUONG PHAM
11101	DORIS FAIRALL
11111	SPARLIN SYPHERD
11162	JOHN LOGAN
11182	ANTONIO GARCIA
	ANTONIO GARCIA INSTALLATION
	MARTHA GARCIA
	RAFAEL MENDOZA
11191	OCCUPANT UNKNOWN
11192	NEAL LYON
11201	RAYMOND DIETSCHE
11202	CHARLES KAIR
11206	JAY CISSELL
11208	WAYNE SALAS
11222	DAVE LAMPEY
11232	ASI LANDSCAPE SERVICE INC
	ISRAEL SORIANO
11242	CANH PHAM
	DUY NGUYEN
	PHUONG NGUYEN
	TAM LE
11252	DAI DONG
	ELIAS DESANTOS
	HANH DUONG

LAMPSON AVE 2008 (Cont'd)

11252	HIEN LE
	KING HA
	THANH TRUONG
	TRINH BUI
11262	OCCUPANT UNKNOWN
11272	DAVID MAITEN
11281	GILBERT HRUSCHKA
11282	MANUEL GUTIERREZ
11292	OCCUPANT UNKNOWN
11294	JEFFREY GROVES
11296	OCCUPANT UNKNOWN
11302	OCCUPANT UNKNOWN
11311	OCCUPANT UNKNOWN
11322	JOHN SCHLOE
	MARILYN HARDER FINE ART
11332	DAN AGUINAGA
	ILLUSTRATION BY DANIEL
11371	TIMOTHY VO
11381	WILLIAM MYERS
11390	ANA OSTINA
	ANDY PHAM
	BK CARPET CLEAN
	CATHYE HORNER
	CLEAN MASTERS
	COLEMAN LIPPERMAN
	DANNY CARRETERO
	DITTED LLC
	EDUARDO GASPARRI
	FIDEL CASTILLO
	JAMES HODGES
	JAMES ROUDON
	KUANG OH
	RAFAEL RIVERA
	ROMEO VILLANUEVA
	ROQUE REYES
	TRUC LENHA
	WILL GALWAY
	YONG KO
11401	TAN NGUYEN
11421	OCCUPANT UNKNOWN
11441	DONNA KERNS
11450	ADALID SANDOVAL
	AEZELDA KARST
	ALEXEY MONEV
	BEN BUTTELING
	BLAKE MONTANO
	CESAR CARRILLO
	CHRIS PETTY
	CLINT SOTELO
	DARLENE SHACKFORD

Target Street	Cross Street	Source
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LAMPSON AVE 2008 (Cont'd)

11450	DAVID LAPPINGA
	DAYSI PONCE
	DONNA OLMSTEAD
	ERICK ORTIZ
	G PUENTE
	GIOVANNI ADAN
	HENRY KIM
	HOLLIE MATCHIE
	HUGO GONZALEZ
	JENNIFER SMITH
	JIAN ZHOU
	JOHN HARDING
	JUAN CASTRO
	JUNIOR SHAW
	KAM LIEW
	KNIGHT GUARD SECURITY
	KYLE MONTANO
	LAMPSON VILLAGE APARTMENTS
	MAGDY SORIAL
	MANUEL LLANILLO
	MARIA RAMIREZ
	MARIO AVALOS
	MICHAEL ANDERSON
	MICHAEL THOMPSON
	OLGA PASSUNI
	ON TIME LENDING
	PATRICIA MURPHY
	R MANN
	REYNA LOPEZ
	RHONDA JENKINS
	RITA MAZUR
	SANDRA BROOKS
	SANDRA JAUREGUI
	SANDY FOSTER
	SARBJIT SINGH
	STEVE NGO
	TREVOR DICK
	TSUNAMI SPORTS COLLECTIBLES
	V CAMPBELL
	VACH NGUYEN
11461	NAM TRAN
11512	CHAT DAO
11571	KAYE MONACHELLI
11582	ROGER GWYNN
11591	T VANLE
11602	JAMES WARD
11611	OCCUPANT UNKNOWN
11612	CHHAVY CHAN
11616	KIM CONSTANTINE
11622	ENCORE HOSPITALS INTERNATIONAL

LAMPSON AVE 2008 (Cont'd)

11622	OPTIMA AUTO MOTOR INC
	PHAT VO
11642	DARRYL ROSS
11661	LEONOR UBALDO
11662	DO JEON
11672	JEFF VANCE
11692	DOANLD TRUBIROHA
11701	GERALD MAJER
11712	AN VU
11714	KIM TA
11732	KYUNG LIM
11771	SERGIO ROCHA
11791	LEONARD SELOVER
11801	RAFAEL GARCIA
11811	EILEEN BRUNING
11821	ANGEL ESPINOSA
11831	LYLE JOHNSON
11841	LIEU PHAM
11851	PHUOC PHAN
11862	OCCUPANT UNKNOWN
11871	TRUONG NGUYEN
11881	ENRIQUE FLORES
11891	PAUL HOIR
11892	EUCHARISTIC MISSIONARIES OF THE MOST
	YOLANDA BARROSO
11902	TODD FLEWITT
11911	WILLARD FAUGHNDER
11921	MARCELINO LOPEZ
11931	SILVIA CAMINO
11951	ASALIA MENDEZ
11961	CURTIS HOOPES
11971	LEONOR UBALDO
	SALLYMAID
12091	GARDEN GROVE UNIFIED SCHOOL DST
	VIOLETTE C C ELEMENTARY SCHOOL
12171	OCCUPANT UNKNOWN
12232	DONALD FERGUSON
12241	JOSE JACOBO
12251	PATRICIA HOLGIN
12252	LUIS MADRIGAL
12262	TONI GREATHOUSE
12271	ARNOLD BORBON
12272	LAWRENCE SERBER
12281	HYPERIONNET
	PERCY BUSTAMANTE
12291	MARGARET MARTINEZ
12301	UMAR BONG
12312	FONG CHANG
12321	ARMANDO MAGDALENO
	ZOILA GONZALEZ

Target Street	Cross Street	Source
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LAMPSON AVE 2008 (Cont'd)

12331	TEODORO PEREZ
12332	DIEN PHAN
12341	ANN DIXON
12352	DALTON KING
12361	SANTIAGO GOMEZ
12371	YESENIA AYALA
12381	MARISELA BARRON
12391	CHARLES & CO LLC
	GLORIA HASSMAN
12399	VICENTE NUALART
12422	PETERS HAIR & FLORAL DESIGN
12432	CARNICERIA & TACOS TIJUANA
	LA VAQUITA MEAT MARKET
12441	GILBERTO CASTILLO
12511	ANGEL TRUCKING
	OCCUPANT UNKNOWN
12531	MARTIN HERNANDEZ
12550	AMERICAS BEST VALUE INN & SUITES GAR
	LEGACY SUITES
12551	GENEVIA HOCUTT
12560	PECH KIM
12571	RODRIGO SANCHEZ
12582	KHAM PHENGTHIRATH
12592	JAMES SCOTT
12601	OCCUPANT UNKNOWN
12602	CHARLES BARLING
12611	OCCUPANT UNKNOWN
12612	ASAP SUPER MALL
	JAMES BOWEN
12621	SE BAEK
12631	PHU DOAN
12632	BOB BOUNHEUANG
12652	NICKOLS CLEANING CO
12661	RODRIGUEZ VICTORIANO
12662	SAMMIE GERNERTT
12671	OAI NGUYEN
12672	VIDULFO CASARES
12682	JAIME AGUILAR
12691	MAGDALENA GOMEZ
12701	KIMBERLY ADKINS
12711	OCCUPANT UNKNOWN
12712	ARTHUR MARTINEZ
12872	WALLY NGUYEN
12882	OCCUPANT UNKNOWN
12892	MUOI VO
13051	MIREYA SANCHZ
13061	A RESENDIZ
	ADALILIA MARTINEZ
	ADRIAN CENTENO
	ALEJANDRA AMARO

LAMPSON AVE 2008 (Cont'd)

13061 ALFREDO VENEGAS
ALICE KEIGLEY
ANGEL LUNA
ANTONIO MORALES
ARACELI GUINTO
ARACELI RENDON
ARIEL CHAVEZ
ARMANDO VARGAS
ARQUIMEDES RAMIREZ
BEATRICE CORAL
BEVERLY NORTON
BRENDA TOLEDO
CARLOS LEQUERICA
CARMEN LOPEZ
CHRISTOPHER AREND
CITY VILLAS APARTMENTS
D PARTIDA
DANIEL DAMITIO
DANIEL HOLBROOK
DAVID GALEANA
ELSA LOPEZ
EMMA TORRES
ERIKA SALDANA
ESMERALDA GONZALEZ
ESTELLA MEDRANO
ESTHER ALVAREZ
FABIOLA CABRERA
FEDERICO MUNOZ
FRANCIS DELAPUERTA
FRANCISCO RIOS
GABRIEL ORTIZ
GERARDO EQUIHUA
GONZALO REYES
GUADALUPE PERALTA
GUADALUPE SANTACRUZ
GUADALUPE SERRANO
GUILLERMO BASTIDA
GWEN FERNANDEZ
HAI PHAM
HEATHER LONG
IRMA BARRENTOS
IRMA CORNEJO
ISELA ROSALES
IVAN BRITO
JAIME BELLO
JAIME GARRIDO
JAIME MARTINEZ
JASMIN CORTEZ
JENNIFER TANA
JESUS SANCHES

Target Street	Cross Street	Source
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LAMPSON AVE 2008 (Cont'd)

13061
JOE TIRADO
JONATHAN OCAMPO
JOSE AVILEZ
JOSE CRUZ
JOSE GONZALEZ
JOSE JIMENEZ
JUAN AGUILERA
JUAN GARCIA
JUAN RAMOS
JULIO PINO
KAREN WONG
KARINA HERNANDEZ
KRISTEN GUERRERO
LIDIA GARCIA
LIZBETH SANDOVAL
LUIS FACUNDO
LUZ BEJINES
M CASTILLEJA
M EADE
MAMAK IRVIN
MANUEL GALVEZ
MARBELLA LORENZO
MARIA BARILLAS
MARIA CALDERON
MARIA ESQUERA
MARIA GONZALEZ
MARIA JIMENEZ
MARIA SOTO
MARIA ZAMUDIO
MARITZA CARBAJAL
MIGUEL URZUA
MOISES MANZANAREZ
NATERAS CNC PROGRAMMING CO
OMAR NAVA
PABLO MELGOZA
PAULINA ORTIZ
PEDRO CAMARILLO
PERLA CARDOSO
PRIMITIVO TORRESCANO
RAMON SALAZAR
RAUL IBARRA
RICHARD WALLACE
ROMANY ATTIA
ROSA ARCINIEGA
ROSA MIRANDA
ROXANA LOPEZ
RUTH RAMOS
RYAN JAMES
SCOTT THOMSON
SHANNON KARN

LAMPSON AVE 2008 (Cont'd)

13061 SHAWN ANDRE
SOCORRO MACIAS
SYLVIA GUTIERREZ
VELIA RODRIGUEZ
VICTOR HOLGUIN
VINH HUYNH
YOLANDA QUINONES

13181 ACEVEDO NUNEZ
ADOLFO SEGURA
ALEX JANOWSKI
ALFREDO PEREZ
ALMA PINEDA
ANA HERRERA
ARTHUR WELCH
BETSABE URQUIOLA
BLAINE WHITNEY
CLAUDIA VIVAS
CONNIE HODGES
CORONAS PUMP KING
CYNTHIA MAWSON
DAVID CAMPBELL
DAVID CASTRO
DIANA FIGUEROA
DON EDWARDS
DONNA RIVERA
ELIAS HERRERA
ELIDIO SALGADO
EVELYN WOODS
FELIPA PIEDRA
FERNANDO MORA
FRANCISCO CHAVEZ
FRANCISCO MEJIA
FRANK MCCOY
GABINO VILLA
GLENHAVEN HOMES
GUILLERMO ARCE
HAP NGUYEN
HIEP TRINH
HUMBERTO RAMIREZ
J WEAKLEY
JAMES HELMAN
JASON ADAM
JEAN PARKER
JEFF MCGUIRE
JOEL COLCHADO
JORGE PERALTA
JOSE TORRES
JOSEPH GONZALES
JULIO ALVAREZ
KATHLEEN DURAND

Target Street	Cross Street	Source
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LAMPSON AVE 2008 (Cont'd)

13181	LINCOLN LAMADRID
	LINDA CASARES
	LORENZO PONCE
	MARGIE WILSON
	MARIA FLORES
	MARIA MENDEZ
	MARIA VARGAS
	MARIO RODRIGUEZ
	MARTHA HERNANDEZ
	MIGUEL RUVALCABA
	MURIEL HENSHAW
	NGOC LETHUAN
	PEDRO ALCOCER
	PHUONG NGUYEN
	PRICILIANO DELACRUZ
	PRISCILIAN CRUZ
	QUANG TON
	RAMONA GONZALEZ
	RAUL DIAZ
	RICARDO SANCHEZ
	ROMONA BARBOUR
	S MARTINEZ
	SALVADOR HERRERA
	STANLEY MAGILL
	SUSANA DELGADO
	THIEN LE
	THINH NGUYEN
	THUAN DANG
	THUY TONG
	TINH TRUONG
	TRANSPORTERS FAGASA EXPRESS
	TRAVIS TRUONG
	VERONICA MUNOZ
	VICTORIA WOOD
	VINCE REAL
13321	ORANGE UNIFIED SCHOOL DISTRICT
13382	MAI NGUYEN
13392	NHAN LE
13402	VINCENT MARROZZO
13422	RAFAEL SEGOVIA
13442	HAI NGUYEN
13462	NORBERT WIETOR
13482	BENITO YU

LAMPSON AVE 2003

3900	OCCUPANT UNKNOWN
3901	OCCUPANT UNKNOWN
4000	COLLEGE PARK MOBIL
	NIRVIAR CORP
4665	CLFRN STATE OF FISH & GAME
	SOUTHWEST REGIONAL LABS CO
	WEST ED
	WESTED
5001	DELORES SLATTON
	DITCO
5011	KAREN HEWITT
5021	E LANE
	ROSSMOOR REALTY CO
5031	JANICE MIKLAS
5041	PATRICIA LICATA
5141	GARY SUTTON
5151	OCCUPANT UNKNOWN
5161	BARBARA SWINEHART
5171	RICHARD QUINN
5181	RONALD DEHERTOGHE
5230	LAMPSON LIQUOR
5234	OCCUPANT UNKNOWN
	YOUR CLEANERS
5238	CLG PARK INTRR FRMRLY CLOWN
	OCCUPANT UNKNOWN
	WEEDS CO
5241	LAMPSON FAMILY CHIROPRACTIC
	RYAN BLOSSEY
	STEVE STRYKER DC
	STRYKER STEVE DC
	WILLDY NUTRI DISTRIBUTING
5244	GENNAROS
5245	JAMES GOFORTH
5246	OCCUPANT UNKNOWN
5247	BRUCE GIBSON
	GIBSON BRUCE & GOFORTH DDS
	GOFORTH JAMES D DDS
	JAMES D GOFORTH
5250	CENTURY 21 EXCLUSIVE
	EXCLUSIVE PRPRTY & INVSTMNT
	OCCUPANT UNKNOWN
5253	RICHARD LEVIN
	SCHNEEKLUTH CLARK DDS MS
5256	OCCUPANT UNKNOWN
5260	OCCUPANT UNKNOWN
	RED SCORPION TAE KWON DO
5871	DANIEL TRAN
	JIFFY STOP MARKET
5877	ALPHA ELECTRONIC TV
5885	ANDRADE AUDREY L DDS

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LAMPSON AVE 2003 (Cont'd)

5887	CUTTING PLACE
	OCCUPANT UNKNOWN
5891	HAIR ARTISTS
6800	ERIC OSTERLUND
6810	STEVEN KELLER
6820	KENNETH KIRSCHKE
6830	SEHIN ARRAGAW
	YARED TEFERAWORK
6840	JOAQUIN CAMPOS
6850	JONG PARK
6851	PACIFICA HIGH SCHOOL
	PCFC HIGH SCHL STDNT ACTVTY
6860	ENA MORA
6864	FERNE QUARANTA
6868	FRANK CHOUNET
6872	KHURSHEED BAWA
7042	BRUNO LEBON
	DOT DOT DOT INC
7050	AANCHOR OVERHEAD DOOR
	MASTERS AWNING
7100	OCCUPANT UNKNOWN
	UMPCO INC
7131	SOUTH COAST SEAFOODS CO
7180	MK HEALTH FOOD DISTRIBUTORS
	NATURES LIFE
7274	AMERICAN PACIFIC PLASTIC
	OCCUPANT UNKNOWN
7340	OCCUPANT UNKNOWN
	SOUTHERN CALIFORNIA CARTON CO
7391	OCCUPANT UNKNOWN
7465	OCCUPANT UNKNOWN
7490	OCCUPANT UNKNOWN
7571	MEAD CORP
	MEAD SCHOOL & OFFICE PRODUCTS
	MOM & ME CREATIONS
	OCCUPANT UNKNOWN
7611	OCCUPANT UNKNOWN
7690	GOLDEN WEST PIPE & SUPPLY
7700	A FRALEY
	ANGELA PETRONIO
	ANNIES DRAPERY
	BCM SALES CORP
	BILL NELSON
	CARR BUSCH
	CHARLES VANHOUTEN
	CHRISTINA FRITZ
	DAVID JONES
	DIANE FISCHER
	DONALD WOLFE
	DONNA CLARK

LAMPSON AVE 2003 (Cont'd)

7700
DUANE HAY
EDITH ALVIDREZ
EDNA MEHL
EDWARD COMEAU
ELLA LEBEAU
EVELYN GOUDIE
F MARIANO
FLEMMIE AZZARO
FRANK BONIELLO
GERALD PINTHUS
GLORIA BERGHOFF
GLORIA FRANZKE
HAROLD CALE
HELEN CASSITY
HENRY THEILEN
HOWARD BONNER
JAMES KREUZ
JANE BERNARDINO
JEAN GERING
JEAN HAMM
JERRY HALL
JERRY SEULKE
JESSIE WARNER
JOE GAZZENY
JOHN FARRELL
JOHNNIE CHAPMAN
JOHNNIE DAVIS
JOHNNIE WINN
JOSE CASARIN
JOSEPHINE TAUSCHER
KATHLEEN EMMERT
KEITH BROWN
KEITH KIMBALL
KENNETH MCCATTY
LARRY GLORIOSO
LEONARD MORRISON
LINDA LEIGHTON
M SACHSE
MAGIC LAMP MOBILEHOME CLUB
MARJORIE CROMEENES
MARTHA BURKHARDT
MARY HARTUNG
MAURICE FORD
MAX BOYER
MICHELLE KERNS
MOBILHOME PARK CORROSION CNTRL
NORBERT DILL
NORMA CUPP
NYLEEN BABCOCK
OPAL BRAY

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

7700	PAUL ANDREWS
	RANDY EIDEMILLER
	RICHARD HOGAN
	RICHARD MILLER
	ROBERT MCHARGUE
	ROBERT ZABOROWSKI
	ROD MALTBY
	RONALD KELLY
	ROY CORNELIUS
	SANDRA POOLE
	SANTO RANDAZZO
	SITTISAK LAOHAVANICH
	SUSAN MAURER
	SUZANNE ERNST
	TANYA MYERS
	TERESA BLACKBURN
	THELMA FOSTER
	THERESA SMITH
	TIFFANY HAMM
	TINA GABEL
	TONIETTE LAVERTU
	WALTER SEKELIK
	WILLIAM COLLIER
	WILLIAM HOCKETT
	WILLIAM HOPPER
	WILLIAM OLSON
	WOODROW REED
7887	ADALBERTO RAMIREZ
	ADELA ARAGON
	ALFRED LUNA
	ANTHONY ESPINOZA
	ANTOINETTE ASSALI
	BARBARA LAFONTAINE
	BETTY FRANCIONE
	CHERYL RINGEL
	CONNIE ROACH
	DAVID BINGHAM
	DELAZCANO YANEZ
	DON RAMSAY
	DUANE RENEE
	EDWARD KENNEDY
	FRANCISCO MOSQUEDA
	HANH TRAN
	HAROLD WILKINS
	HIEP DANG
	HUGO GALEANA
	JACK MEEK
	JACK ORMSBY
	JAMES WARFIELD
	JAQUELINE CASILLAS

LAMPSON AVE 2003 (Cont'd)

7887	JAVIER LOPEZ
	JUDITH DOCKRELL
	KENNETH SHAFFER
	KIM MONEY
	LAMPSON CORP
	LEONARDO BANUELOS
	MARIA ARIAS
	MARILYN SEIFERT
	MARTHA HARTSOCK
	MICHAEL LEE
	MICHAEL PRICE
	NADIA BELLO
	NHI VO
	OLGA SIMONS
	PAMELA KING
	PEDRO AGUIRRE
	PERRY MCLELLAN
	ROY MCLELLAN
	RUTH HOFF
	SHERWOOD ROSEDAHL
	TANYA KIRKLAND
	THOA PHAM
	TOSHIKO BRYAN
	VICTOR BOLO
7931	OCCUPANT UNKNOWN
7932	CLYDE PRYOR
	D LEHINH
	HERNANDO MAPLES
	J ORTEGA
	LORETTA SMITH
	MARIA SOTO
	MARIANA HOZAN
	MINH HOANG
	NAGI ABO-SHADI
	PHILLIP KING
	RHONDA DAY
	TRACY SHAUGHNESSY
	TRANG DO
	UYEN TRAN
	ZINA FELECAN
7972	ALEX GARCIA
	ARTURO CARRANZA
	BARBARA ORTIZ
	ERICA SANCHEZ
	FRANK LUJAN
	HECTOR MUNOZ
	JASON WASHINGTON
	JOHN WILLIAMS
	LAVORA DAVIS
	NEDRA HELLER

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LAMPSON AVE 2003 (Cont'd)

7972	SUZANNE LENAHAN
	YVONNE SAPIEN
8001	OCCUPANT UNKNOWN
8011	OCCUPANT UNKNOWN
8015	OCCUPANT UNKNOWN
8050	SUBWAY 3180
8054	OCCUPANT UNKNOWN
	UNIQUECUTS
8056	OCCUPANT UNKNOWN
8058	ANAHEIM KINGSMEN INC
	OCCUPANT UNKNOWN
8061	NGHI TRAN
8067	TOAN LE
8069	TORRES DIEGUEZ
8081	JOHN DEANGELO
8091	LEO DAUSEL
8100	OCCUPANT UNKNOWN
	USA 10 MINUTE OIL CHANGE
8101	LAMPSON GROVE DAY SCHOOL INC
	OCCUPANT UNKNOWN
8141	ALPHA TRADE CO
	BOK PARK
	CYNTHIA HINOJOSA
	HEE KIM
8151	DARLENE HUTTER
	G POZANAC
	K BELL
	TOD SUTTLE
	TOSHIHIKO YOSHIOKA
8171	JOHN GUERRA
	YOHAN PYEON
8211	GARDEN GROVE UNIFIED SCHL DIST
	OCCUPANT UNKNOWN
8221	TRANG DINH
8222	LESLIE LEONG
	NARITOKU NURSERY
8225	RICK TRAN
	TINA TRAN DBA
8231	KHOI PHAN
8232	OCCUPANT UNKNOWN
8241	OCCUPANT UNKNOWN
8251	DAVID LEE
8279	RAFAEL ROCHA
8281	LAUREEN ANTOLIN
8295	DOROTHY NEGRANZA
8301	HOAN HUYNH
	HONG LEHOANG
	NINH TRANTRI
8331	BHAGAT SINGH
	CHAING LEE

LAMPSON AVE 2003 (Cont'd)

8331	CHONG KIM
	DONNA CERTO
	DORIAN APTS
	ELAINE BICE
	ESPERANZA GARCIA
	HANNA SONG
	JEET GIRAN
	JONG RHEE
	JORGE ALVAREZ
	KEVIN NGUYEN
	LISA GRANT
	MAI ONG
	MARIA FIGUEROA
	MICHAEL HUA
	PAUL CATRINESCU
	RODOLFO REZINOS
	SANTOS RODRIGUEZ
	THOM NGO
	TIEN LE
8362	MILDRED ALLEN
8372	JOE HENSON
8392	ALICE PRINCE
8412	PHAN TRUONG
8422	KIDS 1ST
	TIMOTHY TONKIN
8442	JUDITH TESKE
8515	JORGE GUTIERREZ
	STERESA ARIAS
8525	HA NGUYEN
	PHONG TRAN
8535	DAT NGUYEN
	SALLY HUYNH
8545	VINH NGUYEN
8552	SOUTH COAST TABERNACLE
8555	KEVIN VU
	LOC NGO
8565	HOUNG NGUYEN
	QUOC TRAN
8572	PAUL PHAM
8575	MARK BATES
	SHIRO NISHIDA
8592	CESAR REGINO
	WHITE GABLES LODGE
8602	LINDA WOCHNER
	STEVE MILLINGTON
	WILLIAM BERG
8611	PHONEXAY KANYAVONG
8620	APRIL RIVEL
	GLEN SMITH
	GRESHAUN HUNT

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

8620	MARIA PEREZ
	NELIDA ZUNIGA
	SHIRLEE ALDERETE
8642	DUNG DO
	LARRY PARKER
8652	MICHAEL OBRIEN
8671	NGOC TRAN
8672	THUY NGUYEN
8673	CHANG LEE
	HAI VU
	HELLO PAINTING CO
8675	HUAN NGUYEN
8677	DANIEL HUYNH
	DUNG QUACH
8682	OCCUPANT UNKNOWN
8722	ISMAEL GUILLEN
8752	A NGUYEN
8762	C ANDREWS
	RACHEL RODRIGUEZ
	TERRILL SMOAK
8782	FREE WILL BPTST CHRCH OF GRDN
	OCCUPANT UNKNOWN
8802	OCCUPANT UNKNOWN
8841	ERIC CHANG
	PAUL SHIROMA
8845	DUONG PHAN
	HUN KIM
	IN KIM
	INTAE OH
	KIM NGUYEN
	LUC HINH
	OHS PAINTING & MNTNNC SRVC
	OSCAR DIAZ
	SOO PANG
	YUN OH
8851	ANGEL NAILS
	CUONG TRUONG
	DAEHA YOON
	NIKKI TRAN
	THANH TA
	THUY HUYNH
8852	OAK NAH
8855	HUNG LEE
	JANE SON
	JUNG KIM
8861	FERNANDO PANGILINAN
	NGUYEN TRINH
8865	EDWARD WHANG
	IG LEE
	JACKIE LE

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

8865	JUPITER PAINTING CO
	KI KIM
	L LECHRISTY
	LINDA TROUNG
	LINDA TRUONG
	NORMA VELARDE
	RICHARD TRAN
	TRIEU PHAN
	YONG BUCKENBERGER
8882	ANN OYAMA
8892	HENRY AIHARA
8921	SON TRINH
9002	PETE VIRGA
9011	ERICA RODRIGUEZ
9015	CHUNG NGUYEN
9021	STEPHEN ALMQUIST
	TRISTEN PETERS
9022	GEORGIA MILLER
9031	F EGGLESTON
9033	TIM GEHLE
9035	EUN KIM
9037	JOHN ALLARD
9039	M FARRELL
9041	TED MCKIE
	TMC ENGINEERING
9042	SALLY HUYNH
9043	RONALD CONWAY
9045	EDWIN GREENWALT
9047	GARY PETERSON
9049	HARRY AGGERS
9051	KENNETH LEE
9062	ANH HOANG
9071	OCCUPANT UNKNOWN
9081	OCCUPANT UNKNOWN
9082	KEVIN MICHAELS
9091	OCCUPANT UNKNOWN
9092	LLOYD CHESMORE
9101	LAN DUONG
9105	OCCUPANT UNKNOWN
9109	WOONG DONGBANG
9111	LYNN LUNDEEN
9115	MIKE NGUYEN
9121	MICHAEL DAO
9122	MARIA CEBALLOS
9131	SOEN TJIA
9141	LEYEN
	YEN LE
9142	JESUS GOMEZ
9151	CHRISTINA DO
9161	JOHN TULLY

LAMPSON AVE 2003 (Cont'd)

9162	WILLIAM MORRIS
9171	OCCUPANT UNKNOWN
	RD CONNELL CONTRACTING CORP
	RICHARD CONNELL
9173	LUAN PHAM
	THOMAS NGUYEN
9177	TONG DU
9181	ALLEN BRYANT
9182	RAFAEL CORONA
9191	LOUIS RAYZOR
9202	MICHAEL MYERS
9222	KARI SNYDER
9252	KIM PHAM
9262	DIANA NINH
9282	SAUL ELIAS
9292	BRIDGEWAY INTERNATIONAL
	CHRIS COMPTON
9302	PROSPERO TINOCO
9331	QUYNH TRAN
9332	SON DOAN
9342	GEORGE SANCHEZ
9352	ROBERT GUZMAN
9362	MARK WILEY
9402	TUNG TRUONG
9512	LARRY CONNER
	LARRY CONNER MASONRY
9521	DEEANN REYNA
	WWW FM MORTGAGE CO
9522	AARON PEARSON
9531	GLEN PIPPIN
9542	CISO SERVICES
	DONG CHO
9552	EDNA HOLRITZ
9561	ROY SCHERER
9571	LEONARD HARRIS
9591	MARK PINKSTON
9601	YONEZO UEMA
9621	MELVA MACDUFF
9631	KENNETH BOSHART
9641	CYNTHIA SELBY
9661	TOMMY NGUYEN
9671	JOSE PADILLA
9691	AVELINA CUMBIS
9701	KONRAD MAYA
9721	FRANK MARCARIO
9731	WILLIAM YOUNG
9752	ROGELIO GONZALEZ
9797	PATRICK CATLIN
9811	JACK REIHING
9812	VICENTE FAMADOR

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

9821	LOTYS 1 CARE HOME
	LOTYS II CARE HOME
	M EUSEBIO
9841	JAMES HIGGS
9851	OCCUPANT UNKNOWN
9852	TOMMY TUGGLE
9871	SAULS PLUMBING
	WILLIAM SAUL
9881	JAMES OKAZAKI
9901	THANG HOANG
9911	HUBERT ALLEN
9931	ROBERT NOOTBAAR
9941	RICARDO GONZALEZ
9961	DINH NGUYEN
10029	FAVELLO TERRY
10031	MRA COMPLETE GRAPHICS
	OCCUPANT UNKNOWN
10035	ADVANCED ID SYSTEMS
	OCCUPANT UNKNOWN
10039	OCCUPANT UNKNOWN
	PERFECT IMAGE
10041	NORA DELA ROSA BTY SKIN CARE C
10042	CHANGE STEVE
	COLDWELL BANKER BEST REALTY
	HOWARD HAN REALTY
	KENNY SHIN
	KIM JONG SUN
	MIN STEPHEN
	SHIN TAMMY CLDWL BNKR BEST RLT
	STELLA KIM
10045	ACUPUNCTURE ORTHPDC WLNS CTR
	OCCUPANT UNKNOWN
	UPRISE CONSTRUCTION CO
	UPRISE ENGINEERING & CNSTRCTN
10049	CRAFT RESTAURANT BUILDERS INC
10051	OCCUPANT UNKNOWN
10055	OCCUPANT UNKNOWN
	SOLA SINGHAR
10065	JOSEPH MENDE
	LAMPSON CHIRO MEDICAL CTR
	MENDE JOSEPH G DC
10071	ADAM JUAREZ
	CAROLINA MOLINA
	CHAVEZ MINERVA
	CHI HUYNH
	DAM PHAM
	EDGAR MONZON
	FRANCISCO ALVARADO
	HECTOR SANDOVAL
	HENRY KENDRICK

LAMPSON AVE 2003 (Cont'd)

10071	JACKELINE LOPEZ
	JOHNNIE VUONG
	JOSE CARMONA
	LAURA PEREZ
	MARIA NAVARRO
	MARIA PONCE
	MARQUIS APARTMENTS
	MELISSA MISZCAK
	MOHAMED MOUSTAKIB
	MONICA MENDEZ
	NHUT HUYNH
	NIVAN TRAN
	RAMON AUREOLES
	REBECCA SALAS
	RICHARD GENTRY
	SHARON ANDERSON
	THANG LAM
	VIRGINIA FERNANDEZ
10101	BEARFOOT PHOTOGRAPHY
	CARVERMASSEUS
	OCCUPANT UNKNOWN
	TEDDY JUSTINIANO
10102	HENRY STOKES
10105	OCCUPANT UNKNOWN
10107	OCCUPANT UNKNOWN
10109	OCCUPANT UNKNOWN
10111	RILEY NEW
10113	DONNINGTON VENTURE
10115	BRUCE DOUGLAS
10119	OCCUPANT UNKNOWN
10121	JASON LIND
	YVETTE JOHNSON
10131	DOM UGALDE
10141	LEMON TREE LEARNING CTR
	MARY SMALL
10171	JEONG LEE
10181	EDWIN STUDHOLME
10182	MARTIN SHUBIN
10191	LORI WOOD
	MICHAEL MENOU
10192	CHARLES KEMP
10201	IMAGE ONE
	SARA MARIN
10211	KHANH DOAN
	MAURICE SEALY
10221	SHARON HURLEY
10231	DIRK MELIN
	MADELINE VARGAS
	YOLANDA RAMIREZ
10232	DENNIS KUDLIK

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

10241	DUNG NGUYEN
10281	KEITH LEACH
10321	GREGG WHITE
10332	BAO DANG
	CONCEPCION ALZAGA
	GABRIELLA MARTINEZ
	KHANH NGUYEN
	MARIA ORANTES
	MINH LEHIEN
	PARCIANO RODRIGUEZ
10351	RAMON BALTAZAR
10352	ALBA GRIJALVA
	CRISTINA MORALEZ
	JAIME AGUILAR
	LUIS RIOS
	MARIA AVILES
	MARTIN FRANCO
10361	ANDREW LEE
10362	AURELIA ARCE
	GRACIELA TABAREZ
	MARCELINO ROLDAN
	NATANAEL HERNANDEZ
	RICARDO DORADO
	SAM IOSUA
10371	FEDERICO RAMIREZ
10372	ANDRES MEDINA
	FRANCISCO LEYVA
	RAFAELA NARANJO
	SALOMON TAGLE
10381	RONALD JACK
10392	BONIFACIO RUIZ
	EUGENE GOLDSMAN
	FRANCISCO MIRANDA
	HERIDERTO REYNOSO
	JOSE JAIMES
	ROMAN SALGADO
10401	JAMES STICKLER
10411	TOMAS SALGADO
10412	AN HUYNH
	JOSE VASQUEZ
	MAGDALENA MORA
	RAYMOND REISS
	RODOLFO ESCOBAR
	SONDRA ODONNELL
10421	OCCUPANT UNKNOWN
10422	HILARIO PEREZ
	SANCHEZ JIMENEZ
10431	CIRILO CASTRO
10442	ALBERTO LAREDO
	ARTURO BECERRA

LAMPSON AVE 2003 (Cont'd)

10442	F GODOY
	FAUSTINO AMARO
	GUADALUPE HERNANDEZ
	HANDY FRANK
	JESUS TORRESCONTRERAS
	JOSE NATAL
	JUAN VALENTE
	MARIA RIVERA
	MIGUEL ARAUJO
	PAULA ESCOBAR
	PLACIDO AGUILAR
	RAUL QUIROZ
	REYNA BALDOMERO
	SANDRA NILA
	SERGIO GARCIA
	TELESFORO VALERO
10451	HANH NGUYEN
10501	JUAN GONZALEZ
10502	ARTISTIC VISION
	NANCY LEE
	PIERRE GREMBER
	TELFORD TRAN
10521	OCCUPANT UNKNOWN
10522	JOSE RAYO
10531	DEBRA LEVARIO
10532	GERARDO CARRICHE
10542	RAUL LLAMAS
10551	GRENVILLE MCFARLAND
10562	HAROLD ESTABROOK
10592	MANUEL LEONG
10602	OCCUPANT UNKNOWN
10612	BE TON
10622	AXEL VICKERS
10632	JOSE CAMACHO
10642	RICARDO CARPIO
10661	BARBARA OUGHTON
10662	JOAQUIN AGUIRRE
10671	MALCOLM DIKE
10672	JOHN THORNTON
10681	LOAN DO
10682	DANIEL SUCIU
10691	OCCUPANT UNKNOWN
10692	DIEP TRAN
10701	KEVIN HUA
10712	RAFAEL MARTI
10721	ANGEL CHAVEZ
10722	OCCUPANT UNKNOWN
10732	GERALD TEAHEN
10750	EVANGELICAL FRMRSNN CHRCH
	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

10771	OCCUPANT UNKNOWN
10781	JOAN VANDEVER
10782	AARON REDFERN
	BINH NGUYEN
	BRUCE MITCHELL
	BRUCE REED
	CESAR ILLESCAS
	CHI NGUYEN
	CHRISTIE NGUYEN
	DAT LEE
	DAVID KENDALL
	DEBRA MCCART
	ELLEN COLE
	HERIBERTO CUEVA
	HERIBERTO CUEVAS
	HUNG DO
	HYO SHIN
	JACQUELINE DELOSSANTOS
	JERRY LOWE
	JULIA GOMEZ
	KIM NGUYEN
	MARIO ACEITUNO
	MYUNG HUR
	NANG PHAM
	NELIDA PITTANO
	NGHIEP NGO
	NGOC LEYEN
	NIEN NGUYEN
	PHONG NGIEM
	RANDY HOKE
	TRUNG LE
	VIRGINIA SCHWANER
	YVONNE GERMAN
	ZARLASHT YOUSEFI
10783	DANILO GONSE
10785	AARON LARGE
10842	DUNG TRAN
10851	RALSTON INTERMEDIATE SCHOOL
10852	THUY HA
10862	THANH VANHUYNH
10872	NATHAN NGUYEN
	PHUNG HUYNH
10882	FRANCES LANCASTER
10890	OCCUPANT UNKNOWN
10892	OCCUPANT UNKNOWN
10894	HUE NGUYEN
10898	DINH NGUYEN
10900	JOY DAVENPORT
10902	CLAUDE GAXIOLA
	DAWN SCOTTO

LAMPSON AVE 2003 (Cont'd)

10902	JAMES BLINEBURY
	JORGE CARRIERA
	MAY DO
	VUI NGUYEN
10918	OCCUPANT UNKNOWN
10922	OCCUPANT UNKNOWN
10924	OCCUPANT UNKNOWN
10928	V RATHBUN
10932	BARBARA LYNCH
10934	SANDY TODD
10938	OCCUPANT UNKNOWN
10942	JOYCE BRITTAIN
11041	RAFAEL VILLALOBOS
11042	SAMUEL HUNT
11051	FRANK GLOWACKI
11052	OCCUPANT UNKNOWN
11061	ROBERT LEWIS
11101	DORIS FAIRALL
11111	SPARLIN SYPHERD
11162	STELLA MURPHY
11182	ANTONIO GARCIA
11191	OCCUPANT UNKNOWN
11192	NEAL LYON
11201	RAYMOND DIETSCHE
11202	CHARLES KAIR
11206	DANE RASMUSSEN
11208	WAYNE SALAS
11222	DAVE RAMPEY
11232	CLEON SHOCK
11242	CANH PHAM
	SON NGUYEN
	TAM LE
11252	ANNA DAVIS
	HIEN LE
	THANH TRUONG
	TRINH BUI
	V PHAM
	VINH DONG
11272	DAVID MAITEN
11281	GILBERT HRUSCHKA
11282	MANUEL GUTIERREZ
11294	JEFFREY GROVES
11296	TOAN PHAM
11302	JOHN HOLM
11311	DENISE SILVA
11322	JOHN SCHLOE
11332	DOMINGA AGUINAGA
11371	TIMOTHY VO
11381	JOSE RUIZ
	WILLIAM MYERS

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

11390	ANTHONY VILIANE
	BK CARPET CLEAN
	CATHYE HORNER
	COLEMAN LIPPERMAN
	D LEFRANCOISE-UYEN
	DANNY CARRETERO
	FIRST WORLD GROUP
	ISABEL OSPINA
	JAMES HODGES
	JAMES ROUDON
	JANET CHESSHER
	KIMBERLY SURBER
	LINO SACMAN
	RAFAEL RIVERA
	THOMAS LIBED
	WILBERT AGUIRRE
	WILLIAM GALWAY
	YONG KO
11401	TAN NGUYEN
11421	THOMAS DEVINE
11441	DONNA KERNS
11450	AARON MANSFIELD
	ALEXEY MONEV
	AMINABI MALIM
	ANGELICA RIVERA
	ARNOLD JACKSON
	BI DENG
	BRETT DONELSON
	C KIM
	CELIA SAMPLE
	CHRISTINA CLARK
	CLINT SOTELO
	CRISTINA MARTINEZ
	CRYSTAL JENKINS
	DANIEL WARREN
	DARIN ALBIN
	DARLA MAGANA
	DENISE WALLINGER
	DIANE RODRIGUEZ
	DONNA CHRISTIANSON
	EDUARDO TAMAYO
	GABRIEL DELIZ
	GUILLERMO GONZALEZ
	HUGO GONZALEZ
	JACOB HERMAN
	JOSEPH PRESCOTT
	JUNIOR SHAW
	K LEMBERG
	KAM LIEW
	KEVIN FERGUSON

LAMPSON AVE 2003 (Cont'd)

11450	KYLE MONTANO
	LAMPSON VILLAGE APARTMENTS
	MEREDITH BEYIKIAN
	MICHAEL ANDERSON
	MICHAEL THOMPSON
	NICK LAM
	NORMA ENRIQUEZ
	RAMON ALVAREZ
	REYNALDO GOMEZ
	RODRIGO GONZALEZ
	ROSA SANDOVAL
	ROSEANN PAEZ
	ROY WILLIS
	RUSTY IRESARE
	SAMUEL ROLLING
	SOPIA MONTENEGRO
	TIMOTHY DELANEY
	WENDI SHERWOOD
	XQUIZIT EVENTS
	ZQUIZIT EVENTS
11461	VIET TRAN
11512	CHAT DAO
	CHUONG PHAM
	TRIET TRAN
11571	DOMONICK MONACHELLI
11582	ROGER GWYNN
11591	COLDWELL BANKER
11602	WILLIAM SCHWING
11611	TONY JONES
11612	CHHAVY CHAN
11616	KIM CONSTANTINE
11622	PHAT VO
11642	DARRYL ROSS
11661	MANUEL MILLAN
	TERESA VILLANUEVA
11662	CHOI JOHN B REV
	NAM JEON
11672	JEFF VANCE
11692	MATSU TRUBIROHA
11701	OCCUPANT UNKNOWN
11712	AN VU
11714	KIM TA
11732	KYUNG LIM
11742	SUNG PARK
11771	ROSEMARY BERGMANN
11791	LEONARD SELOVER
11801	RAFAEL GARCIA
11811	EILEEN BRUNING
11821	ANGEL ESPINOSA
11831	LYLE JOHNSON

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

11841	UYEN VO
11851	NGOC CHAU
	THUY PHAN
11881	ENRIQUE FLORES
11891	RENE LHOIR
11892	EUCHARISTIC MISSIONARIES
	MARIA WATTY
11902	THACH FLEWITT
	TODD FLEWITT
11911	RANDALL COLEY
11921	CESAR BALAN
11931	FROYLAN GARCIA
11951	LAUREN KISS
11961	CURTIS HOOPES
11971	GABRIEL CASTANEDA
12091	GARDEN GROVE UNIFD SCHOOL DST
	VIOLETTE ELEMENTARY SCHOOL
12171	M CHANG
12232	JAMES PRESTON
12241	OCCUPANT UNKNOWN
12251	OCCUPANT UNKNOWN
12252	ALBERTO GUZMAN
	LUIS MADRIGAL
12262	TONI GREATHOUSE
12271	ARNOLD BORBON
12272	LAWRENCE SERBER
12281	MARCELO AYALA
12291	OCCUPANT UNKNOWN
12301	UMAR BONG
12312	FONG CHANG
12321	OCCUPANT UNKNOWN
12331	TEODORO PEREZ
12332	ANH LETRUNG
	DIEN PHAN
	NGOC BUI
	TAI NGUYEN
12352	DALTON KING
12361	PEREZ LOPEZ
12362	HELEN BREWBAKER
	HELENE BREWBAKER
12371	QUINTINA AYALABUSTILLOS
12381	MARIA REYES
12391	GLORIA HASSMAN
12399	MARTIN MORALES
12422	OCCUPANT UNKNOWN
	VERONICAS HAIR DESIGN
12432	LA VAQUITA MEAT MARKET
12441	SOCORRO OCAMPO
12442	B & K MARKET
	CIRCLE K FOOD STORES

LAMPSON AVE 2003 (Cont'd)

12442 OCCUPANT UNKNOWN
12511 ANGELS HAULER TRADE
IGNACIO ANGEL
12531 ENRIQUE NOLASCO
12550 DALUBHAI PATEL
LEGACY SUITES
12551 OCCUPANT UNKNOWN
12560 SOKHA NORNG
12571 EDITH TELLEZ
12581 TAMI YBARRA
12582 KHAMSAY PHENGTHIRATH
12592 JAMES SCOTT
12601 TERRY KING
12611 WINSTON KINNEY
12612 ASAP SUPER MALL
JAMES BOWEN
12621 SE BAEK
12631 GIOI SU
12632 BOUNTHANH BOUNHEUANG
12651 JAIME ORTIZ
12652 ANTON JAIMES
12661 GUILLERMO VALDEZ
12662 QUEST HOME INSPECTION
12671 OAI NGUYEN
12672 DELIA CORTEZ
12682 ELFEGO AGUDO
12701 KIMBERLY ADKINS
12702 FLAVIO HERRERA
12711 OCCUPANT UNKNOWN
12712 ARTHUR MARTINEZ
12742 CHURCH OF JESUS CHRIST OF LTR
12872 DUC NGUYEN-DUY
12882 JASON AMBACHER
12902 RUTH WORLEY
13051 MIREYA SANCHEZ
13061 ANDREW ORONA
ANGELA RHODES
ANGELICA CAMPOS
ARMANDO RAMIREZ
ARMANDO VARGAS
BETUEL ROBLES
BONGWAN KIM
CANDICE WILLIAMS
CRISTINA NOVA
DANIEL HOLBROOK
E GUTIERREZ
EDGAR TELLEZ
EFRAIN LUCAS
ELVIA MORALES
ESTEBAN RODRIGUEZ

Target Street	Cross Street	Source
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LAMPSON AVE 2003 (Cont'd)

13061
ESTELA NINO
FLORES MENDOZA
FRANSICO ALVAREZ
G MUNGUIA
GERARDO EQUIHUA
GIANG OHO
GOLF CALIFORNIA
GUADALUPE MORA
HAI CAO
IDUBINA GARCIA
IGNACIO LOPEZ
J HERNANDEZ
JEFFREY DEMONTIGNY
JOHN SANCHEZ
JOSE VAZQUEZ
JOSEFA ARCOS
JUAN AGUILERA
JUAN GODINEZ
JULIE NGUYEN
JULIO ALDAPE
JULIO DIAZ
KAREN WONG
KARINA OLIVEROS
KARLA MARTINEZ
LEANN MASON
LEONCIO PEREZ
LISA ROSAS
LUZ LLAMAS
LYNN DO
MAI DO
MARGARITA TELLEZ
MARTIN URIBE
MELANIA DELGADO
MICHAEL SYFERS
MINH HUYNH
MOISES MANZANAREZ
NORMA LOPEZ
ORANGE COUNTY YELLOW CAB
PATRICK SHA
PHEU HUYNH
PRIMITIVO TORRESCANO
REGINA TORRES
RICH LUCE
RICHARD DIFIORE
RITA MAGDALENO
ROBERT GONZALES
ROBERT GONZALEZ
ROSA MIRANDA
ROSI HERNANDEZ
RUTH RAMOS

Target Street	Cross Street	Source
✓	-	Cole ... ormation Services

LAMPSON AVE 2003 (Cont'd)

13061	SANDRA LOPEZ
	SAUL CONTRERAS
	SERGIO VASQUEZ
	SOCORRO LUCIANO
	SONIA ABARCA
	STEPHEN ANDERSON
	SUSANA MADRIGAL
	TIM CLAWSON
	VERONICA ZAVALA
	VI NHAM
	VINH HUYNH
13181	ABILARDO BARLAHAN
	ADOLFO SEGURA
	ADRIAN CARDOZO
	AMELIA BERRY
	ANGELICA FIGUEROA
	ARTHUR WELCH
	CARLOS ALMAZAN
	CLAUDIA VIVAS
	CYNTHIA MAWSON
	DAVID CAMPBELL
	ELIAS HERRERA
	EVA ORCOSO
	EVELYN WOODS
	FABIAN RIBOTTA
	FELISA YANEZ
	FRANCISCO ASTRAN
	GABINO VILLA
	GABRIEL PELESTER
	GONZALO GONZALEZ
	GUADALUPE VELASCO
	HIEP TRINH
	HUMBERTO ALATORRE
	HUMBERTO FUNETES
	HUMBERTO RAMIREZ
	IZALVA CASTRO
	JACOB CRECAN
	JAIME PEREZ
	JAMES HELMAN
	JEFF MCGUIRE
	JENNY JANOWSKI
	JOAGUIN SALGADO
	JOHN DOOLEY
	JOSE PACHECO
	JOSE TORRES
	KIMBERLY JENSEN
	LUIS CAZARES
	MAGANA MARTINEZ
	MARCOS PLATAS
	MARGIE WILSON

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 2003 (Cont'd)

13181	MARIA REYNOSO
	MARIO JOVEL
	MCGUIRE JEFFREY
	MIGUEL LOPEZ
	MIGUEL RUVALCABA
	MODESTO JIMENEZ
	MURIEL HENSHAW
	NGOC LETHUAN
	PEDRO ALCOCER
	RAFAEL JIMENEZ
	RAMON CORONADO
	RAUL DIAZ
	ROMONA BARBOUR
	SERGIO REMBAO
	STANLEY MAGILL
	SUSANA DELGADO
	TIFF REDMANN
	WINIFRED LUCERO
13321	LAMPSON ELEMENTARY SCHOOL
	OCCUPANT UNKNOWN
13382	KIEN LEVINH
13392	OCCUPANT UNKNOWN
13402	VINCENT MARROZZO
13422	JOSEPH SPADEA
13442	HAI NGUYEN
13462	NORBERT WIETOR
13482	BENITO YU

Target Street	Cross Street	Source
✓	-	Cole ...ormation Services

LAMPSON AVE 1999

3850	JOYCE ROBBINS
	JOYCE RUSSELL
3901	OLD RANCH COUNTRY CLUB
	OLD RANCH COUNTRY CLUB & TENNIS CLUB COUNTRY CLUB
4000	COLLEGE PARK MOBILE
	NIRVIAR CORPORATION
4665	ASSOCIATION OF CALIF SCHOOL ADMINISTRATORS
	ASSOCIATION OF CALIFORNIA SCHOOL ADMINISTRATORS
	WESTED
5001	SLATTON H
	VERNON SMYTHE
5011	MICHAEL JENKINS
5021	E LANE
5041	PATRICIA LICATA
5131	OCCUPANT UNKNOWN
5141	GARY SUTTON
5151	OCCUPANT UNKNOWN
	WILLIAM DUBIN
5161	BARBARA SWINEHART
5224	GENNAROS
5230	MACKS LIQUOR & JUNIOR MARKET
5234	YOUR CLEANERS
5241	WILLDY-NUTRI DISTRIBUTING
5243	AMERICAN SLIDE CHART
5246	BLOSSEY RYAN DC
	STRYKER STEVE DC
5247	GIBSON BRUCE W DDS
	GOFORTH JAMES D DDS
5249	BLUMENTHAL NANCY L ATTORNEY
	LEVIN NANCY ATTORNEY
5250	CENTURY 21 EXCLUSIVE
5253	LEVIN RICHARD A DDS INCORPORATED
	PITA FRANK MSD
	SCHNEEKLUTH CLARK DDS MS
	SCHNEEKLUTH CLARK MS DDS
5871	JIFFY STOP MARKET
5877	ALPHA ELECTRONIC TV
5885	ANDRADE AUDREY L DDS
	AUDREY ANDRADE
5887	CUTTING PLACE THE
	RONS HAIR STYLING & BARBERING
5891	HAIR ARTISTS
6800	DAVID DUNLOP
6803	YARED TEFERAWORK
6820	KENNETH KIRSCHKE
6830	OCCUPANT UNKNOWN
	T LEE
6850	LACY LAMAR
6851	PACIFICA HIGH SCHOOL
	PACIFICA HIGH SCHOOL STUDENT ACTIVITIES

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

6864	FERNE QUARANTA
	OCCUPANT UNKNOWN
7042	NEW HERMES INCORPORATED OFFICE
7050	AWNING MASTERS
	AWNING MASTERS WINDOWS
7100	UMPCO INCORPORATED
	UMPCO INCORPORATED GENERAL INFORMATION
7131	SOUTH COAST SEAFOODS COMPANY INCORPORATED
7180	M K HEALTH FOOD DISTRIBUTORS INCORPORATED
	NATURES LIFE
7274	AMERICAN PACIFIC PLASTIC FABRICATORS
7340	FORT JAMES RIVER CORPORATION
	JAMES RIVER CORPORATION 1835 W ORANGEWOOD AVENUE
	SOUTHERN CALIF CARTON COMPANY
7490	CONTAINER SUPPLY COMPANY
7571	MEAD PRODUCTS DIVISION OF THE MEAD CORPORATION
7690	SMART & FINAL
7700	ALI HARTONO
	B C M SALES CORPORATION
	BEVERLEY FRITZ
	BILL NELSON
	BUSCH CARR & MCADOO MOBILE HOME COMMUNITIES
	C ROSS
	CAROL ZEIGLER
	CHARLES VANHOUTEN
	CHARLIE VINCENT
	DARRELL CLARK
	DAVE GILLESPIE
	DEE ALVERADO
	DELORES KUNTZ
	DIANA BENSINGER
	DIANE FISCHER
	DOROTHY BEER
	DOROTHY SULSER
	DUANE HAY
	E ROSE
	EDIE MEHL
	EDITH ALVIDREZ
	ELBERT SEXTON
	ELLEN WALLACE
	EUNICE VANHOOSER
	F MARIANO
	FERNE HOGAN
	FRANCES BECK
	FRANK BONIELLO
	GARY HEINLEN
	GAYLE HOLDEN
	GENE BOYER
	GENEVA FINLAYSON
	GERALDINE DAVIS

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

7700

GRACE HAMM
GUY MESSINA
HAROLD CALE
HELEN CASSITY
HERMAN KEMPEMA
IVY KREUZ
JEAN GERING
JIM KALB
JOEL SELLERS
JOHN ANDERSON
JOHN BERNARDINO
JOHNNYK KLAAUWER
JORGE CASARIN
JOSE CASARIN
JUDITH ERICKSON
JUDITH EVANS
KARYN MYERS
KENNETH LICHT
KENNETH MCCATTY
LANNY YAKEL
LEONARD TROUSIL
LESLIE ALBERTS
LUCY AGINS
MAGIC LAMP MOBILEHOME CLUB
MARILYN KIM
MARY HARTUNG
MARY STUART
MARY VERONEE
MOBILHOME PARK CORROSION CONTROL COMPANY
NGHIA TRAN
NORMA CUPP
NORMAN VIGNA
PAUL ANDREWS
PAULA WIGINGTON
PHILIP ESHELMAN
RACHEL HOWARD
ROBERT EDDY
ROBERT FOSSUM
ROBERT MCHARGUE
ROBERT OLSZEWSKI
ROBERT YBARRA
RONALD KELLY
ROY STRATTON
SAM GLORIOSO
SANDRA REDING
SANTO RANDAZZO
SHERRY LAVERTU
SITISAK LAOHAVANICH
SITTISAK LAOHAVANICH
SONJA HOFLAND

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 1999 (Cont'd)

7700	SUZANNE ERNST
	TERESA BLACKBURN
	THELMA STEELE
	THOMAS MAURER
	THOMAS WOOD
	VAUGHN SMITH
	VELVA DILL
	WANDA LUNN
	WETZEL JACOB FLR LAYNG
	WILLIAM HOPPER
	WILLIAM PETERSON
	WINIFRED BORGHETTI
	WOODROW REED
7887	AN VU
	CHARLES HARTSOCK
	CHRISTINE GIST
	CONNIE ROACH
	CUONG HOANG
	DAVID STRASBURY
	DEBBY ORDWAY
	DEBORAH AYALA
	DENNY TRAN
	DIEM NGUYEN
	DUYEN HO
	DWIGHT ZIEGLER
	EDWARD LORD
	ELINORE ROTHARMEL
	ERNEST HURST
	ERNESTINIA ESPITIA
	FRANCISCO PARTIDA
	FRANCISCO RAMIREZ
	GABRIEL PAREJA
	GEORGE FRANCIONE
	GRACIELA YANEZ
	GREGORIO GONZALEZ
	HISAE ISHII
	HOANG PHAN
	ISABEL ALCARAZ
	JACK ORMSBY
	JAMES HISEY
	JOHN HOFF
	JUAN TAPIA
	JUDITH DOCKRELL
	KENNETH SHAFFER
	KHANH DO
	L MACALLISTER
	LILY PHAM
	LOAN DUONG
	LUZ MURILLO
	MARIA ARIAS

LAMPSON AVE 1999 (Cont'd)

7887	MARIA QUINTANILLA
	MARTIN PINA
	MICHAEL MARVICH
	MOS GEORGETA
	MYONG YUN
	NGOC HUYNH
	NHI VO
	NICOLE AYNALBEIE
	OLGA SIMONS
	PETER DANG
	R ROE
	RAFAEL LAZCANO
	RITA LAPIERRE
	RODOLFO VELZA
	ROGELIO ARZATE
	RONALD LERETTE
	RUBISELA VALDEZ
	RYAN NGUYEN
	SALLY ROSENBLUM
	SANDRA BILLON
	SANG TIEU
	SERGIO RAMIREZ
	SHIGEYOSHI YAMAGATA
	SI NGUYEN
	SON DO
	SURIYA SIRIYOTIN
	T HO
	TAM VO
	TERESA BELTRAN
	THICH PHUNG
	TIMOTHY QUICK
	TOSHIKO ALLMON
	VERONICA JUAREZ
	VU NGO
	WILLIAM POMEROY
	ZION ORPAZ
7907	PRAPAI WANLARBKAM
7931	OCCUPANT UNKNOWN
7932	ANNA GONZALEZ
	BICH NGUYEN
	C ROUSH
	DAI HUYNH
	J SINCLAIR
	JENNIFER SMALL
	LACETTE ALLEN
	LORETTA SMITH
	NAOMI THOMPSON
	PATRICK RILEY
	SALVADOR DELATORRE
	SHIN AHN

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

7932	SOONKI HONG
	STACIE CROZON
	SUSAN ICAMEN
	SYLVIA BLUM
	TIEN NGUYEN
	UYEN TRAN
7972	AARON WASHINGTON
	ALTON GRUN
	ARTURO AMADOR
	ARTURO CARRANZA
	BAO PHAN
	BETTY BEARD
	CLAUDIA CERVANTES
	FRANK LUJAN
	J ORTEGA
	JAIME ORTEGA
	JEFFERSON NGO
	JESUS HERNANDEZ
	JOCELYN CIUDADANO
	JOHN WILLIAMS
	KIM NGUYEN
	KWANG KIM
	LILIA RAVADAN
	LYNDA ALCANTAR
	LYNN HERRON
	MARTHA RIVERA
	MELISSA LENAHAN
	MICHEAL MEDINA
	ORLANDO TERAN
	QUANG TRAN
	RAUL ARIAS
	RUBEN VIVES
	TYRONE DAVIS
8011	OCCUPANT UNKNOWN
8054	UNIQUECUTS
8061	ANTHONY VO
8063	KAROLYN DILLER
	OCCUPANT UNKNOWN
8065	LIEN PHU
8067	PATRICK NGO
8069	EDDIE MADERA
	LOC NGUYEN
8081	JOHN DEANGELO
	OCCUPANT UNKNOWN
8101	LAMPSON GROVE DAY SCHOOL INCORPORATED
8141	CARRIE ALONZO
	EDUARDO RANGEL
	LINDA CURRY
	MAY PERINO
8151	JILL WEDGE

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

8151	LINDA MINSON
	MOHAMMED TAREELL
	PAULINA TUPAZ
	THOMAS SUTTLE
8171	CRYSTAL TORRES
	ROGER ONATE
8221	OCCUPANT UNKNOWN
	VINH LO
8225	RICK TRAN
8231	ANDY NGUYEN
8232	LESLIE LEONG
8251	OCCUPANT UNKNOWN
8274	OCCUPANT UNKNOWN
8279	SHERI ROCHA
8281	CARMELO ANTOLIN
	OCCUPANT UNKNOWN
8295	MICHELLE PARK-UNCAPHER
	OCCUPANT UNKNOWN
8301	HIEP NGO
	M NGUYEN
	MINH LE
	PAUL MCLEOD
	QUYNH LUC
	TRAN CUNG THE
8331	CHUONG DANG
	DIANA CATRINESCU
	DORIAN APARTMENTS
	JENNY NGO
	LUCINA AQUINO
	M TRGONG
	MARIA ESPINO
	MARIA FIGUEROA
	MICHAEL HUA
	MICHAEL NGUYEN
	MINH THICH
	TIEN LE
	TUAN PHAM
	TUNG PHAM
8362	MILDRED ALLEN
8372	JOE HENSON
	OCCUPANT UNKNOWN
8392	ALICE PRINCE
8412	OCCUPANT UNKNOWN
	PHAN TRUONG
8422	WILLIAM TONKIN
8442	JUDITH TESKE
8515	FRANCISCO ARIAS
	MARIA VELEZ
8525	SON NGUYEN
	TUAN TRAN

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 1999 (Cont'd)

8535	BEIM PAINTING MAINTENANCE
	HELEN BUI
	SALLY HUYNH
	WILLIAM NGYEN
8545	TUNG NGUYEN
8552	CHRISTIAN SCI CHURCHES & READING ROOMS GDNS GRV
8555	MAIHOA KHUAT
	THANH TRAN
	XUAN VU
8572	OCCUPANT UNKNOWN
	QUAN NGUYEN
8575	SHIRO NISHIDA
8592	WHITE GABLES LODGE
8602	LINDA WOCHNER
	MARK HINRICHS
	STEVE MILLINGTON
8611	MARCO MARTINEZ
	THANH VU
8617	OCCUPANT UNKNOWN
8620	GERARDO RAMIREZ
	GLEN SMITH
	KRISTINA BREWER
8622	ALAN PIERSON
	WAYNE INFANGER
8642	DY YEK
	LARRY PARKER
	PATRICK MCCORMICK
8654	MI OBRIEN
8671	NGOC TRAN
8672	OCCUPANT UNKNOWN
	THU NGUYEN
8673	BAO PHAM
	HYUN LEE
	NGUYET TRAN
	OCCUPANT UNKNOWN
8677	OCCUPANT UNKNOWN
	TAM HUYNH
	TUONG PHAN
8682	OCCUPANT UNKNOWN
	VIET NGUYEN
8752	OCCUPANT UNKNOWN
8762	GREGORY CARTMELL
	TERRILL SMOAK
8782	FREE WILL BAPTIST CHURCH OF GARDEN GROVE
	YOUNG NAK PRESBYTERIAN CHURCH OF USA
8821	NHAT LO
8841	LANG TRINH
8845	KIM HA
	KYUNG YANG
	LINDA PURWADI

LAMPSON AVE 1999 (Cont'd)

8845	LUC HINH
	OSCAR DIAZ
	SOO PANG
	TRUNG NGUYEN
8851	BINH PHAN
	CARLOS MARIN
	JEONG LIM
	O KI SOO
	PARK SUN YOUNG
	PHAT DIEP
	SOO KI
8852	QUA LE
8855	CHRIS LEE
	RICHARD SON
	SANG HAN
8861	HAI TRINH
	NGUYEN TRINH
	TIMOTHY BRYANT
8865	ANDRES VELARDE
	DUAN LE
	EDWARD WHANG
	ERIC LE
	HARRISON LE
	IG LEE
	RICHARD TRAN
	YONG BUCVKENBERGER
8873	CHANG LEE
8882	HENRY AIHARA
8892	ANN AIHARA
8921	SON TRINH
8931	TUYEN PHAM
8933	SAESOON
9011	JOSE CUENCA
	MINH TRAN
	OCCUPANT UNKNOWN
9015	SUY VU
	THAO LUU
9021	HUY NGUYEN
	TRUNG HUA
9022	GEORGIA MILLER
9031	FELICITAS EGGLESTON
9033	TIM GEHLE
9035	JOHNNY PHAM
9037	ROGER ALLARD
9039	BERNARD FARRELL
9042	HINH VUONG
9045	EDWIN GREENWALT
9048	SALLY HUYNH
9049	HYOWON SEO
9051	KENNETH LEE

LAMPSON AVE 1999 (Cont'd)

9053	OCCUPANT UNKNOWN
9062	OCCUPANT UNKNOWN
	VALERIE NGUYEN
9071	PETER BICKNELL
9081	KEVIN BICKNELL
9091	C CARPENTER
9092	MATTHEW BELL
	OCCUPANT UNKNOWN
9101	MINH NGUYEN
9105	HEE PARK
9111	LYNN LUNDEEN
9115	HOANG NGUYEN
9121	MICHAEL DAO
9122	OCCUPANT UNKNOWN
9131	IELIU TJIA
9141	YEN LE
9142	JESUS GOMEZ
	OCCUPANT UNKNOWN
9151	OCCUPANT UNKNOWN
	RAUL PEREZ
9161	JOHN TULLY
9173	SANG NGUYEN
9175	MICHELLE NGO
	OCCUPANT UNKNOWN
9177	TONG DU
9181	RAYMOND NORMANDIN
9182	OCCUPANT UNKNOWN
9191	JEHOVAHS WITNESSES WESTMINSTER MAGNOLIA CONGREG
	OCCUPANT UNKNOWN
9202	MICHAEL MYERS
	OCCUPANT UNKNOWN
9252	OCCUPANT UNKNOWN
	STEVE LE
9262	DIANA NINH
	MARLEN ENTERPRISES MAINTENANCE
9282	SAUL ELIAS
9302	MARCOS TINOCO
9312	DAGMAR CARLSON
	EMILY STULTS
9332	SON DOAN
9362	DUNG DANG
9402	ANDREW TRUONG
9521	OCCUPANT UNKNOWN
9522	PHILIP HOANG
9531	CHRIS HENSON
9552	DELMER FARMER
9561	ROY SHIN
9571	LEONARD HARRIS
9591	MARK PINKSTON
9601	YOUNG YUM

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

9631	MARSHA HOLLAND
9641	CYNTHIA SELBY
9661	TOM NGUYEN
9691	OCCUPANT UNKNOWN
	RODOLFO TOMANENG
9701	ESTHER MAYA
9721	FRANK MARCARIO
9731	WILLIAM YOUNG
9752	OCCUPANT UNKNOWN
	ROGELIO GONZALEZ
9797	PATRICK CATLIN
9811	JACK REIHING
9812	VICENTE FAMADOR
9821	OCCUPANT UNKNOWN
9841	HIGGS JAMES
	JAMES HIGGS
	OCCUPANT UNKNOWN
9851	KEVIN NGUYEN
9852	TOMMY TUGGLE
9871	JULIUS ARGUMEDO
	SAULS PLUMBING
9881	JAMES OKAZAKI
9901	THANG HOANG
9911	JOO BYUNG
9931	MELALEUCA DISTRIBUTOR OF CALIFORNIA
	NOOTBAAR ROBERT E & NEVADA
	ROBERT NOOTBAAR
10039	ABC WEST GROVE HEARING AID CENTER
10041	NORA DELA ROSA BEAUTY SKIN CARE CENTER
10042	CHUNG TONI
10045	CHAMPAGNE SERVICES
	OCCUPANT UNKNOWN
10051	MRA COMPLETE GRAPHICS
10055	ANIS TAYYABA SOLA SINGHAR BRIDAL & BEAUTY STUDIO
	SOLA SINGHAR BRIDAL & BEAUTY STUDIO
10065	MENDE JOSEPH G DC
10071	ADAM JUAREZ
	ALEJANDRO HUIMANI
	ANDRE DESBIENS
	AUDREY GORDON
	CHI HUYNH
	HIEN NGUYEN
	HOANG LE
	JUAN GONZALEZ
	JUDY SRABIAN
	LE CAU
	LIEM PHAM
	LU VO
	MANUEL PEREZ
	MARIA TAPIA

LAMPSON AVE 1999 (Cont'd)

10071	MARQUIS APARTMENTS
	NHAN TRUONG
	OMAR VASQUEZ
	SAIDUR RAHMAN
	TINA LEE
	TRO DO
	TUAN TO
	V ROMAN
	VAN TRAN
	VICTORIA SORIANO
10101	TRUNG LE
10102	HENRY STOKES
10103	OCCUPANT UNKNOWN
	TINH TRAN
10105	OCCUPANT UNKNOWN
	VAN TRUONG
10107	CHI LE
	OCCUPANT UNKNOWN
10109	DOMINIC NGO
	OCCUPANT UNKNOWN
10111	OCCUPANT UNKNOWN
10113	NANCY NGUYEN
10117	LISA NGUYEN
10119	TU VO
10121	HOAN NGUYEN
	OCCUPANT UNKNOWN
	THUTRANG DINH
10141	LEMON TREE LEARNING CENTER
	OCCUPANT UNKNOWN
10181	EDWIN STUDHOLME
10182	BOBBY WALL
10191	ROBERTA GEARIN
10192	CHARLES KEMP
10201	CONSTANCE FERNANDEZ
	VILLAGE PINES APARTMENTS
10211	DOAN KHAO
	KHANH DOAN
10221	MARTIN GONSALEZ
	VIRGINIA BOOTH
10231	DIANNE GONZALEZ
	MIGUEL GONZALEZ
10232	MINH NGUYEN
	OCCUPANT UNKNOWN
10241	ROBERT FRAME
	SHARON ENGEL
10301	SEAN BUSBY
10321	GREGG WHITE
10332	CONCEPCION ALZAGA
	IRVING WEISER
	JOE FONG

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

10332	L LEHUONG
	SAM HO
	TAI TRUONG
10352	JAIME LAUREANO
	JOSE BETANCOURT
	LEYDI TELLEZ
	LOLILA FAALIGA
	LUIS RIOS
	MIRIAM ALCOCER
	OLIVIA DELGADO
	OSCAR VASQUEZ
10361	NGOAN NGUYEN
10362	ANGELA FLORES
	ANOSI MAAE
	BERTHA AVELINO
	BERTHA VALENCIA
	JOVITA VAZQUEZ
	MARIA AGUIRRE
	MARIANO ARANO
	MIGUEL BENITEZ
10371	OCCUPANT UNKNOWN
10372	ALMA GONZALEZ
	ANA BRAVO
	FRANCISCO LEYVA
	JULIO RAMIREZ
	MARIA OZUNA
	MIGUEL MIRANDA
	RAFAELA NARANJO
10381	RONALD JACK
10392	ANDRES MEDINA
	ARMANDO VELASQUEZ
	CLAUDIA VALENZUELA
	EUGENE GOLDSMAN
	HERIDERTO REYNOSO
	MARGARITO OLIVARES
10401	JAMES STICKLER
10411	JOSE OCHOD
10412	DANIEL IBANEZ
	GILBERTA VERGARA
	JOSE VASQUEZ
	MARIA MERANDA
	RAYMOND REISS
	RODOLFO ESCOBAR
	VICTOR IBANEZ
10421	RUTH VINCENT
10422	CRISTINA MENDOZA
	ESPERANZA ARCEO
	GUADALUPE ESCOBAR
	HERNAN VALDEZ
	ISABEL OLVERA

LAMPSON AVE 1999 (Cont'd)

10422	MARIO BENITEZ
	NICOLAS CLETO
	TINA NGUYEN
	VICTOR BUSTAMANTE
10442	ALBERTO LAREDO
	ALFREDO ESCOBAR
	ANA VALENTIN
	ARTURO BECERRA
	AZUCENA CIERRA
	EDGAR JIMENEZ
	ERNESTO RIVERO
	HUGO AGUILAR
	JAVIER ESTRADA
	JOSE HERNANDEZ
	LEOCADIO PERALTA
	LUCILA SIERRA
	MONICA DUARTE
	RAUL QUIROZ
	ROSA LOPEZ
	SANTOS PARRA
	SANTOS PERALTA
	SANTOS RAMOS
10451	JOHN NGUYEN
10501	MICHEL PEREZ
10502	NANCY LEE
10521	TONY CASTELLANOS
10531	PEDRO LEVARIO
10532	GERARDO FALCON
	OCCUPANT UNKNOWN
10542	ANDREW NGUYEN
	OCCUPANT UNKNOWN
10551	TRACY MCFARLAND
10552	KY LEJOHN
10562	HAROLD ESTABROOK
10582	JOE ADKISON
	OCCUPANT UNKNOWN
10592	MANUEL LEONG
10602	MARIA CERON
	OCCUPANT UNKNOWN
10612	NHO NGHE
10622	AXEL VICKERS
10632	OCCUPANT UNKNOWN
10642	RICARDO CARPIO
10661	OCCUPANT UNKNOWN
10662	JOAQUIN AGUIRRE
	OCCUPANT UNKNOWN
10671	MALCOLM DIKE
10672	JOHN THORNTON
10681	GEMCO FIRE EXTINGUISHER COMPANY
	TAM PHAM

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

10682	DANIELA SUCIU
	OCCUPANT UNKNOWN
10692	OCCUPANT UNKNOWN
	STEVEN TRAN
10701	KEVIN HUA
10712	RAFAEL MARTI
10721	CHAVEZ RAUD MARTINA CAR
	OCCUPANT UNKNOWN
10722	OCCUPANT UNKNOWN
10750	EVANGELICAL FORMOSAN CHURCH OF ORANGE COUNTY
	EVNGLCL FORMOSAN CHURCH OF ORNG CNTY ENGL CONGREG
10771	ERICK WILLIAMS
	OCCUPANT UNKNOWN
10773	REBECCA REYES
10781	JOAN VANDEVER
10782	ALEJANDRO LOPEZ
	ARMANDO IBARRA
	DANIEL ESPINOZA
	DEBBIE MCCART
	HA BUI
	HOANG TO
	HYO SHIN
	HYUN NOH
	JON SUTHERLIN
	JULIA GOMEZ
	KATRINA LOPEZ
	KEVIN FLORES
	KHANH LE
	LARA LEE
	LEOBARDA ABARCA
	MELANIE WINSCHER
	NGOC LEYEN
	NGUYEN CAP THI
	NGUYEN HOC THAI
	OROPEZ DAVA
	RANDY HOKE
	RENEE LEVY
	ROGELIO MERCADO
	STEVEN HUA
10783	OCCUPANT UNKNOWN
10785	OCCUPANT UNKNOWN
	SCOTT HUBBARD
10791	MICHELLE NGUYEN
10842	DIANE TRAN
10851	RALSTON INTERMEDIATE SCHOOL
10862	LOAN DINH
	THANH HUYNH
	THI NGUYEN
10872	LUU TRAN
	MEN DO

LAMPSON AVE 1999 (Cont'd)

10892 OCCUPANT UNKNOWN
10894 OCCUPANT UNKNOWN
10895 HUNG NGUYEN
10896 CHAU LAM
OCCUPANT UNKNOWN
10898 DAT LAM
10902 DO LAC
GARDEN GROVE YELLOW CAB GARDEN GROVE
THU NGUYEN
VUI NGUYEN
YELLOW CAB GARDEN GROVE
10912 OCCUPANT UNKNOWN
TRUNG TRAN
10922 JOYCE BRITTAIN
10938 OCCUPANT UNKNOWN
WILLIAM THOMPSON
10942 THU NGUYEN
11041 RAFAEL VILLALOBOS
11042 OCCUPANT UNKNOWN
RICHARD ARNOLD
11051 CAROL LEWIS
OCCUPANT UNKNOWN
11061 CHUONG PHAM
11101 PHAM KHANH
11111 SPARLIN SYPHERD
11162 JOHN LOGAN
11182 RAFAEL MENDOZA
11192 NEAL LYON
11201 RAYMOND DIETSCHE
11202 CHARLES KAIR
OCCUPANT UNKNOWN
11206 MELISSA HERNANDEZ
OCCUPANT UNKNOWN
11222 DAVE LAMPEY
11232 ISRAEL SORIANO
11242 CANH PHAM
CAO TRI
DUY NGUYEN
HOAN DUONG
TAM LE
11252 DAI DONG
ELIAS DESANTOS
HANH DUONG
HIEN LE
THANH TRUONG
TRINH BUI
11272 DAVID MAITEN
11281 GILBERT HRUSCHKA
OCCUPANT UNKNOWN
11282 MANUEL GUTIERREZ

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

11282	OCCUPANT UNKNOWN
11294	JEFFREY GROVES
	OCCUPANT UNKNOWN
11302	WILFRED HOLM
11311	CHARLES CASTANEDA
	MICHAEL SILVA
11322	JOHN SCHLOE
	OCCUPANT UNKNOWN
11332	DOMINGA AGUINAGA
11371	TIMOTHY VO
11381	WILLIAM MYERS
11390	ANA OSTINA
	ANDY PHAM
	ANN MARAS
	B K CARPET CARE
	B K CARPET CLEAN
	CATHYE HORNER
	CLARA TORRES
	COLEMAN LIPPERMAN
	DAVID KO
	JAMES HODGES
	KUANG OH
	LYN CARRETERO
	RAFAEL RIVERA
	ROMEO VILLANUEVA
	TANYA JOHNSON
	TOMMY FERNANDEZ
	TRUC LENHA
	TRUNG NHAN
11401	GAY HAMILTON
	HAMILTON SATELLITE SYSTEMS
	TAN NGUYEN
11441	DONNA KERNS
	OCCUPANT UNKNOWN
11450	BEN BUTTELING
	DARLENE SHACKFORD
	DAVID LAPPINGA
	DAYSI PONCE
	ERICK ORTIZ
	FLOR LAM
	FRANCISCO NUNEZ
	G PUENTE
	GIOVANNI ADAN
	HENRY KIM
	JAMES SOTELO
	JENNIFER SMITH
	JUNIOR SHAW
	KAM LIEW
	KIM PHAM
	LAMPSON VILLAGE APARTMENTS

LAMPSON AVE 1999 (Cont'd)

11450	MANUEL LLANILLO
	MARIA RAMIREZ
	MARIO AVALOS
	MICHAEL ANDERSON
	MICHAEL THOMPSON
	PAUL KILLIAN
	RAYMOND ROADES
	REYNA LOPEZ
	RHONDA JENKINS
	SANDY FOSTER
	SARBJIT SINGH
	TREVOR DICK
	VACH NGUYEN
	YOLANDA OROZCO
11512	BINH TRAN
11582	ROGER GWYNN
11591	T VANLE
11602	JIMMY WARD
11612	OCCUPANT UNKNOWN
11616	OCCUPANT UNKNOWN
11622	PHAT VO
11642	DARRYL ROSS
11661	MANUEL MILLAN
11662	CHOI JOHN B REV
11672	JEFF VANCE
11692	DOANLD TRUBIROHA
	OCCUPANT UNKNOWN
11712	MARIA VILLANUEVA
11714	OCCUPANT UNKNOWN
	ROMEO TA
11732	KYUNG LIM
11742	HAE KIM
	OCCUPANT UNKNOWN
11791	LEONARD SELOVER
11801	GARCIA MARIA MERCEDES
	OCCUPANT UNKNOWN
11811	EILEEN BRUNING
11821	ANGEL ESPINOSA
11831	LYLE JOHNSON
11841	BINH VO
11851	PHUOC PHAN
11862	OCCUPANT UNKNOWN
11871	THAI NGUYEN
11881	ENRIQUE FLORES
	OCCUPANT UNKNOWN
11891	OCCUPANT UNKNOWN
	PAUL HOIR
11902	OCCUPANT UNKNOWN
	TODD FLEWITT
11911	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

11921	LAURA LESNIAK
11951	CHUONG HA
	MARIA OLBERA
11961	CURTIS HOOPES
12091	VIOLETTE ELEMENTARY SCHOOL
12232	DONALD FERGUSON
	OCCUPANT UNKNOWN
12241	JOSE JACOBO
12251	PATRICIA DEHOLGUIN
	STEVEN ROBERTS
12262	TONI GREATHOUSE
12271	ARNOLD BORBON
	OCCUPANT UNKNOWN
12272	LAWRENCE SERBER
12281	MARCELO AYALA
	OCCUPANT UNKNOWN
12301	OCCUPANT UNKNOWN
	UMAR BONG
12321	ANDRES MAGDALENO
12331	OCCUPANT UNKNOWN
	TEODORO PEREZ
12332	DIEN PHAN
12352	DONALD KING
12361	SANTIAGO GOMEZ
12371	YESENIA AYALA
12381	MARIA REYES
12399	VICENTE NUALART
12422	VERONICAS HAIR DESIGN
12432	LAVAQUITA MARKET
12441	MIRELLA AVILA
12442	CIRCLE K FOOD STORES
12531	JACKIE RICO
	OCCUPANT UNKNOWN
12550	LEGACY SUITES
	OCCUPANT UNKNOWN
12551	GENEVIA HOCUTT
12560	NORNG SOKHA
12571	P E
12582	KHAM PHENGTHIRATH
12592	JAMES SCOTT
12601	OCCUPANT UNKNOWN
12612	JAMES BOWEN
12631	OCCUPANT UNKNOWN
	PHU DOAN
12632	BOB BOUNHEUANG
12661	OCCUPANT UNKNOWN
	RODRIGUEZ VICTORIANO
	VALDEZ MEMO & LIA
12662	SAMMIE GERNERTT
12671	OAI NGUYEN

LAMPSON AVE 1999 (Cont'd)

12682 JAIME AGUILAR
OCCUPANT UNKNOWN
12691 OCCUPANT UNKNOWN
12701 OCCUPANT UNKNOWN
12702 OCCUPANT UNKNOWN
12711 CHARLES FARRELL
12712 ARTHUR MARTINEZ
12742 CHURCH OF JESUS CHRIST OF LTTR DAY SAINTS THE STAK
12751 OCCUPANT UNKNOWN
12872 OCCUPANT UNKNOWN
WALLY NGUYEN
12892 MUOI VO
13061 ADRIANA ALCALA
AIRPORT SHUTTLE
ANGEL LUNA
ARACELI GUINTO
BRENDA TOLEDO
C LUCIO
CLEMENTE ESTRADA
CRYSTAL WELLS APARTMENTS
D PARTIDA
DANIEL DAMITIO
E RODRIGUEZ
ELSA LOPEZ
EMMA TORRES
ESMERALDA GONZALEZ
ESTHER ALVAREZ
FEDERICO MUNOZ
FRANCELIA ORTIZ
GABRIEL ORTIZ
GARDEN GROVE CAB
GERARDO EQUIHUA
GILBERTO LOPEZ
GRACIELA JAMAICA
GUADALUPE SERRANO
HEATHER LONG
HERMENEGILDO TERAN
ISRAEL MARTINEZ
IVAN BRITO
J FISHER
JAIME BELLO
JAVIER ARVIZU
JENNIFER TANA
JOANNE HALE
JOHN CALVO
JUAN ESPARZA
JUAN RAMOS
JULIO PINO
KAREN WONG
KARIN HERNANDEZ

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

13061	KARINA DELACRUZ
	LEONOR MEZA
	M LIMAS
	MACARIO LOZANO
	MARBELLA LORENZO
	MARIA ESQUERA
	MARIA JIMENEZ
	MARIA SOTO
	MARIA ZAMUDIO
	MARISELA JIMENEZ
	MARY ROBLES
	MIGUEL URZUA
	ORANGE COUNTY YELLOW CAB
	PABLO FLORENTINO
	PAKISTAN TODAY
	RAUL IBARRA
	REYNALDO SOTO
	ROMANY ATTIA
	ROSA DIAZ
	ROSA MIRANDA
	ROSEMARIT MCGOWAN
	ROXANA LOPEZ
	RUFINO MEZA
	RYAN JAMES
	SERGIO NAJERA
	SHAWN ANDRE
	STEPHEN ANDERSON
	SUPERB SHUTTLE
	TISHA CABRAL
	VELASQUEZ MENDOZA
	YELLOW CAB
	YESENIA GONZALEZ
	YOLANDA QUINONES
13181	ACEVEDO NUNEZ
	ALEX JANOWSKI
	ALFREDO PEREZ
	ALMA PINEDA
	ANGELICA FIGUEROA
	ANNETTE DAVIS
	ANTONIO TORRES
	ARTHUR WELCH
	BENJAMIN MENDEZ
	BETSABE URQUIOLA
	CLAUDIA VIVAS
	CONNIE HODGES
	DON EDWARDS
	DONNA RIVERA
	ELIAS HERRERA
	ELSA MARRERO
	ENRIQUE GONZALES

LAMPSON AVE 1999 (Cont'd)

13181 ERNEST HIGGINS
EVELYN WOODS
FRANK MCCOY
G CALMER
GABINO VILLA
GILBERTO VELASCO
GREGORY ROBERTSON
HAP NGUYEN
HIEP TRINH
HUMBERTO RAMIREZ
JAMES HELMAN
JAN WEAKLEY
JASON ADAM
JEAN PARKER
JEFF MCGUIRE
JOHN HERNANDEZ
JORGE PERALTA
JOSE JIMENEZ
JUANITA LUCERO
JULIO ALVAREZ
LINA ALMAZAN
LINCOLN LAMADRID
LORENZO PONCE
MAGDALENA HERRERA
MAGILL STANLEY GLENHAVEN MOBILODGE CLUB
MARCO ANAYA
MARGIE WILSON
MARIA VARGAS
MARTHA HERNANDEZ
MAYRA GONZALEZ
MURIEL HENSHAW
NGOC LETHUAN
OSCAR BUSTAMANTE
PAULA FISCHER
PEDRO FLORES
PHUONG NGUYEN
PRICILIANO DELACRUZ
PRISCILIAN CRUZ
QUANG TON
RAMON FLORES
RAUL DIAZ
RICARDO LOPEZ
SALVADOR HERRERA
STANLEY MAGILL
SUSANA DELGADO
THINH NGUYEN
THUAN DANG
THUY TONG
TINH TRUONG
TRAVIS TRUONG

Target Street	Cross Street	Source
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LAMPSON AVE 1999 (Cont'd)

13181 VERONICA MUNOZ
VINCE REAL
WILLIAM JOHNSON
13321 LAMPSON ELEMENTARY SCHOOL
OCCUPANT UNKNOWN
ORANGE UNIFIED SCHOOL DISTRICT SCHOOLS
13382 MAI NGUYEN
OCCUPANT UNKNOWN
13392 NHAN LE
13422 RAFAEL SEGOVIA
13442 HAI NGUYEN
13462 NORBERT WIETOR
13482 BENITO YU

Target Street	Cross Street	Source
✓	-	Cole I. rmation Services

LAMPSON AVE 1995

3900	OLD RANCH TENNIS CLUB
4000	CYRUS MOBIL
4665	ASSOCIATION CA SCHL ADMNSTRTRS
	SWRL EDUCATION RESEARCH & DEV
	TITUS, AMANDA
5001	SLATTON, HELEN
5011	CORTENS, JIM
5021	LANE, E J
5031	MIKLAS, JANICE C
5041	LICATA, P L
5141	OCCUPANT UNKNOWNN
5151	TRIPP, WILLIAM
5161	SWINEHART, BARBARA A
5171	GRIFFITH, ALAN B
5230	MACKS LIQUOR & JUNIOR MARKET
5238	COLLEGE PARK INTERIORS
5243	AMERICAN SLIDE CHART
5244	GENNAROS
5247	BRUCE W GIBSON DDS
	JAMES D GOFORTH DDS
5249	LEVIN & LEVIN LAW OFFICES
5250	CENTURY 21
5253	RICHARD A LEVIN DDS
5256	SHEAR EXPRESSIONS
5260	HAIR DESIGNS BY KEN
5871	JIFFY STOP MARKET
5885	AUDREY L ANDRADE DDS
5887	CUTTING PLACE
5891	HAIR ARTISTS
6800	OSTERLUND, ERIC L
6810	LUCKETT, VALERIE
6820	OCCUPANT UNKNOWNN
6840	NGUYEN, JESSICA
6850	OCCUPANT UNKNOWNN
6851	PACIFICA HIGH SCHOOL
6864	OCCUPANT UNKNOWNN
6868	SATMARY, BOB
6872	SMALL, STEPHEN I
7042	NEW HERMES INC
7050	AWNING MASTERS
7180	LECHNER, JAMES
	SMC PNEUMATICS INC
7272	BROWNELL ELECTRO INC
7274	AMERICAN PACIFIC PLASTIC
7340	SOUTHERN CALIFORNIA CARTON CO
	SPECTRUM INC CO
7382	WYLE LABORTORIES COMPUTER PROD
7571	MEAD PRODUCTS
7690	SMART & FINAL
7700	ADLER, WAYNE G

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

7700	AKSH, MOHAMAD A
	BATES, LOIS W
	BEASLEY, ROBERT E
	BECK, EUGENE
	BECKER, HENRY A
	BELLENIR, IRMA J
	BERG, M R
	BERNHART, A S
	BONIELLO, FRANK J
	BONNER, HOWARD
	BURKHARDT, MARTHA
	BUSCHCARRMCAD, EA
	BUZZARD, HAROLD W
	CAMERON, CARROL C
	CASSITY, HELEN M
	CHESEBRO, HAROLD E
	COFFMAN, B B
	COMEAU, EDWARD V
	COYER, T J
	CRAWFORD, JOHN H
	CUPP, LLOYD L
	DAVIS, MILLARD C
	DRISCOLL, ALFORD
	DUNN, RUTH
	EMMERT, K S
	ERNST, S M
	FORD, P
	FORREST, KARREN J
	FRITZ, DALE
	FURST, E
	GAZZENY, J
	GOUDIE, JOHN F
	HALL, DONALD K
	HALLOCK, FRED
	HAMM, G E
	HARGROVE, GARY
	HARTUNG, MARY
	JACOB WETZEL
	JANES, SAMUEL J
	JENKS, ALVIN A
	JENSEN, GEORGE
	JONES, FRANCES N
	KELLY, G A
	KEY, IRMA
	KIRK, BONNIE L
	LAND, GERMAIN J
	LAVERTU, TONIETT
	LEIGHTON, M
	LILIENTHAL, R H
	LORINO, KAREN

Target Street	Cross Street	Source
✓	-	Cole I. rmation Services

LAMPSON AVE 1995 (Cont'd)

7700	MAGIC LAMP MOBILEHOME CLUB
	MARIANO, F
	MARTINEZ, MARY L
	MCCATTY, KENNETH W
	MCCURRY, PAUL L JR
	MCHARGUE, ROBERT
	MILLICH, P G
	MOORE, DENNIS
	MORRISON, LEONARD
	MURGUIA, WANDA
	MURPHY, MAXINE
	PETERSEN, CHARLES D
	PIERCE, FLOYD
	PLUZDRAK, R M
	ROSE, E A
	SACHSE, M A
	SCHROEDER, ROBERT
	SEDIG, DONALD
	SELBY, CECLL F
	SEULKE, JERRY
	SURRETT, P A
	THEILEN, HENRY M
	TIBBITTS, HAROLD J
	WARFEL, L E
	WARREN, ROBIN J
	WELKE, DOROTHY
	WILDER, NELLE K
	WINN, JR
	WRIGHT, WILLIAM C
	YOUNG, GOLDIE M
	ZABOROWSKI, ROBERT E
7887	ARAGON, ADELA J
	ATTINELLO, S F
	BALEERAS, ANTHONY
	BEATTY, FRED J
	BRAKEFIELD, GLADYS E
	BUCHANAN, JEANNE E
	CANTRELL, SHARON
	CHUDLEY, GERALD
	CONNELL, MICHAEL R
	DOCKRELL, JUDITH
	FIEBIGER, DALE D
	FRANCIONE, BETTY L
	HAGADONE, HELEN
	HANLEY, EDWARD
	HARRIS, L G
	HAUKOOS, DRU A
	HUETTNER, RICHARD L
	HUTCHISON, M
	JOHNSTON, THOMAS L

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

7887	JUNELL, ALEEN
	KELLICK, MATTHEW
	LAFONTAINE, WILLIAM
	LEE, MICHAEL G
	MARVICH, MICHAEL P
	MCLELLAN, ROY A
	MONEY, KIM P
	MONGEY, M
	MONTECINOS, LOUIS A
	NEUMANN, WILLIAM G
	ORMSBY, JACK R
	OWENS, JOHN R
	PERKINS, LLOYD K
	PERRY, INEZ M
	RAMIREZ, MANUEL H
	RAMSAY, DON
	RANCHO 39 MOBILE PARK
	RATHSWOHL, FRANK
	RIOLA, AGAPITO E
	ROACH, CONNIE
	ROSEDAHL, S F
	ROTHARMEL, ELINORE L
	RUPPE, R M
	SHAFFER, KENNETH G
	SIMONS, OLGA M
	SMART, SANDRA
	SVOBODA, ELMER
	TRESTON, PAUL J
	VANDEHOEF, RICHARD
	VASQUEZ, ROSE
	VOGEL, LENA M
	WADLEY, EVELYN
	WEEKS, RONALD W
	WILKINS, HAROLD P
	WILLEFORD, BARBARA A
	WOISTMAN, GILBERT
7923	OCCUPANT UNKNOWNN
7931	SCHMID, WALTER R
	WALTER SCHMID
7932	ANDOE, GREG
	BAO, SAU N
	DALTON, LYNN
	FLANAGAN, TOM
	GREENSTEIN, HY
	H & P REALTY
	HODGES, TIFFANY
	HUYNH, NGOC
	KIM, UNJUNG
	LE, THUONG
	LIBERATORE, ANTHONY

LAMPSON AVE 1995 (Cont'd)

7932	NELSON, M
	NGUYEN, PETER
	NGUYEN, PHUNG
	NUFABLE, E
	PHAM, OANH
	SAPORTEZA, MYRA
	SENA, BONNIE
	UGALDE, ARMANDO JR
7972	CAMACHO, JOSE P
	CANCINO, SERGIO
	CARRANZA, ARTURO
	CROCKETT, EVERETT
	FLORES, ANGELA
	FUENTES, JUANA
	GALICIA, HECTOR M
	KAHALIL, EVELYN
	LOPEZ, LUIS A
	LUJAN, FRANK
	MEDRANO, ROCIO
	MUNOZ, SIXTA
	POONI, GURDEV
	ROSALES, MIGUEL
	TRAN, LUAN
	WINCHEK, JOSEPH
8011	OCCUPANT UNKNOWNN
8050	SUBWAY SANDWICHES & SALADS
8054	UNIQUECUTS
8061	SANCHEZ, LAURA
8063	RONDON, DESAMPA
8065	SANCHEZ, ENRIQUE
8069	OCCUPANT UNKNOWNN
8071	OCCUPANT UNKNOWNN
8081	DELIO, ALICE D
8100	OILMAX 10 MINUTE LUBE WASH
8101	LAMPSON GROVE DAY SCHOOL INC
8141	KALOUST, VICTOR
	PIERCE, JOHN
8151	AKATFUKA, SATOMI
	HEYN, KENNETH A
8221	OCCUPANT UNKNOWNN
8225	OCCUPANT UNKNOWNN
8231	KLEPNER, JAMES S
8232	NARITOKU, JOE
8241	AGBISIT, MELANIO T
8251	MEDINA, JAIME
8281	ANTOLIN, CARMELO J
8301	NGUYEN, KIM
8331	ALLEN, E L
	DAVIS, SHELLY
	DOAN, HUONG

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

8331	DORIAN APARTMENTS
	GARCIA, JORGE A
	HINH, HAI
	KIM, CHONG T
	MCCOY, ROBERT L
8362	ALLEN, MILDRED M
8372	GUAJARDO, MARIA D
8392	OCCUPANT UNKNOWNN
8412	TRUONG, CHI
8422	HAMILTON, DONOVAN
	KELLEY, S
	RICHARDSON, JIM
8442	TESKE, JUDY
8515	DURAN, SUSANA
	TORRES, GUSTAVO
8525	MURRAY, CHARLES
8545	NGUYEN, LONG
8552	CHRISTIAN SCIENCE CHURCH
8555	WEST, DOUG
8575	NISHIDA, SHIRO
8592	WHITE GABLES LODGE
8602	LADERACH, JOANN
	LIPTAN, C
	WEAVER, RANDY
	WOCHNER, JOSEPH
8611	KOEHLER, EDWARD W
8620	GONZALEZ, LETICIA
	SERANO, ARMINDA
8622	OCCUPANT UNKNOWNN
8642	NGUYEN, AN
8652	OBRIEN, MICHAEL JR
8654	OCCUPANT UNKNOWNN
8671	THIELEN, FRANK E
8673	OCCUPANT UNKNOWNN
8675	SACKETT, DOUGLAS
8677	OCCUPANT UNKNOWNN
8682	DANG, NHUT
8722	OCCUPANT UNKNOWNN
8762	WILSON, CLAUDIA L
8782	FREE WILL BAPTIST CHURCH
	ORANGE KOREAN COVENANT CHURCH
8802	OCCUPANT UNKNOWNN
8841	SHIROMA, PAUL K
8845	KUGH, ROBERT H
	SAWANOUTHAI, ARPON
8851	KIM, KWON N
	PARK, SUN Y
	SHIM, EUN B
8852	LE, QUA V
	LEQUA, VAN

LAMPSON AVE 1995 (Cont'd)

8855	PINERO, MINDA B
	WELLS, CHARLES W
8865	BUCKENBERGER, YONG S
	KANG, KWANG N
	LEE, IG A
	LEPHAM, TRINA
	LU, HUNG V
	PHAN, TRIEU
8882	AIHARA, ANN K
8892	AIHARA, SAM K
	SUZUKI, D M
8921	L T CONSTRUCTION INC
	VONG, BAC
8931	OCCUPANT UNKNOWNN
8933	HAN, JUSIK
9011	NICHOLAS, LORIE
9015	HERNANDEZ, ALEJAND
	PALOMARES, EVA
	TRAN, THAI Q
9021	BARBITO, CHIMENE
9022	MILLER, GEORGIA L
9031	EGGLESTON, ROY H
9033	BLYTH, WILLIAM
9035	PARK, MICHAEL
9037	OCCUPANT UNKNOWNN
9039	FARRELL, BERNARD J
9041	MCKIE, TED
9042	VINEYARD, JOHN W
9043	OCCUPANT UNKNOWNN
9045	OCCUPANT UNKNOWNN
9047	OCCUPANT UNKNOWNN
9049	AGGERS, TERRY
9051	COLLINS, MELINDA L
9071	OCCUPANT UNKNOWNN
9082	MAKOVIC, GREGG R
9091	ELSASSER, DOUGLAS
9101	DUONG, LAN
9105	NGUYEN, THOMAS
9109	KIM, SOON
9111	LUNDEEN, LYNN K
9121	OCCUPANT UNKNOWNN
9122	HUX, SHERRY
9131	TJIA, SOEN H
9142	CHRISTIANSEN, ROBERT E
9151	RENFRO, PAT
9161	TULLY, JOHN M
9162	MCGUIRK, K
9171	CONNELL, RICHARD D
	TANABE, GINO Y
9173	PHAM, THO

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

9175	JULIEN, TYLER
9181	OCCUPANT UNKNOWNN
9182	LIZARRARAS, MARIANO
9191	OCCUPANT UNKNOWNN
9202	JACOBSON, KENNETH J
9222	GOMEZ, HECTOR M
9252	OCCUPANT UNKNOWNN
9262	FERNANDEZ, T J
9272	SPECTER, FRANK
9282	ELIAS, SAUL
9292	COMPTON, CHRIS
9302	TINOCO, P
9312	CARLSON, HENRY K SR
9331	OCCUPANT UNKNOWNN
9332	OCCUPANT UNKNOWNN
9342	OCCUPANT UNKNOWNN
9352	GUZMAN, ROBERT
9362	DEERING, GERALD A
9402	SIMURDA, BRIAN S
9512	CONNER, LARRY
9521	KLACHKO, DAVID
9522	PEARSON, STAN
9531	PIPPIN, GLEN E
9542	STEFFEN, JEAN W
9552	OCCUPANT UNKNOWNN
9571	HARRIS, LEONARD F
9591	OCCUPANT UNKNOWNN
9601	UENA, YONEZO
9621	OCCUPANT UNKNOWNN
9631	BOSHART, KENNETH J
9641	SELBY, CYNTHIA
9661	OCCUPANT UNKNOWNN
9671	DOLAN, EDWARD
9691	TRAN, DIEP
9701	MAYA, ESTHER B
9721	MARCARIO, FRANK
9731	YOUNG, WILLIAM
9752	RODNEY, GEORGE
9797	CATLIN, PATRICK C
9811	REIHING, JACK
9812	OCCUPANT UNKNOWNN
9821	FERNANDEZ, ANTONIO C
	VANDRUFF, MERLE D
9841	HIGGS, JAMES R
9851	OCCUPANT UNKNOWNN
9852	TUGGLE, TOMMY
9871	SAUL, WILLIAM B
	SAULS PLUMBING
9881	OKAZAKI, ANN F
9901	LOCKWOOD, JOHN

LAMPSON AVE 1995 (Cont'd)

9911 OCCUPANT UNKNOWNN
9931 MELALEUCA DISTRIBUTOR OF CA
NOOTBAAR, ROBERT E
9941 VICK, GEORGET R
9961 LUU, HUNG M
10029 ECONO PAINTING & MAINTENANCE
10035 UNIVERSAL CARE MEDICAL GROUP
10042 WEST ORANGE COUNTY ASSN RLTRS
10045 HAN NGUYENTRAN & CO
OCCUPANT UNKNOWNN
10055 OCCUPANT UNKNOWNN
10065 JOSEPH G MENDE DC
MENDE, JOSEPH G
10071 CHUNG, SOON K
DUMAS, DELILIA
HUYNH, PHONG K
MARQUIS APARTMENTS
NGUYEN, LY
PHAN, HUONG T
ROMAN, VALENTI
SANDERS, NICHOLA E
SEIBEL, WENDY
TRAN, HUY
TRAN, KHOE H
10101 VIERHEILIG, VALERIE L
10102 STOKES, HENRY A
10103 JONES, TERRY A
TOP HAT & WHITE GLOVES
10105 RICKMAN, K S
10107 OCCUPANT UNKNOWNN
10109 STANLEY, DOUG
10111 OCCUPANT UNKNOWNN
10113 WILDSMITH, JOHN A
10115 OCCUPANT UNKNOWNN
10117 OCCUPANT UNKNOWNN
10119 PORTER, JOYCE
10121 HOPKINS, V
10131 UGALDE, DOM
10141 LEMON TREE LEARNING CTR
OCCUPANT UNKNOWNN
10171 KIM, EZRA T
10181 STUDHOLME, EDWIN R
10182 SHUBIN, MORRIS M
10191 TRANSFIGURACION, LARRY
10192 KEMP, CHARLES E
10201 CUMBIS, AVELINA
RULO, JERRY L
VILLAGE PINES APARTMENTS
10211 KANG, YOUNG H
10221 BOOTH, V

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

10221	NAVARRO, CELINA
10231	GROVE, WALTER
	VINH, DUONG
10241	GUEVARA, G
10281	BOUGHTON, JUDI
10301	BUSBY, DONOVAN
10321	WHITE, GREGG
10322	OCCUPANT UNKNOWNN
10332	BERBER, JAVIER
	CERVANTES, G P
	VILLA, RAMIREZ L
10351	OCCUPANT UNKNOWNN
10352	BARRIOS, AGUILAR A
	GUITIERREZ, CALISTR
	GUTIERREZ, LLANES M
10361	LEE, ANDREW M
10371	NELSON, IVAN
10372	AYALA, TORRES S
	BERMUDEZ, JUAN A
	LIFANTE, LELIA
10381	JACK, RONALD D
10392	LICONA, RAFAEL
	RUIZ, PAVANA M
10401	PERCY, JAMES S
10411	OCCUPANT UNKNOWNN
10412	ALEMAN, C
	HUYNH, AN K
	PHAM, CONG
	RIVERA, E
	SANCHEZ, PEDRO
10421	VINCENT, RUTH E
10422	CRUZ, VELINA
	RUIZ, RAUL
10442	CORTEZ, MOISES
	COTA, CARMEN
	FLORES, ALFREDO
	HERNANDEZ, ALMANZA I
	LAMAS, ROSIE
	OCAMPO, JORGE O
	RIVERA, ERIKA
	SANCHEZ, ARTURO S
	TORREZ, NOE
10451	NGUYEN, CAU N
10532	SANDOVAL, CARMEN C
10542	PINKHAM, RICHARD R
10552	DOAN, CUONG T
10562	CASEY, KELLY A
10582	ADKISON, CHARLIE L
10592	LEONG, MANUEL L
10602	HAMPTON, BRUCE

LAMPSON AVE 1995 (Cont'd)

10612	ALEXANDER, COLE
10622	MOGOLLON, UBALDO E
10632	OCCUPANT UNKNOWNN
10642	GARPIO, RICARDO G
10661	OCCUPANT UNKNOWNN
10662	OTT, DANIEL R
10671	DIKE, MALCOLM O
10672	THORNTON, JOHN A
10681	ALDAY, JAY
10682	GROOVER, PERCY L
10691	OCCUPANT UNKNOWNN
10701	HUA, KEVIN
10712	MARTI, RAFALEL G
10721	STONE, RICHARD
10722	OCCUPANT UNKNOWNN
10732	OCCUPANT UNKNOWNN
10750	EVANGELICAL FORMOSAN CHURCH
	OCCUPANT UNKNOWNN
10771	WILLIAMS, ERIC
10773	OCCUPANT UNKNOWNN
10782	CANO, A
	GARCIA, MARTHA
	LARSEN, MELANIE K
	LE, AI D
	LE, HANH
	NGUYEN, KHOI V
	NGUYEN, TRAN
	NGUYEN, VANCAM
	NGUYEN, VINH Q
	REED, BRUCE H
	TIEU, DONG
	TROUNG, DAT D
10783	MILLS, IRENE
10785	OCCUPANT UNKNOWNN
10842	OCCUPANT UNKNOWNN
10851	DR WALTER C RALSTON INTER SCHL
10852	OCCUPANT UNKNOWNN
10862	AGUILAR, E
	VEGA, EDUARDO
10872	ANDRADE, GARCIA S
10882	LANCASTER, FRANCIS
10890	OCCUPANT UNKNOWNN
10892	OCCUPANT UNKNOWNN
10894	SWEENEY, STANLEY
10902	BLINEBURY, JAMES J
	BUSH, JOAN B
10918	DOERR, K
10922	WELSH, OLIVE
10924	OCCUPANT UNKNOWNN
10928	RATHBUN, V E

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

10932	COWLES, ERMA M
10934	WOOD, LEO N
10938	MUNDY, MARTHA
10942	BRITTAIN, JOYCE A
11041	VILLALOBOS, RAFAEL
11061	TREJO, ABEL
11101	DAILEY, ANDREW T
11111	AHN, BYUNG H
11139	MUELLER, NANCY
11162	BURCHFIEL, LOYAL
	LOGAN, JOHN
11182	GARCIA, ANTONIO
11191	SKINNER, RICHARD N
11192	LYON, PEARL S
	SILVERSMITH, PHILIP
11201	DIETSCHE, RAYMOND O
11206	OCCUPANT UNKNOWNN
11222	WRIGHT, DON
11232	SHOCK, CLEON V
11242	PHAM, CANH
11252	OCCUPANT UNKNOWNN
11262	FROEMKE, WALTER
11271	BORBON, ARNOLD
11272	MAITEN, DAVID G
11282	GUTIERREZ, MANUEL B
11292	COLES, FRED
11294	OCCUPANT UNKNOWNN
11296	VEGA, ABELDA
11302	HOLM, JOHN
11311	JENKINS, ROBERT E
	SILVA, MICHAEL J
11322	OCCUPANT UNKNOWNN
11332	OCCUPANT UNKNOWNN
11371	LERMA, RIC
11381	ROBUCK, JOE
	ROEBUCK, JOE
11390	BERNSEN, HELLE A
	BROWN, JACK D
	GALWAY, WILLIAM G
	HAMMOND, GREGORY C
	HENMAN, JOHN W
	IOSUA, H K
	LIVA, WILLIAM D
	MARTIN, JOSEPH C
	MCCANN, KEVIN
	OSUNA, JOSEPH W
	TEMPLETON, LULA M
	VASQUEZ, VICKI L
	WONG, SAMUEL K
11401	HAMILTON SATELLITE SYSTEMS

LAMPSON AVE 1995 (Cont'd)

11421	DEVINE, DORIS
11441	KERNS, DONNA
11450	BRANNEN, MURIEL
	BRINTON, C H
	DUONG, QUI T
	ELWOOD, JOHN
	HARBIN, L
	HERNANDEZ, JULIA
	JAN, MIKE
	JANUSZKIEWICZ, MIKE
	KENNEDY, M
	LAMPSON VILLAGE APARTMENTS
	MOORE, RODNEY W
	PITTANO, NELIDA
	SHRIVER, T
	SUTTERFIELD, CARL
	WHITTINGTON, EARL
11461	TRAN, VANK
11571	MONACHELLI, DON
11591	OCCUPANT UNKNOWNN
11602	BALLIET, BARBARA A
	NILES, MICHAEL
11611	HOWES, JAMES
11612	NELSON, HARRY P
11616	CASTILLO, YVONNE
11642	OCCUPANT UNKNOWNN
11662	CHOI, JOHN B
	OM, UN
11672	VANCE, JEFF
11692	OCCUPANT UNKNOWNN
11701	MAJER, GERALD L
11712	KANG, JOO E
11732	HYEOK, KIM
	KIM, STEPHEN
	LIM, HAE J
11742	OCCUPANT UNKNOWNN
11771	BERGMANN, R
	MERSEREAU, RICHARD
	NOGUEZ, LUIS
11791	SELOVER, LENNAE J
11801	OCCUPANT UNKNOWNN
11811	BRUNING, GLENN J
11821	ESPINOSA, ANGEL S
11831	JOHNSON, LISA
11851	ANDERSON, ANGELA
11871	YOUNG, DENNIS L
11881	DOMINGUEZ, RENDON R
11891	GILIO, MARK
11892	OCCUPANT UNKNOWNN
11911	WHITTINGTON, JACK R

Target Street	Cross Street	Source
✓	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

11921	GIRON, HERBERT O
11931	OCCUPANT UNKNOWNN
11951	OCCUPANT UNKNOWNN
11961	OCCUPANT UNKNOWNN
11971	OCCUPANT UNKNOWNN
12091	C C VIOLETTE ELEMENTARY SCHOOL
12171	LAGRANGE, F
12251	ROBERTS, STEVEN F
12252	LLOYD, CONNY
12262	GREATHOUSE, TONI L
12271	BORBON, MARIA
12272	SERBER, L L
12281	WALKER, R P
12301	OCCUPANT UNKNOWNN
12312	LIN, LIHWA
12331	OCCUPANT UNKNOWNN
12332	OCCUPANT UNKNOWNN
12341	MILLSPAUGH, ANDREW L
12361	OCCUPANT UNKNOWNN
12362	GORDON, LARRY
12371	ZUNIGA, MARIA L
12391	STRUNK, CHARLES C
12399	CHAVEZ, VICTOR G
12422	TIP VIDEO
12432	SAMS KOSHER MEAT MARKET
12511	OCCUPANT UNKNOWNN
12531	GUTIERREZ, CLAUDIO
12550	FIESTA MOTEL
	OCCUPANT UNKNOWNN
12551	HOCUTT, GENEVA N
12571	OCCUPANT UNKNOWNN
12581	LOZANO, VICENTE
12582	OCCUPANT UNKNOWNN
12592	SCOTT, JAMES E
12601	OCCUPANT UNKNOWNN
12602	WILDEY, CHARLES R
12611	KINNEY, WINSTON S
12612	BOWEN, JAMES E
12621	BAEK, SEHYUN
12631	ONEILL, JOHN R
12632	OCCUPANT UNKNOWNN
12651	ORTIZ, JAMIE
12652	OCCUPANT UNKNOWNN
12661	OCCUPANT UNKNOWNN
12662	HOUTCHENS, BILLY G
12671	NGUYEN, OAI Q
12672	OCCUPANT UNKNOWNN
12682	TREJO, YVONNE M
12691	SANDEZ, NOE
12702	QUICK, DONALD R

LAMPSON AVE 1995 (Cont'd)

12712 MARTINEZ, ARTHUR L
12872 MOOM, JUMP
12882 BLEVINS, RICHARD C
12892 LARRISON, MARY
12902 OCCUPANT UNKNOWNN
12982 LARRISON, KEVIN
13061 ARENALES, ALFREDO
BANWARTH, LOUIE
BOULANGER, L
BRAGDON, MICHELL
BREWINGTON, ARDELL C
BUELL, ROY D
CHAN, CHHAVY
COOK, TANYA
CRYSTAL WELLS APARTMENTS
DAVIS, PAT
DIFIORE, RICHARD
EVANS, KARON
FLORES, ADOLFO G
FOSTER, JENNIE
GARCIA, G
GUERRERO, V
KEIGLEY, E
LENE, LUPE
MCNAUGHTON, B
MORENO, G
NAZAMI, MEHRI
NGUYEN, CHIEN D
OCONNELL, FRANK L
ONOFRE, MARTHA
PALOMINO, ANDREW
PHAM, HAU
RANDALL, HARVEY
RHODES, ANGELA
SALLENDER, CURT
SHIVERS, NANCY
THOMAS, DARLA J
TRAN, QUYNH V
WERTEL, JESSICA
WILSON, BILLIE
13181 ADAMS, J
ALTON, D J
AMER, L
ANDERSON, B M
BARBER, MICHAEL
CALMER, G
CASTILLO, ISAAC
CLARK, P
CORONA, MARTIN R
CROSBY, MARY E

Target Street	Cross Street	Source
✔	-	Cole Information Services

LAMPSON AVE 1995 (Cont'd)

13181 DAYLIGHT WINDOW CLEANING
DOOLEY, JOHN W SR
EADS, MIKE
EBNET, CHARLES
FLOWERS, DAVID G
GLENHAVEN MOBILODGE
GOODSON, M B
GRANT, ELEANOR
GUERETTE, MICHAEL W
HAMPTON, FRIEDA L
HARTMAN, PAUL
HARTNETT, JOSEPH
HENSHAW, MURIEL
JUSTICE, MELDA
KEMERY, M
LAMBERT, SAM
MAGILL, STANLEY
MAGILL, STANLEY R
MARTINEZ, LORI
MILES, MARK T
MUNOZ, ARTHUR C
MUSSER, J
NEVERMAN, MABEL M
ORR, WARREN R
PERKINS, ELAINE
PLATAS, E M
REDMANN, ERNEST
ROBERTSON, S L
RODEGHIER, JOHN H
RODRIGUEZ, IDA N
SAMUELSON, GUDRUN
SAVAGE, JASON
SMITH, MYRON A
TORRES, CLAUDIA
WALLACE, J
WILSON, G E
WOODS, EDWARD C
WOODS, WILLIAM
YOUNG, WILLIAM E
ZIMMERMAN, PENNY
13321 LAMPSON ELEMENTARY SCHOOL
13392 NGUYEN, HOAN H

LAMPSON AVE 1990

LAMPSON AV 90720
LOS ALAMITOS

4665	*ASSOCTN CA SC ADMIN	952-4202	7
	*ASSOCTN CA SC 17	493-4431	4
	*SOUTHWST RGNL LAB	598-7661	
5001	SLATTON H	894-3909	5
	SLATTON H	598-2840	
5011	SCHOELLER Roy	431-7299	9
5021	LANE E Jack	430-5026	
5031	MIKLAS Milton J	594-0198	1
5151	XXXX	00	
5161	SWINEHART Richard	430-8351	
5171	CAPLAN Gail	598-6773	7

* 3 BUS 8 RES 0 NEW

LAMPSON AV 90740
SEAL BEACH

3901	*OLD RANCH CNTRY CLB	847-8524	7
	*OLD RANCH CNTRY CLB	596-4425	
	*OLD RANCH CNTRY PRO	596-4611	
	*OLD RANCH TNNIS CLB	598-8624	
4000	*CYRUS MOBIL	598-3513	7

* 5 BUS 0 RES 0 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1990

LAMPSON AV 92645
GARDEN GROVE

5230	★VANS LQR CLLG PRK E	893-5001	2
5232	XXXX	00	
5234	★CLOWN CLEANERS	897-9026	7
5238	★COLLEGE PK INTERIOR	898-4361	
5241	★WILLDY NUTRI DISTB	892-0318	6
5243	★AMER SLIDE CHART	895-1448	9
	★CA MARKETING GROUP	895-1447	5
5244	GENNARO S	892-2705	
5246	XXXX	00	
5247	★GIBSON BRUCE W DDS	893-2453	
	★GOFORTH JAMES D DDS	893-2453	
5249	★BLUMENTHAL N L ATTY	898-3396	7
	★LEVIN DOROTHY ATTY	898-3396	
	★LEVIN NANCY ATTY	898-3396	
	★LEVIN&LEVIN LAW	898-3396	
5250	★ALLSTATE INS SALES	891-1060	+0
	★S&S PROPERTIES	898-9824	2

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1985

LAMPSON AV 90720
LOS ALAMITOS

4665	ASSOCTN CA SC ADMIN	952-4201	+5
	SOUTHWEST LAB RSRCH	821-7790	+5
5001	SLATTON H	894-3909	+5
*	2 BUS 1 RES	3 NEW	

LAMPSON AV 90740
SEAL BEACH

3901	OLD RANCH CNTRY CLB	596-4425	7
	OLD RANCH CNTRY PRO	596-4611	
	OLD RANCH TNNIS CLB	598-8624	0
4000	SHORTRIDGE ATMTV	598-3513	3
*	4 BUS 0 RES	0 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1985

LAMPSON AV 92645
GARDEN GROVE

5230	VANS LOR CLLG PRK E	893-5001	2
5232	XXXX	00	
5234	CLOWN CLEANERS	897-3985	8
5238	CLOWN CSTM INT	898-4361	8
5241	AMER HOME ESCROW	897-0354	
5243	CA MARKETING GROUP	895-1447	+5
5244	GENNAROS	892-2705	
5246	PATS PRIME MEATS	893-8211	
5247	GIBSON BRUCE W DDS	893-2453	
	GOFORTH JAMES D DDS	893-2453	
5249	LEVIN DOROTHY ATTY	898-3396	7
	LEVIN NANCY	898-3396	
	LEVIN&LEVIN LAW	898-3396	
	NAYFACK FELISA ATTY	898-3396	4
	ROSEMAN STEVEN ATTY	898-3396	4
5250	S&S PROPERTIES	898-9824	2

LAMPSON AVE 1985

LAMPSON AV 92645
GARDEN GROVE

SEE ORANGE
COUNTY DIRECTORY

LAMPSON AV 90720
LOS ALAMITOS

4665	ASSOCTN CA SC ADM	493-4431	4
	NATL CENTER BILINGL	598-7661	2
	PROVIDENT CREDIT UN	493-4433	4
	SOUTHWEST RGNL LAB	598-7661	0
5001	SLATTON H	598-2840	6
5011	WILLIS ROBT	596-5793	1
5021	LANE E JACK	430-5026	6
5031	MIKLAS MILTON J	594-0198	1
5041	XXXX	00	
5151	BOURDY PATRICK	594-8536	9
5161	SWINEHART RICHARD	430-8351	7
5171	BARBER ROSS	430-7766	7
*	4 BUS 8 RES	0 NEW	

LAMPSON AV 90740
SEAL BEACH

3901	OLD RANCH CNTRY CLB	596-4425	7
	OLD RANCH CNTRY PRO	596-4611	
	OLD RANCH TNNIS CLB	598-8624	0
4000	SHORTRIDGE ATMTV	598-3513	3
*	4 BUS 0 RES	0 NEW	

LAMPSON AV 90740 SEAL BEACH

3901	OLD RANCH CNTRY CLB	842-1376		7
	OLD RANCH CNTRY CLB	847-8524		7
4010	XXXX		00	
	• 2 BUS	1 RES	0 NEW	

LAMPSON AVE 1980

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1980

LAMPSON AV 92645
GARDEN GROVE

ALSO SEE SOUTH
SUBURBAN DIRECTORY

5230	COLLEGE PK E LQR	893-5001	8
5232	XXXX	00	
5234	CLOWN CLEANERS	897-3985	8
	RUG DOCTOR RENTS	897-3985	8
	RUG DOCTOR RENTS	898-4361	6
5238	CLOWN CSTM INT	898-4361	8
5241	AMER HOME ESCROW	897-0354	5
	COLLEGE PK ESCROW	897-0354	5
5243	COLLEGE PK REALTORS	898-5511	6
5244	GENNAROS	892-2705	5
5246	PATS PRIME MEATS	893-8211	4
5247	GIBSON BRUCE W DDS	893-2453	5
	GOFORTH JAMES D DDS	893-2453	5
5249	BAYPORT FINANCIAL	898-0793	+0
	LEVIN DOROTHY LAW	898-3396	7
	LEVIN NANCY	898-3396	9
	NATL DESIGN CONCPTS	892-4497	+0
	SCHWARTZ JOANNE C	898-3396	8
5250	REAL ESTATE STORE	892-8361	2

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1980

LAMPSON AV 90720 LOS ALAMITOS

4665 *	SOUTHWEST RGNL LAB	598-7661	+0
5001	SLATTON H	598-2840	6
5011	TARKINGTON RAY E	598-4761	2
5021	LANE E JACK	430-5026	6
5031	JEFFERY THOS A	598-5708	6
5041	XXXX	00	
5151	BOURDY PATRICK	594-[illegible]	9
5161	SWINEHART RICHARD	430-[illegible]	7
5171	BARBER ROSS	430-[illegible]	7
*	1 BUS 8 RES	1 NEW	

LAMPSON AV 90740 SEAL BEACH

3901 *	OLD RANCH CNTRY CLB	596-4425	7
*	OLD RANCH CNTRY PRO	596-4611	3
*	OLD RANCH TNNIS CLB	598-8624	+0
4000 *	CHETS SERVICE CNTR	598-3513	
*	OLD RANCH SRV CNTR	598-3513	
*	5 BUS 0 RES	1 NEW	

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1980

LAMPSON AV 92645
GARDEN GROVE

ALSO SEE ORANGE
COUNTY DIRECTORY

5230*	COLLEGE PARK E LQR	431-6912	8
5232	XXXX	00	
5234*	CLOWN CLNRS&DRPRIES	430-1906	4
5238*	CLOWN CUSTOM INTRS	431-2677	8
5241*	AMER HOME ESCROW	598-6603	6
*	COLLEGE PARK ESCROW	598-6603	6
5243*	COLLEGE PARK RLTRS	430-0505	6
5249*	LEVIN DOROTHY	421-1777	+0
*	LEVIN NANCY	421-1777	+0
*	LEVIN&LEVIN	421-1777	+0
*	SCHWARTZ JOANNE C	421-1777	+0
5250*	REAL EST STORE	598-6661	2
5251	XXXX	00	
5253*	LEVIN RICHARD DDS	430-2453	5
5260*	CAROL JS HAIR DSGN	596-8718	9

Target Street	Cross Street	Source
✔	-	Haines Criss-Cross Directory

LAMPSON AVE 1975

LAMPSON AV 92645 GARDEN GROVE

ALSO SEE SOUTH
SUBURBAN DIRECTORY

5232*COLLEGE PK EAST LQR893-5001 2
5234*CLOWN CLNRS&DRPRS 892-2914+5
*CLOWN LAUNDRY&CLNRS892-2914+5
5238*B&G POOL&CANVS SPLY898-1501+5
5241*AMER HOME ESCROW 897-0354+5
*COLLEGE PARK ESCROW897-0354+5
5244*GENNAROS 892-2705+5
5246*PATS PRIME MEATS 893-8211 4
5247 GIBSON BRUCE W DDS 893-2453+5
GOFORTH JAMES D DDS893-2453+5
5249*LEVIN DOROTHY 898-3396+5
5250*REAL ESTATE STORE 6892-8361 2
5251*COLLEGE PARK MRTG 892-3346+5

Target Street	Cross Street	Source
✓	-	Haine riss-Cross Directory

LAMPSON AVE 1975

LAMPSON AV 90720 LOS ALAMITOS

```
4665*SOUTHWST REGNAL LAB320-5315 3
    *SOUTHWST REGNL LAB 598-7661 3
5011 TARKINGTON RAY E   598-4761 2
5021  XXXX              00
5031 SCHICK THOS A      598-4235 4
     SCHICK THOS E      598-4224 2
5041 MCNAIR BERNARD B   431-4587 2
5161 RUDNICK DANL L     430-7198 3
    *   2 BUS    6 RES    0 NEW
```

LAMPSON AV 90740 SEAL BEACH

```
3900  XXXX              00
3901*OLD RANCH CNTRY CLB596-4425
    *OLD RNCH CNTY CLUB 596-4611 3
4000*CHETS SERVICE CNTR 598-3513
    *OLD RANCH SERV CTR 598-3513
    *   4 BUS    1 RES    0 NEW
```

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1975

LAMPSON AV 92645 GARDEN GROVE

ALSO SEE ORANGE
COUNTY DIRECTORY

5232*COLLEGE PK E FD MRT431-6912+5
5234*CLOWN CLNRS&DRPRIES430-1906 4
*CLOWN CLNRS&LNDRY 430-1906 2
5249 LEVIN DOROTHY 421-1777+5
5250*REAL ESTATE STR 6 598-6661 2
5253 LEVIN RICHARD DDS 430-2453+5
5260*RICARDOS HAIR DESGN596-8718 2
5262*BILL LANES ARCO SV 598-3519+5
5877*PARK GATE REALTY 430-7216 3

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1972

LAMPSON AV 92645 GARDEN GROVE

5232 *COLLEGE PK EAST LQR 893-5001+2
5238 CARUSO CHAS E 897-6630+2
*JEANS FASHION FBRCS 897-8680+2
5246 *PRIME MEAT MART 893-8211+2
5250 *REAL ESTATE STORE 6892-8361+2
5254 *BEHOLDERS EYE ART 897-7774+2
5256 *LOUIES MEN HR STYLG 893-9823+2
5260 *RICARDOS HAIR DSGN 893-9623+2
5262 *KING ARCO SERV STN 892-1090+2

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

LAMPSON AVE 1971

LAMPSON AV 92641 GARDEN GROVE

ALSO SEE
ORANGE CO DIRECTRY

7042*PLASTIC INDUSTRIES 598-1014
7490*DECAR PLASTIC CORP 598-4463
*DENTIN MANUFACTURNG598-4463
* 3 BUS 0 RES

LAMPSON AV 90740 SEAL BEACH

3901*OLD RNCH CLB PRO SH596-4611
*OLD RANCH CNTRY CLB596-4425
*OLD RANCH TNNIS CLB596-4425
4000*CHETS SERVICE CNTR 598-3513
*OLD RANCH SERV CTR 598-3513
* 5 BUS 0 RES

APPENDIX G:
HISTORICAL CHAIN OF TITLE REPORT

The EDR 1940 Chain of Title

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Inquiry Number: 4405855.14S
September 21, 2015

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.353.0050
www.edrnet.com

EDR Chain of Title

The EDR Chain of Title Report tracks a line of successive owners from the present back to 1940 of a particular parcel of property, linked together by recorded transactions which pass title. Available nationwide, this report provides a summary of a property's ownership history and is a valuable source for determining the prior uses of a property

A network of professional abstractors following established procedures, uses client supplied address Information to locate:

- Historical Chain of Title research
- Leases and Miscellaneous

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Chain of Title

TARGET PROPERTY INFORMATION

ADDRESS

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, CA 90720

Research Source

Source 1: Orange County Recorder of Deeds

Source 2: Orange County Assessor

Examiner's Note: Public records of Orange County, California were searched from January 1, 1940 to September 21, 2015, and no other deeds vesting title in the subject property were found of record during the period searched.

PROPERTY DESCRIPTION

Current Owner: United States of America

Legal Description: All that certain piece or parcel of land containing 12.367 acres, more or less, being a portion of Section 32, Township 4 South, Range 11 West, situate and lying in the County of Orange, State of California.

Property Identifiers: 130-012-35

HISTORICAL CHAIN OF TITLE

See Exhibit "A"

LEASES AND MISCELLANEOUS

See Exhibit "B"

Chain of Title

Exhibit "A"

EDR Chain of Title

HISTORICAL CHAIN OF TITLE

PARCEL NO. 1

Chain 1

According to the Los Angeles County Assessor, the current owner of the subject property is the United States of America. Records were searched at the Los Angeles County Recorder's Office back to 1941. No conveyance was found of record for the subject property. Based on our research, it appears that the United States of America acquired title to the property through eminent domain from the Fred H. Bixby Rancho Co.

EDR Chain of Title

LEASES and MISCELLANEOUS

Exhibit "B"

EDR Chain of Title

LEASES and MISCELLANEOUS

1. Type of Instrument:
   First Party:
   Second Party:
   Recorded:
   Book:
   Page:
   Document No.:

   Comments:

2. Type of Instrument:
   First Party:
   Second Party:
   Recorded:
   Book:
   Page:
   Document No.:

   Comments:

APPENDIX H:
ADDITIONAL INFORMATION REVIEWED

Soil Map—Orange County and Part of Riverside County, California
(4665 Lampson Avenue, Los Alamitos, CA)
Natural Resources Conservation Service
USDA
Web Soil Survey
National Cooperative Soil Survey
10/5/2015
Page 1 of 3
Map Scale: 1:1,830 if printed on A landscape (11" x 8.5") sheet.
Meters
0 25 50 100 150
Feet
0 50 100 200 300
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84
Lampson
Lampson Ave
158
402570
402710
402750
402790
402830
402870
402910
402950
402990
403030
3738360
3738400
3738440
3738480
3738520
3738560
3738600
33° 46' 50" N
33° 46' 59" N
118° 3' 5" W
118° 2' 46" W

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County and Part of Riverside County, California
Survey Area Data: Version 8, Sep 19, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 16, 2014—Jul 2, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Orange County and Part of Riverside County, California (CA678)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
158	Hueneme fine sandy loam, drained	13.9	100.0%
Totals for Area of Interest		**13.9**	**100.0%**

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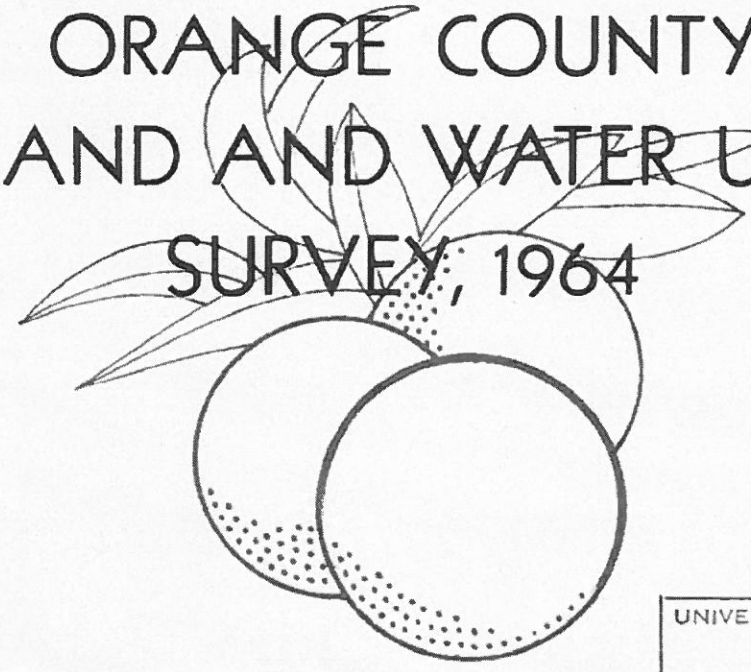
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ORANGE COUNTY LAND AND WATER USE SURVEY, 1964



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SPENCE AIR PHOTOS

The Santa Ana River
North from near Olive

The river, which is the principal stream in Orange County, rises in the San Bernardino Mountains, a little more than 75 miles inland, and passes through portions of Riverside and San Bernardino Counties.

STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 70-64

ORANGE COUNTY LAND AND WATER USE SURVEY, 1964

AUGUST 1967

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources

FOREWORD

In 1948, an intensive land and water use survey was conducted on a statewide basis. This information was published in State Water Resources Board Bulletin No. 2, "Water Utilization and Requirements of California", June 1955. The 1948 survey also served as the basis for a more detailed report on the entire Santa Ana River drainage area. This was published as Department of Water Resources Bulletin No. 15, "Santa Ana River Investigation", February 1959.

To bring information on land and water use in the Santa Ana River drainage area up to date, the Department began a new survey in 1957 which resulted in the publication of two bulletins: Bulletin No. 70, "Orange County Land and Water Use Survey, 1957", and Bulletin No. 71, "Upper Santa Ana River Drainage Area Land and Water Use Survey, 1957".

This report, Bulletin No. 70-64, presents land and water use as of 1964 and updates data presented in Bulletin No. 70. Such updating of land and water use data has been carried on since 1957 for different areas throughout the Southern District as set forth in Sections 225, 226, and 232 of the California Water Code.

The Department of Water Resources expresses its thanks to the many farmers of the area without whose cooperation detailed crop mapping would not have been possible.

William R. Gianelli

William R. Gianelli, Director
Department of Water Resources
The Resources Agency
State of California

June 12, 1967

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State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

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cover illustration by

Robert L. Strawn . . . . . .Delineator

ABSTRACT

Bulletin No. 70-64 reports that, in the Orange County study area, urban development has been rapidly increasing while the area devoted to agriculture has been declining. / The area of the report encompasses 825 square miles and includes most of Orange County and minor portions of Los Angeles, Riverside, and San Bernardino Counties. It consists of portions of three hydrologic units: Los Angeles-San Gabriel River, Santa Ana River, and San Juan. / Population in the Orange County portion of the survey increased from 516,000 in 1957 to 1,070,800 in 1964. / The gross urban-suburban area (in the entire study area) increased from 69,490 acres in 1957 to 140,590 acres in 1964. The gross agricultural area decreased from 101,920 acres in 1957 to 61,760 acres in 1964. / Net water use in the study area expanded from 244,000 acre-feet in 1957 to 305,400 acre-feet in 1964 -- a 25-percent increase. Urban-suburban net water use increased from 104,100 acre-feet in 1957 to 220,500 acre-feet in 1964, while agricultural net water use decreased from 139,900 acre-feet in 1957 to 84,900 acre-feet in 1964. / Foldout plates depict hydrologic units, subunits, subareas; water-bearing sediments; major water agencies; present land use; and change in land use between 1957 and 1964.

CHAPTER I. INTRODUCTION AND SUMMARY

A periodic survey of land and water use is necessary to provide information on present water requirements and to form the basis of predictions of future water requirements and the need for supplemental water supplies. This is particularly true in an area such as Orange County where the recent rapid growth of population and industry and the resulting decline in irrigated agricultural acreage have created drastic changes in the character and amount of demand for water.

Charting the land uses and water needs in areas such as this began in 1947 when the California Legislature directed the Department of Water Resources and its predecessor agencies to conduct a comprehensive investigation of the water resources of the entire State. Out of this investigation came The California Water Plan -- a master blueprint for management of California's water resources.

Since then, the Department has periodically updated its land and water use surveys to keep abreast of the changes taking place. For example, the investigation reported here, which was conducted in 1964, updates a similar survey made in 1957 in the same area.

Objectives and Scope of Investigation

The major objective of the program, of which this survey is a part, is to provide timely and reliable information on the availability, suitability, and use of land throughout the State for various kinds of water-using development.

The specific objectives of this survey were to develop information on present water use in the study area and to compare present water

use with historical use to determine water use trends. This information will then be used by the Department of Water Resources in continuing studies to compare values of present use with local and imported water supplies to ascertain the need for supplemental water.

This report contains data for Orange County and for small parts of Los Angeles, Riverside, and San Bernardino Counties. These minor areas outside of Orange County have been included because the boundaries of the hydrologic drainage areas extend beyond county lines. A general location map of the study area is presented in Figure 1.

Methods and procedures employed in this investigation are similar to those used in the 1957 survey. A detailed explanation of the classification of land use and conduct of the study is given in Appendix A, and an explanation of the unit value method for estimating net water use is given in Appendix B. For definitions of terms as used in this report, see Appendix C. For a list of references used in this report see Appendix D.

Summary of Findings

The investigation reported in this bulletin disclosed that in 1964, the land in the area of investigation was being put to these uses:

Gross urban and suburban area	140,590 acres
Gross irrigated agriculture area	61,760 acres
Gross water service area	202,350 acres

And this land was found to be using the following amounts of water:

Net urban and suburban water use	220,500 acre-feet
Net irrigated agriculture water use	84,900 acre-feet
Total net water use	305,400 acre-feet

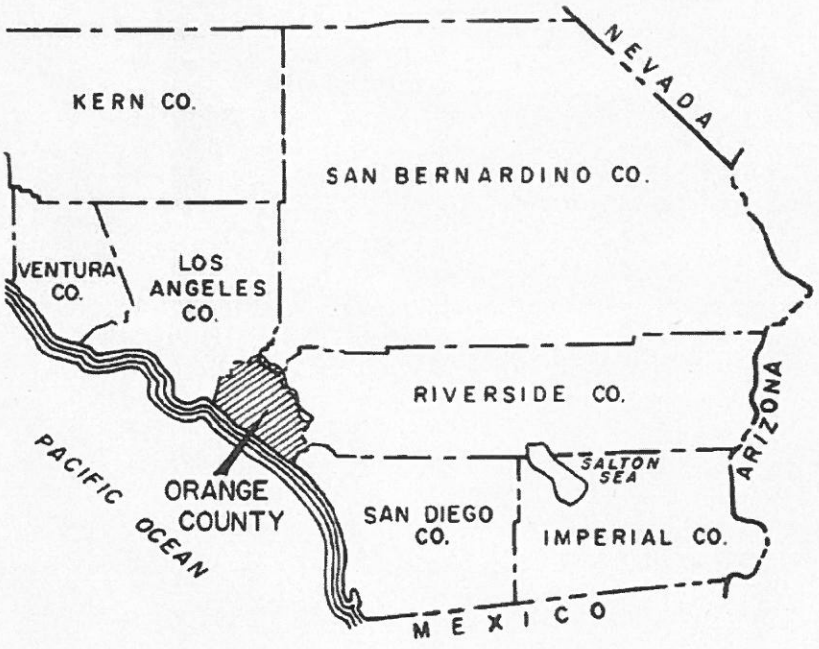


Figure 1. Location of Area of Investigation

The following findings result from the 1964 survey of the study area:

1. The population of Orange County has increased 108 percent since the 1957 survey (516,000 in 1957 to 1,070,800 in 1964).
2. The gross urban and suburban area within the area of investigation increased from 69,490 acres in 1957 to 140,590 acres in 1964, an increase of 71,100 acres, or 102 percent.

3. The gross irrigated agricultural area decreased from 101,920 acres in 1957 to 61,760 acres in 1964, a reduction of 40,160 acres, or about 39 percent.
4. The gross water service area increased from 171,410 acres in 1957 to 202,350 acres in 1964, an increase of 30,940 acres, or about 18 percent.
5. Eight major water agencies encompass 75 percent of the study area and provide service to 99 percent of the water service area.
6. Annual net water use for urban and suburban acreage increased 116,400 acre-feet between 1957 and 1964 -- from 104,100 to 220,500 acre-feet, or almost 112 percent.
7. Annual net water use on irrigated agricultural lands declined from 139,900 acre-feet to 84,900 acre-feet between 1957 and 1964, a decrease of 55,000 acre-feet, or about 39 percent.
8. Overall net water use increased about 61,400 acre-feet, or almost 25 percent, from 244,000 acre-feet in 1957 to 305,400 acre-feet in 1964.
9. The deliveries of water imported to Orange County from the Colorado River increased from 154,200 acre-feet in 1957 to 303,400 acre-feet in 1964.
10. The total seasonal net water use for Orange County by the year 2020 has been estimated to be 804,000 acre-feet. This means that nearly 650,500 acre-feet of water will have to be imported annually to this area in the future.

Conclusions

Based on the results of this investigation, it is concluded that:

1. The population within the study area will continue to increase within the foreseeable future.
2. Irrigated agricultural lands will continue to lose choice acreage to urban and suburban expansion, but a portion of this loss will be offset by new development of lands which previously have been in native vegetation or farmed under a nonirrigated condition.
3. Increasing reliance on importation has relieved, but not solved, the current overdraft conditions.
4. Orange County is undergoing very rapid changes. These changes will require continued periodic inventories of land use to serve as a foundation for future water resources planning and development.

Newport Bay is one of the most intensively used small craft harbors in Southern California.

Newport Bay

PACIFIC AIR INDUSTRIES

CHAPTER II. AREA OF INVESTIGATION

The Orange County study area comprises about 825 square miles. It is roughly rectangular in shape and extends some 37 miles parallel to the Pacific Ocean, with an inland depth of about 25 miles.

The study area is situated in a locale that encompasses many variations in topography, ranging from relatively level land along the coast to rugged mountains along the Santa Ana Range. A short drive through the county will carry one along scenic country roads that pass fields of stubble grain or undeveloped valleys where large oaks shade the highway. Going west, one may pass through a broad plain that stretches to the ocean. This plain is the scene of intense urban and agricultural activity. A highway along the coast takes one along beautiful beaches and unique cities that attract crowds of holiday and weekend visitors.

This flat coastal plain blends into the Coastal Plain of Los Angeles County on the northwest. The north and northeast boundary of the study area runs along the drainage divide of the Puente and Chino Hills. The eastern limits of the study area follow the rugged Santa Ana Mountains. The southeast boundary follows the Orange County and San Diego-Riverside county lines. This last stretch of the study area runs through very hilly and mountainous terrain. The southern boundary borders on the Pacific Ocean.

The internal features of the county are quite variable. The San Joaquin Hills, which are located just inland from Laguna Beach, and the Puente Hills attain elevations of about 1,200 feet and 1,800 feet, respectively. Both ranges are relatively smooth. The Santa Ana Mountains are more rugged and rise to an elevation of 5,700 feet.

The Santa Ana River, the principal stream in Orange County, originates to the northeast in the San Bernardino Mountains a little more than 75 miles inland and passes through portions of Riverside and San Bernardino Counties. It enters Orange County by way of a 12-mile gorge between the Puente Hills and the Santa Ana Mountains, known as the Santa Ana Narrows, and flows in a southwesterly direction across the coastal plain to the Pacific Ocean.

Precipitation in Orange County varies widely both according to season and according to geography and generally occurs in the form of rainfall. Mean seasonal rainfall near the center of the county at the City of Santa Ana for the 30-year period 1934-1964 was 13.04 inches, and precipitation ranged from a maximum of 34.34 inches during the 1940-41 season to a minimum of 3.56 inches during the 1960-61 season. At Camp Silverado in the Santa Ana Mountains mean seasonal rainfall is 24.37 inches. The maximum recorded rainfall at this station was 48.73 inches during the 1940-41 season, while the minimum recorded rainfall was 10.78 inches during the 1960-61 season.

Generally the temperature range is small. At the City of Santa Ana the mean temperature is 62° F. with recorded extremes of 22° F. and 112° F. Killing frost and temperatures exceeding 110° F. are of infrequent occurrence. Loss of semitropical crops is usually prevented during heavy frosts by use of orchard heaters or wind machines.

Hydrologic Subdivisions

The Orange County Study area is divided into three major hydrologic units: Los Angeles-San Gabriel River, Santa Ana River, and San Juan. Because each takes in considerable territory outside this study area, any

reference to a unit in this report will refer to only that portion of the unit within the study area. Information on the remainder of the Los Angeles-San Gabriel River Unit may be found in Department of Water Resources Bulletin No. 24-60, "Coastal Los Angeles County Land and Water Use Survey, 1960". Additional data on the Santa Ana River unit may be found in Bulletin No. 71-64, "Upper Santa Ana River Land and Water Use Survey, 1964". The San Juan unit is another unit that extends into another study area. Information on the remainder of this unit may be obtained from Department of Water Resources Bulletin No. 102, "San Diego County Land and Water Use Survey, 1958".

Each hydrologic unit has been subdivided into subunits and, in some instances, into subareas. Subunits were found to be the most suitable subdivision to describe. Three of these -- Anaheim, San Juan, and San Mateo -- extend beyond the study area; therefore, any values of land use extracted from this report pertaining to these three subunits will not be a subunit total.

The names and areas of the hydrologic units and subunits are presented in Table 1. The location and configuration of the boundary has been delineated on Plate 1.

Anahaim Subunit

This subunit, which is a subdivision of the Los Angeles-San Gabriel River Hydrologic Unit, extends beyond the study area into Los Angeles and San Bernardino Counties. The part of the subunit within the study area is located in the northwestern part of Orange County and covers 79,840 acres, or 125 square miles. The northern limits of this partial subunit correspond with the Los Angeles county line. The southern

TABLE 1

AREAS OF HYDROLOGIC UNITS AND SUBUNITS
IN THE STUDY AREA

In acres

Hydrologic subdivision	Area
Los Angeles-San Gabriel River Unit	
Anaheim Subunit	79,840*
Santa Ana River Unit	
Lower Santa Ana River Subunit	281,720
San Juan Unit	
Laguna Subunit	40,940
San Juan Subunit	101,310*
San Clemente Subunit	12,680
San Mateo Subunit	11,600*
Subtotal	166,530
STUDY AREA TOTAL	528,090

*Subunits that extend into other study areas.

boundary is a drainage divide extending diagonally from Alamitos Bay northeast through Anaheim to another drainage divide in the Chino Hills.

Rolling hills form the northern part of this partial subunit. The hills level off to meet the coastal plain just north of Fullerton. The rest of this subunit is relatively level to the ocean. Elevations range from sea level on the coast to more than 1,700 feet near the county line. A number of canyons and gullies slice through the northern part of the partial subunit. Some form major thoroughfares where highways carry

large volumes of traffic. In particular, Brea and Carbon Canyons provide access to and from the Chino and Pomona areas, which are north of the study area.

Agriculture still exists in the more level parts, but urban development is rapidly encroaching on the once so plentiful farm land. Urban development is widespread and not restricted to any one metropolitan area. Rapidly growing cities such as Buena Park, Fullerton, and La Habra are located here, along with a large segment of Anaheim.

There are no perennial streams flowing through this partial subunit. All surface flow is to Coyote Creek, a tributary of the San Gabriel River, which passes through another portion of the hydrologic unit outside of the study area.

Lower Santa Ana River Subunit

The Lower Santa Ana River Hydrologic Subunit, which is a subdivision of the Santa Ana River Hydrologic Unit, covers all the central part of Orange County. It is rectangular in shape and oriented in a southwest-northeast direction. This important hydrologic subdivision of Orange County covers about 281,720 acres, or 440 square miles.

The wide, expansive coastal plain is the site of vast urban construction activity, spotted by intensively farmed agricultural land. East of the City of Santa Ana a considerable acreage of irrigated agriculture remains, including truck crops, oranges, and avocados.

The coastal plain extends inland about 15 miles where the land gently changes to rolling hills which rise to the steep slope of the Santa Ana Mountains. The inland limits of this subunit follow the drainage

divide of the Santa Ana Mountains which separates runoff between the Upper and Lower Santa Ana River Hydrologic Subunits. The southern or southeastern limit of this subunit extends toward the coast from Santiago Peak following the divide between the Lower Santa Ana River Subunit and the Laguna Subunit. This boundary closely parallels El Toro Road.

The Santa Ana River enters this subunit at Prado Dam and flows through the Santa Ana Narrows to the west side of the subunit. It then flows through the coastal plain in a southerly direction between the cities of Anaheim and Orange to the ocean just southeast of Huntington Beach. Santiago Creek, which is located in the northeast part of the subunit, flows into Irvine Lake. Below the lake, the creek continues on to meet the Santa Ana River just west of the City of Santa Ana.

The most populous cities in Orange County are located in this subunit. Anaheim, Santa Ana, and Garden Grove continue to be the hub of county activity. On the coast is Newport Bay, one of the most intensively used small craft harbors in Southern California. Military installations, such as the Marine Corps Air Station at El Toro and the U. S. Naval Weapons station at Seal Beach, are important to the economy of the study area.

Laguna Subunit

The Laguna Subunit is part of the San Juan Hydrologic Unit and is located in the southern part of Orange County, encompassing 40,940 acres, or about 64 square miles. The boundaries of the subunit follow drainage divides.

The topography is very rolling and steep, leveling off sharply on the coast to form steep palisades interspersed with scenic beaches.

Laguna Beach is the center of importance here, attracting throngs of tourists and vacationers from nearby metropolitan areas.

Agriculture is limited to the few level valleys in the upper reaches of Aliso Creek near the town of El Toro. Urban growth has occurred primarily along the coast between Dana Point and Laguna Beach.

San Juan Subunit

This subunit is also a subdivision of the San Juan Hydrologic unit. The subunit is bounded on the north by the rugged Santa Ana Mountains and on the west by the Laguna Subunit. The eastern side of the subunit borders on the San Clemente and San Mateo Subunits.

This hilly and mountainous area covers 101,310 acres, or 158 square miles. Major creeks in the area are San Juan, Canada Gobernadora, and Arroyo Trabuco.

Irrigated agriculture is restricted to the valleys and some rolling hills where avocados are successfully grown. Urban development is centered at San Juan Capistrano and Capistrano Beach.

San Clemente Subunit

This small subunit covers 12,680 acres which is almost 20 square miles. The subunit is also part of the San Juan Unit. It is situated east of Capistrano Beach and extends inland only about 6 miles. There are no major streams or creeks here.

Nearly all development, both urban and agricultural, remains confined to the coast. The coastal city of San Clemente attracts large crowds of tourists during the summer months.

San Mateo Subunit

The portion of this subunit in Orange County covers 11,600 acres, or about 18 square miles. It is a subdivision of the San Juan Unit. This partial subunit drains to San Mateo Creek which flows outside the study area. Most of the subunit falls within San Diego and Riverside Counties. There is very little urban development here and no irrigated agriculture. The subunit completes various land and water use values for Orange County.

Population

For many years Orange County has been one of the fastest growing areas in the nation. A feeling of this growth can be experienced when driving through the county. The aura of this dynamic growth is reflected in the gross changes of the landscape. New housing tracts are emerging everywhere. Roads are blocked for excavation, new sewers, water pipes, and gas lines. The road detour and construction signs are an indication of the progress being made in the county.

In 1940 the Bureau of Census estimated the population to be 130,760. By 1950 this value had increased to 216,224, an increase of 65 percent. Between 1950 and 1957, the year of the Department's last land and water use survey, the population had added 300,000 persons to reach a total of 516,000. This 139 percent increase of population in the county in seven years is continuing. Population figures in 1964 were estimated to be 1,070,800. This is an increase of 554,800, or 108 percent since 1957.

Table 2 lists the incorporated cities in Orange County with the census counts for 1940, 1950, 1960, and estimates by the Orange County Planning Commission for 1957 and 1964.



Urban Encroachment on
Citrus Groves near Anaheim

SPENCE AIR PHOTOS

Orange County is rapidly losing agricultural lands to urban and suburban development.

The increases in population between 1957 and 1964 varied from city to city, ranging from 6 percent in Dairyland to 1,078 percent in Fountain Valley. In 1957 approximately 82 percent of the county residents lived within an incorporated city. By 1964 this value amounted to slightly more than 90 percent.

The study area includes small portions of Los Angeles County and Riverside County. The population of these portions can be considered negligible when compared to the population of Orange County; therefore, the population values and results discussed in this section reflect only the figures for Orange County.

Urban and Suburban Development

The study area is rapidly losing agricultural lands to urban and suburban development. Housing tracts have replaced a large portion of the important agricultural development.

The total urban-suburban area, which had amounted to 69,490 acres in 1957, covered 140,590 acres in 1964. This area is made up of a number of different types of land use, many of which are dependent on the others for support.

For example, construction of a residential tract causes new schools to be built. The neighborhood shopping center emerges to serve the family needs. Light industry moves into the area to take advantage of the labor. This interdependency grows and accumulates at faster and faster rates, pushing and prodding at city boundaries and causing expansion in all directions.

TABLE 2

POPULATION OF INCORPORATED CITIES IN ORANGE COUNTY

City	1940 census	1950 census	1957[a] estimate	1960 census	1964[a] estimate	Increase in percent 1957-1964
Anaheim	11,031	14,556	65,000	104,184	144,719	123
Brea	2,567	3,208[b]	6,500	8,487	12,166	87
Buena Park	Uninc.	5,483[b]	27,000	46,401	63,014	133
Costa Mesa	Uninc.	11,844[b]	23,000	37,550	63,510	176
Cypress	Uninc.	Uninc.	1,700	1,753	12,583	640
Dairyland[c]	Uninc.	Uninc.	600	622	634	6
Fountain Valley	Uninc.	Uninc.	600	2,068	7,070	1,078
Fullerton	10,442	13,958[b]	46,000	56,180	73,672	60
Garden Grove	Uninc.	3,762[b]	58,500	84,238	113,698	94
Huntington Beach	3,738	5,237	12,300	11,492	59,734	386
Laguna Beach	4,460	6,661	8,500	9,288	11,031	30
La Habra	2,499	4,961	15,000	25,136	35,539	137
Los Alamitos	Uninc.	Uninc.	Uninc.	4,312	6,704	---
Newport Beach	4,438	12,120	21,200	26,564	34,582	63
Orange	7,901	10,027	20,000	26,444	61,083	205
Placentia	1,472	1,682	3,200	5,861	11,362	255
San Clemente	479	2,008	7,400	8,527	13,825	87
Santa Ana	31,921	45,533	71,200	100,350	130,272	83
Seal Beach	1,553	3,553	4,200	6,994	18,298	336
Stanton	Uninc.	Uninc.	4,600	11,163	17,819	287
Tustin	953	1,143[b]	1,800	2,006	7,054	292
Westminster	Uninc.	3,131[b]	14,200	25,750	48,355	240

a. Orange County Planning Commission estimate for July 1.
b. U. S. Census count of unincorporated communities, shown for comparative purposes.
c. Is now incorporated and called La Palma.

Single family residential units form about 85 percent of all existing dwelling units. Multiple units are rapidly replacing older single family residential development in the major cities. In 1964 there were 28,501 building permits authorized within the county. Of this total, 15,345 were for multiple units -- more than 53 percent.

Another phenomenon of competition for land area is the development of the condominium. This type of development resembles duplex or triplex residences set in a park-like atmosphere. Similar to this type of development is the retirement community. There are a number of these within the county -- some being cities in themselves, covering hundreds of acres.



SPENCE AIR PHOTOS

Industrial Complex near Buena Park

Light industry moves in to take advantage of the labor.

Industrial development has followed the fast pace set by the population influx. North American Aviation, Inc., with some 22,000 employees, is one of the largest of the approximately 1,400 manufacturing plants within the county. Other large industries are Hughes Aircraft Company, Beckman Instruments, Aeronutronic Division of Ford Motor Company, Douglas Aircraft Company, Nortronics, and Hunt Foods. Most of the manufacturing plants, however, would be classed as light industry.

Total expenditures by military installations increased from a little more than $92 million in 1957 to slightly more than $133 million in 1964. The U. S. Marine Corps Air Station at El Toro contributes almost $96 million to this expenditure.

The assessed valuation of Orange County increased from $793,634,290 during the 1956-57 period to $1,820,385,734 during 1963-64. This 129 percent increase reflects the dynamic changes occurring in the county.

Agricultural Development

The first known agricultural development in the study area occurred in the vicinity of the mission San Juan Capistrano in 1776. Before 1900, the principal source of revenue was the raising of cattle pastured on native grasses and dry farm stubble. However, some irrigated agriculture, primarily truck crops and wine vineyards, did exist. Water for irrigation was obtained by diversions from the Santa Ana River and other streams, although shallow dug wells were developed during the latter part of the nineteenth century to provide firm supplies during the late summer and fall.

About the year 1900, the planting of orchards, primarily citrus, became common. The greatest influence on the expansion of agricultural

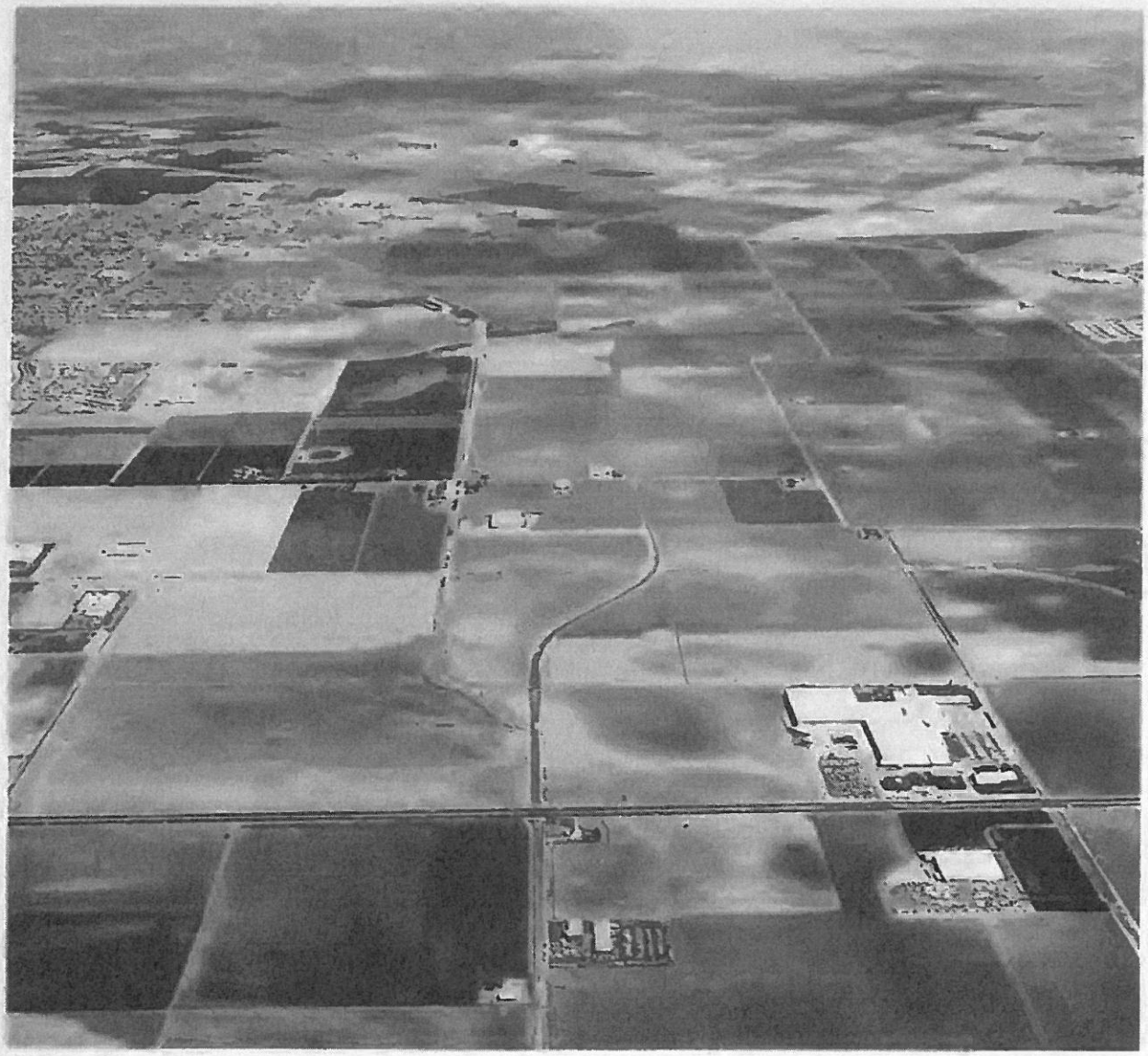
development was the introduction of the deep-well turbine pump. Use of ground water resulted in an increase of approximately 350 percent in agricultural acreage between 1904 and 1926. By 1948 there were 136,600 gross acres of irrigated agriculture in the study area. The principal crops were citrus, avocados, walnuts and other deciduous fruits, truck crops, and alfalfa. In 1957 the agricultural area was found to have decreased to 101,920 acres. The 1964 survey indicated even a greater decline in irrigated agriculture -- reaching 61,760 acres -- far below the 140,590 acres in urban and suburban development recorded in that same year.

The Orange County Department of Agriculture reported in the "Agricultural Crop Report, 1951" that, at peak development, citrus and avocado orchards covered as much as 84,000 acres. By 1957, only about 49,500 acres of orchards were productive, and by 1964 this figure had dropped to 26,730 acres.

Many of the citrus orchards that have been subdivided have been developed into estate-type ranches. Although much of the ranch is occupied by residences, there is still an appreciable area of bearing citrus trees that can be farmed on a commercial basis.

Citrus and avocados remain important to the economy of the county, but field crops have declined in value. There has been a shift to more intensive use of the land, growing and harvesting as many as three truck crops in a year on the same piece of land.

In recent years smog damage has been more prevalent. Nurseries appear to be the hardest hit, but almost all crops are affected to some degree. The smog problem will be a factor in deciding the type of agriculture that will exist in the future.



Agriculture in the Coastal Plain

SPENCE AIR PHOTOS

There has been a shift to more intensive use of the land, growing and harvesting as many as three truck crops in a year on the same piece of land.

The value of farm products in Orange County increased sharply from $34 million in 1940 to almost $94 million in 1945. The peak was reached in 1959 when production reached $114 million. The total gross value of Orange County agricultural products for 1964 was almost $98 million.

Water Supply

The two primary sources of water for the study area are ground water and imported water from the Colorado River through facilities of The Metropolitan Water District of Southern California. As previously mentioned, surface diversions from the Santa Ana River constituted the primary source of water supply for early irrigation enterprises. However, because of the erratic nature of this supply and the increased demands for irrigation and domestic water, this source became inadequate and wells were drilled to tap the underlying aquifers. As a result of the increased ground water development, large overdrafts developed in certain portions of Orange County.

The first published engineering evaluation of overdraft conditions was given in a report by the former Division of Water Resources, "Present Overdraft On, and Safe Yield from, the Ground Water of the Coastal Plain of Orange County", dated June 1, 1945. At that time the average annual overdraft on the coastal plain was estimated to be 12,000 acre-feet.

Overdraft conditions resulted in sea-water intrusion along the coast. In 1961 sea water had intruded some 3 to 4 miles inland, degrading approximately 6,700 acres. Saline waters have been moved seaward short distances in recent years as a result of pressures established by artificial recharge activities in the forebay area north of the City of Santa Ana.

In recognition of the inadequacy of local water supplies to meet the growing needs of the county, three cities -- Santa Ana, Fullerton and Anaheim -- became charter member agencies of The Metropolitan Water District of Southern California. Since the District's organization in 1928, two additional water service agencies, the Coastal Municipal Water District and the Orange County Municipal Water District have been formed and accepted into membership. The U. S. Marine Corps Air Station at El Toro also receives deliveries of Colorado River water from the Metropolitan Water District.

The Orange County Water District was created in 1933 and now encompasses most of the Coastal Plain of Orange County. The District overlaps the territory of previously mentioned water agencies and is responsible for spreading water for ground water recharge and for constructing salinity barriers along the coast.

Imported water was first delivered to Orange County in 1941 by the Metropolitan Water District through the Orange County feeder. This water, delivered through surface distribution facilities, has replaced water that otherwise would have been pumped. Beginning in 1949, imported water has also been used for recharge of the ground water basins by spreading in and adjacent to the streambed of the Santa Ana River. The net result of these operations has been a reduction in overdraft. During the 1956-57 season, 154,200 acre-feet of water was purchased by Orange County water agencies. This importation had increased in 1963-64 to 303,400 acre-feet. This represents an increase in deliveries of 97 percent.

Table 3 gives the historic seasonal deliveries of imported water. The boundaries of the major water agencies are shown on Plate 2.

TABLE 3

HISTORIC SEASONAL DELIVERIES OF IMPORTED WATER
TO THE STUDY AREA BY
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

In acre-feet

Season ending September 30	Softened water	Unsoftened water	Total delivered
1940-41	1,500	--	1,500
41-42	800	--	800
42-43	700	--	700
43-44	4,300	--	4,300
44-45	9,200	--	9,200
1945-46	10,900	--	10,900
46-47	11,000	--	11,000
47-48	12,300	--	12,300
48-49	12,900	4,700	17,600
49-50	13,200	25,300	38,500
1950-51	15,000	28,500	43,500
51-52	17,500	38,200	55,700
52-53	18,600	28,900	47,500
53-54	22,000	61,000	83,000
54-55	26,500	52,400	78,900
1955-56	28,000	21,700	49,700
56-57	34,600	119,600	154,200
57-58	38,300	88,500	126,800
58-59	48,300	90,100	138,400
59-60	50,700	185,400	236,100
1960-61	59,400	172,000	231,400
61-62	53,100	242,300	295,400
62-63	61,700	232,900	294,600
63-64	77,400*	226,000	303,400

*Includes 33,200 acre-feet of filtered, nonsoftened water.

Sewage and Industrial Waste Disposal

In the early stages of urbanizing Orange County, sewage and industrial waste were disposed of through privately owned cesspools and septic tanks. In free ground water areas, percolation from these cesspools and septic tanks constituted an important source of replenishment to the underlying ground water basins. With increased urban and industrial development it became necessary, for public health and convenience, to construct extensive sewerage systems and treatment facilities with ocean disposal.

The County Sanitation Districts of Orange County operate and maintain two marine outfall lines. In addition, smaller marine outfall lines are operated by other agencies. These smaller agencies are in Seal Beach, Laguna Beach, South Laguna, Dana Point, and San Clemente.

The only major water reclamation plan that has been attempted in Orange County was undertaken by the Talbert Water District. It pioneered in using primary effluent for irrigation, but discontinued this because of odor and other nuisance problems and also because of the encroachment of urban development on agricultural lands. The Irvine Company is proceeding with plans to reclaim waste water produced within the projected University City. The service area includes the new University of California at Irvine and the proposed city surrounding it. Orange County Water District, in collaboration with the U. S. Public Health Service, is conducting research in reclaiming and injecting effluent through wells to create an underground barrier for control of sea-water intrusion.

During the 1956-57 season a total of 38,900 acre-feet of treated effluent was discharged to the ocean. By 1963-64 this figure had increased to 103,100 acre-feet, or 165 percent over a period of seven years.

Presented in Table 4 is a tabulation of estimated quantities of sewage and industrial waste discharged to the ocean from sewerage systems within the study area.

TABLE 4

ESTIMATED DISCHARGE OF
SEWAGE AND INDUSTRIAL WASTE TO
THE OCEAN FROM THE STUDY AREA

Season ending September 30	Acre-feet
1940-41	9,400
41-42	9,500
42-43	10,300
43-44	11,000
44-45	12,000
1945-46	12,500
46-47	12,900
47-48	13,600
48-49	15,100
49-50	16,100
1950-51	17,800
51-52	19,600
52-53	20,900
53-54	23,100
54-55	27,500
1955-56	35,000
56-57	42,300
57-58	49,900
58-59	59,600
59-60	64,100
1960-61	71,300
61-62	86,500
62-63	95,300
63-64	103,100

CHAPTER III. LAND USE

The nature, location, and areal extent of land use within the Orange County study area were determined by a detailed survey conducted in 1964. For analysis and presentation, the various land uses were classified and grouped according to their water requirements. A detailed explanation of land use classification used in this report is presented in Appendix A. The classes of land use described are similar to those used in Bulletin No. 70 (the report on the 1957 survey). Irrigated fallow and idle lands were formerly placed in the nonirrigated agriculture category, but for this report, these lands have been considered part of the gross irrigated area.

Results of the Survey

Data from the 1964 land use survey are compiled in Table 5 by hydrologic units, subunits, and subareas. Land use by counties is shown in Table 6. Table 7 presents land use by selected major water agencies that serve the county. The subtotals in all the tables are in terms of net acreage (i.e., minus the streets, rights-of-way, and other nonwater-using sections within the particular land uses).

In 1964 the gross acreage requiring water service within the area of investigation was 202,350 acres. About 140,590 acres, or 69 percent of this area, was devoted to urban-suburban development. Gross irrigated agriculture totaled 61,760 acres accounting for the remaining 31 percent gross water service area.

Detailed information concerning the pattern of land use as determined from this survey is presented on Plate 3. Although the acreages of nonwater service areas within urban-suburban and irrigated

TABLE 5

LAND USE IN HYDROLOGIC UNITS, SUBUNITS, AND
In acres

Category and Class of Land Use	Los Angeles-San Gabriel River Unit				Santa Ana River Unit			
	Anaheim Subunit			UNIT TOTAL	Lower Santa Ana River Subunit			UNIT TOTAL
	Anaheim Subarea	La Habra Subarea	Yorba Linda Subarea		East Coastal Plain Subarea	Santiago Subarea	Santa Ana Narrows Subarea	
WATER SERVICE AREA								
Urban and Suburban								
Residential	12,570	3,610	1,930	18,110	35,470	230	340	36,020
Commercial	2,820	710	230	3,760	8,030	30	10	8,070
Industrial	900	140	90	1,130	1,670	0	0	1,670
Unsegregated urban and suburban area	2,030	370	440	2,840	3,500	150	240	3,950
Subtotals	18,320	4,830	2,690	25,840	48,710	410	590	49,710
Included Nonwater-service Area	11,550	4,740	2,920	19,210	35,070	120	310	35,500
Gross Urban and Suburban Area	29,870	9,570	5,610	45,050	83,780	530	900	85,210
Irrigated Agriculture								
Alfalfa	0	0	0	0	230	0	0	230
Pasture	640	30	10	680	420	10	30	460
Citrus and subtropical	1,950	690	2,990	5,190	17,070	60	1,760	18,890
Truck crops	1,110	220	50	1,380	19,570	0	60	19,630
Field crops	650	10	10	670	2,810	0	0	2,810
Deciduous fruits and nuts	*	0	10	10	490	0	0	490
Small grains	10	0	0	10	0	0	130	130
Subtotals	4,360	910	2,670	7,940	40,590	70	1,970	42,630
Fallow	230	30	0	260	1,070	0	0	1,070
Included Nonwater-Service Area	1,230	340	210	1,770	4,020	20	150	4,190
Gross Irrigated Agriculture	5,810	1,280	2,880	9,970	45,680	90	2,120	47,890
GROSS WATER SERVICE AREA	35,680	10,850	8,490	55,020	129,460	620	3,020	133,100
NONWATER-SERVICE AREA								
Nonirrigated Agriculture	330	430	490	1,250	4,410	60	60	4,530
Native Vegetation	4,100	1,940	2,700	8,360	21,880	2,980	4,700	29,560
Unclassified	260	1,100	13,850	15,210	38,920	50,730	24,880	114,530
GROSS NONWATER-SERVICE AREA	4,690	3,040	17,040	24,820	65,210	53,770	29,640	148,630
TOTALS	**40,370**	**13,940**	**75,530**	**79,840**	**194,670**	**54,390**	**37,660**	**281,720**

*Less than 5 acres

SUBAREAS OF THE ORANGE COUNTY AREA, 1964

San Juan Unit									
Laguna Subunit				SUBUNIT TOTAL	San Juan Subunit	San Clemente Subunit	San Mateo Subunit	UNIT TOTAL	TOTAL INVESTIGATION AREA
San Joaquin Subarea	Laguna Subarea	Aliso Subarea	Dana Point Subarea						
340	700	480	440	1,960	940	1,350	10	4,260	58,390
30	120	50	60	260	160	270	10	700	12,530
0	0	10	0	10	30	10	0	50	2,850
10	10	150	100	270	200	200	0	670	7,460
380	830	690	600	2,500	1,330	1,830	20	5,680	81,230
100	360	1,020	420	1,900	1,380	1,280	90	4,650	59,360
480	1,190	1,710	1,020	4,400	2,710	3,110	110	10,330	140,590
0	0	0	0	0	220	0	0	220	450
0	0	130	0	130	30	40	0	200	1,340
0	20	790	0	810	1,840	0	0	2,650	26,730
0	0	20	0	20	450	0	0	470	21,480
0	0	0	0	0	20	0	0	20	3,500
0	0	0	0	0	0	0	0	0	500
0	0	0	0	0	0	0	0	0	130
0	20	940	0	960	2,560	40	0	3,560	54,130
0	0	10	0	10	30	0	0	40	1,370
0	*	60	0	60	240	*	0	300	6,260
0	20	1,010	0	1,030	2,830	40	0	3,900	61,760
480	1,210	2,720	1,020	5,430	5,540	3,150	110	14,230	202,350
0	0	650	0	650	1,690	0	0	2,340	8,120
0	430	1,800	170	2,400	11,990	10	680	15,080	53,000
3,930	5,690	17,730	5,110	32,460	82,090	9,520	10,810	134,880	264,620
3,930	6,120	20,180	5,280	35,510	95,770	9,530	11,490	152,300	325,740
4,410	7,330	22,900	6,300	40,940	101,310	12,680	11,600	166,530	528,090

agricultural categories are shown individually in Table 5, they were not differentiated on the plate. Also omitted from the plate were developed nonwater service lands, such as nonirrigated agriculture, and undeveloped nonwater service lands, such as native vegetation. The boundaries of major water agencies are shown in detail on Plate 2. In Table 7, the eight agencies listed to the left of The Metropolitan Water District of Southern California are all members of it; their totals are given in the Metropolitan Water District column. About 397,000 acres, or 75 percent of the study area, lie within these eight major water service districts. These same districts include more than 99 percent (201,120 acres) of the gross water service area (202,350 acres).

Changes in Land Use

Changes in land use within the study area are indicated in Table 8 which lists land use data obtained during both the 1957 and 1964 surveys. The locations of these land use changes have been delineated on Plate 4. During the period between these surveys the gross urban and suburban area increased from 69,490 acres to 140,590 acres, an increase of 102 percent. Gross irrigated agricultural area was reduced by 40,160 acres, from 101,920 acres to 61,760 acres, a drop of 39 percent. The total gross water service area increased from 171,410 acres in 1957 to 202,350 acres in 1964, an 18 percent-increase.

Residential area increased from 27,960 acres in 1957 to 58,390 acres in 1964, a gain of 109 percent. Commercial lands gained by 244 percent, increasing from 3,640 acres in 1957 to 12,530 acres in 1964. The area in industry increased from 1,450 acres in 1957 to 2,850 acres in 1964,

TABLE 6

LAND USE BY COUNTIES IN THE ORANGE COUNTY AREA, 1964
In acres

Category and Class of Land Use	Orange	Los Angeles	Riverside	San Bernardino	TOTAL
WATER SERVICE AREA					
Urban and Suburban					
Residential	58,260	0	50	80	58,390
Commercial	12,510	0	0	20	12,530
Industrial	2,850	0	0	0	2,850
Unsegregated urban and suburban area	7,280	0	30	150	7,460
Subtotals	80,900	0	80	250	81,230
Included Nonwater-Service Area	59,240	0	60	60	59,360
Gross Urban and Suburban Area	140,140	0	140	310	140,590
Irrigated Agriculture					
Alfalfa	450	0	0	0	450
Pasture	1,340	0	0	0	1,340
Citrus and subtropical	26,630	0	30	70	26,730
Truck crops	21,480	0	0	0	21,480
Field crops	3,500	0	0	0	3,500
Deciduous fruits and nuts	500	0	0	0	500
Small grains	130	0	0	0	130
Subtotals	54,030	0	30	70	54,130
Fallow	1,370	0	0	0	1,370
Included Nonwater-Service area	6,240	0	10	10	6,260
Gross Irrigated Agriculture	61,640	0	40	80	61,760
GROSS WATER SERVICE AREA	201,780	0	180	390	202,350
NONWATER-SERVICE AREA					
Nonirrigated Agriculture	8,120	0	0	0	8,120
Native Vegetation	51,070	0	1,510	420	53,000
Unclassified	246,800	970	4,740	12,110	264,620
GROSS NONWATER-SERVICE AREA	305,990	970	6,250	12,530	325,740
TOTALS	**507,770**	**970**	**6,430**	**12,920**	**528,090**

TABLE 7

LAND USE IN MAJOR WATER AGENCIES

In acres

Category and Class of Land Use	Coastal Municipal Water District	Chino Basin Municipal Water District	Orange County Municipal Water District	Pomona Valley Municipal Water District
WATER SERVICE AREA				
Urban and Suburban				
Residential	6,860	80	43,070	0
Commercial	1,830	10	8,630	0
Industrial	290	0	2,000	0
Unsegregated urban and suburban area	500	140	6,180	0
Subtotals	9,480	230	59,880	0
Included Nonwater-Service Area	5,340	60	46,660	0
Gross Urban and Suburban Area	14,820	290	106,540	0
Irrigated Agriculture				
Alfalfa	0	0	230	0
Pasture	60	0	1,270	0
Citrus and subtropical	170	70	25,690	0
Truck crops	90	0	21,290	0
Field crops	10	0	3,380	0
Deciduous fruits and nuts	0	0	500	0
Small grains	0	0	130	0
Subtotals	330	70	52,490	0
Fallow	0	0	1,320	0
Included Nonwater-Service Area	100	20	5,760	0
Gross Irrigated Agriculture	430	90	59,570	0
GROSS WATER SERVICE AREA	15,250	380	166,110	0
NONWATER-SERVICE AREA				
Nonirrigated Agriculture	730	0	5,380	0
Native Vegetation	1,190	390	37,980	0
Unclassified	15,850	12,170	114,520	950
GROSS NONWATER-SERVICE AREA	17,770	12,560	157,880	950
TOTALS	**33,020**	**12,940**	**323,990**	**950**

*Less than five acres

**Agency formed primarily to spread water; its territory overlaps that of other agencies.

OF THE ORANGE COUNTY AREA, 1964

Western Municipal Water District of Riverside County	City of Santa Ana	City of Anaheim	City of Fullerton	Metropolitan Water District of Southern California	Orange County** Water District
80	3,260	1,320	3,420	58,090	48,090
10	1,000	380	650	12,510	10,410
0	130	190	230	2,840	2,490
30	120	80	340	7,390	5,380
120	4,510	1,970	4,640	80,830	66,370
80	1,780	880	4,100	58,900	46,660
200	6,290	2,850	8,740	139,730	113,030
0	0	0	0	230	210
0	0	0	0	1,330	1,030
30	340	60	340	26,700	21,500
0	50	0	10	21,440	19,480
0	*	0	110	3,500	3,230
0	0	0	0	500	500
0	0	0	0	130	10
30	390	60	460	53,830	45,960
0	0	0	0	1,320	1,230
10	40	*	310	6,240	5,310
40	430	60	770	61,390	52,500
240	6,720	2,910	9,510	201,120	165,530
0	0	0	400	6,510	3,220
1,510	20	10	820	41,920	21,580
3,940	10	0	10	147,450	10,780
5,450	30	10	1,230	195,880	35,580
5,690	**6,750**	**2,920**	**10,740**	**397,000**	**201,110**

amounting to an increase of about 96 percent. In the unsegregated urban and suburban category, which includes such land use types as dairies, farmsteads, livestock ranches, parks, cemeteries, and golf courses, land use increased from 6,090 acres in 1957 to 7,460 acres in 1964 -- a total increase of 22 percent.

A great deal of the residential growth between 1957 and 1964 occurred on what had been irrigated agricultural land; this accounted for most of the 39-percent loss in that category. New construction is also spreading to nonirrigated agricultural lands as well as raw brush lands. Valley lands are most vulnerable to development, although hilltops are being leveled by heavy equipment and are being developed.

The comparatively small percentage increase in development of the unsegregated urban and suburban area is caused by a shift rather than a loss of dairies and feedlots. The dairy industry has shifted from the older, established dairy-producing areas to more rural areas of the county. Because the dairy owner can no longer afford a large pasture area connected to his farm, he has reduced his operation to a milking shed, processing house, and holding pens. Instead of pasture to roam in, the dairy cows are now kept in what resembles a feedlot where they eat imported hay. This dairy feedlot operation may be expected to continue to develop in the more rural areas of the county where less expensive land can be obtained.

New golf courses are being constructed in many areas of the county. Their appearance is most noticeable adjacent to the large city-like developments such as the condominium and the retirement city.

TABLE 8

COMPARISON OF 1957 AND 1964 LAND USE
IN THE ORANGE COUNTY AREA
In acres

Category and Class of Land Use	1957	1964	Percent Change
WATER SERVICE AREA			
Urban and Suburban			
Residential	27,960	58,390	109
Commercial	3,640	12,530	244
Industrial	1,450	2,850	96
Unsegregated urban and suburban area	6,090	7,460	22
Subtotals	39,140	81,230	108
Included Nonwater-Service Area	30,350	59,360	96
Gross Urban and Suburban Area	69,490	140,590	102
Irrigated Agriculture			
Alfalfa	2,450	450	–82
Pasture	4,070	1,340	–67
Citrus and subtropical	48,470	26,730	–45
Truck crops	20,330	21,480	6
Field crops	19,670	3,500	–82
Deciduous fruits and nuts	1,060	500	–53
Small grains	770	130	–83
Subtotals	96,820	54,130	–44
Fallow	*	1,370	- -
Included Nonwater-Service Area	5,100	6,260	23
Gross Irrigated Agriculture	101,920	61,760	–39
GROSS WATER SERVICE AREA	171,410	202,350	18
NONWATER-SERVICE AREA			
Nonirrigated Agriculture	45,980	8,120	–82
Native Vegetation	26,860	53,000	97
Unclassified	283,840	264,620	–7
GROSS NONWATER-SERVICE AREA	356,680	325,740	–9
TOTALS	**528,090**	**528,090**	

*Value Distributed Between Truck Crops and Nonirrigated Agriculture

As has been pointed out, a large part of the 39-percent decrease in agriculture can be attributed to urban development. Citrus and subtropical fruits suffered the greatest numerical loss, declining 45 percent, from 48,470 acres in 1957 to 26,730 acres in 1964. Field crops declined from 19,670 acres in 1957 to 3,500 acres in 1964. This 82-percent loss may actually be the result of the lower economic value of field crops and a shift to more intensive farming. Many acres of field crops formerly in



SPENCE AIR PHOTOS

Leisure World near El Toro

There are a number of retirement communities within the county – some being cities in themselves, covering hundreds of acres.

dry beans and other low income crops are now planted in truck crops. Pasture land declined about 67 percent, dropping from 4,070 acres to 1,340 acres. This too may be due to a lower economic value of the pasture land which has resulted in the changeover to a feedlot operation in the dairy industry. The only increase recorded in crop acreage within the county was experienced in truck crops, where the area increased from 20,330 acres to 21,480 acres. This amounts to a 6-percent increase since 1957.



PACIFIC AIR INDUSTRIES

College and Shopping Center Development in Santa Ana

From 1957 to 1964, commercial lands gained by 244 percent.

CHAPTER IV. WATER USE

To estimate the 1964 level of water use, the land use data reported in Chapter III were used with the unit values assigned to the various types of water use (as described in Appendix B). The results of this computation are presented in this chapter plus a comparison of these estimates with those from the 1957 survey. In addition, this indicated demand is compared with the estimated water supply.

Estimates of 1964 Net Water Use

The level of net water use in Orange County under 1964 conditions of development and under average precipitation and climatic conditions was estimated by applying mean seasonal unit values of consumptive use of applied water or, in some cases, total applied water to the net areas of each type of land use.

In water service areas overlying or tributary to free ground water basins, it was assumed that all applied water in excess of consumptive use requirements, except the portions of sewage and industrial waste exported from the area, returns to ground water storage and is available for reuse. The net water use for such an area was estimated to be the sum of the consumptive use of applied water plus sewage export. The inland or forebay area of Orange County was treated in this manner.

Recent studies by the Department have indicated that there is some deep percolation occurring in areas overlying confined ground water basins. The quantities and rates of recharge are not yet known. Therefore for this report, as in Bulletin No. 70, it has been assumed that deep percolation is limited and that net water use for these areas was considered to be equal to the total applied water. This method of calculating net water use was used in the coastal

part of the county because it overlies a pressure area where deep percolation is limited (pressure and forebay areas shown on Plate 1). Furthermore, some of the ground water basins underlying the coastal area are contaminated by oil brines or sea water. It is reasonable to assume that percolating water would be degraded in quality so that it could not be reused.

Details of the method used to estimate net water use are given in Appendix B, plus a brief discussion of unit water use. Unit values of water use for the study area are in Table 13 in Appendix B.

The estimated levels of mean seasonal net water use in Orange County, for 1964 conditions, are presented in Table 9. For comparison, values estimated for 1957 conditions are also given.

As indicated in the first part of this chapter, the unit values used to derive the net water use represent the needs of the various types of water-using developments under average conditions of precipitation and climate. The actual net water use for a specific year may have differed from the estimated values reported here because of deviations from the mean, but the estimates presented indicate the general level of water use.

Mean annual precipitation recorded at climatological stations in Anaheim, Newport Beach, and San Clemente over a 30-year period (1930-1961) were 13.76, 11.99, and 12.27 inches, respectively. During both water years 1956-57 and 1963-64, the average precipitation was 67 percent of the 30-year mean precipitation for these stations. Therefore, although the estimates of levels of net water use shown in Table 9 are probably on the low side as compared to actual water use, the difference between estimates for the two years shown is considered to be a good estimate of the change in water use during the period.

TABLE 9

ESTIMATED LEVELS OF NET WATER USE IN THE STUDY AREA
FOR CONDITIONS OF DEVELOPMENT IN 1957 AND 1964

In acre-feet

Development	1957	1964	Change
Irrigated lands	139,900	84,900	- 55,000
Urban-suburban lands	104,100	220,500	+116,400
TOTAL	244,000	305,400	+ 61,400

Net water use data presented in this report reflect the changes in land use that were given in Chapter III. The estimated seasonal net water use for 1964 was 305,400 acre-feet -- this was an increase of 25 percent, or 61,400 acre-feet, above that of 1957. Urban-suburban water use increased by 116,400 acre-feet, almost 112 percent, while water use by irrigated agriculture decreased 55,000 acre-feet, or 39 percent.

TABLE 10

COMPARISON OF NET WATER USE AND
SUPPLEMENTAL REQUIREMENTS IN THE STUDY AREA

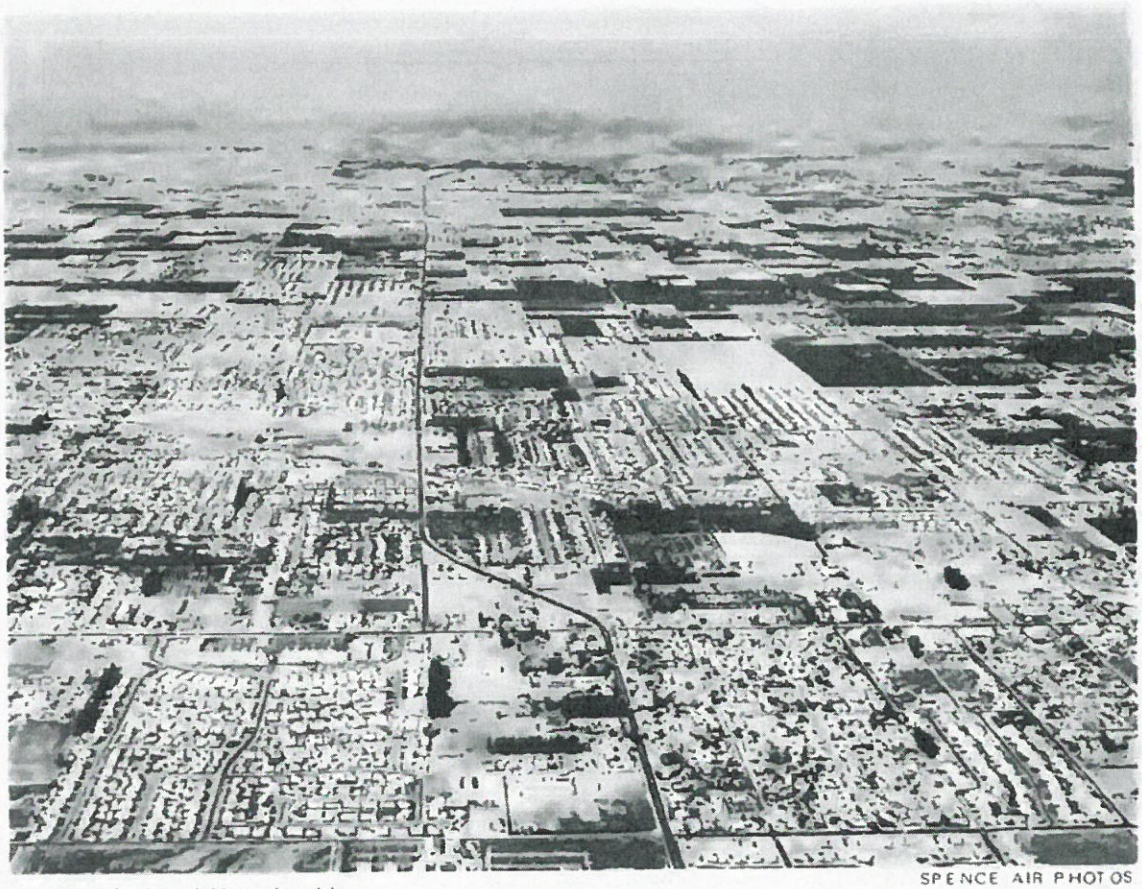
In acre-feet

Date of survey	Net water use	Safe yield* of local supplies	Supplemental water requirements	Historic imports**
1957	244,000	153,500	90,500	154,200
1964	305,400	153,500	151,900	303,400
1990	591,000	153,500	437,500	--
2020	804,000	153,500	650,500	--

*From Bulletin No. 78, Appendix D.
**From The Metropolitan Water District of Southern California.

Comparison with Water Supply

As was pointed out earlier, the water supply for the study area comes from local ground water and imports from the Colorado River. The approximate mean annual safe yield of the local supply as is shown in Table 10, has been estimated in earlier studies of the Department to be 153,500 acre-feet. Included in Table 10 is the forecast net water use for the years 1990 and 2020 as derived from current Department studies.



SPENCE AIR PHOTOS

Changes in Land Use, Looking North from near Garden Grove

For many years Orange County has been one of the fastest growing areas in the nation. (Same scene in two photos – above: 1956; on facing page: 1963.)

The export of sewage has been included in the net water use value in those areas overlying the forebay. Department records show that this was about 25,200 acre-feet in 1957. By 1964, it had reached 48,500 acre-feet. The imported water shown in Table 10 does not include that imported to the Los Angeles-San Gabriel Unit from adjacent ground water basins in Los Angeles County. These imports are small when compared to that imported through The Metropolitan Water District of Southern California.



SPENCE AIR PHOTOS

By the year 2020, the estimated total seasonal net water use for Orange County, as derived from current Department studies, will be on the order of 804,000 acre-feet. Of this, 650,500 acre-feet will have to be obtained by importing supplies. The expected increase in net water use between the present and the year 2020 will result largely from the development of land currently not receiving water service.

In the development of estimates of future requirements for water, particularly for urban areas, the value of the requirement can vary, depending upon the assumption made, particularly with respect to the disposition of sewage. The estimated requirement for the year 2020, presented above, was based on the assumption that additional facilities will be constructed to export sewage from the study area.

Experience has indicated that, as areas approach a high degree of urbanization, aesthetic conditions force the disposal of sewage to the ocean. It is recognized that the collection and central disposal of sewage is required in many areas to avoid public health problems and that the export of a certain amount of sewage, together with various industrial wastes, is necessary to maintain salt balance in ground water bodies. The derivation of the volume of such waste that is required to prevent adverse salt balance is beyond the scope of this investigation. However, the foregoing estimates of future net water use illustrate the extent to which the development of facilities for reclamation and local use of waste waters and for ocean disposal of sewage can affect water needs. It is, therefore, indicated that any such estimates may be subject to considerable modification, depending upon the ultimate sewerage system developed for the drainage area.

Regardless of the degree of development of facilities for ocean disposal of sewage in Orange County, estimates of net water use presented above indicate that a large increase in the volume of water imported to the area will be required to meet forecast demands.

To help meet this demand, The Metropolitan Water District of Southern California has contracted with the California Department of Water Resources to purchase over 2,000,000 acre-feet of water from the State Water Project. The State Water Project is expected to meet the area's supplemental water needs until 1990. Deliveries are to begin in 1971 and a portion of this water will be sold through the Metropolitan Water District to its member agencies in Orange County.

Demands for water after 1990 will require further implementation of the California Water Plan to convey additional supplemental water to Southern California, plus increased emphasis on the reclamation of waste water and sea-water desalination.

Appendix A

CLASSIFICATION OF LAND USE
AND
CONDUCT OF THE STUDY

Appendix A

CLASSIFICATION OF LAND USE AND CONDUCT OF THE STUDY

For analysis and presentation, the various land uses are grouped into two major categories under water service areas: (1) urban and suburban, and (2) irrigated agriculture; and into three major categories under nonwater service areas: (1) nonirrigated agriculture, (2) native vegetation, and (3) unclassified. Each of the two categories under water service areas includes several classes of land use. The classes include a number of types of land use -- all types within a class requiring similar unit amounts of water.

The major categories, classes, and types of land use in the classification are listed in Table 11.

In delineating land use types in the field, no attempt was made to exclude such items as streets, roads, railroad and powerline rights-of-way, and other essentially nonwater-using lands occurring within the surveyed areas. Later in the office, these land uses were extracted from overall land use totals by applying to each major land use class a percentage value appropriate for that class. The amounts extracted from gross land use totals were then classified as "included nonwater service area".

During this survey, a brief study was made to reevaluate the reduction factors for residential and commercial land use classes. The appropriate percentage reduction factors for the major classes of land use are presented in Table 12.

TABLE 11

MAJOR CATEGORIES, CLASSES, AND TYPES OF LAND USE FOR WATER SERVICE AND NONWATER SERVICE AREAS

Category and class of land use	Types of land use
WATER SERVICE AREA	
Urban and Suburban Category	
Residential	Single- and multiple-family houses and apartments, trailer parks, and residential subdivisions under construction at time of survey.
Commercial	All classes of commercial enterprises, including strip commercial and downtown commercial areas, schools, hospitals, churches, and motels.
Industrial	All classes of industrial land use involving manufacturing, processing, packaging, but excluding extractive (oil, sand, and gravel), storage, and distribution facilities.
Unsegregated urban and suburban	Dairies, farmsteads, livestock ranches, parks, cemeteries, and golf courses.
Included nonwater service	Oilfields, tank farms, vacant lots, quarries, gravel pits, warehouses, storage yards, railroad rights-of-way, public streets, landing strips of airfields, and miscellaneous paved areas.
Irrigated Agriculture Category	
Alfalfa	Alfalfa raised for hay, seed, or pasture.
Pasture	Irrigated grasses and legumes, other than alfalfa, used for livestock forage.
Citrus and subtropical	Oranges, lemons, grapefruit, avocados, olives, and miscellaneous subtropical fruits.
Truck crops	Vegetables of all varieties, melons, flower seed, and nursery crops.
Field crops	Sugar beets, corn, cotton, flax, and sorghums.
Deciduous fruits and nuts	All varieties of deciduous fruits and nuts.
Small grain	Barley, wheat, and oats.
Fallow	Land tilled between crops.
Included nonwater service	Public highways and roads, farm access roads, canals, and other inclusions not devoted to crop production, including irrigated idle and abandoned lands.
NONWATER SERVICE AREA	
Nonirrigated Agriculture Category	All varieties of dry-farmed crops, including pasture, nonirrigated fallow, and idle, that overlie defined ground water basins.
Native Vegetation Category	Native grasses, brush, and trees, including phreatophytes, that overlie defined ground water basins.
Unclassified Category	Bare ground, including river washes, beaches, and water surfaces, that overlie defined ground water basins; nonirrigated agriculture and native vegetation not overlying defined ground water basins.

TABLE 12

FACTORS FOR REDUCTION OF
GROSS AREAS TO NET AREAS

Land use	Percent deducted from gross area
Residential	22
Residential (low density)	10
Commercial	20
Schools	15
Industrial, manufacturing	25
Parks, cemeteries, and golf courses	15
Farmsteads, livestock ranches, and dairies	10
Irrigated agriculture	5

The net acreage values used in the tables summarizing land use represent the gross acreage values minus those portions of the gross values that have been deducted for these included nonwater-service areas.

Mapping of land use in Orange County was carried out by field crews who delineated the various land use types on recent aerial photographs. In the office, these field delineations were projected onto reproducible prints of U. S. Geological Survey quadrangle maps at a scale of 1:24,000. These maps served as area control maps insuring the accuracy of the succeeding process, while the reproducible prints served as masters for reproducing land use delineations on vellum prints. The individual areas of land use types were cut from the vellum prints and weighed, and these weights were converted into total acreages of individual land use types. These various land use types were grouped according to their

water requirements. Then, appropriate unit values of water use were employed to estimate net water use.

Land use data collected by the Department of Water Resources are processed by machine techniques, which permit the evaluation of this data in terms of a sizable number of hydrologic, geographic, or political subdivisions. The tabulations in the main body of this report give land use within the boundaries that are thought to be the most generally useful.

For a critical hydrologic analysis, determining and compiling the types of land use -- both developed and undeveloped -- for the entire area of the hydrologic unit would be desirable. This would permit a comprehensive analysis and evaluation of the various levels of water use for the entire area. However, the additional expense incurred in making such a complete compilation is not felt to be warranted at present; therefore, only those areas that are underlain by water-bearing material are mapped in their entirety. In those areas that are not underlain by water-bearing material, only types of land use requiring applied water are mapped. All other types of land use in areas not underlain by water-bearing material are tabulated in a category called "unclassified".

Appendix B

UNIT VALUE METHOD FOR ESTIMATING NET WATER USE

Appendix B

UNIT VALUE METHOD FOR ESTIMATING NET WATER USE

Where none of the applied water is available for reuse, the net water use is determined by measuring the total applied water. On the other hand, in areas where a portion of the applied water becomes available for reuse, it is not possible to measure the volume of return flow of reusable water. The net water use in these areas must be determined in another manner; therefore, an indirect method is used.

In the indirect method employed in this investigation, estimates of net water use are obtained by multiplying the areas of the various classes of water-using developments by appropriate average values of consumptive use of applied water. These unit values of consumptive use reflect average conditions of precipitation and the normal practices associated with urban water distribution and with irrigated agriculture.

When using this method for determining net water use, the unit values of consumptive use of water must be clearly correlated with the appropriate land use classes or types (see Appendix A). This is especially critical for residential, industrial, and commercial water uses.

During this investigation, urban and suburban unit values of consumptive use of applied water derived in State Water Resources Board's Bulletin No. 2 and Department of Water Resources' Bulletin No. 70 were reviewed and were found to be the best available. A complete discussion of the techniques employed in the derivation of units of water use is contained in Bulletin No. 2; therefore, only a general description of those procedures is given here.

TABLE 13

ESTIMATED MEAN SEASONAL UNIT VALUES OF DELIVERY AND CONSUMPTIVE USE OF APPLIED WATER ON URBAN-SUBURBAN AND IRRIGATED LANDS IN THE ORANGE COUNTY AREA

In feet of depth

Land use type	Hydrologic Unit			
	Los Angeles-San Gabriel River and Santa Ana River		San Juan	
	C.U.A.W.*	Delivery	C.U.A.W.*	Delivery
Urban-Suburban Lands				
Residential				
Single	1.3	2.6	1.3	2.8
Estate	.9	2.0	.9	2.2
Multiple	.3	4.5	.3	5.0
Recreational	.2	0.4	.2	0.4
Farmstead	.8	1.8	.8	1.8
Commercial				
Strip	.4	3.4	.4	4.0
Downtown	1.1	10.2	1.1	--
Industrial, manufacturing	1.4	10.8	1.4	10.8
Schools	.4	0.9	.4	1.1
Parks, cemeteries, and golf courses	2.4	3.4	2.5	3.6
Dairies	1.0	1.9	1.0	--
Livestock and poultry ranches	.6	1.3	.6	1.3
Irrigated Lands				
Alfalfa	2.4	3.4	2.4	3.4
Pasture	2.4	3.4	2.5	3.6
Deciduous fruits and nuts	1.7	2.4	1.5	2.1
Citrus and subtropical fruit	1.3	1.9	1.4	2.0
Truck crops	1.3	1.8	1.4	2.0
Field crops	1.3	1.9	1.3	1.9
Small grains	.7	1.0	.4	0.6

*Consumptive use of applied water.

Mean seasonal unit values of consumptive use of applied water on urban and suburban lands were estimated for Bulletin No. 2 on the

basis of a sampling procedure in which an inventory was made of measured water deliveries to study areas representative of each class or type of land use. For residential and commercial areas, study areas consisting of single blocks devoted entirely to one type of land use were selected. To compute the unit values of water use, an allowance for the applied water that is disposed of as sewage and is returned to the ground water body was deducted, and the remainder was divided by the net sampled area. Unit seasonal values of consumptive use of applied water by irrigated crops were derived by a method developed for the U. S. Department of Agriculture by Harry F. Blaney and Wayne D. Criddle.

The mean seasonal unit values of consumptive use and delivery of water so determined, shown in Table 13, along with sewage export, were utilized to compute net water use in all forebay areas where excesses of consumptive use are available for reuse through deep percolation.

In the coastal pressure areas of the county, net water use was estimated by applying unit values of delivery to the net areas of land use. The applied water or delivery figure is used in any area where deep percolation is restricted and recharge of the ground water basin is assumed to be negligible.

It should be pointed out that, in the derivation of the net water use for any given year, the volume of applied water required is based on the assumption that the precipitation for the season was equal to the long-time mean. However, the use of applied water will actually be somewhat larger or smaller in individual years, varying inversely with the amount of rainfall. A similar effect occurs with urban use; however, the use of precipitation by residential, commercial, and industrial

classifications is relatively small. Therefore, variations of rainfall from year to year have a lesser effect upon the use of applied water by these land use classes than by irrigated lands. Despite the possibility of these variations, the procedures used in this survey are considered by the Department to be the best available, resulting in reasonable values of current levels of water use.

Appendix C

DEFINITION OF TERMS

Appendix C

DEFINITION OF TERMS

Annual - The 12-month period from January 1 of a given year through December 31 of the same year, also called the "calendar year".

Applied Water - Water delivered to a farmer's headgate, in the case of irrigation use, or to an individual's meter (or its equivalent), in the case of urban use. Applied water does not include direct precipitation. Man applies water to satisfy the requirement for consumptive use in excess of the amount supplied from natural sources. However, as a practical matter, the quantity of water applied is usually in excess of the consumptive use of applied water and that portion of the water applied to any use that is not consumed or irrecoverably lost remains a part of the water supply.

Average - An arithmetical average relating to a period other than a mean period.

The California Water Plan - A master plan to guide and coordinate the planning and construction by all agencies of works required for the control, protection, conservation, and distribution of California's water resources for the benefit of all areas of the State and for all beneficial purposes.

Confined Ground Water - A body of ground water that is immediately overlain by material sufficiently impervious to sever free hydraulic connection with overlying water and that is acted upon by pressure caused by the difference in head between the intake, or forebay area, and the discharge area of the confined water body.

Consumptive Use of Water - Water from any source consumed by vegetative growth in transpiration and building plant tissue, also water evaporated from adjacent soil, from water surface, and from foliage. It also refers to water similarly consumed or evaporated by urban and nonvegetative types of land use.

Forebay Area - An area that consists of unconfined ground water where hydraulic continuity with the ground surface generally exists and that is located so as to provide a supply of ground water by subsurface flow to a body of confined ground water.

Free Ground Water - A body of ground water not immediately overlain by impervious materials.

Gross Area - An area of land use, as mapped in the field, which includes the acreage of streets, roads, railroad and powerline rights-of-way, and other essentially nonwater-using lands.

Ground Water Overdraft - The annual net extraction of water from a ground water basin in excess of safe yield.

Hydrologic Unit* - In this bulletin, a classification embracing one of the following two topographic characteristics, both of which are defined by surface drainage divides:

a. In general, the total watershed area, including water-bearing and nonwater-bearing formations, such as the total drainage to the Santa Ana River.

*The areal designation system, i.e., categorizing areas into units, subunits and subareas, is designed to separate data according to areas of hydrologic significance. The system, as developed, does not differentiate between water-bearing formations and nonwater-bearing tributary areas, although land use, as inventoried, does differentiate between such boundaries.

b. In coastal areas, two or more small contiguous watersheds having similar hydrologic characteristics and water supply problems, each watershed being directly tributary to the ocean and all watersheds emanating from one mountain body located immediately adjacent to the ocean.

Hydrologic Subunit* - In this bulletin, a major logical subdivision of a hydrologic unit, including water-bearing and nonwater-bearing formations, best typified by a major tributary of a stream, a major valley, or a plain along a stream containing one or more ground water basins and having closely related geologic, hydrologic, and topographic characteristics.

Hydrologic Subarea* - In this bulletin, a logical subdivision of a hydrologic subunit which may include either water-bearing or nonwater-bearing formations or both. Where possible, a hydrologic subarea includes one known ground water basin and its tributary area; the ground water basin comprising the water-bearing deposits of the subarea. In areas which are essentially nonwater bearing, the subarea division was based only on surface drainage conditions, and such factors as locations of gaging stations were given due consideration.

Irrecoverable Losses - Such items as disposal or seepage of unconsumed water to bodies of unsuitable quality, including the ocean, and disposal or seepage of unconsumed water in such a manner as to be uneconomical to recapture for use. These irrecoverable losses are incidental to consumptive use of water.

*See Footnote on preceding page.

Irrigation Efficiency - The ratio of consumptive use of applied irrigation water to the total amount of water applied, expressed as a percentage.

Mean - An arithmetical average relating to a mean period.

Mean Period - A period chosen to represent conditions of water supply and climate over a long series of years. For the current investigation, the mean precipitation period embraces the 50 seasons from 1897-98 through 1946-47.

Net Area - An area of land use less the area in streets, road, railroad and powerline rights-of-way, and other essentially nonwater-using lands.

Net Water Use - That portion of applied water which is consumptively utilized for beneficial purposes or otherwise irrecoverably lost. It does not include that portion of the applied water which is subject to possible reuse.

Overdraft - The annual net extraction of water from a ground water basin in excess of safe ground water yield.

Pressure Area - A ground surface area underlain by an aquifer containing confined ground water.

Primary Effluent - Waste water that has gone through the primary treatment process. Primary treatment removes a portion of the settable, suspended, and floating matter from domestic or industrial waste by screening, skimming, sedimentation, or other physical means.

Safe Yield - The average annual net amount of water that could be beneficially extracted from a ground water basin over an indefinitely

long period of years under a particular set of physical conditions affecting supply to and disposal from the ground water basin, without causing a net lowering of ground water levels during the period.

Seasonal - Any 12-month period other than the calendar year.

Water Use - In the broadest sense, includes all uses of water by nature or by man, whether consumptive or nonconsumptive, as well as irrecoverable losses of water incidental to such employment. It is synonymous with "water utilization".

Appendix D

REPORTS ON RELATED INVESTIGATIONS
AND OTHER REFERENCES

Appendix D

REPORTS ON RELATED INVESTIGATIONS AND OTHER REFERENCES

There are three very important reports which are related to this bulletin:

California State Water Resources Board, "Water Utilization and Requirements of California", Bulletin No. 2, June 1955. This bulletin was written in preparation of The California Water Plan and contains information on land and water use for the entire State. The land use data is based on a survey made in 1948.

California Department of Water Resources, "Santa Ana River Investigation", Bulletin No. 15, February 1959. Hydrology of the entire Santa Ana River drainage area was the subject of this report. It contains an inventory of surface and underground water resources along with estimates of ultimate water utilization and requirements. Like Bulletin No. 2, this report is based on the 1948 land use survey.

California Department of Water Resources, "Orange County Land and Water Use Survey, 1957", Bulletin No. 70, January 1959. This report sets the pattern which Bulletin No. 70-64 follows. Land and water use data are based on a 1957 survey. The results of the 1957 bulletin have been used extensively in the present report for comparison.

Other references which were helpful throughout the course of this study are presented below:

Bank of America National Trust and Savings Association. "Focus on Orange County." No date

California Department of Public Works, Division of Water Resources. "Present Overdraft on, and Safe Yield from, the Ground Water of the Coastal Plain of Orange County." June 1945.

----. "South Coastal Basin Investigation, Overdraft on Groundwater Basins." Bulletin No. 53. 1947.

California Department of Water Resources. "Investigation of Alternative Aqueduct Systems to Serve Southern California", Appendix D. "Economic Demand for Imported Water." Bulletin No. 78, Appendix D. March 1960.

----. "Upper Santa Ana River Drainage Area Land and Water Use Survey, 1957." Bulletin No. 71. May 1960.

----. "San Diego County Land and Water Use Survey, 1958." Bulletin No. 102. August 1963.

----. "Coastal Los Angeles County Land and Water Use Survey, 1960", Bulletin No. 24-60. March 1964.

----. "Santa Ana Gap Salinity Barrier." Bulletin No. 147-1, Preliminary Edition. November 1965.

----. "Upper Santa Ana River Drainage Area Land and Water Use Survey, 1964", Bulletin No. 71-64. July 1966.

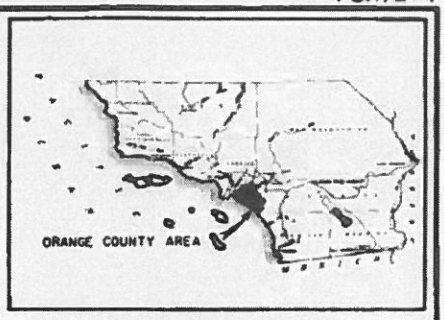
Lowry and Associates, and Engineering-Science, Inc. "Waste Water Disposal and Reclamation for the County of Orange, California 1966-2000." July 1966.

Orange County Department of Agriculture, "Agricultural Crop Report, 1951".

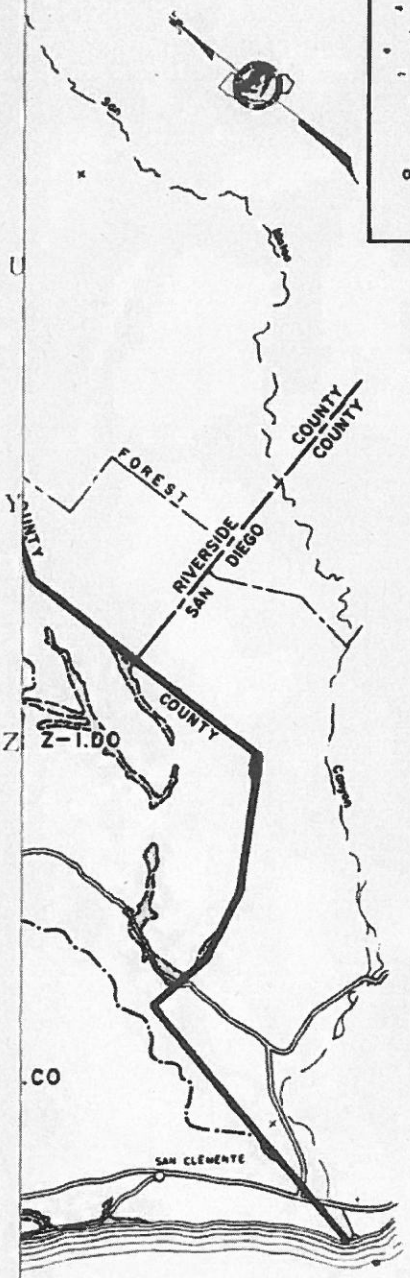
Orange County Planning Department. "Orange County Progress Report." Volume 3, Supplement No. 5. March 1966.

Orange County Water District. "Inspection Tour of Water Spreading and Conservation Facilities-Sea Water Intrusion Areas Within Orange County Water District." July 17, 1963.

PLATE 1



LOCATION MAP



L E G E N D

- INVESTIGATIONAL BOUNDARY
- HYDROLOGIC UNITS
- HYDROLOGIC SUBUNITS
- HYDROLOGIC SUBAREAS
- FOREBAY/PRESSURE BOUNDARY *
- WATER-BEARING SEDIMENTS
- MILITARY RESERVATION

*This boundary was taken from W. C. Mendenhall's U.S.G.S. Water Supply and Irrigation Paper No. 139, 1905. Current DWR studies are modifying its location.

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT

ORANGE COUNTY LAND AND WATER USE SURVEY

HYDROLOGIC UNITS, SUBUNITS, SUBAREAS AND WATER-BEARING SEDIMENTS-1964

SCALE OF MILES

1 0 1 2 3 4

1967

Attachment A
Comment Letter 17 Attachments

"Tom Oliver" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2F50968C6D3942FB8137C610A(
RE: 4665 Lampson Ave.
Nov 29, 2022 at 8:29:26 AM
"Hector Huffman" <huffmanhlls@yahoo.com>
"Schelly Sustarsic" <ssustarsic@sealbeachca.gov>

Hi Hector,

Good morning. The developer does not plan to make these gated communities at this point. However, they will be submitting a plan with two small parks, one in the affordable housing and one in the market rate housing, and children's play equipment will be in each. Is that what you are asking about?

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhlls@yahoo.com>
Sent: Monday, November 28, 2022 4:41 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Schelly Sustarsic <ssustarsic@sealbeachca.gov>
Subject: Re: 4665 Lampson Ave.

Hello Tom, it is my understanding the low income housing does not have open space/park The regular homes being built is a gated community and the low income housing will not have access to the parks.

One of the representatives explained this to me I wanted to confirm with you.

Hector Huffington

17-3

On Nov 8, 2022, at 8:33 AM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Hector,

Good morning. Thanks for your email. Unfortunately, the cutoff date for public submissions asking for a particular study of various environmental conditions has passed. However, be rest-assured that these type of issues you mention have been made apparent through other public-submitted emails and letters, and your thoughts will be studied as a part of the Environmental Impact Report for this project.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhlls@yahoo.com>
Sent: Monday, November 7, 2022 9:44 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Schelly Sustarsic <ssustarsic@sealbeachca.gov>
Subject: Re: 4665 Lampson Ave.

Hi Tim,

The big question is the environmental impact of increased traffic as you might have been asked already. With the 405 expansion and tolls, new development, Lampson Ave will be impacted.

Reviewing the plans I don't understand how the parking adds up to accommodate. Looks like we will have a Montecito St in Seal Beach near Rossmor situation where the condos take over the residential streets. I believe those units have 2 car garages and the overflow is difficult.

17-4

Thanks for your attention.

Hector Huffington

17-4 (CONT.)

On Oct 27, 2022, at 8:22 AM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Hector,

Thanks for your response. The City will consider this issue as a part of the Environmental Impact Report.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhils@yahoo.com>
Sent: Thursday, October 27, 2022 8:21 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Re: 4665 Lampson Ave.

Yes please.

Hector Huffington

17-5

On Oct 27, 2022, at 8:11 AM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Hector,

Good morning. There was no mention of the trees during the meeting. Are the trees a subject that you would want studied in the Environmental Impact Report (EIR)?

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhils@yahoo.com>
Sent: Thursday, October 27, 2022 7:47 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Re: 4665 Lampson Ave.

Good morning tom sorry I missed a meeting was there any mention about the trees being knocked down?

Hector Huffington

17-6

On Oct 10, 2022, at 8:59 AM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

2

Thanks, Hector.

Good morning. Thanks for your response. We will consider this as part of our Environmental Impact Report.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhils@yahoo.com>
Sent: Friday, October 7, 2022 12:19 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Schelly Sustarsic <ssustarsic@sealbeachca.gov>
Subject: 4665 Lampson Ave.

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender huffmanhils @ yahoo.com

Good morning Tom,

Our primary concern in our household is the need for trees in our community. On the housing plan it looks like all the trees are being ripped out. There is a lot of history with those trees in our community. They are important to the environment in our community. It seems like the open space on the project is very limited. And the neighbors will becom dependent on the park resources provided by Seal Beach. The environmental impact of destroying those trees is a cause for concern.

The amount of vehicles at that location will create automobile pollution. Lampson Avenue will turn into Lampson Highway.

Is it possible to only have one entryway where the primary apartment entryway is?

This way there's no disruption for the residence off of Rose and Lampson?

This developer has a lot of experience and I don't see why they can't design to keep the trees.

Thank you for your attention.

Hector Huffington

17-7

3

"Tom Oliver" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2F50968C6D3942FB8137C610A(
RE: 4665 Lampson Ave.
Nov 8, 2022 at 8:31:11 AM
"Hector Huffman" <huffmanhlls@yahoo.com>
"Schelly Sustarsic" <ssustarsic@sealbeachca.gov>

Hi Hector,

Good morning. Thanks for your email. Unfortunately, the cutoff date for public submissions asking for a particular study of various environmental conditions has passed. However, be rest-assured that these type of issues you mention have been made apparent through other public-submitted emails and letters, and your thoughts will be studied as a part of the Environmental Impact Report for this project.

As always, if you have any questions, please email or call me.

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhlls@yahoo.com>
Sent: Monday, November 7, 2022 9:44 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Schelly Sustarsic <ssustarsic@sealbeachca.gov>
Subject: Re: 4665 Lampson Ave.

Hi Tim,

The big question is the environmental impact of increased traffic as you might have been asked already. With the 405 expansion and tolls, new development, Lampson Ave will be impacted.

Reviewing the plans I don't understand how the parking adds up to accommodate. Looks like we will have a Montecito St in Seal Beach near Rossmor situation where the condos take over the residential streets. I believe those units have 2 car garages and the overflow is difficult.

Thanks for your attention.

Hector Huffington

On Oct 27, 2022, at 8:22 AM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Hector,

Thanks for your response. The City will consider this issue as a part of the Environmental Impact Report.

As always, if you have any questions, please email or call me.

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhlls@yahoo.com>
Sent: Thursday, October 27, 2022 8:21 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Re: 4665 Lampson Ave.

Yes please.

Hector Huffington

4

On Oct 27, 2022, at 8:11 AM, Tom Oliver <Toliver@cityofiosalamitos.org> wrote:

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Good morning. There was no mention of the trees during the meeting. Are the trees a subject that you would want studied in the Environmental Impact Report (EIR)?

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Tom Oliver
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3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

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Sent: Thursday, October 27, 2022 7:47 AM
To: Tom Oliver <Toliver@cityofiosalamitos.org>
Subject: Re: 4665 Lampson Ave.

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Hector Huffington

On Oct 10, 2022, at 8:59 AM, Tom Oliver <Toliver@cityofiosalamitos.org> wrote:

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Good morning. Thanks for your response. We will consider this as part of our Environmental Impact Report.

As always, if you have any questions, please email or call me.

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Hector Huffman <huffmanhils@yahoo.com>
Sent: Friday, October 7, 2022 12:19 PM
To: Tom Oliver <Toliver@cityofiosalamitos.org>
Cc: Schelly Sustarsic <ssustarsic@sealbeachca.gov>
Subject: 4665 Lampson Ave.

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender huffmanhils @ yahoo.com

Good morning Tom,

Our primary concern in our household is the need for trees in our community. On the housing plan it looks like all the trees are being ripped out. There is a lot of history with those trees in our community. They are important to the environment in our community. It seems like the open space on the project is very limited. And the neighbors will becom dependent on the park resources provided by Seal Beach. The environmental impact of destroying those trees is a cause for concern.

The amount of vehicles at that location will create automobile pollution. Lampson Avenue will turn into Lampson Highway.

Is it possible to only have one entryway where the primary apartment entryway is?

5

From: Travis Covey
To: Tom Oliver
Subject: 246 Residential Unit Project for 4665 Lampson Ave a.k.a. West Ed Property
Date: Wednesday, November 2, 2022 1:54:41 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tcovey11@gmail.com

Mr. Tom Oliver,

This project is terrible for many reasons. This project is going to leave 1400+ kids between fall and spring seasons with nowhere to play soccer. These kids will not be able to play anywhere else because there is so little park area to even use. All of the schools control their grass area and control the rental cost (which is ridiculously expensive) , the times it can be used and the access. Nowhere for these kids to go to learn the AYSO Six philosophies including:

Everyone Plays
• Balanced Teams • Open Registration • Positive Coaching • Good Sportsmanship • Player Development

These kids will be losing the opportunity to learn leadership skills, discipline, team work, listening skills, and more. I have been a coach for my kids at this field for several seasons, referee, and a part of the board for a year. The top things I hear from the parents in my years is this is a safe place for kids to learn a new skill. This is a great place for my child who is shy or an introvert and is really flourishing. Or my child really needs this outside time and exercise and discipline. It is good for them. Another ridiculous residential project is going to wipe all that away for many kids. You can't tell me that the revenue or more rental / leasing income is more important than these kids sports. This will be just another amount of units taking over premium land for kids to enjoy.

I have been in the construction industry for a long time and I see how all of this land gets taken away from more important things, like kids playing and having fun but no developers create a new park out of it. It is not like if you cut down a tree you have to plant a tree. These developers just take and take and take and never give back.

Travis Covey

17-8

From: Dustin Boyce
To: Tom Oliver
Subject: 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE
Date: Wednesday, November 2, 2022 12:37:03 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender dboycelbc@yahoo.com

Hi Tom,

Please do not let this development go forward. I will cause traffic issues and cut 100's of kids the opportunity to play soccer at arbor park.

Best, Dustin

17-9

From: Brittney Sanderson
To: Tom Oliver
Subject: 4665 Lampson
Date: Wednesday, November 2, 2022 3:25:07 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender brittsanderson84@gmail.com

AYSO Region 159 environmental concerns regarding the proposed 246 Residential Unit Project for 4665 Lampson Ave a.k.a. West Ed Property

1. Arbor Park has approximately 100 parking spots, with 30 of those parking spaces located on the south side of the dog park. Region 159 has always strived to provide adequate parking for the dog park, which leaves roughly 70 parking spaces available on Saturdays. Therefore, Region 159 families and volunteers utilizing Arbor Park on Saturdays routinely park in the 4665 Lampson Avenue parking lot. That parking lot provides over 300 parking spaces that are essential to our use of Arbor Park and ensure soccer families are not parking in the nearby neighborhood of College Park East (CPE). The proposed project at 4665 Lampson Avenue states it will provide 557 parking spaces that will be entering and leaving the property from Lampson Avenue between traffic lights at Heather Street and Rose Street. The lack of signal control currently planned for traffic in and out of the development will adversely impact traffic safety on Lampson. It is already a dangerous street with a history of serious accidents. The number of planned parking spaces is insufficient for the number of planned residences. Garage spaces will be used as storage, or other purposes other than parking. Many of the homes will have more than two or three cars and drivers. These homes will have guests that will need parking as well. Region 159 is concerned Arbor Park or CPE residential streets will then become overflow for the planned development. 17-10

2. CPE has less park acreage than other neighborhoods in Seal Beach, Los Alamitos or Rossmoor. Arbor Park has helped fill that void by providing a large grass area to support organized and unorganized sports including soccer and baseball. The proposed new development details do not show any park space, such as a playground for residents. Region 159 requests the EIR include a listing of existing parks within a ½ mile of the planned development. In addition, we request the EIR include an evaluation if the planned development should include park space, such as a playground, basketball court, etc. for the residents of the planned development, to not further impact already limited nearby park facilities. 17-11

3. Arbor Park is currently home to many recreational activities, some of which begin in the early hours of the morning, plus a portion of Arbor Park is used for a very popular dog park. Region 159 requests that the EIR include an evaluation of noise at Arbor Park during busy weekends when the park is filled with soccer matches and the dog park is being utilized. To avoid future complaints from the new residents of the planned development about noise from soccer Saturdays and the dog park, noise impacts should be studied and if necessary, mitigation measures proposed. The noise study should be conducted to include all hours of the day on Saturdays when whistles, loud voices, cheering and other noises are made. 17-12

From: TKV Nolan
To: Tom Oliver
Subject: 4665 Lampson
Date: Tuesday, November 1, 2022 10:38:46 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tkvnolan@gmail.com

I am a resident of this community. I grew up in Seal Beach in College Park East. I lived there for 4 years as a parent and am still in the area for community events.

My children do soccer at Arbor Park every weekend. My children play at Heather Park near your proposed project site.

I am very concerned about your proposed project will negatively affect our neighborhood. This is our community and I don't want to ruin our community and keep it true to our roots.

Please strongly consider my concerns for our community. I strongly oppose this project.

Loan Nolan
Rossmoor resident

17-13

From: Mark Wintheiser
To: Tom Oliver
Cc: Leslie Wintheiser
Subject: 4665 Lampson ave project
Date: Friday, October 28, 2022 2:59:04 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mwintheiser@yahoo.com

Dear Mr Oliver

Thank you for the opportunity to respond on the project on Lampson. I live at 4689 Hazelnut Ave Seal Beach. I have lived in Seal Beach for 31 years. College Park East has been a great place to live and raise my two children. The property at 4665 Lampson has been fantastic open space to walk my dogs and teach my kids to ride their bikes in open space. I am not opposed to changing from commercial to residential. I know we need the housing in Southern Ca. Please consider the density and space of this project. You must have two parking spots per unit of housing. Condo, Townhouse or SFR. You know each unit will have two adults to pay the rent or mortgage and they both drive a car. There is NO parking on Lampson. Over flow parking will go into College Park East. I live two block off Lampson. College park will be the only place the over flow can park. Please consider more open space for the complex. You need space for kids to play and walk your dogs. The maps shows one small park 14,000 sq ft., residence will all come into College Park and use Heather park and have their dogs crapping on our property. Please consider these two items before you approve this project. This will affect my quality of life and I hope you consider these changes.

Mark & Leslie Wintheiser
562-822-0796
4689 Hazelnut Ave
Seal Beach Ca 90740

17-14

From: Michelle Banks
To: Tom Oliver
Subject: 4665 LAMPSON AVENUE A.K.A. WEST ED PROPERTY - Feedback
Date: Wednesday, November 2, 2022 2:29:33 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender banks731@gmail.com

Hi Tom,

As a member of the CEP community, we are strongly against a large building project on Lampson.

- The road is already very busy and poorly planned. We live on Birchwood and our street is unsafe as is with people using it as a bypass.
- Our streets are barely able to accommodate the excess of cars from the people who currently live here - people have more cars than can fit on their driveways or in garages. Having more cars parked for a large-capacity building (owners and visitors) will be unbearable.
- Our parks are some of the worst in the area and we are already limited on green space. Having a project that does not include its own resources is unacceptable.

17-15

Plese reconsider this project.

Thank you,

Michelle Stohler
4280 Birchwood Ave

17-16

From: Ryan Winkleman
To: Tom Oliver
Subject: 4665 Lampson Avenue DEIR NOP
Date: Tuesday, November 1, 2022 7:32:34 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rswinkleman@gmail.com

Hello Mr. Oliver,

My name is Ryan Winkleman. I am a wildlife biologist and biological consultant and have been practicing in southern California for 17 years. I am the lead data reviewer in Orange County for the Cornell Lab of Ornithology's eBird website, a global database of bird location records supported by citizen science and the birding community, and I am Orange County's quarterly report compiler for the American Birding Association's quarterly scientific publication *North American Birds* (NAB), which has examined the status and distribution of birds on a local and national scale for decades.

I am writing about the 4665 Lampson Avenue project in the City of Los Alamitos. I see on the City's Notice of Preparation (NOP) website that a Draft Environmental Impact Report (DEIR) is planned for this project, but Biological Resources are missing from the list of resources to be addressed in it. I am writing to you to let you know that I believe Biological Resources should be a focus of the DEIR due to the project's adjacency to both the Joint Forces Training Base (JFTB) and Arbor Park. Based on the Exhibit 2 *Site Plan* on the website, the project will raze the existing parking lot and office building inhabited by the California Department of Fish and Wildlife (CDFW) and replace them, and the entire rest of the parcel, with residences where none currently exist.

17-17

However, several species of protected birds are known to utilize the immediate surrounding area that could be impacted both by construction and by the increase in disturbance that would result from the new residences. These include species that are obligated under the California Environmental Quality Act (CEQA) to be given a significant impacts analysis because they have been designated as a CDFW Species of Special Concern (SSC) or higher. This obligation is in the first Biological Resources question in Appendix G of the CEQA Guidelines, which asks whether the project would "Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?"

The species that I believe require a significant impacts analysis in the City's DEIR include the following:

- Swainson's Hawk. This species is designated as threatened under the **California Endangered Species Act**. Between 2018 and 2022 Swainson's Hawks have visited this area annually, with successful nesting confirmed in 2019 (two chicks fledged) and 2021 (three chicks fledged) and nesting strongly suspected to have occurred but failed based on behavior in 2018 and 2020. Each year the birds have summered on the far eastern edge of the Old Ranch Country Club other than 2019 when they nested on Naval Weapons Station Seal Beach. At the time of the discovery of the 2019 nest, this was the first confirmed nesting attempt in Orange County in 131 years. I actually monitored these birds for several years due to my

17-18

association as the lead biologist at the time on the I-405 Improvement Project, and worked closely with the designated CDFW biologist on the project, Ms. Simona Altman. I also have a network of local birders in the Los Alamitos/Seal Beach/Long Beach area who help keep tabs on the birds for me for my own reporting purposes in the quarterly NAB reports. They are a very well-known occurrence in this area both in the birding community and among wildlife agencies.
- White-tailed Kite. This species is designated as fully protected by CDFW and the California Fish and Game Code. That means it cannot be taken or harmed in any way other than for valid scientific research. There is a population of kites that nests nearby and uses the JFTB as foraging habitat. This is a well-documented use area by this species, with over 300 individual reports of one or more birds observed in the area since 2018 in the eBird database.
- Northern Harrier. This species is designated as a SSC by CDFW. Although it has no legal conservation status, SSC are required under the CEQA to be analyzed for significant impacts. Harriers are also known to frequent this area, with nearly 250 individual reports of one or more birds observed in the area since 2018 in the eBird database.
- Vermilion Flycatcher. This species is also designated as a SSC by CDFW. Vermilion Flycatchers have a robust breeding population at Arbor Park and are documented year-round in typically high numbers by local birders. This species has nearly 450 individual records of one or more birds observed in the area since 2018 in the eBird database.

17-18 (CONT.)

I believe that these four species, *at a minimum*, require a significant impacts analysis in the DEIR under the CEQA due to their overwhelmingly well-documented presence in the area by the birding community and biologists. Whomever is hired to write the DEIR should perform a thorough and exhaustive literature review of which sensitive species are known to occur in this area and should analyze all of them for significant impacts if they have a conservation status of SSC or higher. This may include other species that I have not mentioned here including Peregrine Falcon, Horned Lark, or others, including non-avian species. Construction and operation of the project may have adverse impacts on breeding and/or foraging behavior by the four aforementioned bird species and possibly others as well as possibly a loss of foraging habitat as a result of the development. The project should investigate rigorous nesting bird protection measures as well as possibly compensatory mitigation for direct and indirect loss of foraging habitat both on- and offsite as a result of the development and increased human disturbance.

This is one of the last remaining places in Orange County where these birds have large spaces of open habitat to support them, particularly for Swainson's Hawks, which had not nested in Orange County since 1888 prior to the discovery of the 2019 nest. I implore the City of Los Alamitos to conduct a thorough analysis of Biological Resources in its DEIR for the 4665 Lampson Avenue Project.

17-19

Sincerely,
Ryan Winkleman
Orange County *North American Birds* Quarterly Report Compiler
Orange County Lead eBird Data Reviewer
Senior Ecologist, Ecological Society of America
Senior Biologist, Michael Baker International

"Diana Mejia-Jones" <dianamejiajones@gmail.com>
4665 Lampson Avenue Development
Nov 2, 2022 at 4:19:28 PM
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender dianamejiajones @ gmail.com

Dear Mr. Oliver,

As a 48 year resident of CPE and one of thousands of families that use the Arbor Park facilities on a weekly basis, I ask you to reconsider the current plan of developing a high density residential development at 4665
Lampson Avenue. This property provides the community the ability to use the limited green space our residents have access to. Your proposed plans would have a dire affect on the value of the surrounding neighborhoods and signficantly increase traffic and parking
along Lampson. The lack of signal control currently planned for traffic in and out of the development will adversely impact traffic safety on Lampson. It is already a dangerous street with a history
of serious accidents including the death of a very close friend. The number of planned parking spaces is insufficient for the number of planned
residences. Garage spaces will be used as storage, or other purposes other than parking. Many of the homes will have more than two or three cars and drivers. These homes will have guests that will need parking as well.

17-20

Your proposal to include low-income housing on this property is also very concerning considering the exorbitant amount of of property tax current residents in the surrounding
area currently pay. This is simply not beneficial to anyone in the surrounding neighborhoods. I would hope that the City of Los Alamitos would be more conscientious of its neighboring cities and create a plan that is more inclusive and beneficial for the residents
in the area.

17-21

Sincerely,
Diana Mejia-Jones

smime.p7m

From: Joseph Nieblas
To: Tom Oliver
Subject: 4665 Lampson Avenue Draft EIR
Date: Wednesday, November 2, 2022 9:53:14 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender josephnieblas@hotmail.com

Dear Mr. Oliver,

The parking lot servicing the office building at
4665 Lampson Avenue
acts as overflow parking for Arbor Park. As you may know, the park is one of the main play fields for Region 159 AYSO soccer. It hosts both games and practices for many young people throughout the week, including my two daughters.

Arbor, and the adjacent dog park do not have enough parking space for the number of vehicles they attract on the weekends. If the parking lot at 4665 Lampson Avenue is developed into residential/commercial space many AYSO participants, and pet owners will be forced to park in the neighborhood directly south of the park. I believe that may cause friction between park users and home owners as it will reduce street parking in the neighborhood. The increase in park goers crossing Lampson at the Heather St crosswalk will also slow through traffic on Lampson, and creates a greater risk of children/parents getting hit by a car. I ask that the city's Draft Environmental Impact Report look at what options are available to keep Arbor's overflow parking on the north side of Lampson.

17-22

Very Respectfully,

Joseph Nieblas
3952 Denwood Avenue
253-973-2314

From: Holly Harris
To: Tom Oliver
Subject: 4665 Lampson Avenue Project
Date: Wednesday, October 19, 2022 8:39:23 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender hollyharris33@yahoo.com

Hi Tom,

I spoke with you today about my concerns 4665 Lampson Avenue Project. My name is Holly Harris, and I am the homeowner of 4632 Hazelnut Ave in Seal Beach; I have many concerns about the project and have to let you know my neighbors know nothing about the project when I told them in complete shock.

Since your meeting is about the environmental issue, these are the issue that I would like you to consider the test on.

17-23

<!--[if !supportLists]-->• <!--[endif]-->Wildlife- endangered habitat, plants, nesting birds

<!--[if !supportLists]-->• <!--[endif]-->Noise pets, feral cats, and dogs increase of rats population spilling over and preying on birds and nests

<!--[if !supportLists]-->• <!--[endif]-->Did you search California's natural diversity database for a list of species and their habits threaded and endangered specials

17-24

- <!--[endif]-->Have the city reviewed the CEQA Report on environmental impact

California Environmental Quality Act (CEQA) Review

> **California Environmental Quality Act (CEQA) Review**
> The Department of Fish and Wildlife manages California's diverse fish, wildlife, and plant resources, and the ha...

17-25

<!--[if !supportLists]-->• <!--[endif]-->WATER we are in a significant drought building more housing crowding

17-26

<!--[if !supportLists]-->• <!--[endif]-->Traffic on Lampson this proposed new neighbor would only have one way out on Lampson, and Collège Park East

17-27

has only one way out of the neighborhood off Lampson. The danger level in an emergency trap many people.

17-27 (CONT.)

<!--[if !supportLists]-->• <!--[endif]-->Sanitation, trucks, and lots of garbage allocated for landfills

Please send me any information and keep me updated. I also want to be involved and plan on getting my neighbors in College Park. I believe the city of Los Alamitos has not adequately informed the homes and people in the surrounding area it will affect the most.

17-28

Holly Harris

4632 Hazelnut Ave

Seal Beach, CA 90740

562-519-6100

October 30, 2022

Mary Ramsden Saenz
3950 Rose St.
Seal Beach, CA 90740
mkramsden@hswlaw.com

To: Tom Oliver, Associate Planner
City of Los Alamitos
toliver@cityoflosalamitos.org

Re: 4665 Lampson Avenue Project

Dear Mr. Oliver:

The 4655 Lampson Avenue Project (the "Project") as proposed will not only have a devastating impact on the value of our College Park East, Seal Beach, home just two doors from Lampson (which we have owned since 1988), but also on the quality of our daily lives and of our neighborhood. My major objections to this high density residential project for hundreds of residents in the place of a modest two-story government office building are as follows:

Inadequate Project Parking Will Result in Project Residents
Using Seal Beach Homeowners' Parking Spaces

The vastly inadequate parking spaces proposed in comparison with the number of vehicles likely to be owned by the hundreds of Project residents will necessarily result in residents parking in front of our house and the houses of our neighbors here on Rose Street in particular, and elsewhere in our neighborhood. We are a four-car family, and already need all of the available spaces for our own use and that of our visitors. Most of our neighbors are in similar circumstances.

17-29

Increased Traffic and Traffic Hazards

The Project as proposed will also bring significantly increased traffic and traffic hazards to the already busy Lampson corridor. College Park East residents have no alternatives to Lampson for entry into our neighborhood. As it is, cars frequently exceed the speed limit on the Lampson straightaway, and traffic records will confirm the many accidents and fatalities on this route. In addition to the significant traffic that will be added by hundreds of additional Project residents coming and going at all hours of the day and night, the Project design will require its residents to make a dangerous U-turn when heading towards Valley View. When exiting the Project site, they will first need to turn right unto Lampson, and to then make a U-turn at Heather, as the median strip

17-30

prevents a direct left turn from the site.

17-30 (CONT.)

Inadequate Public Facilities Will Cause Project Residents To Use Seal Beach's, Which are Paid For and For the Use of Seal Beach Residents

College Park East's three parks, including their kids' playgrounds and tennis and basketball courts, are maintained by the taxes paid to the city of Seal Beach by its residents for the use of its residents. The absence of any similar public spaces and facilities in or even near the Project in the city of Los Alamitos, and the fact that Seal Beach's facilities are just across the street from the Project, insure that the hundreds of Project residents will want to make use of the Seal Beach facilities at Seal Beach's expense.

17-31

Strain On School System

Although College Park East has no elementary school itself, the hundreds of new Project residents will put a strain on the already crowded Los Alamitos Unified School District system.

17-32

Installation of New Utility Infrastructure Needed by Project Will Cause Major Disruptions

The change in the use of the land from a state office building to housing for hundreds of residents will necessitate major utility infrastructure changes. The construction work needed for these changes will cause of major disruptions to Lampson Avenue and College Park East residents for many months.

17-33

Environmental Concerns

The Project's hundreds of new residents will put a strain on water delivery in a region already suffering from drought conditions. The pollution resulting from hundreds of new residents and their vehicles and other polluting appliances and devices, squeezed into 12.3 acres, will affect the existing residents across the street in College Park East.

I urge you to use your office to strongly oppose the 4655 Lampson Avenue Project and to prevent this high density residential use of the property or any other use so wildly divergent from its former use as a modest office building.

17-34

Mary Ramsden Saenz

From: Reid Kupfer
To: Tom Oliver
Subject: 4665 Lampson development project
Date: Monday, October 31, 2022 9:42:15 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rfkupfer@gmail.com

Reid Kupfer
4549 Ironwood Avenue
Seal Beach, CA
90740
rfkupfer@gmail.com

October 31, 2022

DEVELOPMENT PROJECT 4665 LAMPSON AVENUE

Hello my name is Reid Kupfer. I am a homeowner and resident in College Park East and I strongly oppose your development at 4665 Lampson Ave.

I believe your project will have a negative impact on our environment and on the quality of life for the residents living in College Park East/Seal Beach, West Garden Grove and Los Alamitos. This is a very unique situation where four cities are within a quarter mile of each other and share one road(Lampson Avenue) with only one way in and one way out.

Your development will bring hundreds of more vehicles onto Lampson Avenue causing congestion and creating more pollution. This will have a major impact on our wildlife and residences living nearby. Having no traffic light at your development will force hundreds of your Vehicles to go west on Lampson Avenue or cut through the neighborhoods of College Park East causing a backup of traffic, potential car accidents and safety issues for pedestrians and children.

17-35

I understand that purchasing this property was a win-win for the City of Los Alamitos and for the housing developers, however it will come at a cost to the residents of College Park East/Seal Beach and West Garden Grove. Since your development has no playgrounds, no markets, no walking paths, no tennis courts, and no pools, your residence will be coming into the nearest cities (College Park East/Seal Beach & West Garden Grove) for all their needs and recreation. This will cause overcrowding, excessive noise, pollution, traffic congestion, parking issues, and wear and tear to our facilities/equipment. Is there a plan to stop these issues before they become major problems to our environment and communities?

17-36

I Believe a compromise of adding a traffic light, reducing your apartments down to two stories, and adding a playground would help to reduce some of the problems/environmental impact that your development will bring to our communities. Please consider how the added noise, bright lights, traffic, pollution, and overcrowding will affect the environment and residence of College Park East/Seal Beach and West Garden Grove before you continue with the current plans for your housing development project.

Thank you

Reid Kupfer

17-37

From: Ryan La Bounty
To: Tom Oliver
Subject: 4665 Lampson Project - Concerns for Environmental Impact Report
Date: Wednesday, November 2, 2022 11:54:15 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rhlabounty@yahoo.com

Mr. Oliver -

Thank you for taking the time to sift through what I am assuming is a number of concerns that have been proposed in regards to this project. I'd like to make sure the environmental impact study does address a few points: 17-38

1) Arbor park has been the location for youth AYSO soccer for nearly 40 years. The new project would remove the use of the current parking lot for this park. My concern is that this will push all participants into the College Park East neighborhood to park and force them to cross Lampson with small children and wagons full of equipment. With nearly 1000 participants in the fall, having that many children crossing the street all day will create a safety concern as cars already speed down that street. A safety study must be done to make sure that these kids are safe crossing the street, especially since the light at Heather St comes just after a blind curve. In addition, parking must be fully addressed in this plan as it would be unfair for residents of this new project to use Arbor park's limited 100 spaces as their own. 17-39

2) I would also like to make sure that noise is addressed in the report, specifically relating to soccer on Saturdays and the use of the dog park on all mornings and evenings. Residents of these new units will need to deal with the noise of soccer games, cheering and whistles, starting at 8am on Saturdays. In addition, they would deal with the noise of dogs barking from the park whenever they may be present. Constant noise complaints from these residents may effect the publics ability to use the precious facilities. 17-40

On a continuing note, the loss of Arbor park as a facility for kids, including my own, to play in a community sport, would be a huge detriment. Remember all of these kids are residents of this community from Seal Beach/Rossmoor/Los Alamitos. I am currently a coach for a group of 8-9 year old boys and the comradery they get and the grow I've seen in them as they play together is tremendous. More so for the couple of kids on our team that have attention or social anxiety disorder diagnoses. Making Arbor park an obsolete green space by not having parking access would be tragic. 17-41

There are many more issues that I am sure will be included in the report: traffic flow on Lampson (or closures of the street due to an inevitable accident caused by increased activity and increased speeds), the increased use of College Park East's streets, parks and facilities by these new residents, noise/dust/pollutants from the construction, and the need for coordination between agencies and cities for Police and Fire services just to name a few.

The project as planned is not one that will work for the community. Adjustments must made once the environmental report is completed. 17-42

Thank you,

Ryan La Bounty
rhlabounty@yahoo.com
College Park East resident and AYSO soccer coach

November 1, 2022

Tom Oliver
Associate Planner
City Of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
Subject; 4665 Lampson Project

Dear Mr. Oliver,

I am a native born Californian with over 60 years residency in Orange County and a decades long resident of Seal Beach. Over the years I've witnessed the development of open space, farms, orchards, pastures into homes, commercial areas, shopping centers, roads and freeways and have experienced all the impact on infrastructure and traffic congestion this development naturally brings with it. Lately I've been seeing the demolition of old shopping centers and industrial buildings to reclaim land to build high-density residential areas. I recently learned about the proposed development of the 4665 Lampson Project for this purpose and wanted to voice my objection to this project for your consideration.

I am a capitalist and don't begrudge an investors desire to make a profit on his investments to create wealth and prosperity for his family and his business but I also feel that there is a societal aspect that should be considered so that residents, the city and the investor all takeaway something beneficial because a development like this impacts everyone.

17-43

I am concerned about the impact on traffic not only on Lampson, but also on the cross streets, Valley View and Seal Beach Boulevard and the freeway exits. The addition of new residential units on Lampson will increase traffic, noise, quality of life and pollution on this already busy street. This location will cause the local freeway exits to be even more congested that they are now even after the extensive improvement made by CalTrans over the past 10 years. This will impact everyone needing access to the freeway regardless if they live miles from College Park East and this 4665 Project. Along with increased traffic congestion is the need to mitigate safety risks as a result of the volume increase. This new development and added traffic with cause more accidents and pose higher risk to children and adults using the sidewalks and bike lanes along Lampson. The noise will have a negative impact on the homeowners in College Park East and the new development. I am asking for traffic, wildlife and safety impact studies be done immediately.

17-44

In closing I am just asking that this project be considered in a holistic way that takes into consideration the needs of the already existing neighbors and not just the revenue to the City and the profit to the developer.

Glenn Smith, Old Town Seal Beach

From: Samantha Baksic
To: Tom Oliver
Subject: 4665 Lampson Project Concerns
Date: Wednesday, November 2, 2022 12:33:13 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender sgbaksic@gmail.com

Good Afternoon, Mr. Oliver,

I have some concerns regarding the proposed project at 4665 Lampson Ave. As a resident who lives just off of Lampson Ave, a mom of 2 kids who have enjoyed Arbor Park for soccer games and practices, and a dog owner who utilizes the Arbor Dog Park frequently, I am very worried about the current proposal. 17-45

1. Traffic: adding this high density dwelling plan will impact traffic as well as public safety. I am concerned that without a new traffic light plan it will create a more hazardous situation on an already dangerous road. With only 2 lanes on each side, can Lampson handle an increase of approximately 500 more cars driving on that stretch of road daily? How will this public safety issue be resolved? 17-46

2. Recreation: I am concerned about the ability of our children to continue using Arbor park for sports recreation. Is there a plan to increase parking at Arbor Park? Can this be done without the removal of current green space in that area? Without additional parking it seems impossible for the region to continue enjoying that park. Is there a plan for parks to be built within the new community so as not to impact the current community use park at Arbor? Adding a residential area to increase the earnings of a developer at the expense of our current youth residents seems like a disgrace. 17-47

3. Environmental: I am concerned that some of the green space will be removed. As we all know, greenhouse gas emissions are already a problem and removing existing green space is going to exacerbate this problem. What is the plan for this? 17-48

4. Air Quality: Adding more cars to the area will reduce air quality and impact the health of local residents with issues such as asthma. Again, this is another issue that will negatively impact the lives of the current residents of your city. 17-49

I see no benefit to this housing development other than increasing corporate profits for a developer. How can the city justify impacting the safety, health and well-being of its current residents? 17-50

Thank you for your time and consideration,

Samantha Baksic
714-330-2021

From: kmarkman@earthlink.net
To: Tom Oliver
Subject: 4665 Lampson Proposal
Date: Tuesday, October 18, 2022 2:54:58 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kmarkman@earthlink.net

Mr. Oliver,

I am writing to express concerns relative to the proposed development at 4665 Lampson. I live in Garden Grove, just off of Lampson, less than one mile east of the proposed development. Though not a resident of Los Alamitos my Garden Grove neighbors and I will most certainly be affected in a major way by such a development. While you dated your proposal October 3, 2022, my good friends who live in Seal Beach directly across Lampson from the project received your Notice of Proposal letter on Wednesday October 12. None of my Garden Grove neighbors have received your letter nor have any knowledge of the "Project". Unfortunately, I will not be available to attend your scoping meeting on October 20.

It seems as if notifying a majority of the potentially impacted neighbors would be prudent or at least the right thing to do. I am confident you will be sending out minutes of the meeting. Please retain my email address so that you may forward a copy of your minutes to me.

Regards,

Ken Markman

5811 Richmond Ave

Garden Grove CA 92845

17-51

From: Brittney Sanderson
To: Tom Oliver
Subject: 4665 Lampson
Date: Wednesday, November 2, 2022 3:25:07 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender brittsanderson84@gmail.com

AYSO Region 159 environmental concerns regarding the proposed 246 Residential Unit Project for 4665 Lampson Ave a.k.a. West Ed Property

1. Arbor Park has approximately 100 parking spots, with 30 of those parking spaces located on the south side of the dog park. Region 159 has always strived to provide adequate parking for the dog park, which leaves roughly 70 parking spaces available on Saturdays. Therefore, Region 159 families and volunteers utilizing Arbor Park on Saturdays routinely park in the 4665 Lampson Avenue parking lot. That parking lot provides over 300 parking spaces that are essential to our use of Arbor Park and ensure soccer families are not parking in the nearby neighborhood of College Park East (CPE). The proposed project at 4665 Lampson Avenue states it will provide 557 parking spaces that will be entering and leaving the property from Lampson Avenue between traffic lights at Heather Street and Rose Street. The lack of signal control currently planned for traffic in and out of the development will adversely impact traffic safety on Lampson. It is already a dangerous street with a history of serious accidents. The number of planned parking spaces is insufficient for the number of planned residences. Garage spaces will be used as storage, or other purposes other than parking. Many of the homes will have more than two or three cars and drivers. These homes will have guests that will need parking as well. Region 159 is concerned Arbor Park or CPE residential streets will then become overflow for the planned development.

17-52

2. CPE has less park acreage than other neighborhoods in Seal Beach, Los Alamitos or Rossmoor. Arbor Park has helped fill that void by providing a large grass area to support organized and unorganized sports including soccer and baseball. The proposed new development details do not show any park space, such as a playground for residents. Region 159 requests the EIR include a listing of existing parks within a ½ mile of the planned development. In addition, we request the EIR include an evaluation if the planned development should include park space, such as a playground, basketball court, etc. for the residents of the planned development, to not further impact already limited nearby park facilities.

17-53

3. Arbor Park is currently home to many recreational activities, some of which begin in the early hours of the morning, plus a portion of Arbor Park is used for a very popular dog park. Region 159 requests that the EIR include an evaluation of noise at Arbor Park during busy weekends when the park is filled with soccer matches and the dog park is being utilized. To avoid future complaints from the new residents of the planned development about noise from soccer Saturdays and the dog park, noise impacts should be studied and if necessary, mitigation measures proposed. The noise study should be conducted to include all hours of the day on Saturdays when whistles, loud voices, cheering and other noises are made.

17-54

From: Cindy Ivandic
To: Tom Oliver
Subject: Arbor park-Lampson Project.
Date: Wednesday, November 2, 2022 11:12:44 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ivandic3825@gmail.com

Good morning Tom,

I know you are probably bombarded with emails regarding the Lampson project. It's disappointing that it's even a question as to why it shouldn't be done. That park is part of a program for kids. It's disappointing that we can loose the value of neighborhood style. I moved here in 2018 because I loved the quietness and neighborhood style. I hope you can reconsider the Lampson Project.
--
Thank you,

Cindy Ivandic

17-55

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 12
1750 EAST 4TH STREET, SUITE 100
SANTA ANA, CA 92705
PHONE (657) 328-6000
FAX (657) 328-6522
TTY 711
www.dot.ca.gov/caltrans-near-me/district12

Making Conservation a California Way of Life.

Nov. 2, 2022

Mr. Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA. 90740

File: LDR/CEQA
SCH: 2022090476
12-ORA-2022-02112
SR-22, SR-605
SR-405, SR-39

Dear Mr. Oliver,

Thank you for including the California Department of Transportation (Caltrans) in the review of the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the 4665 Lampson Avenue Project. The Project Applicant proposes to redevelop the existing office building with a residential development consisting of a variety of different product types, including: cluster homes, townhomes, and apartments. The unit mix would include 55 cluster homes, 114 townhomes, and 77 affordable multi-family apartment homes. The mixed density for the Project would be 20 dwelling units per acre (DUA). The Project would provide approximately 21,000 sf of common open space, which includes a central 14,000 sf neighborhood open space area. Under the City's R-3 development standards, the maximum building height for the Project is 35 feet. The Project would provide a total of 557 parking spaces: 459 parking spaces for the cluster homes and townhomes and 98 parking spaces for the affordable multifamily apartment homes. Vehicle access to the Project site would be provided via one driveway on Lampson Avenue.

The 4655 Lampson Avenue Project (Project) site is located in the City of Los Alamitos, Orange County, California. The 12.3-acre Project site is located north of Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street. The project is located less than a half mile from State Route (SR) 405, The project is also two and a quarter miles from SR-605, two miles from SR-39 and almost a mile from SR-22. All four State Routes are owned and operated by Caltrans. Therefore, Caltrans is a responsible agency on this project, and has the following comments:

17-56

Transportation and System Planning

1. Caltrans encourages the design of Complete Streets that include high-quality pedestrian, bicycle, and transit facilities that are safe and comfortable for users of all ages and abilities. Improvements may include providing secure bicycle parking, pedestrian-oriented LED lighting, and comfortable connections to nearby active transportation and/or transit facilities. Complete Streets improvements also promote regional connectivity, improve air quality, reduce congestion, promote improved first-/last-mile connections, and increase safety for all modes of transportation.

2. New residential infill development offers an opportunity to encourage multimodal transportation options. Caltrans encourages the project to look at opportunities to include Complete Streets improvements in the project, and/or to improve bicycle, pedestrian, and transit access and connectivity to nearby bikeway, sidewalk, and transit facilities.

3. Consider including long-term bicycle parking facilities for the multi-family apartment units. Refer to APBP's Essentials of Bike Parking guide for long-term bicycle parking best practices. (https://www.apbp.org/assets/docs/EssentialsofBikeParking_FINA.pdf)

4. There is a Class II bike lane on Lampson Avenue. During project construction, if there are any impacts to the existing bike lanes, please ensure that appropriate temporary detours are provided to maintain safe bicycle access to Lampson Ave.

5. There is a Park & Ride leased by Caltrans located at the Federal Southwest Regional Lab parking lot. Include discussion on the existing Park & Ride, and potential impacts and mitigation. Also, please coordinate with Caltrans System Planning Unit regarding the existing Park and Ride facility agreement on the property.

17-57

Traffic Operations

6. Submit copies of all traffic related documents for review. The data used in the Traffic Impact Analysis (TIA) should not be more than 2 years old and shall be based on the Southern California Association of Governments Regional Transportation Plan Model. Use the Highway Capacity Manual methodology for all traffic analyses.

17-58

Freight Operations and Planning

7. Ensure that truck parking, ingress and egress, and staging will not interfere with vehicle parking, pedestrian paths, or bicycle lanes/bicycle parking.

8. Establish freight pick up & drop off times that do not coincide with peak commute hours to reduce passenger vehicle conflicts and congestion for freight. Consider designating on-street freight-only parking and delivery time windows so trucks will not resort to double parking, thus causing street traffic congestion.

9. For the residential development proposed, consider how many individual packages will be delivered daily to individual residences. Amazon lockers or an equivalent shared drop-off location can help reduce the amount of driving done by delivery trucks and can increase the efficiency of deliveries.

10. Work with local partners and community representatives to mitigate any truck traffic routing onto residential streets or conflicting with other road users, including and especially bicyclists and pedestrians.

17-59

Caltrans' mission is to provide a safe, sustainable, equitable, integrated, and efficient transportation system to enhance California's economy and livability. Please continue to coordinate with Caltrans for any future developments that could potentially impact State transportation facilities. If you have any questions, please do not hesitate to contact Julie Lugaro at Julie.lugaro@dot.ca.gov.

17-59 (CONT.)

Sincerely,

Scott Shelley
Branch Chief, Regional-IGR-Transit Planning
Caltrans, District 12

"Provide a safe and reliable transportation network that serves all people and respects the environment"

From: OBRIEN
To: Tom Oliver; StopLampsonProject@gmail.com
Subject: comments to Stop Lampson Project
Date: Tuesday, November 1, 2022 2:39:06 PM
Attachments: Los Alamitos Lampson Housing Project concerns10312022.docx

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender freddieccp@verizon.net

Hello:

Please find attached, our comments regarding the city of Los Alamitos pending development on Lampson Ave. We do not feel the location of the development is at all appropriate and should be halted.

Thank you. Please contact us if you have any questions.

Sincerely,

Bart and Alice O'Brien
3831 Fir Circle
Seal Beach, CA 90740
562-430-4178 (landline)

17-60

2022 Los Alamitos Lampson Housing Project concerns:

1. **Lampson is dangerous enough with speeding cars all hours of the day, and others going through red lights in the early morning hours, don't need or want a possible additional 500 cars on this street, being only 2 lanes on each side. Heavy and dangerous traffic.** → 17-61
2. **Housing is placed at the outer boundary of Los Alamitos, and it won't affect their city/neighborhoods, but will strongly hinder our neighborhood of College Park East (CPE), Seal Beach.** → 17-62
3. **Part of this housing project is low income housing? Low income housing has the potential to bring increased crime to our neighborhood. Our home values could/will decrease.**
4. **Minimal parking at this complex? There is the potential for increased traffic and parking and crowding in our neighborhood. Many households park on the street, not in their garages or driveways. Our streets will be jammed with Los Alamitos vehicles. Does CPE now need residential parking permits, and give tickets or tow Los Alamitos cars? Will Seal Beach now have to enforce parking permits, if this is needed? Costs for permits/enforcement?** → 17-63
5. **There is not a large police presence here at CPE, and we don't need one…but that may change with additional housing units across the street. With these new houses/people/cars/noise/traffic, our neighborhood will suffer from all of this.**
6. **This town has been known as "Mayberry by the Sea" and is the reason we moved here from Long Beach. This will certainly taint this title.**

This is a huge negative to our lives, homes, and lifestyle…..a quiet, safe and a small piece of heaven we love. Protect us city of Seal Beach and whoever has the power to stop this invasion of our small, great town. → 17-64

Aesthetics: More development on Lampson will not be pleasant to see. It's mainly open space right now with green space. More development will definitely not be aesthetically pleasing to this neighborhood and may cause loss of home value. → 17-65

Air Quality: Air quality will most definitely be impacted with the increased traffic on Lampson with the new development. During construction, with the heavy equipment and other vehicles, air emissions will increase and the → 17-66

cumulative impacts from this will definitely be a problem, especially with older residents and those with comorbidities.

17-66 (CONT.)

Construction Noise and road closure: This will definitely be a big problem for the residents at College Park East (CPE), Seal Beach. Lampson is already a major, busy road for drivers and is already very easily impacted by minor construction projects. This project will have a tremendous negative impact on Lampson and CPE residents.

17-67

Fire / Police / Medical Response: Will be hindered by increased traffic on Lampson. More traffic on Lampson means potentially more accidents and police/ medical response needed.

17-68

Greenhouse Gas Emissions: Definitely will increase due to construction related vehicles, heavy and small equipment use during construction, and increased car emissions from the increased traffic.

17-69

Hazards & Hazardous Materials: Lampson Ave is already hazardous because of the speeding, and increased traffic will cause it to be even more hazardous to drivers and pedestrians. In addition, the hazards of increased vehicle emissions which are hazards to our breathing.

17-70

Land Use & Planning: The proposed development is adjacent to an active military airfield and in potential danger from airfield accidents. A community development in this location is inconsistent with the surrounding land use.

17-71

Noise Pollution (vehicles on Lampson): There already is a noise issue from Lampson traffic. There will be added noise pollution from not only the increased vehicles on Lampson, but added vehicles on the 405 freeway from residents exiting to approach Lampson and the new development.

17-72

Population & Housing: Increased population and housing in Los Alamitos

17-73

will impact the adjacent CPE Seal Beach neighborhood, including CPE parking spaces, use of CPE parks.

17-73 (CONT.)

Parking in our neighborhood: Most definitely the increased population, traffic and housing in Los Alamitos will impact the adjacent CPE Seal Beach neighborhood parking spaces. Parking permits for CPE residents should be implemented to prevent parking spaces being taken by the new development.

17-74

Public Services: New development in Los Alamitos will cause added strain on Seal Beach public services including police and fire department due to potential negative impacts on Lampson Ave, i.e. traffic accidents, pedestrian related issues, traffic issues.

17-75

Recreation: More development means increased use of parks and park equipment (from non-city residents) resulting in need for more care and upkeep of parks/ equipment and need for additional funding (from Seal Beach residents) for upkeep.

17-76

Road impacts from heavy equipment: Lampson is a heavily trafficked street and very prone to potholes, which can result in vehicle damage. Heavy equipment will definitely cause more damage to Lampson than just the normal heavy traffic. This will result in the need for additional funding (from Seal Beach residents) for upkeep on road repairs.

17-77

Rodents: With this development, more people means more trash and litter around because most people are lazy and don't clean up after themselves, resulting in vermin like mice and rats.

17-78

Schools / Libraries: There will obviously be more crowding at schools with more development, which will mean higher student to teacher ratios which negatively impacts learning. The local libraries will be impacted with more use by people, and more upkeep and resources needed at the libraries.

17-79

Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc): Lampson is already a heavily used street between Seal Beach Blvd. and Valley View, and adding additional traffic will cause a tremendous cumulative impact on traffic safety. There is regular speeding and continuous traffic violations on Lampson that will definitely get worse with more development. More cars in CPE will also cause safety issues for pedestrians and residents.

17-80

Utilities & Service Systems: New development will cause added burden to utilities and service systems, of which many are in need of repair and frequent upkeep. Infrastructure is always lacking behind hasty development projects and adds stress to utilities and service systems.

17-81

Views from our backyards: More development on Lampson will not be pleasant to see from front or backyards. It's mainly open space right now with green space. More development will definitely not be aesthetically pleasing to this neighborhood and may cause loss of home value.

Most likely, Seal Beach residents will have to bear the burden of costs and decreases in current lifestyle and negatively impacted home values, and not the city of Los Alamitos.

Respectfully,

Bart and Alice O'Brien

3831 Fir Circle

Seal Beach, CA 90740

562-430-4178 (landline)

17-82

From: JeffBranson1 Gmail
To: Tom Oliver
Subject: Concerns about proposed 246 Residential Unit Project for 4665 Lampson Ave
Date: Wednesday, November 2, 2022 9:43:33 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jeffbranson1@gmail.com

Good morning Mr. Oliver,

This letter is in regards to the proposed 246 Residential Unit Project for 4665 Lampson Ave.

First: I am a resident of College Park East in Seal Beach and live on the closest street to the proposed project location (Ironwood Ave). I understand that sufficient parking will not be added to accommodate the 246 new structures that are proposed to be built, which will result in overflow parking be required in College Park East, particularly on my street, Ironwood Ave. Parking on Ironwood is already rather sparse. Not only will this result in decreased parking for College Park East residents, but this will have other negative impacts such as increased foot traffic around the clock, increased unsafe street crossings, which will likely increase crime and unsafe activities, not to mention further impact the already dangerous Lampson Ave. This is not the type of area I would desire to optimally raise my small children in.

17-83

Second: I understand that there is an open grass area in the proposed development, but not a park. College Park East parks, especially Heather Park, is already very busy most times of the day. It is certainly highly predictable that College Park East parks will be bogged down with regular visitors from this new development. College Park East parks are already smaller on average than other neighborhood parks, so there is severe concern that they will be too small to handle such overflow (let alone be able to absorb any recreational activities that Arbor Park will not be able to handle, should the proposed development move forward).

Third: Arbor Park is utilized by our entire community as a place for sports and other recreation (my family included). AYSO for example, will seemingly be forced to move as the area that is currently used for parking during the practices and games will now be consumed by the new development. As mentioned above, College Park East parks are not sufficiently sized, and therefore not capable of handling events that currently take place at Arbor Park. This certainly can't be viewed as positive for the community as a whole.

17-84

Overall, this whole proposed development seems as though it was hastily thought through without considering all of the environmental and social impacts. I know I speak for my family and most likely most of College Park East when I say that I respectfully, entirely disagree with the new development as proposed. Overall, this will not be positive for our community as a whole. Please reconsider moving forward with this proposed development.

If further information is required please feel free to contact me.

17-85

Sincerely,

Jeff Branson
4532 Ironwood Ave
Seal Beach, CA 90740
714-801-5867

From: Adam Offenberg
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Concerns about the Lampson Housing Project Being Developed
Date: Tuesday, November 1, 2022 2:44:38 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender adam.offenberg@gmail.com

Hello Los Alamitos and Seal Beach City Council Members,

My name is Adam Offenberg. I am a resident of College Park East (4400 Fir Ave). I was made aware about the Lampson Housing Project that is being proposed and I am writing to the city council to voice some of my concerns.

In looking at the plans that were made available, I am deeply concerned about the safety impacts of this project due to increased traffic. Many people including children cross Lampson at Heather to go to Arbor Park for AYSO Soccer Games and practices as well as the Dog Park. With over 200 units being put in, the increased traffic will bring more opportunity for traffic and pedestrian accidents. I would expect that the city would require the developer to perform studies on traffic flow in that area as well as research on pedestrian safety. A traffic flow study needs to take into account time frames such as 7:45 am to 8:00 am (Peak school and work traffic time). There is only one right hand turn lane onto Seal Beach Blvd which all parents use coming from College Park East to drop kids off at Los Alamitos Schools. It currently backs up to Old Ranch Country Club already at these times. With the addition of these units I can imagine a scenario where traffic will be back up to Candleberry or worse during peak times. 17-86

Something that will compound the safety issue is the lack of sufficient parking being planned for the development. Their needs to be a study focused on if the proposed parking for the development is sufficient to handle the amount of cars that will require parking by the owners, renters and guests of the dwellings being built. The plans that I have seen do not seem to include enough parking. So where will the excess cars be parked??? There is no street parking on Lampson so the only option will be for the excess cars to be parked in College Park East. This will bring in more traffic, especially by Heather Park (traffic and safety concern) where kids are always present. 17-87

While this is a Los Alamitos City property, the residents of these units will undoubtedly be utilizing Seal Beach City resources and amenities. Heather Park, Blue Bell Park, Almond Park College Park East Parking and Streets. Does either city plan to study the impacts of this influx of residents on said amenities? 17-88

There is signage posted on Lampson restricting trucks over 3 tons from using the street. With a large development project such as this, it would seem like this restriction would need to be lifted to accommodate the trucks / tractors / cranes and other large vehicles required to perform this build. Is this the case? The effects of this construction on Lampons Ave needs to be looked into. 17-89

I appreciate all of your attention on this matter.

Regards,
Adam Offenberg

From: Michelle Beck
To: Tom Oliver
Subject: Concerns Regarding the Proposed 246 Residential Unit Project for 4665 Lampson Ave.
Date: Wednesday, November 2, 2022 1:57:09 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender michelleannbeck@gmail.com

Hello,

I am writing in regards to some of the Environmental concerns regarding the proposed 246 Residential Unit Project for 4665 Lampson Ave a.k.a. West Ed Property.

1) This development will undoubtedly impact traffic on Lampson Ave. There are already major traffic problems on this road; especially, when there is road construction, accidents, or rain. These problems either cause the road to be completely shut down for hours at a time, to being able to travel in one lane, to flooding. Will there be alternate roads built to accommodate the traffic that this development will bring? I am unaware of any alternate routes that can be built when one considers that there are major constraints on all sides.

17-90

2) This development impact will seemingly have a negative impact on the use of Arbor Park and its neighboring dog park? The park is essential for AYSO 159 where all four of my children have played soccer. Thousands of families have used this park and parking lot to support their children in remaining active outdoors.

3) Will this development include a listing of existing parks within a ½ mile of the planned development. How will it impact the CPE parks? Will the EIR include an evaluation if the planned development should include park space, such as a playground, basketball court, etc. for the residents of the planned development, to not further impact already limited nearby park facilities.

17-91

Thank you

Michelle Beck

Sent from my iPhone

From: Jennifer Michalek
To: Tom Oliver
Subject: DEIR Comments for 4665 Lampson Ave
Date: Wednesday, November 2, 2022 9:25:08 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender michalekj@yahoo.com

Dear Tom Oliver and members of the Planning Division,

I'm writing in regard to development on 4665 Lampson. I'd ask that you take extra care in the DEIR to confirm that the plans ensure that use of Arbor Park not be negatively impacted. The park is a critical part of the community infrastructure for all of the youth involved in AYSO soccer. As it is, Los Alamitos has few designated soccer fields and spaces for kids to play organized, recreational soccer so Arbor Park is essential to providing kids healthy opportunities to be active, challenge themselves, and build healthy citizens that work well with others.

I support the need for additional housing in the area, but development of the site should ensure there is additional parking for Arbor Park. If the site is switched to residential use, there will be a need to provide accessible and sufficient parking to compensate for the evening and weekend parking available on the site now.

The new development should also include a play area for residents to offset additional demand for using Arbor Park. Field lines, grass problems (that can cause injury), and refuse from pets are already a challenge for the kids with the current levels of use. With many new neighbors planned, the builder should provide outdoor areas for pets and kids as part of the building plan to offset the impact.

17-92

The plans should also consider the noise levels for residents coming from the park and from parking. The units should provide sufficient sound barriers or building materials to allow residents their peace even when Arbor Park and the dog park are in high use.

Lastly, I would encourage the city to invest in more soccer fields in general. While there are a number of baseball fields kept up by the city, there are hardly any soccer fields. The community needs safe, well lit, and maintained soccer fields! The number of gopher holes and lack of field markings in Arbor Park is both dangerous and a disservice to the kids. In winter it also makes it hard for working parents to keep their kids active because the fields are not lit late enough. Please add improvements to the soccer fields as part of the city's long term plans!

17-93

Thank you,
Jenni DeSelm
Parent & Volunteer Soccer Coach

From: L Chappell
To: Tom Oliver
Subject: Development Project 4665 Lampson Ave
Date: Tuesday, November 1, 2022 5:54:01 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lesleyjchappell@gmail.com

Lesley Chappell
1000 Electric Avenue Apt 6
Seal Beach, CA 90740
lesleyjchappell@gmail.com

November 1st, 2022

DEVELOPMENT PROJECT 4665 LAMPSON AVENUE

Hello, my name is Lesley Chappell. I have been a resident in Seal Beach for the past 30 years and I strongly oppose your development at 4665 Lampson Ave.

I believe your project will have a negative impact on our environment and on the quality of life for the residents living in College Park East/Seal Beach, West Garden Grove, and Los Alamitos.

Your development will bring hundreds of more vehicles onto Lampson Avenue causing congestion and creating more pollution. This will have a major impact on our wildlife and residences living nearby. Having no traffic light at your development will force hundreds of your Vehicles to go west on Lampson Avenue or cut through the neighborhoods of College Park East causing a backup of traffic, potential car accidents and safety issues for pedestrians and children.

17-94

Since your development has no playgrounds, no markets, no walking paths, no tennis courts, and no pools, your residence will be coming into the nearest cities (College Park East/Seal Beach & West Garden Grove) for all their needs and recreation. This will cause overcrowding, excessive noise, pollution, traffic congestion, parking issues, and wear and tear to our facilities/equipment. Is there a plan to stop these issues before they become major problems to our environment and communities?

I believe a compromise of adding a traffic light, reducing your apartments down to two stories, and adding a playground would help to reduce some of the problems/environmental impact that your development will bring to our communities. Please consider how the added noise, bright lights, traffic, pollution, and overcrowding will affect the environment and residence of College Park East/Seal Beach and West Garden Grove before you continue with the current plans for your housing development project.

17-95

Thank you for your consideration,

Lesley Chappell

From: Rebecca Branson
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; ssustarsic@sealbeachca.gov
Subject: Disapproval of proposed 246 Residential Unit Project for 4665 Lampson Ave
Date: Wednesday, November 2, 2022 12:25:16 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rebeccasbranson@gmail.com

Hello Mr. Oliver,

I'm writing to express my disapproval for the proposed 246 Residential Unit Project for 4665 Lampson Ave.

I am a resident of College Park East in Seal Beach and live on the closest street to the proposed project location (Ironwood Ave), so this greatly impacts my family and I. Safety concerns due to increased traffic, expected unsafe driving (u-turns at Heather, etc), and greater foot traffic on Lampson and throughout CPE are my greatest concerns. But also, insufficient parking provided for the new residents, lack of community space (parks), the view/noise from our yard, and the impact this will have on current recreational activities are also something that need to be addressed. 17-96

As aforementioned, safety for my family and others in the community is my number one concern. Inevitably, there will be a significant increase in traffic down Lampson, Seal Beach Blvd, and Valley View which are already congested especially during school drop off and pickup times. It's my understanding that there will be no added walking paths or any additional roads being built to access the shopping centers nearby, which means our already busy streets will be busier. Additionally, Lampson is already a dangerously fast street; adding an additional 246 homes (500+ more cars) will surely add to the already notoriously accident-prone street. 17-97

I understand that sufficient parking will not be added to accommodate the 246 new structures that are proposed to be built, which will result in overflow parking be required in College Park East, particularly on my street, Ironwood Ave. Parking on Ironwood is already rather sparse. Not only will this result in decreased parking for College Park East residents, but this will have other negative impacts such as increased foot traffic around the clock, increased unsafe street crossings, which will likely increase crime and unsafe activities. This is not the type of area I would desire to optimally raise my small children in. 17-98

I understand that there is an open grass area in the proposed development, but not a park. College Park East parks, especially Heather Park, are already very busy most times of the day. It is certainly highly predictable that College Park East parks will be bogged down with regular visitors from this new development. College Park East parks are already smaller on average than other neighborhood parks, so there is severe concern that they will be too small to handle such overflow (let alone be able to absorb any recreational activities that Arbor Park will not be able to handle, should the proposed development move forward). Given the above concerns, it doesn't seem 17-99

right that Seal Beach residents who pay for these (already small) parks will have to share our community space with Los Alamitos residents on a regular basis because the proposed community is not being planned appropriately. If this project does go through, a park should be added to accommodate its own residents.

17-99 (CONT.)

Given that we live so close to the proposed development, the noise from construction and view from our yard will be greatly impacted by a multi level building. If the project is approved, we would request that a taller sound and privacy wall be built down Lampson to ensure our current privacy and living situation is not impacted.

17-100

Arbor Park is utilized by our entire community as a place for sports and other recreation (my family included). AYSO for example, will seemingly be forced to move as the area that is currently used for parking during the practices and games will now be consumed by the new development. As mentioned above, College Park East parks are not sufficiently sized, and therefore not capable of handling events that currently take place at Arbor Park. This certainly can't be viewed as positive for the community as a whole.

Overall, this whole proposed development seems as though it was hastily thought through without considering all of the environmental and social impacts. I know I speak for my family and most likely most of College Park East when I say that I respectfully, entirely disagree with the new development as proposed. Overall, this will not be positive for our community as a whole. Please reconsider moving forward with this proposed development.

17-101

Please let me know if you need any further information. I appreciate your time.

Thank you,

Rebecca Branson
4532 Ironwood Ave
Seal Beach, CA 90740
562-537-4735

From:	tdpederson1@gmail.com
To:	Tom Oliver; Shelley Hasselbrink; Mark Chirco; Jordan Nefulda; Tanya Doby
Cc:	jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; "Google Home"; "Andrea Pederson"
Subject:	Environmental Concerns with Lampson Project
Date:	Tuesday, November 1, 2022 11:08:02 AM
Attachments:	LampsonProject-TerryPederson-CPE-22 11 01.docx

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tdpederson1@gmail.com

City of Los Alamitos

Subject: Lampson Project

As a resident of College Park East, I am concerned with the proposed Lampson Avenue Project.

I have lived in CPE for 23 years. This neighborhood has been here since the mid-60s.

It was developed during a time when nearly 79% of households had fewer than 2 cars.

Our parks were developed for CPE and not for extended communities.

Our streets and parking were developed for CPE residents.

17-102

The proposed Lampson Project will severely impact CPE.

Since I have lived here, Lampson Avenue has had many deaths due to accidents. Added cars and traffic will only increase the possibility of future accidents and fatalities. Not to mention added risk with heavy construction vehicles…

17-103

CPE has endured multiple construction projects with the 405 over the last decade. Noise and pollution have been unacceptable. The Lampson Project would add more suffering to CPE residence with noise and pollution.

17-104

Our parks were meant for CPE. No parks are planned for the new development. How can this be acceptable. The Lampson Project not having those resources would bleed over into the CPE/Seal Beach community and our resources.

17-105

As most new communities, parking is developed to only serve the residents living there and probably only 2 cars per household. When that expands due to children getting cars, or during holidays, there will be little to no additional parking for the Lampson Project residence expanded and extended families, especially during holidays. That parking issue will bleed over to CPE/Seal Beach and create parking issues within our community.

17-106

It is irresponsible to create a high-density community without the resources to support it.

For Los Alamitos residents, having a new community pop up on the other side of a large military base may sound like a great idea. It won't impact current Los Al residents' everyday life. It will add to the tax base, etc. But for us in CPE/Seal Beach, which is outside Los Al control, we are the ones being impacted. We will have the noise, the pollution, over population of our parks, will have parking impacted in front of our own homes, and increased traffic and possibility of accidents that impact everyone.

I believe that the plan is not well thought out. It won't support the Lampson Project residents. The lack of resources will create enormous pressure on CPE/Seal Beach residents.

Quality of life for those residents and as well as neighboring communities should be considered.

It is not just about how many homes can be crammed into a limited space and the maximum dollars that can be achieved for developers and Los Al.

I ask that you reconsider moving forward with this project.

17-107

Terry Pederson

4508 Fir Ave.

Seal Beach, CA 90740

CPE

562-355-0224

Tdpederson1@gmail.com

From: Richard Brown
To: Shelley Hasselbrink; Tanya Doby; Trisha Murphy; Mark Chirco; Jordan Nefulda; Tom Oliver
Subject: ENVIRONMENTAL IMPACT for 4665 Lampson
Date: Wednesday, November 2, 2022 12:05:05 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender vnerbrown@gmail.com

Hello,
My enviornmental impact concerns for the proposed build at 4665 Lampson invlove more than just the immediate area of area of Arbor Park. A proposed build, such as the one at 4665 Lampson, in such a small community as Los Alamitos, has an enviornment impact that far exceeds the immediate area of the build site.

I am worried we do not have enough room in our elementrary schools, middle schools, and high school for the inflex of students. With the City allowing many - many more additional outter district transfers, than in the past, our class sizes are max'd out as-is. And play area at our schools, are already extrmely limited. We are one of the last remaining school districts with "Blue Ribbon" acalades and I would hate for our current students to suffer due to the inflex of students due to this build. I would like to see the environmental impact the proposed build would have on our local schools. 17-108

I am also concerned about our police and fire response. Last year, we voters, approved Measure Y, which increased sales tax to make up for the crippling costs of police and fire in Los Alamitos. I need to see the environmental impact the proposed build would have on our police and fire response by adding hundreds of housing units. 17-109

I am also concerned we do not have enough parks and play areas in Los Alamitos to support the current residents, let-alone the influx of residents in the proposed build. Little cottonwood Park is already packed during weekends and most summer weekdays. We have no room to accomodate several hundred or a thousand extra residents. I would like to see the environmental impact study that will address the need for more parks and play area space for our children. 17-110

In Los Alamitos, we also [only] have one hospital. The few times I have needed services from Los Alamitos hospital, it was clear to me, the hospital was under staffed and too small to service the current residents. I would like to see the envioronmental impact the proposed build would have on our only hospital by adding several hundred housing units and several hundres new residents. 17-111

Lastly, I am concerned we do not have enough youth camps, summer camps, and summer school activities to support the current residents, let-alone the influx of residents in the proposed build. The city needs to provide adaquate camps during school breaks, such as summer and winter. The current camps are regulary sold out and extremely hard to get a child registered into. I would like to see the enviromental impact on how the proposed build would effect the city's already strained youth camps. 17-112

Traditionally, when a new neighborhood begins a new build, like we recently saw in the unicorpated area of Irvine, the builders and home owners, need to submit and contribute to addtional taxes, such as mello-roos, to pay for the increase in city services. As current

residents, we are already max'd out with taxes and WILL NOT agree to any addtional taxes and WILL NOT tolerate any loss of current services or reduction in "quality of life." Unless the proposed build at 4665 Lampson would adequately improve the lives of current residents and will provide the same "quality of life" and services, I do not think the proposed build should be approved. Also, an "overnight" build of several hundred housing units will undoubtly put additional strain on services. Current residents should not have to bare the additional costs, or loss of services, or loss of "quality of life" because another buider wants to make another $100million.

I grew up in the Cities of Long Beach and Lakewood. I saw, first hand, the schools degrade, policing and fire response degrage and quality of life degrade when adding hundreds and thousands of housing units without increasing city services. Now, Long Beach has the highest taxation in the nation, their property tax is well over 1%, their crime rate has risen drastically over recent years, and their schools have all lost their "Blue Ribbon" status as well as class sizes approaching 30 kids per class. Please do not turn us into the City of Long Beach, Lakewood, or Hawaiian Gardens, or Stanton.

17-112
(CONT.)

Sincerely,
Rich Brown
562-212-4452
11151 Essex Drive
Los Alamitos, CA 90720

From: Kevin Day
To: Tom Oliver
Cc: Kendra Day (kendraday27@gmail.com)
Subject: Environmental Impacts to the Surrounding Area of 4665 Lampson Avenue Residential Development Project
Date: Wednesday, November 2, 2022 3:21:40 PM
Attachments: image003.png
image004.png
image005.png
image006.png

I write as both a land use attorney and a homeowner living directly across the street from the 4655 Lampson Avenue Project. My home, located at 4601 Ironwood Ave., Seal Beach, is directly across Lampson Avenue from one of the two driveways into the proposed Project. As a result, the direct impacts of the potential Project are literally directed into my property and those of my neighbors on Ironwood. These impacts include increased light pollution, sound pollution above the roadway standards allowed, vibrations (which while felt outdoors are one thing, the perceived intensity of such impacts are much greater indoors with rattling windows, doors and the shaking of structures), increased traffic, impacts to neighborhood traffic on already busy streets, loss of park space utility and unsafe road conditions.

17-113

These impacts reach multiple sensitive receptors in the College Park East neighborhood and cannot be underestimated. Notably, the development as currently planned and constituted cannot mitigate any of these impacts.

First, three of the structures to be built are three-stories tall, exceeding the height of the current use of the property. These three apartment buildings are planned for an area currently used as a parking lot that is directly across Lampson from our home. This parking lot has normal usage seven days a week, but hardly any use at night. To introduce a dense urban project into the site will magnify the duration and type of use. The amount of light and sound that will emanate from 70+ apartments and its residents is a clear environmental impact that cannot be mitigated to manageable levels, particularly during nighttime hours. The developer has no plan for sound dampening or addressing the increased light pollution that will occur from this intensive use.

17-114

Second, the proposed project will introduce 500+ cars per day onto Lampson Avenue, already a crowded street with 19,000 average daily trips; the ADT

17-115

amount is expected to rise beyond 20,000 in 2025 and that is without the proposed projects increases. The rise in noise and vibration levels attributable to the project alone are a significant environmental impact that cannot be mitigated. Notably, the developer is doing nothing to even address this issue.

17-115 (CONT.)

Third, the introduction of new and unplanned for vehicle trips is but one issue created by the project. The number of units versus the number of parking spaces provided may work in paper calculations for a series of mandates and density forgiveness measures but are not realistic and do not take into account the actual impacts for the surrounding neighborhood. Apartments, townhomes and cluster homes will likely have multiple cars tied to each unit as a fact of modern life. Moreover, there is no public transit that is realistically usable for the new project. There are minimal bus stops on Lampson Avenue because the street is not wide enough to accommodate a turn out lane. The project as designed does not contain enough parking to serve 246 units. If each unit has two vehicles associated with it, the approximately 500 added vehicles will overwhelm the scant parking provided. These vehicles, plus guests, will have no choice but to park in College Park East and cross Lampson on foot. College Park East is fully developed and occupied with much of the street parking already utilized. There is simply no additional parking availability. Again, the developer is relying on density credits for a paper development – the City is required to study the actual environmental impacts; parking is a massive impact that cannot be mitigated with the density, uses and design of the proposed project.

17-116

Fourth, Lampson Avenue is the only route for ingress and egress for the Project. Lampson is already heavily-travelled as discussed above. As a two-lane roadway with *minimal* medians separating the lanes now and tremendously limited bike lanes, Lampson is a limitation that cannot be expanded because it is fully built out on both sides in both directions. The developer's plans for the project dictate that vehicles leaving the site must turn right onto Lampson because a left-turn movement cannot be safely made and there are no turnout lanes to accommodate the flow of vehicles going both left and right out of the project. As a result, if half of the cars presumably want to go in each direction, but those wanting to head east on Lampson cannot do so,

17-117

that means 250 vehicles per day are going to attempt to make a "u-turn" at the intersection of Lampson and Heather Street, a key intersection for CPE residents as it is one of only four entrances into the community. Lampson has a very short dedicated turn lane onto Heather that will be quickly overcome during peak travel hours. Heather Park is heavily utilized by the residents of CPE and there are adults and children riding parks in and near the park. Introducing new and unsafe turn movements along with hundreds of new vehicle trips per day into the Heather/Lampson intersection is a significant environmental impact that cannot be mitigated. The developer is creating this impact but doing nothing to address it.

17-117 (CONT.)

Fifth, this project takes the concept of urban in-fill to a ridiculous extreme. Between 500 and 1000 people will be crammed into the site because the developer is taking advantage of every density forgiveness ratio possible with basically no open space to be built. The residents and their guests will be forced to recreate at Heather Park but will bear none of the costs for upkeep or increased impacts because it is located in Seal Beach, not Los Alamitos. The park facilities and tennis courts are already oversubscribed with the current residents, adding in a few hundred more is another unplanned impact that the developer is exploiting for financial gain at the cost of environmental impacts to the surrounding residents.

17-118

Along the same lines, Arbor Park is utilized for the local AYSO soccer league on many weekends during the year, providing a great recreational opportunity for local kids. The current parking lot at the site is a key component of the use, as it allows for 300 vehicles to safely park and accommodate the large use of the fields. This project will eliminate that entire parking lot, forcing AYSO parents and guests to park in College Park East as there is simply no other parking within a walkable area in either direction. Adding these vehicles onto the project's "new" vehicles will only further impact CPE's residents.

17-119

Accordingly, I ask that the City of Los Alamitos insist that these impacts (along with a myriad of other impacts that people far smarter than me can and have identified) be studied as part of the land use and environmental approval process. **Ultimately, this project should be denied along with the use, zoning**

17-120

and other waivers/changes requested by the project applicant. There is a feasible use to be made of the 4655 Lampson Avenue property – jamming a project down the communities' throats without the proper design criteria is simply not the way forward.

17-120
(CONT.)

Kevin A. Day
Shareholder

kday@alvaradosmith.com | BIO

1 MacArthur Place, Suite 200, Santa Ana, CA 92707
714.852.6800 AlvaradoSmith.com

Excellence in Practice. Diversity in People.

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"Tom Oliver" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2F50968C6D3942FB8137C610A(
FW: 4665 Lampson Ave. PWQMP Review #1
Nov 3, 2022 at 11:18:21 AM
"Les Johnson (ljohnson@tbplanning.com)" <ljohnson@tbplanning.com>

Hi Les,

Here are our Consultant comments on the WQMP, attached.

As always, if you have any questions, please email or call me.

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Jordan Koga <jordankoga@caa.inc>
Sent: Tuesday, November 1, 2022 5:31 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Mike Smith <mikesmith@caa.inc>
Subject: 4665 Lampson Ave. PWQMP Review #1

Good evening Tom,
I have attached the review memo for the subject project. Please feel free to contact me if you have any questions.
Regards,

--
Jordan Koga
Environmental Analyst

Charles Abbott Associates, Inc.
27201 Puerta Real, Suite 200
Mission Viejo, CA 92691
Phone: (949) 421-9373

4665 Lampson Ave....#1.pdf

17-121

CAA
PROFESSIONAL BUILDING & SAFETY/ENGINEERING/INFRASTRUCTURE MANAGEMENT

MEMORANDUM

To: Tom Oliver, Associate Planner
From: Jordan Koga, Environmental Analyst
Date: November 1, 2022
Subject: 4665 Lampson Ave. PWQMP Review #1

Charles Abbott Associates, Inc. (CAA) Staff have completed the review of the Preliminary Water Quality Management Plan (WQMP) for the project located at 4665 Lampson Ave., in the City of Los Alamitos. The project applicant proposes to redevelop the site to construct 76 buildings consisting of 2- and 3-story detached single family homes, 3-story townhomes, and 3-story apartment buildings, which totals 12.12 acres. The project applicant has proposed seven (7) Modular Wetlands Systems for Proprietary Biotreatment (BIO-7) as the post-construction best management practices (BMPs) for compliance with the current MS4 Permit.

WQMP Deficiencies
The project applicant must address the deficiencies indicated below prior to approval of this PWQMP.

General

1. The PWQMP shall include a signed certification statement from the project owner as well as a signature and stamp from the engineer of record, which post-dates the final revision. This may be satisfied after it is determined that no further revisions are necessary.
2. Include the project's signed and notarized Maintenance Covenant with the O&M Plan, in the Final WQMP. Please include these items with the Site Plan Exhibit as a combined attachment to the Final WQMP. The O&M Plan, Maintenance Covenant, and Site Plan Exhibit will be recorded as a standalone document at project completion.
3. Provide the month, day, and year of original plan development as well as all subsequent revision dates on the Title Page.
4. It is acknowledged that a 90% impervious percentage was selected as a conservative value for preliminary design. Please note: a thorough review will take place in the final design stages once an impervious percentage is determined and the BMP size may be affected due to the change.
5. Demonstrate the LID BMPs are designed for the peak flow rate for the 1-year, 1-hour storm event per the Trash Provisions.

17-122

CHARLES ABBOTT ASSOCIATES, INC.
27201 PUERTA REAL • SUITE 220 • MISSION VIEJO, CA 92691
TOLL FREE: (866) 530-4980 • PHONE: (949) 367-2850 • FAX: (949) 367-2852
WWW.CAAPROFESSIONALS.COM

2

CAA
PROFESSIONAL BUILDING & SAFETY/ENGINEERING/INFRASTRUCTURE MANAGEMENT

Section I

6. Provide the water quality conditions of approval verbatim in the Final WQMP.
7. Revise Section I to include the TMDLs for the San Gabriel River. Refer to the TMDLs page on the Orange County Public Works website.

Section II

8. Revise Section II.1 to specify the development category. The provided MWQMP language is acceptable.
9. Revise the last paragraph in the project narrative to update the following conflicting statement: "divided into five (7) Drainage Management Areas (DMA)".

Section III

10. The following statement in Section III.2 contradicts the provided groundwater results and the geotechnical report: "Groundwater was **not** encountered in three of our borings…". Revise accordingly.
11. Revise the receiving waters in Section III.3 to match the drainage narrative in Section II.1 and the provided Susceptibility Analysis of San Gabriel-Coyote Creek HCOC map. It does not appear the site is directly tributary to Coyote Creek nor San Gabriel River Reach 1. Additionally, provide the 303(d) listed impairments for San Pedro Bay Near/Off Shore Zones and update the 303(d) listed impairments for San Gabriel River Estuary per the most updated list (California 2020-2022 Integrated Report).
12. Update the TMDLs for the receiving waters in Section III.3. It appears the 303(d) listed impairments were included in this section. Refer to the TMDLs page on the Orange County Public Works website.

Section IV

13. The DCV values provided in Section IV.1 do not match the values calculated utilizing the numbers provided. It is acknowledged that these DCV values will change once the DMA's imperviousness is finalized but the volumes shall be accurate per the values provided. Revise accordingly.
14. Update the narrative in Section IV.3.3 to state the harvested water demand and feasibility assessment was performed per Worksheet J and the results show that evapotranspiration and rainwater harvesting BMPs are infeasible.

WQMP Site Plan

15. Provide surface flow arrows.
16. Label the ultimate discharge/outlet point for the project site.
17. Provide a sample of the storm drain stenciling that will be utilized on-site.
18. Show the private storm drain system, underground storage system, and any additional catch basins. A separate exhibit may be necessary.
19. Provide a conceptual detail of the storm drain system connecting to the underground

17-122
(CONT.)

CHARLES ABBOTT ASSOCIATES, INC.
27201 PUERTA REAL • SUITE 220 • MISSION VIEJO, CA 92691
TOLL FREE: (866) 530-4980 • PHONE: (949) 367-2850 • FAX: (949) 367-2852
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3

CAA
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storage system, which connects to the sump pump to discharge off-site. Provide all associated elevations.

Attachments

20. There are several conflicting answers provided for Table 2.7, such as Items 1, 5, 9, and 11. Revise accordingly.
21. Update the Project area on Worksheet I to match the total site area.
22. Update the value from Table X.8 for Item #14 on Worksheet J to ensure the value is for the design capture storm depth of 0.8 in.
23. Provide the site-specific MWS detail sheets for all proposed units. Ensure the high-capacity model details are also included.
24. Provide the most updated TAPE/GULD certification documents for the proposed MWS.
25. Provide all applicable grading plan sheets.

If you have any questions or require additional information, please feel free to contact me at (949) 421-9373 or jordankoga@caa.inc.

17-122
(CONT.)

CHARLES ABBOTT ASSOCIATES, INC.
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TOLL FREE: (866) 530-4980 • PHONE: (949) 367-2850 • FAX: (949) 367-2852
WWW.CAAPROFESSIONALS.COM

4

"Tom Oliver" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2F50968C6D3942FB8137C610A(
FW: Lampson Housing Project
Nov 14, 2022 at 9:37:59 AM
"Les Johnson (ljohnson@tbplanning.com)" <ljohnson@tbplanning.com>

FYI

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Tom Oliver
Sent: Monday, November 14, 2022 9:40 AM
To: Eric Holmes <ericholmes1@gmail.com>
Cc: Jill Ingram <jingram@sealbeachca.gov>; sealbeachpa@gmail.com
Subject: RE: Lampson Housing Project

Hi Eric,

Good morning. Thanks for your email, and the suggestion. I will forward your email to the Developer of the project.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Eric Holmes <ericholmes1@gmail.com>
Sent: Thursday, November 10, 2022 7:42 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Jill Ingram <jingram@sealbeachca.gov>; sealbeachpa@gmail.com
Subject: Lampson Housing Project

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ericholmes1 @ gmail.com

Tom,

My name is Eric Holmes and I live in the College Park East neighborhood, right across from the proposed housing project on Lampson.

Not sure who to chat with there, but our MAIN park and playground for the kids and where we have all of our events is at Heather Park. That park cannot handle additional kids, it's small and needs to be remodeled.

I think the parents of College Park East would be much more receptive if there was some agreement to split the remodel of that park with the city of Seal Beach.

I've CC'd Jill Ingram on this email as well.

I have started the Seal Beach Playground association and have over 100 members that can help plan. All of whom live in CPE.

Let me know how I can help facilitate this.

Thanks!
Eric Holmes

17-123

From: Nicole Morse
To: Les Johnson; Justin Nguyen
Subject: FW: Lampson Project Comments
Date: Wednesday, October 26, 2022 2:53:21 PM
Attachments: image002.png
image003.png

FYI

Nicole Morse, Esq.
Principal

T&B Planning, Inc.
3200 El Camino Real, Suite 100 Irvine, CA 92602
Office: 714.505.6360 Ext. 126
Cell: 949.887.6715
nmorse@tbplanning.com | www.tbplanning.com
Nationally Certified Women's Business Enterprise (WBENC)

From: Tom Oliver <Toliver@cityoflosalamitos.org>
Sent: Wednesday, October 26, 2022 1:49 PM
To: Nicole Morse <NMorse@tbplanning.com>
Subject: FW: Lampson Project Comments

Hi Nicole,

Here is another letter for the EIR consideration.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Mica Brandt <micabell@gmail.com>
Sent: Wednesday, October 26, 2022 1:28 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>

Cc: Shelley Hasselbrink <SHasselbrink@cityoflosalamitos.org>; Tanya Doby <TDoby@cityoflosalamitos.org>; Mark Chirco <MChirco@cityoflosalamitos.org>; Jordan Nefulda <JNefulda@cityoflosalamitos.org>; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender micabell@gmail.com

Hello City of Los Alamitos and Seal Beach-
I have been a resident of CPE for the past 6 and a half years with 2 elementary school kids who attend Lee. The proposed Lampon project is going to cause havoc in our amazing neighborhood and our Community.

The added traffic to the already busy Lampson Ave will make dropping the kids off at school and commuting to work even more difficult than it already is (only one turn lane to get from Lampson to Seal Beach Blvd!) Not to mention the speed that the cars already drive, adding more cars without widening the sidewalks or the already insanely dangerous bike lane. 17-124

There are nowhere close to enough parking spaces for the residents of this community and therefore will drive those cars into our neighborhood - and when they do, they will take up our parking spaces. We already have issues with people coming and parking and leaving their cars in the neighborhood for several days since it is safe, so now we will have to be utilizing police services more to have those cars cited or towed - is Los Alamitos PD going to cover these calls, no probably not, Seal Beach PD will have to incur these extra calls. 17-125

On Weekdays and Weekends AYSO utilizes Arbor park for soccer practice - where will these families park when the Arbor Park Parking is being utilized by the residents or their guests? More traffic crossing Lampson with young kids. Additionally, Arbor Park Dog park will have even more restricted parking - and it is the best dog park around - I have utilized it for 15 years! 17-126

The Right Turn only option for residents coming out of the complex will create congestion and dangerous situations at the corner of Heather and Lampson - Also the corner of where Heather Park is - the most heavily trafficked park in CPE. There will be u turns and running of the red lights more than there already are. This is the intersection where the major school bus pick up is every morning and afternoon - we need to keep our kids safe from this added traffic! 17-127

The Lampson Project only includes 14,000 square feet of open space, but that space does not include a playground for kids, therefore those families are going to be utilizing our CPE parks - is Los Alamitos going to help upkeep and repair our current parks? An added 246 units will overcrowd our already heavily utilized parks, not to mention will add more noise for the neighboring homes.

I am concerned for the safety and well being of my children and the neighborhood - we chose CPE over other neighborhoods for specific reasons and this project will bring down the quality of life in CPE! 17-128

Thank you for reading and taking these items into consideration!
Mica Brandt
3761 Oleander St

"Tom Oliver" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2F50968C6D3942FB8137C610A(
FW: Stop Lampson Sign
Nov 7, 2022 at 1:34:52 PM
"Javier Marquez" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=77313e7c4b7f4d47ab14d71588f447f3-Javier Ma

Hi Javier,

Good afternoon. Could you send a picture of the Stop Lampson sign?

As always, if you have any questions, please email or call me.

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

My City ♥ My Los Al

From: Les Johnson <ljohnson@tbplanning.com>
Sent: Monday, November 7, 2022 1:01 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: RE: Stop Lampson Sign

Tom,
Thanks for letting us know. Would greatly appreciate it if it could be removed. Would also appreciate if you could forward a photo of the sign to me, if not an inconvenience.
Thank you, Tom.

Les Johnson
Director of Planning Services

T&B Planning, Inc.
3200 El Camino Real, Suite 100 Irvine, CA 92602
Office: 714.505.6360 Ext. 111
Cell: 760.275.2487
ljohnson@tbplanning.com
www.tbplanning.com
Nationally Certified Women's Business Enterprise (WBENC)

From: Tom Oliver <Toliver@cityoflosalamitos.org>
Sent: Monday, November 7, 2022 12:46 PM
To: Les Johnson <ljohnson@tbplanning.com>
Subject: Stop Lampson Sign

Hi Les,

Someone placed a stop Lampson project on the Lampson property. Would you like for it to be taken away?

As always, if you have any questions, please email or call me.

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303

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17-129

From: Helen Knisley
To: Tom Oliver
Subject: Fw: Stop The Lampson Project
Date: Wednesday, November 2, 2022 11:39:02 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender hhknisley@yahoo.com

----- Forwarded Message -----
From: Helen Knisley <hhknisley@yahoo.com>
To: sprtsmchns@netzero.net <sprtsmchns@netzero.net>; shasselbrink@cityoflosalamitos.org <shasselbrink@cityoflosalamitos.org>; tdoby@cityoflosalamitos.org <tdoby@cityoflosalamitos.org>; mchirco@cityoflosalamitos.org <mchirco@cityoflosalamitos.org>; jnefulda@cityoflosalamitos.org <jnefulda@cityoflosalamitos.org>; toliver@cityoflosalamits.org <toliver@cityoflosalamits.org>; jkalmick@sealbeachca.gov <jkalmick@sealbeachca.gov>; mvaripapa@sealbeachca.gov <mvaripapa@sealbeachca.gov>; tmoore@sealbeachca.gov <tmoore@sealbeachca.gov>; ssustarsic@sealbeachca.gov <ssustarsic@sealbeachca.gov>; smassalavitt@sealbeachca.gov <smassalavitt@sealbeachca.gov>; stoplampsonproject@gmail.com <stoplampsonproject@gmail.com>
Sent: Wednesday, November 2, 2022 at 11:33:21 PM PDT
Subject: Stop The Lampson Project

November 1, 2022

RE: Stop The Lampson Project

This letter is to the Los Alamitos Planning Department, to T&B Planning, to MJW Investments, the Builder/Development Company and to the surrounding cities and residences that will be affected.

It was apparent at the 10/20/2022 Los Alamitos City Meeting that the City of Los Alamitos, together with T&B Planning (handling the Environmental Impact Study), and the Builder/Developer, MJW Investments Company's focus was to keep this project as hush hush as possible so the citizens and families living in the nearby areas would neither know about, nor be able to voice their

17-130

concerns to this proposed project on Lampson Ave. With that said, aside from Los Alamitos, the outcome of this project will have long term safety issues affecting several surrounding neighborhoods - in addition to College Park East, the residents immediately across the street on Lampson. The neighboring residents of West Garden Grove (to the immediate east), Los Alamitos (adjacent to the Joint Forces Base), and Rossmoor (home to four key Los Alamitos elementary schools) will all be affected by increased traffic and safety issues.

17-130 (CONT.)

Pros and Cons to this Project:
Pros:

Cons:

1.) **Land grab** to build extremely compacted / high density housing on 12.3 acres zoned for business … not zoned for residential.

17-131

2.) Extremely **limited accessibility** "into" and "out of" the complex. This, in and of itself is a huge fire hazard and safety concern for police/emergency access.

17-132

3.) **Dangerous traffic / pedestrian safety issues** – this project is directly off Lampson Ave. without any designated stop lights to be put in.

17-133

a.) This is already an accident-prone main street – which will only intensify with well over 240 + additional cars and school buses coming and going during the day –

17-134

especially during high traffic rush hours.

17-134 (CONT.)

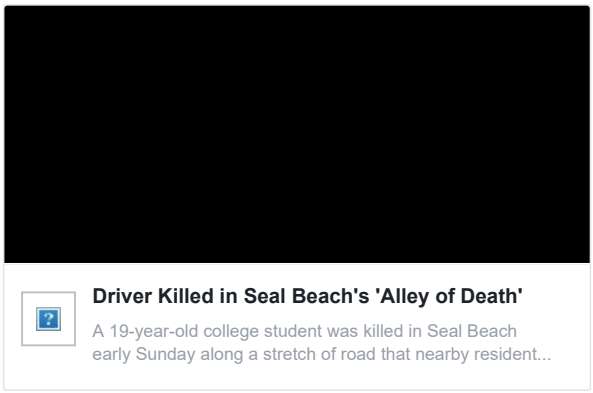
b.) At this Lampson Ave. location, the exits can only be right turns – taking you west on Lampson Ave. towards Seal Beach Blvd. - a busy main highway. For those wanting to head East towards Valley View St., the only option is to pull a U-turn at Heather Park - which is dangerous with the College Park East residential traffic.

c.) Lampson Ave. is a key thorough way to avoid the 405 Freeway stop & go traffic, a direct route to and from Valley View St., and one of the few remaining safe routes for the established Los Alamitos High School cross country teams.

17-135

d.) For years Lampson Ave. was known as the **"Alley of Death"** for motorists (Driver Killed in Seal Beach's 'Alley of Death' before raised median strips were put in as safety dividers. What is to prevent this street from becoming that again with all the hundreds of additional vehicles / pedestrian bikes (and many more passengers/pedestrians) on a daily basis, in a hurry to get to and from work and/or taking their kids to and from school? Who wins or worse yet, who loses in this situation? What are the statistics and number of accidents / near misses reported on this street alone within the last 5 /10 years, let alone on a weekly/monthly basis? Now add an additional 500+ residents to this highly traveled street when everyone is in a hurry. How will the statistics read then?

17-136



17-136 (CONT.)

4.) The meeting drew great **concern for the lack of parking** in the complex as T&B Planning played down the fact that each housing unit may likely have 2 or more cars. If there is already not enough planned parking within the complex, then who will be forced to face the brunt of providing parking? Most likely, the College Park East residents directly across the street - who themselves neither have the extra space for this nor should be subjected to "deal with it."

17-137

5.) College Park East is a family community that is well known for its well visited weekend **Soccer Little League games**. The bulk of attendees' park across Lampson Ave. on this property. What are your plans in how best to handle this ongoing successful tradition for youths and their families in this community?

17-138

6.) The **renderings** and large number of proposed homes, show as, **thrown together boxes** all packed into an area the size of a sardine can – with little room to walk around, little room to park, and little room to safely drive in and out.

17-139

There are no attachments in this message. Learn more.

"Sheena k" <asheena.k@gmail.com>
Fwd: Lampson Project
Dec 15, 2022 at 5:42:27 PM
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender asheena.k @ gmail.com

---------- Forwarded message ---------
From: **Sheena k** <asheena.k@gmail.com>
Date: Wed, Dec 14, 2022, 2:58 PM
Subject: Lampson Project
To: <planningcommision@cityoflosalamitos.com>

Hello,

My name is Asheena Lee. I am a resident of Parkewood in Los Alamitos. I have a few concerns about the Lampson project.

1. Please consider the dangerous increase in Uturns. We need a no Uturn sign and added lights to prevent mortality and morbidity. 17-140

2. Please request that they add more parking. Living in Parkewood I am aware of how quickly parking spaces fill up. We already have a problem with so many parked cars on the road it is often dangerous driving and walking. There are narrow passages with two-way traffic trying to get into a small space due to so many street vehicles. This will only be amplified if the Lampson project does not have appropriate parking. Parking garages or fewer units would help with this. 17-141

3. Please consider requiring a public park. We do not have many parks here, and the park we have is in seal beach. With adding so many residents, we will need a safe place for children to play. Parks decrease crime and increase the quality of life. Please consider requiring some of the land for a park for the children. 17-142

4. Consider keeping some of the land commercial. There is not much commerce on the street here. It may be a great place to keep a few units that could be used for small restaurants such as coffee shops, bakeries, or restaurants. This would bring further revenue to the city and reinvigorate the community. 17-143

Thank you,
Asheena Lee

"Elisha Boothe" <elishanboothe@gmail.com>
Fwd: PROPOSED 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE A.K.A. WEST ED PROPERTY
Nov 1, 2022 at 10:43:43 PM
"Ron Noda" <rnoda@cityoflosalamitos.org>,
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender elishanboothe @ gmail.com

---------- Forwarded message ---------
From: **info.ayso159 (Region 159)** <clubnews@bluesombrero.com>
Date: Tue, Nov 1, 2022 at 10:31 PM
Subject: PROPOSED 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE A.K.A. WEST ED PROPERTY
To: <elishanboothe@gmail.com>

Good Evening Friends and Families

We are sending out this informational email out to help spread the word of the current proposed project in the works with the City of Los Alamitos for the West Ed property located at

4665 Lampson Avenue and how it will affect our Region of 159 and the residents of Los Alamitos and Seal Beach communities.

Our region has been part of the local community for over 40 years, and our mission is to provide world-class youth soccer programs. For more than 20 years, Arbor Park has been our primary
facility to provide our community-based soccer programs. In the fall and spring seasons Arbor Park is a critical facility for our recreational, all-star, and club soccer programs, and in the summer it hosts soccer camps. Our primary season is in the fall,
when over 1,000 players and their families come together as a community to practice and play soccer. Due to the popularity of our soccer programs at Arbor Park, we have always utilized the parking lot at

4665 Lampson Avenue and have done so for over 20 years.

The City and other entities involved in the project are in the draft stages of working on an "EIR" which is an Environmental
Impact Report (DEIR) for the proposed project. They are taking comments/concerns regarding the environmental impact of this project from the
community with a deadline of Wednesday, November 2, 2022. Below we are sharing our concerns about the project so that the community can know and understand the impact that this proposal will have
the Region and the community. We urge you to share your comments and concerns about the environmental impact this will have on your community as well. All correspondence on this issue should be sent to..

Tom Oliver, Associate Planner
City of Los Alamitos Planning Division
3191
Katella Avenue

17-144

Los
Alamitos, CA 90720
toliver@cityoflosalamitos.org
(562) 431-3538, Ext. 300

AYSO Region 159 environmental concerns regarding the proposed 246 Residential Unit Project for

4665 Lampson Ave a.k.a. West Ed Property

1. Arbor Park has approximately 100 parking spots, with 30 of those parking spaces located on the south side of the dog park. Region 159 has always strived to provide adequate parking for the dog park, which leaves roughly 70 parking spaces available on Saturdays. Therefore, Region 159 families and volunteers utilizing Arbor Park on Saturdays routinely park in the 4665 Lampson Avenue parking lot. That parking lot provides over 300 parking spaces that are essential to our use of Arbor Park and ensure soccer families are not parking in the nearby neighborhood of College Park East (CPE). The proposed project at 4665 Lampson Avenue states it will provide 557 parking spaces that will be entering and leaving the property from Lampson Avenue between traffic lights at Heather Street and Rose Street. The lack of signal control currently planned for traffic in and out of the development will adversely impact traffic safety on Lampson. It is already a dangerous street with a history of serious accidents.

The number of planned parking spaces is insufficient for the number of planned residences. Garage spaces will be used as storage, or other purposes other than parking. Many of the homes will have more than two or three cars and drivers. These homes will have guests that will need parking as well. Region 159 is concerned Arbor Park or CPE residential streets will then become overflow for the planned development.

17-144
(CONT.)

2. CPE has less park acreage than other neighborhoods in Seal Beach, Los Alamitos or Rossmoor. Arbor Park has helped fill that void by providing a large grass area to support organized and unorganized sports including soccer and baseball. The proposed new development details do not show any park space, such as a playground for residents. Region 159 requests the DEIR include a listing of existing parks within a ½ mile of the planned development. In addition, we request the DEIR include an evaluation if the planned development should include park space, such as a playground, basketball court, etc. for the residents of the planned development, to not further impact already limited nearby park facilities.

3. Arbor Park is currently home to many recreational activities, some of which begin in the early hours of the morning, plus a portion of Arbor Park is used for a very popular dog park. Region 159 requests that the DEIR include an evaluation of noise at Arbor Park during busy weekends when the park is filled with soccer matches and the dog park is being utilized. To avoid future complaints from the new residents of the planned development about noise from soccer Saturdays and the dog park, noise impacts should be studied

2

and if necessary, mitigation measures proposed. The noise study should be conducted to include all hours of the day on Saturdays when whistles, loud voices, cheering and other noises are made.

If you have any questions/comments/concerns of your own regarding this project please reach out to the City of Los Alamitos and express them!

Thank you for your continued support of our Region!

17-144 (CONT.)

AYSO Region 159

For general inquiries, please contact your organization directly.
Email: info.ayso159@gmail.com

SPORTS CONNECT
746 Willoughby Way NE, Atlanta, GA 30312

Want to opt out of these types of emails?

elishanboothe@gmail.com UNSUBSCRIBE

3

From: howley.ryan
To: Tom Oliver
Subject: Lampson Ave project EIR comments
Date: Wednesday, November 2, 2022 11:50:27 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender howley.ryan@yahoo.com

In regards to the PROPOSED 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE

Development of this project would impact the community in a negative way by taking away parking opportunities for the AYSO soccer fields and dog park

It will increase traffic and pollution .

Youth soccer provides life skills for our youth by build leadership and teamwork. Soccer also keeps kids physical fit and gives structure and purpose .

Access to parking for the fields is vital. I am not in favor of this project as proposed.

Sent from my Verizon, Samsung Galaxy smartphone

17-145

From: Melanie Gotto
To: Tom Oliver
Subject: Lampson Ave West Ed Property
Date: Wednesday, November 2, 2022 9:05:21 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender melaniegotto@gmail.com

Hello,

I am concerned about the proposed West Ed Property. I urge you to reconsidered moving forward with this development as it will negatively impact my family as a home owner in College Park East and a parent of players within AYSO region 159. I'm concerned about noise pollution, overcrowding of Heather park, non CPE residents crowding the streets in CPE with their cars, traffic safety on Lampson, and the negative effects this project will have on AYSO soccer. Please do not move forward with the Lampson Ave West Ed property.

Sincerely,
Melanie Gotto (CPE homeowner/AYSO parent)

17-146

From:	Mike Polye
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject:	Lampson Avenue Project - Comments and Concern
Date:	Tuesday, November 1, 2022 9:02:25 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mike.polye@gmail.com

Mr. Oliver,

I am a resident of the College Park East community in Seal Beach and I am writing to express my grave concern regarding the impacts of a potential housing development slated to be built at 4665 Lampson Avenue in Los Alamitos ("Lampson Avenue Project").

This new, high-density development will have a myriad of negative impacts on our community both from a quality of life AND environmental standpoint. As a College Park East resident who lives on Ironwood Avenue, which runs parallel to Lampson Avenue, I already experience a great deal of sound pollution from the ever-increasing traffic just beyond my backyard wall. Adding a development to accommodate 800+ additional residents, along with their guests, will only add to the sound pollution from the added traffic and make the northside Ironwood Avenue residents' backyards unbearable during certain times of day.

17-147

Just as concerning as the sound pollution from additional vehicles on Lampson is the increased traffic as a result. Lampson is already a very dangerous road with numerous accidents occurring on a regular basis. The area of Lampson that runs along the community of College Park East has historically been known as "The Alley of Death," due to the significant number of fatalities that have occurred in the area. With no space to expand Lampson, the increased traffic will only add to the number of dangerous and deadly accidents. Below are some examples worth noting of accidents in this area of Lampson. One of these is from this past month (October 2022). Another involves a child. I have 3 children of my own, who often ride their bikes in the area, and I do not want their abilities to ride in the area to be hindered by uncontrollable traffic that cannot be accommodated by the Lampson intersections.

General safety and pedestrian safety should be a top priority for both the city of Los Alamitos and Seal Beach. An increase in injury and death rates in the area should not be on anyone's conscience.

https://www.sunnews.org/drunk-driver-gets-15-to-life-for-lampson-avenue-death/
https://www.latimes.com/archives/la-xpm-1989-09-11-me-1559-story.html
https://www.oc-breeze.com/2022/10/04/219326_seal-beach-police-investigating-serious-traffic-collision-involving-two-vehicles-on-lampson-avenue/
https://www.laweekly.com/rider-hospitalized-motorcycle-crash-lampson-avenue-seal-beach-ca/
https://www.ocregister.com/2013/06/17/lampson-speeds-scrutinized-after-accidents/

17-148

While dangerously increasing traffic and noise pollution are of utmost concern, there are also several other factors that are essential for the City of Los Alamitos to investigate. Below is a list of concerns that MUST be addressed in the environmental impact assessments:

- Aesthetics (visual perception of environment)
    - Daytime glare and its impact on drivers, cyclists and neighboring homes

17-149

- Nighttime illumination
- Existing visual characteristics

- Property Values
  - Existing home values are likely to decrease and be adversely impacted due to additional multi-family dwellings alleviating housing pressure in an area that is primarily single family homes
- Air Quality and Environmental Conditions
  - Increased carbon monoxide emissions
  - Increased particulate matter
  - Increased greenhouse gas emissions
- Biological Impacts
  - The appropriate agencies must investigate how this development will impact local wildlife
  - There are a large number and variety of birds in the area – hawks, falcons and other large birds of prey, as well as squirrels and other varieties of smaller birds
    - Do any of these birds nest and feed in the vicinity of the development site?
    - Do any of these birds of prey have special environmental protective or endangered status?
  - How many trees will be eliminated for this project and how will this impact shade and air quality?
- Geology and Soils
  - Impact on drainage in the area
  - Runoff concerns
  - How will the local soccer field conditions be impacted?
- Public Protection Services Impact
  - Fire protection
    - High population density requires additional fire protection services
    - Multi-family dwellings tend to require more fire protection
  - Police protection
    - High population density requires additional fire protection services
    - Is there an expectation that crime may increase in the general vicinity due to a higher population density?
    - Additional police support from the City of Seal Beach will be required as a result of a development that is taking place in a separate city (Los Alamitos), which will impact Seal Beach taxes
- Other Public Services
  - Library
    - Can local libraries accommodate the additional residents?
  - Parks and Recreation (There are no planned parks or play areas for the residents of this development which will directly impact College Park East parks)
    - Can local parks accommodate the additional residents causing an increased rate of wear and tear?

As the leader of the city council in Los Alamitos, it is imperative that you perform the necessary steps and due diligence to halt the Lampson Project. I urge you to disapprove the current proposed development plan, reassess and preserve the well-being of the surrounding communities.

Regards,

Mike and Jessica Polye

4201 Ironwood Avenue
Seal Beach, CA 90740
973-517-3963

17-149 (CONT.)
17-150
17-151
17-152
17-153
17-154
17-155

From: John Geraghty CPA
To: Tom Oliver
Subject: Lampson Developement concern
Date: Wednesday, November 2, 2022 7:35:59 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender geraghtycpa@gmail.com

For 20 years the parking lot on lampson at West Ed has a CalTrans park and ride. New development is missing the park and ride.

Also for 20 years the parking lot at West Ed has been used as a community parking lot to support the community park, Arbor that host AYSO games.

I don't see any plan for keeping this parking lot for the community park.

This need to be evaluated in the EIR.

John Geraghty

17-156

From: Megan Cecala
To: Tom Oliver
Subject: Lampson Development
Date: Wednesday, November 2, 2022 1:21:01 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender megancecala@aol.com

Good afternoon,

I'm a resident of College Park East and am writing to express my concern about the new proposed housing development on Lampson. I hope that the city will not allow the approval of this development. This development will overpopulate Lampson/CPE area and cause overflow parking in our neighborhood. This will also make traffic on Lampson even worse than it currently is, which has caused many fatal accidents over the years. Please don't approve the plans to move forward.

Thank you,

Megan Cecala

17-157

From: user1963@yahoo.com
To: Tom Oliver
Subject: Lampson development project
Date: Wednesday, November 2, 2022 10:59:45 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender user1963@yahoo.com

I write to express concerns about the proposed development of the land on Lampson, adjacent to the military base and golf course. Both Arbor Park and the proposed development property are home to many types of wildlife. There are rabbits, coyotes, and red-tailed hawks, to name a few, including endangered species. On a regular basis, I see no fewer than three (3) pairs of nesting Red-Tailed hawks in the trees on the property. Any plan MUST include parameters for the development that will NOT cause nesting parents or babies to be disturbed during breeding season. A wildlife expert or avian biologist must be specifically consulted to insure that endangered species and nesting birds are not disturbed in violation of the Endangered Species Act.

17-158

Another concern is that the various animals on the site will lose their homes, and will likely travel into the local neighborhoods seeking refuge. The homeowners in the neighborhood will likely demand that the city trap and kill these animals. This is not acceptable. Governments continually encourage people to fear wildlife, therefore giving said government the basis for killing off the wildlife. Any plan for the property MUST include specific details of how the wildlife will be effected by the plan and MUST include a NO KILL requirement for a set number of years until the wildlife can relocate themselves and find new homes and resources.

17-159

Finally, since the state is continually battling the current or next drought - where is the water supply originating to provide for this project? Is the re-directing of water to this project from another source, further causing harm to endangered species in the locations where the water is taken from? Will taking more water from rivers, and other sources cause the loss of wetlands needed for migratory animals, who again are endangered species and protected by Federal law?

17-160

Additional concerns related to the project, but not the EIS include national security issues in placing additional people and houses in such close proximity to a military installation. Also, while the state has mandated low income housing, placing such housing adjacent to middle class housing will likely lower the value of adjacent homes, and possibly lowering property taxes of those who request a reassessment. Devaluation is also likely since most low income housing is accompanied by crime, drugs, unemployment, and poorly maintained housing itself? What plan is there for additional police battle increases in crime? Where do the additional resources originate for code enforcement of housing maintenance rules? What plan is there to deal with 1000 additional cars traveling along Lampson and needing to merge onto Seal Beach Blvd. - a place is already currently impacted by excessive traffic?

This is a poorly designed plan, that will kill long term wildlife, lower the standard of living for all in this area, and add more issues to the already precarious issue of water in the state. I hope the city will reconsider any support for this plan.

Respectfully Submitted.
L. Pellegrini, Ph.D.

17-161

From: Stephen Freeland
To: Tom Oliver
Subject: Lampson Housing Development
Date: Wednesday, November 2, 2022 2:25:14 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender s.freeland@gmail.com

Hi Tom,

Lampson is already a dangerous street. Just two weeks ago a driver was killed in an auto accident. Allowing high density housing at the West Ed complex is crazy. The amount of cars turning left into the housing project and those coming out will cause many more accidents and fatalities. The increased traffic will be awful.

17-162

Arbor park has been utilized by sports teams for over 40 years. How long until the park gets shut down because of noise complaints by the residents of the new housing project?

To put so many houses and apartments in such a little space with NO playground is cruel. It will force kids to have to cross lampson to go to Heather Park across the street.

17-163

The space needs to be better utilized. If housing needs to go in that space then there needs to be more parking, have it connected to Arbor park and have a playground built. The developers are trying to shove as many houses in there as possible to maximize their profits, not benefit the city.

17-164

Thanks,
Stephen Freeland

From: Gene Kochevar
To: Tom Oliver
Subject: Lampson housing development
Date: Tuesday, November 1, 2022 9:38:44 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender gkochevar@roadrunner.com

Your project to develop houses across from the College Park east development is great for Los Alamitos at the expense of College Park east residents. Our home in College Park east has probably already decreased in value as a result of just the mere announcement of your project. My wife and I are considering moving because we know how much traffic will get worse going up and down Lampson. Adding thousands of additional drivers with only Lampson to convey them to where they want to go is dangerous and unacceptable. Lampson is already dangerous – I can't imagine how many more souls will lose their lives after you and Los Alamitos are done adding to the traffic.

17-165

This is a perfect example of one group of individuals profiting on the backs of another group of individuals.

If you want to develop housing across from Lampson, figure out a way to create an entirely new boulevard that somehow parallels Lampson to handle the traffic for you new community.

We already have aircraft overflights from the military base and constant freeway construction to deal with, but we knew about that when we bought. Now we have to handle a greedy neighboring community as well.

What are you thinking?! Build new office buildings or expand Arbor Park with maybe 20 units of new housing! This shouldn't be a get rich opportunity for Los Alamitos.

Gene Kochevar
714-293-8178

17-166

From:	Brian & Mimi Cannizzaro
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Housing Project - comment
Date:	Tuesday, November 1, 2022 8:10:33 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender brianandmimi@gmail.com

Dear City Leaders

I am very concerned about the negative impact that the proposed housing development on Lampson Avenue will have on our community. Specifically, I am concerned about the predictable delays caused by increased traffic on Lampson Avenue, Seal Beach Blvd., and Valley View Blvd., the severe lack of adequate parking for the new residents, and the dangers associated with unprotected left turns and no new stop lights on Lampson. 17-167

Our community cannot handle such a large increase in population. Lampson already backs up every morning and afternoon. More residents will mean more cars, and longer back ups. It's also not safe to have so many people dependent on one thoroughfare. There are no alternate routes from CPE. 17-168

Additionally, there are not nearly enough parking spaces in the proposed design. That will cause residents of the new development to look for parking in College Park East, taking away spots from current residents. It will also increase pedestrian crossings on Lampson Blvd which will be dangerous. 17-169

Finally, there are several serious accidents on Lampson Ave every year. An increase in traffic will no doubt lead to an increase in car accidents. It's simply not safe to build that many new housing units in the area.

Please reject the current housing proposal. The number of units need to be significantly reduced, and parking spots need to be doubled at a minimum. 17-170

Thank you,

Brian and Mimi Cannizzaro
3541 Primrose Circle
Seal Beach, CA 90740

From: David Vititow
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Housing Project
Date: Wednesday, November 2, 2022 8:19:01 AM

Hello,

My name is David Vititow and I am a long time resident of College Park East. I understand a housing project is going up where the federal building now stands across from Rose and Lampson by the Dog Park. I have several major concerns about a housing project of that size going up. 17-171

My biggest concern is parking. I have taken a look at the drawings, as well as I was at the first townhall meeting asking questions. A lot of their parking they are including garages which we all know will be used for storage and can't be constantly regulated to make sure that it is used for parking. Legally, I understand the builders are including enough parking for the residents but realistically, they are shy about 200+ parking spots, all of which will end up in College Park East. 17-172

My other big concern is traffic and accidents. I grew up in College Park East. I saw many deaths on Lampson, and I still see many accidents on Lampson. There will have to be more police stationed on Lampson to control speeding vehicles to hopefully prevent accidents. Also, there will not be any left hand turns out of the complex, forcing everyone who needs to go out towards Valley View to make a U-Turn at Heather Park, causing major traffic jams and most definitely more accidents. Or residents will speed through College Park East neighborhood instead of making a U-turn which is no safer. 17-173

I have a few other smaller concerns. I'm concerned about noise pollution while building the housing project. I'm concerned with the environment and the impact building these homes will have on the wild life in the strawberry fields directly west of the project. I'm concerned for the air pollution caused by all of the equipment building the homes. 17-174

Bottom line is, Lampson is already an extremely busy thoroughfare, and adding an extra 300-500 cars daily will make it an absolute nightmare. I think that the housing project needs to be scaled down or potentially just nixed all together. Or build a parking structure of some sort or something. I don't know what the winning idea will be for this project but I truly think this project is way too big for what this little street can handle.

Thank you for your time

David Vititow

17-175

--
David Vititow
Operations Manager
Atlas Backflow
562-304-3069

From: John Jacobs
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Housing Project
Date: Tuesday, November 1, 2022 8:49:57 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender johnjacobs38@gmail.com

Good evening,

I am writing to request environmental studies be done on traffic safety, parking, population, and recreation regarding the projected high-density housing development on Lampson Ave. As a homeowner in College Park East (CPE), I am concerned about the effects this development will have on the quality of life in the neighborhoods of Seal Beach, Los Alamitos, and Garden Grove. In reviewing the developer's plans for the project, I find the height of the buildings and the lack of parking, traffic signals, and recreation space unacceptable. The inadequate number of parking spots for the projected number of residents will result in the surrounding neighborhoods' streets serving as regular overflow parking. My home is on the corner of Heather and Hazelnut, across from Heather Park and I think it is safe to assume the streets surrounding the park and along the side of my house will become very crowded with parked cars regularly. In addition to the residents of this development using CPE streets for parking, evenings and Saturdays during sporting events/practices at Arbor Park will bring more people needing to park in the neighborhood and then walk across Lampson. With Lampson already being a busy street with high speeds, I am concerned that an increase in traffic and pedestrians could be a major safety issue.

17-176

I would like to request that the developer be limited in the number of units they may build and those units be restricted to two-stories, rather than three. I would also like the developer to be required to build a recreation space and increase parking to a more reasonable number to accommodate the maximum number of projected residents and their guests. Additionally, a traffic signal must be strongly considered so that residents do not need to make unnecessary, dangerous u-turns at Heather Ave. and Rose Ave. Thank you for your time!

17-177

John Jacobs
4465 Hazelnut Ave.
Seal Beach, CA. 90740
(562) 900-7495

There are no attachments in this message. Learn more.

"Eric Holmes" <ericholmes1@gmail.com>
Lampson Housing Project
Nov 10, 2022 at 7:42:07 PM
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>
"Jill Ingram" <jingram@sealbeachca.gov>,
"sealbeachpa@gmail.com" <sealbeachpa@gmail.com>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ericholmes1 @ gmail.com

Tom,

My name is Eric Holmes and I live in the College Park East neighborhood, right across from the proposed housing project on Lampson.

Not sure who to chat with there, but our MAIN park and playground for the kids and where we have all of our events is at Heather Park. That park cannot handle additional kids, it's small and needs to be remodeled.

I think the parents of College Park East would be much more receptive if there was some agreement to split the remodel of that park with the city of Seal Beach.

I've CC'd Jill Ingram on this email as well.

I have started the Seal Beach Playground association and have over 100 members that can help plan. All of whom live in CPE.

Let me know how I can help facilitate this.

Thanks!
Eric Holmes

17-178

"Les Johnson" <ljohnson@tbplanning.com>
Lampson Park Place - Driveway Access/Circulation Discussion
Nov 7, 2022 at 7:21:34 AM
"Les Johnson" <ljohnson@tbplanning.com>, "Iris Lee" <ilee@sealbeachca.gov>, "Farhad Iranitalab " <firanitalab@willdan.com>,
"Tom Oliver" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2f50968c6d3942fb8137c610a07eebda-Tom Oliver>,
"Charlene So" <cso@urbanxroads.com>
"Alexa Smittle" <ASmittle@sealbeachca.gov>, "George Voigt" <george@sgvfund.com>, "matt@walbern.com" <matt@walbern.com>

Discussion Items:

- U-turn movement @ Lampson & Heather
- Proximity of Lampson & Rose intersection to project's easterly driveway
- Left turn pocket design for westerly driveway
- Potential for internal vehicular connection

17-179

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

Meeting ID: 291 421 148 835
Passcode: BXT5GU
Download Teams | Join on the web

Or call in (audio only)
+1 323-673-4554,,889787575# United States, Los Angeles
Phone Conference ID: 889 787 575#
Find a local number | Reset PIN

Learn More | Meeting options

Lampson Park Plac...on.ics

There are no attachments in this message. Learn more.

"Enea Ostrich" <ooenea@gmail.com>
Lampson Park Place Comment
Nov 18, 2022 at 11:36:32 AM
"ljohnson@tbplanning.com" <ljohnson@tbplanning.com>
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>

Dear Mr Les Johnson:

Thanks first off to you and your design team for taking the time out to show the communities the plan this past Wednesday night at Ayres Hotel.

I am a CPE resident who resides close to the project as I live in this over 1700 home tract since 1988 with my husband (who are now adults). I know the project is proposed to lay on Los Alamitos property at the old West Ed property. Anyhow since the land behind it is federal property and leased to the City of Seal Beach I think it's valid that you listen to what we have to say as well as anyone living in the city of Los Alamitos because it affects us all. It also will affect Rossmoor, Cypress, and Garden Grove.
My comments are as follows:

1. Arbor Park has always only had one way in and one way out. Looking at the map from Alan the architect it shows that there are a few open walkways right into Arbor Park. This is not allowed legally because I have told it's federal land. It is opened at the main gate near Heather St in the daytime by a Seal Beach official and at night it's always closed by a federal rep. At dusk it's always closed for the night. No one is allowed in Arbor Park per the Army Corp of Engineers I have been told.

17-180

2. The parking in Arbor Park has and always will be full as soon as there is soccer or dog park people. This clashes often and that is when there are well over 200 parking spaces that West Ed allowed people to park since a very long time ago. It was always practice to allow it because you can see clearly if you go to Arbor Park how quickly it gets filled. We need better parking at Arbor if this is truly going to be a project that helps communities get on that field at Arbor Park.

3. I think it's fine that there are two parks within the complex that helps the people who will be living there but Arbor Park is where their kids will be playing at most often because it's wide open.

4. Parking spaces that the architect showed me isn't sufficient for the project. Originally in the April 11th conceptual plan it shows 580 spaces and then in the current one they showed us it said 556 spaces. Why? These spaces are still insufficient and as we all know there will be more needed for the apartments. This was proven when there was a fight for LA Fitness to not be next to a complex in Rossmoor. Those condos were originally with one parking space but then that changed when people had two cars. Then they parked the overflow at the shopping center on the other side of the building because they had no other parking. You see what I mean by you need to think about parking within your complex better. Anyhow even if there are parking spaces added that still means there was work to be done to help Arbor Park itself.

17-181

5. Concerning the left turn lane at large, main entrance, I can't believe one believes that it's the best way to move the flow of traffic to a lane that at certain points of the day will clog up Lampson. How do you propose the safety too for that when cars clog the left lane on Lampson? That's not the stagnant lane..it's the passing lane! Since there is no third lane on Lampson this makes it difficult to move approximately 500 cars a day into and out of that complex without causing destruction. Stop lights will also create a cluster btw. This is proven at every stop light we currently have just coming out of our over 1700 home tract.

I have indicated key parts in this letter and I know I will have more questions but for now this is it. Thanks for reading.

17-182

There are no attachments in this message. Learn more.

"Jeff T" <jefftilson.77@gmail.com>
Lampson Park Place Project Concerns
Dec 14, 2022 at 10:23:36 AM
"ljohnson@tbplanning.com" <ljohnson@tbplanning.com>
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jefftilson.77 @ gmail.com

Hi,

My wife, my 3 young kids, and myself are residents of College Park East, Seal Beach and we feel the proposed development on Lampson Ave. has some major concerns that haven't been addressed:

Lack of parking for the proposed community:

Resulting in 250-plus cars parked in our neighborhood every night:
Garage parking is used for storage and not parking
Parking at Arbor Park will be impacted (Dog park/AYSO soccer). Parking will be used by residents during the day.
Vehicles will park all around Heather Park, which will limit parking for visitors.

17-183

Impact on Heather Park:

Only 14,000 sq feet of open meeting space with no play structure
Residents will be crossing Lampson Ave. to walk to Heather Park which will be a safety hazard.
Heather park is already overused and in terrible shape.
Impact on tennis courts.

17-184

Traffic Safety on Lampson:

Lampson Ave. does not have street parking and a sidewalk on one side of the road.
Vehicles will all have to make right turns when leaving the development, significantly increasing U-turns and cut-through traffic at Heather Dr.
There have been many serious and fatal traffic collisions on Lampson, which will increase.
Limited visibility when residents exit CPE onto Lampson Ave. will cause more collisions.
Lack of visibility for vehicles approaching U-turns at intersections.
There is not enough room to make U-turns at Heather Dr. and Lampson, resulting in 3-point turns.

17-185

Other concerns:

Children's safety
Heather Park is the main pick up and drop off stop for the school buses, the increased traffic will create additional hazards when the busses are stopped with red lights flashing
Water runoff (flooding)
Lampson Ave floods easily during storms and additional housing and construction will cause additional flooding
Utilities (internet, electricity, sewer)
CPE already has spotty internet with the Military Base Interference, more users will cause more disruptions and impact service
Police Response

The planned Community is under the City of Los Alamitos, however, Seal Beach will be heavily utilized/impacted for accidents on Lampson or called for additional issues (ie parking or disturbance issues) in CPE
Density of project.
In the affordable housing: 1 bedroom can house 1-3 people
2 bedrooms can house 3-5 people
3 bedrooms can house 4-7 people

Thank you for your consideration and look forward to hearing how these issues may be resolved if the project moves forward.

Jeff Tilson
562-310-3096

17-186

From: J Croce
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project
Date: Wednesday, November 2, 2022 2:57:20 PM

I am writing to express my opposition to the so called Lampson Project. I am a resident of College Park East which will be directly impacted by this development. The following is a list of items which concern me about this project. 17-187

- Construction Noise and road closures.
- Fire / Police / Emergency Response.
- Increased traffic on Lampson and parking in our neighborhood.
- Increased population.
- Traffic Safety (u-turns at Heather, left / right turns at Seal Beach Blvd and Valley View, cars cutting though our neighborhood, etc)
- Utilities & Service Systems.
- Impact on local shopping and services with the additional residents.
- Safety of children in the street.
- Impact on local parks and city services.
- on AYSO at Arbor Park. 17-188

The traffic in this area has already been impacted in the last 20 years with the expansion of Rossmoor Center and addition of another site for this development. 17-189

Respectfully,

Joe Croce

From: Mercedes Cecala
To: Tom Oliver
Subject: Lampson project
Date: Wednesday, November 2, 2022 1:16:04 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mercedes_cecala@yahoo.com

Good afternoon,

I'm a resident of College Park East and am writing to express my concern about the new proposed housing development on Lampson. I hope that the city will not allow the approval of the development. This development will overpopulate Lampson/CPE area and cause overflow parking in our neighborhood. Not to mention make traffic a nightmare on Lampson. We already have traffic on Lampson and many fatal accidents. My family has lived here 10 years and our kids play AYSO soccer at that park every year. PLEASE don't approve the plans to move forward.

Sent from my iPhone

17-190

From: Tom Power
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Project
Date: Tuesday, November 1, 2022 4:35:46 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tpower@e-sbco.com

This project is wrong on so many levels. First was Los Al city council was quoted as saying they were completely blindsided by this. What? A piece of property that size and the sale passes through without them being notified just seems wrong to me either legally or certainly ethically. However, getting to specifics regarding the Environmental Impact Report : 17-191

1) **Everyone I'm sure mentions traffic and they should They like so many in CPE have only one exit….Lampson. The street would need to be widened.** 17-192

2) **The multiuse soccer fields which has as many as 7 youth soccer games uses the current parking lot regularly. The existing parking isn't enough. All of the many events would require an enormous amount of parking IN College Park East by youth sports games for game day as well as practice. Softball and baseball is also using that facility and parking is a problem NOW. This new project would practically eliminate ALL of the sports programs that use that facility.** 17-193

3) **Parking would REGULARLY be used by the new residents in CPE. Traffic lights for the congestion would be needed for the excess cars and pedestrians who will be parking regularly in CPE.** 17-194

4) **With the addition of hundreds of cars parking in CPE comes the** 17-195

inevitable rise in crime with car break ins. Car break ins in CPE has been on the rise the last few years. IT would explode if this project gores through

17-195 (CONT.)

5) **Air quality CLEARLY will be harmed by a massive increase in traffic**

6) **Noise pollution will also be off the charts too**

17-196

7) **All of the CPE parks especially Heather park will be used excessively. Waiting an hour sometimes to play tennis at Heather park will now turn into 3 or 4 hour wait to play.**

17-197

8) **I am concerned about how this will work for the Los Alamitos police department. It is a long out of the way place to patrol.**

17-198

9) **Local schools will also be impacted too with larger classroom sizes. Children undoubtedly crossing Lampson for bus pickups will be unsafe as Lampson is like a 50 MPH highway.**

17-199

IF I can think of more, I will This was just off the top of my head.

Tom Power

3600 Sunflower Circle

Seal Beach, Ca. 90740

Cell (310)994-6004

From:	Cathy Mathews
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson project
Date:	Tuesday, November 1, 2022 2:27:53 PM

IRONSCALES finds this email suspicious! We know Cathy Mathews by name, but the email was sent from an unfamiliar address cchen20002@gmail.com | Know this sender?

To City of SB,

I am a resident of Old Ranch and have lived in SB for the last 25 year. I am very concerned about the congestion and pollution on Lampson that this project will bring. I drive a few times daily on Lampson to head towards GG. The sheer amount of congestion and cars on that street will create a backlog of traffic. It is only a two lane road on each side and that stretch of road is notorious for accidents as it is without the various turn outs. It isn't dubbed death alley for no reason. There was just a serious accident there last month. 17-200

The number of cars on the road will add to the pollution , noise, traffic not to mention the overall safety of its location at the end of the base runway.
It is completely irresponsible to place homes there. In addition to safety let's talk about the number of overflow of cars into CPE street parking as well as people crossing the street. Again another safety issue. 17-201

I understand there is a need for affordable housing but that is NOT the place. It will forever change the small town feel that is what makes this town unique. I am not opposed to housing just not high density housing. In addition, I understand there is a plan to include affordable housing. Nothing in SB will be affordable. As soon as those units go up the prices will go up and the people that really want/need affordable housing will be soon priced out. There will be no system in place to stop the neighboring residence to get their friends and family to purchase those homes using some creative ways. Again it does not serve the purpose. Please listen to the residence of SB and do not approve this. 17-202

Sincerely,
Pin Chen
12299 Old Harbor Ct.
Seal Beach, Ca 90740
562-234-9482

From:	Karole Chesser
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject:	Lampson Project
Date:	Friday, October 28, 2022 12:39:45 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kgsc88@gmail.com

Please stop the Lampson Project!

As a resident of College Park East, I can tell you that the impact on the noise of additional traffic, the increased danger of driving on Lampson due to higher volume of motorists, not to mention the impact on air quality, will truly be felt and detrimental to those of us who reside here. We already deal with the consequences of being bordered by the freeway, but adding ANOTHER border of traffic, noise and pollution is ridiculous and preventable.

I urge you to oppose this project for the health and well being of all of us in College Park East.

Thank you,
Karole Chesser
4764 Candleberry Ave
Seal Beach, CA 90740
Kgsc88@gmail.com

17-203

Sent from Mail for Windows

From:	amygfgirl amy reid
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project *STOP*
Date:	Wednesday, November 2, 2022 1:48:39 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender aereid729@gmail.com

Hello City Council Members and City Planners,

I am urging you to stop the lampson project!
When my family and I moved to College Park East neighborhood, 8 years ago, we were so excited to have a safe, calm & quiet neighborhood for our young kids to grow up in and enjoy. The lampson project will do the opposite for this atmosphere in our neighborhood! 17-204

The construction and noise that will be added to the neighborhood for the next few years will not only be a nuisance but an overload! We have already endured years of construction going on with the 405 revamp project. This will just add to the noise, dust, dirt and rodent problem that we have already been experiencing for the last few years! It has been awful and I can't imagine MORE of it!! 17-205

The other thing that I worry about is the increase in cars and traffic not only on lampson but in our neighborhood of College Park East! There are so many children that live in this neighborhood that are constantly riding bikes, skateboards, enjoying the parks & outdoors with their friends, and now they will have to worry about an increase in traffic the neighborhood. This is very worrisome!
The increase in traffic on lampson will also be extreme! Going in and out of the CPE neighborhood at Heather Park and Rose Street. As well as cut through traffic in College Park East. 17-206

Our home backs up to lampson, we are directly across from a portion of the golf course at Old Ranch Country Club. We are at 4161 Ironwood Ave. and there is already a high amount of traffic noise on lampson and this will only make it worse. Not too mention many accidents that happen along this stretch of the road due to speeding cars down lampson. 17-207

This housing project will also contribute to overpopulation in this area! College Park East neighborhood is already densely populated. With surrounding neighborhoods such as Westgate, Garden Grove, Rossmoor, we don't need to add to the congestion and amount of people in this area! Please don't crowd us out!!!

Just to name a few and reiterate these issues of major concern. Highly populated, dense neighborhoods, increase in traffic and traffic issues, unsafe conditions for our children- in recreational parks, neighborhoods and in the streets and traffic. An increase in noise and air pollution! Construction issues added to what we already have going on with the 405 revamp project, including dirt, dust and rodent infestations!
Please help keep our families and children safe and DO NOT continue with the lampson project! 17-208

THANK YOU,
CONCERNED RESIDENT OF SEAL BEACH COLLEGE PARK EAST NEIGHBORHOOD,
AMY REID

From:	L. Bobby Papoulias
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject:	Lampson Project - Stop Now
Date:	Friday, October 28, 2022 10:14:12 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender bobbypapoulias@gmail.com

Los Al and Seal Beach Council Members,

I write this E-mail in regard to the Lampson Project Development In Los Alamitos, CA. Where do I begin?

The fact that a development with so many dwelling units has been considered by the city of Los Al is not only unacceptable, but borderline unethical. I have been in construction for quite some time and I have never seen anything like this for an area we live in. How did this even get this far? The negative effects this project will have outweigh the benefits by a landslide. I am not sure who is getting kickbacks (city of Los Al), and I really do not care, but this project is not a good idea. THIS PROJECT SHOULD NOT BE APPROVED.

17-209

Negative Side Effects

- Increased and overwhelming traffic
- U-Turn being forced at Heater park on an already dangerous/blind turn where you can;t determine the speed of upcoming traffic
- Not even close to ample parking (under served)
- College Park East (Seal beach) will have cars parked in the are from this development
- Parks in College Park East over crowded

17-210

City of Seal Beach Council Members, I am surprised that you are not fighting this (except Schelly who might be). Would you approve this if it was in Old Town or The Hill?

City of Los Al Council Members, You are turning a blind eye to your neighbors and this is not right. You all know this development should not be moving forward, but whatever kickback the city of Los Al is getting shows how unethical this is. Would you be moving forward with this project if you did not get this kick back?

You need to put a stop to this immediately.

17-211

Best Regards,

Bobby Papoulias
(562) 805-1942
4388 Fir Avenue
Seal Beach, CA 90740

From: Kupfer III, Owen
To: Tom Oliver
Subject: Lampson Project
Date: Wednesday, November 2, 2022 8:47:39 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender Owen.KupferIII@braggcrane.com

Owen Kupfer
4380 Candleberry Ave
Seal Beach, CA 90740

Greetings Mr. Oliver,

My name is Owen Kupfer, a recent homeowner and resident of College Park East for over 30 years. I grew up in Seal Beach and have seen the many changes our little city has faced, many good and some outright deceitful. The Lampson project proposed sits squarely in the latter. I viamently oppose the development at 4665 Lampson Ave. Im sure you have received many letters and comments so i wont run through the ways this proposal will consume our peaceful neighborhood. The thing is, my previous profession involved working closely along side real estate developers and although i loved my job, i got to see these projects behind the vail. Along side my overall assesment, after reviewing the details of this expansion and using statistical software, the outcome is unsatisfactory. I emplore you to seek an unbiasd review and/or full assesment of the proposal, it will open your eyes to the havoc these atypical developments cause long term. I thank you for your time and attention, this matter is consequential to me and envokes the passion of many of my neighbors.
Respectfully,
Owen Kupfer

17-212

From: Thom Thomas
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Project
Date: Wednesday, November 2, 2022 6:09:18 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lizthom4572@yahoo.com

As a resident of College Park East (4572 Hazelnut Ave.) we have numerous concerns regarding the proposed Lampson Project at the West Ed site. Beyond the obvious concerns of more traffic and more air/noise pollution, we have objections to this project as proposed because of the following:

17-213

* limited parking in the development which could negatively affect parking in our neighborhood
* lack of parks/recreation area
* impact of more students in our schools which will cause overcrowding
* already strained resources of emergency service providers-fire, medical, and police
* construction-specifically the impact of large trucks and equipment on Lampson; the noise that we would have to endure during construction; the movement of vermin to our neighborhood as a result of construction; impact on animals who already live in the area
* 3-story buildings which will limit privacy and aesthetics to our one and 2-story homes across the street
* impact of water usage as well as impact on water quality during construction

17-214

We expect the Enironmental Impact Report to address our concerns along with any others we may have failed to mention. We respectfully ask that the developer seriously consider our concerns as we have endured the construction of the 405 Fwy expansion and now this proposed development that we object to as it will negatively impact our daily life.

17-215

Sincerely,
Thomas and Elizabeth Thomas
4572 Hazelnut Ave.
Seal Beach, CA 90740
562-826-4117
626-378-3597

From: Elizabeth Cortez
To: Tom Oliver
Subject: Lampson Project
Date: Wednesday, November 2, 2022 11:41:03 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender elizcortez88@gmail.com

Hello,

I would like to voice my concerns regarding the new housing development on Lampson Ave.

Our City and infrastructure is not able to support this new housing development. Our School District, Police Dept., Hospital, Community will all be impacted negatively with this new development. Currently we face water restrictions and flex alerts oh hot days from our electric company. This new housing development will only make everything worst.

The City should instead use this land to create a park. A new park with a community pool or community splash pad for the Residents of Los Alamitos.

Thank you
Elizabeth Cortez
Concerned Los Alamitos Resident

17-216

From: Shanna Jacobs
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Project
Date: Tuesday, November 1, 2022 8:26:52 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender shannalynne79@aol.com

Good evening,

I am writing to express my concern over the projected high-density housing development on Lampson Ave. As a resident of College Park East (CPE), I worry about the affects this development will have on the quality of life in the surrounding neighborhoods. Among other things, my primary concern is regarding traffic, parking, and safety. I have reviewed the plans made available by the developer and find the lack of parking, traffic signals, and recreation space completely unacceptable. My home is on the corner of Heather and Hazelnut, across from Heather Park. The insufficient number of parking spots for the probable number of residents will inevitably result in the surrounding neighborhoods' streets serving as regular overflow parking as there is no parking on Lampson Ave. This is unacceptable and will result in traffic congestion and safety issues. In addition to the residents of this development using CPE streets for parking, people attending sporting events/practices at Arbor Park will also have to park in the neighborhood and cross Lampson. Lampson is already a busy thoroughfare with motorist driving too fast around blind curves. An increase of up to 800+ more residents in the area will only increase traffic and my fear is that with an increased number of people, mostly children, crossing Lampson there is a high likelihood of tragic accidents.

I would like to respectfully request environmental studies be done on traffic safety, parking, population, and recreation before plans go any further. Thank you for your time!

Shanna Jacobs
4465 Hazelnut Ave.
Seal Beach, CA. 90740
(562) 714-1638

17-217

From: JULIA SHORES
To: Tom Oliver
Subject: Lampson Project
Date: Tuesday, November 1, 2022 7:40:46 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jshoresx4@yahoo.com

We live in the College Park East neighborhood, and we are opposing what is to be planned on Lampson Ave.

The traffic on Lampson Ave is difficult at peak times of the day. We cannot imagine how it will improve by adding additional housing along that street. Lampson will become a very busy street not just during peak hours, but during all hours.

Julia and James Shores...4833 Fir Ave., SB

17-218

From: Karen Kupfer
To: Tom Oliver
Cc: Owen Mister Kupfer
Subject: Lampson Project
Date: Tuesday, November 1, 2022 5:14:37 PM

Mr. Oliver:

I would like to express my concerns about the proposed Development on Lampson between Rose and Heather. My biggest concerns are about the traffic. I don't believe Lampson can support the additional traffic and the added traffic on the 405 freeway access will be extreme, considering how dangerous the northbound onramp is currently. Also, the plans are not adequate for the traffic coming in and out of the project. 17-219

I am also extremely concerned about the schools. The local elementary, middle schools and High School are at or near capacity. Where will all these additional children go and what are the plans to accommodate them? 17-220

Finally, what is the plan for emergency ingress and egress? Lampson will not be able to support a mass evacuation.

The scope of the project appears to be too large, too dense and not well thought out. 17-221
Thank you.

Owen E. Kupfer, Jr.
4380 Candleberry Ave.
Seal Beach, CA 90740

From: Karen Kupfer
To: Tom Oliver
Subject: Lampson Project
Date: Tuesday, November 1, 2022 4:27:08 PM

I am writing to express my concerns about the proposed housing project on Lampson at the old West Ed site.

Primarily I am concerned about the additional traffic of a project this size. I believe the project is simply too big in scope.
Since traffic will only be able to turn right out of the complex, the added traffic will either proceed to Lampson and Seal Beach Blvd. (already really crowded) or cut through College Park East residential neighborhoods to get out of the area.

Additionally, no large trucks (construction) are currently allowed on Lampson. How will the project be constructed? If a waiver is allowed for the construction trucks, who will be responsible for repairing Lampson after the project is complete? Since the project is in Los Alamitos, but Lampson and the area directly effected is Seal Beach, how will that be resolved.

17-222

Also, what about in case of an emergency. Large fire, earthquake, etc. Only one way out appears to be a safety hazard. I believe some other route must be provided for getting in and out of this project. Perhaps a route that winds its way along the eastern border and empties onto Orangewood or somewhere in Eastgate; west Garden Grove.

17-223

Another issue: If 3 story apartments are suitable for this project, why not place them at the back of the project, near the Naval Base, overlooking the new homes they are building, vs. overlooking the homes in College Park East. If 3 stories is appropriate, then why not keep it in Los Alamitos instead of effecting Seal Beach, College Park East.

17-224

Why not include a park with equipment for children in this project? College Park East was built with several community parks; one of the selling features of our community. With not place for the residents of this proposed project to gather, play, etc., it is likely that our neighborhood/community parks will be overrun. Again, this project is Los Alamitos and our parks are Seal Beach. Will there be some sort of compensation to Seal Beach for park upkeep and maintenance?

Basically, I strongly believe that this project is too large, as proposed, and should be reduced/modified to make it more feasible.

17-225

Thank you.
Karen Kupfer
4380 Candleberry Ave.
Seal Beach, CA 90740

There are no attachments in this message. Learn more.

"Don Schwartz" <Don.Schwartz@csulb.edu>
Lampson Project
Oct 31, 2022 at 1:42:52 PM
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>,
"shasselbrink@cityoflosalamitos.org" <shasselbrink@cityoflosalamitos.org>,
"tdoby@cityoflosalamitos.org" <tdoby@cityoflosalamitos.org>,
"mchirco@cityoflosalamitos.org" <mchirco@cityoflosalamitos.org>,
"jnefulda@cityoflosalamitos.org" <jnefulda@cityoflosalamitos.org>
"jkalmick@sealbeachca.gov" <jkalmick@sealbeachca.gov>,
"mvaripapa@sealbeachca.gov" <mvaripapa@sealbeachca.gov>,
"tmoore@sealbeachca.gov" <tmoore@sealbeachca.gov>,
"ssustarsic@sealbeachca.gov" <ssustarsic@sealbeachca.gov>,
"smassalavitt@sealbeachca.gov" <smassalavitt@sealbeachca.gov>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender Don.Schwartz @ csulb.edu

As a resident of College Park East, I have serious concerns over the proposed project to build 240 or more housing units along Lampson Avenue. My concerns are as follows:

- The project does not provide adequate parking, which will result in overflow parking in College Park East;
- The additional cars from the new units will seriously add to congestion, impeding fire, police and medical responses
- Additional cars and project construction will adversely affect air quality and create noise pollution for existing residents along Lampson;
- Traffic congestion will undoubtedly increase along Lampson, particularly since drivers from the Project can only make a right turn onto Lampson and will have to make u-turns near Heather Park to go toward Valley View;
- Neighborhood k-12 schools will be impacted, since the project does not call for new school construction.

Don Schwartz

3911 Rose Street

Seal Beach, CA 90740

17-226

From: KAREN MICHAEL IWAKOSHI
To: Tom Oliver
Subject: Re: Lampson Project
Date: Monday, October 31, 2022 2:32:51 PM
Attachments: image002.png
image003.png

Thank you, for responding and I realize you have possibly no answers at this time. But do you know anything you can share regarding the timeline the possible possibility of this going thru? Where do we go to share our concerns or are you the person? I understand there a meeting on the 16th, correct? Is there proposal for another entrance or street to alleviate the impact on Lampson? Maybe one that will filter in and out through Los Alamitos somehow?

17-227

Just some thoughts.

Thank you again,
Karen Iwakoshi

Sent from Yahoo Mail for iPhone

On Monday, October 31, 2022, 2:11 PM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Karen,

Good afternoon. Thanks for your response. The City will consider these issues as a part of the Environmental Impact Report.

As always, if you have any questions, please email or call me,

Tom Oliver

Associate Planner

City of Los Alamitos

3191 Katella Avenue

Los Alamitos, CA 90720

(562) 431-3538 x303

From: KAREN & MICHAEL IWAKOSHI <kmpriwo@yahoo.com>
Sent: Monday, October 31, 2022 9:44 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Lampson Project

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kmpriwo@yahoo.com

Hello,

I live in College Park East, looking at the big picture here and thinking what the heck do you think this is going to do to the traffic in this area??? We are very impacted now have you driven on Seal Beach Blvd to Lampson and Valley View almost a parking lot can you even imagine what this will do adding so many more dwellings? The long term effect on the over all environment of the area is key here we live here because of the area and this will impact this area tremendously and if you find that the EIR shows otherwise I'd be surprised? The TRAFFIC alone has to be the worst part of this plan.

PLEASE make other arrangements I fear that money for this is the only reason to make this happen at the cost of homeowner just right across the street who has lives here for years and raised their families. This will impact them/us 100 fold and no consideration to them/us!

What can we do to encourage or stop this wrecking ball from happening?

Thank you for some or any consideration,

Karen Iwakoshi

17-228

From: Michael Gotto
To: jkalmick@sealbeachca.gov; Jordan Nefulda; Mark Chirco; mvaripapa@sealbeachca.gov; Shelley Hasselbrink; smassalavitt@sealbeachca.gov; ssustarsic@sealbeachca.gov; Tanya Doby; tmoore@sealbeachca.gov; Tom Oliver
Subject: Lampson Project
Date: Sunday, October 30, 2022 8:56:03 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender michaelgotto@gmail.com

Hello,

I am concerned about the proposed development on Lampson Ave. at the current WestEd site for a variety of environmental reasons: traffic congestion and safety, gas emissions, hazardous materials, air quality, noise pollution, and more.

Please do not move forward with this project. Feel free to contact me.

Michael R. Gotto, Ed.D. (CPE Homeowner)
4280 Guava Ave.
Seal Beach, Ca 90740
(626) 617-8757
michaelgotto@gmail.com

--
Blessings, Michael R. Gotto, Ed.D. 626-617-8757

17-229

10/29/2022

4665 Lampson Avenue development project

Hello, my name is Anjanette Kupfer. I am a homeowner in College Park East and reside with my husband, young child and dog. Our home backs up to Lampson Avenue and is directly across from your proposed development/Apartment buildings. My husband and I both grew up in Seal Beach/College Park East and have fond memories of our wonderful neighborhoods. College Park East is an ideal neighborhood for families, elderly and retirees because of its beautiful, safe and peaceful environment. I am strongly opposed to the proposed housing development at 4665 Lampson Avenue because of the negative impact it will have on our environment, neighborhoods and surrounding cities. 17-230

We currently have a beautiful Unobstructed view from our backyard of mountains, trees and wildlife with calming sounds of nature from the animals, birds and critters that live in the parks and military base along Lampson Avenue. This beautiful view may soon be replaced with your housing development consisting of 77unit three-story high apartment buildings, 114 townhomes, 55 cluster homes and parking lots filled over Max capacity with cars, trucks, school buses and motorcycles. This will cause excessive noise, bright lights, mass traffic, toxic pollution and extreme amounts overcrowding to College Park East and its surrounding cities. Although this is very concerning for me, my main concern is for the protection of our environment and for the wellbeing and safety of our community. 17-231

I understand the need for more housing in Los Alamitos/CA, however bringing this development to 4665 Lampson Avenue will have devastating effects on College Park East and its surrounding cities. As you may already know we have a very unique situation where Lampson Avenue connects College Park East, Los Alamitos, Seal Beach and West Garden Grove all within a few blocks of each other. I believe we already deal with a great amount of traffic, noise, pollution and overcrowding in this small area. Your development will cripple our community and roads. Creating many safty, and environmental issues. Your development will also decrease property values and destroy quality of life for people and animals in this area. 17-232

Your proposed development will create a very noisy environment. It will create noise from hundreds of vehicles pulling in and out of the development and driving up and down Lampson Avenue throughout the day and night. College Park East currently has an inadequate, outdated sound wall that is not tall enough or strong enough to absorb this new mass amount of noise created by this traffic. Residents' sleep and quality of life will suffer immensely. This noise will also affect our pets and wildlife that live outside. These loud noises will create anxiety, restlessness and frustration for them. 17-233

Your development will be built right out to the edge of Lampson Avenue. Loud noise from people going in and out of their cars, homes, and socializing will cause loud echoing noises into the neighborhoods of College Park East. I would like to insist that a sound study is conducted for the entire street of Lampson Avenue to show the effects it will have on the residents that live along this street.

Will there be a school bus picking up children in front of your development? School buses can be very loud from the sounds of their engines, exhaust and brakes. This will create a large amount of noise pollution. People living in College Park East, especially those living in the homes that back up to Lampson Avenue will be disrupted by loud voices of children getting on and off the bus and the loud noise from the bus itself. Please consider this and how it will affect College Park East residents. If there is no school bus in front of your development this would mean the kids might have to cross over Lampson to catch the bus? This could be very dangerous for them or may require a crossing guard. Which would add extra noise and more traffic in College Park East.

17-234

Noise from your development will also negatively Affect birds, animals, reptiles and critters that reside in the military base and parks nearby. Added noise from traffic, people socializing, children playing and heavy Equipment could deplete our wildlife. In a panic these animals will run to the nearest neighborhood/parks looking for safety and refuge. While crossing over Lampson Avenue they can be hit by cars or cause car accidents. What will you do to prevent this situation? Please do a study on how this noise will affect the wildlife and their habitats. It is important that we preserve the small amount of nature and wildlife that we have left in our cities and on this earth!

Noise from your development can also negatively affect children and adults with autism or other special needs who are highly sensitive to sound. Many of these people have chosen to reside in College Park East because of its calm and quiet neighborhoods which are required for their health and wellbeing. Please consider your special needs neighbors before any further development is pursued. Please do a research study on how loud noises from traffic,construction and overcrowding can interrupt the health & wellbeing of our special needs friends.

17-235

College Park East residents already have heightened stress from having to endure the extreme noises from fighter jets, military vehicles, police helicopters training, traffic on Lampson Avenue and the echoing sounds from the freeway and Disneyland fireworks. Adding noise from years of heavy equipment to construct your development will cause extreme amounts of stress, anxiety and depression to people living and working from home in College Park East. Please do a research study on how much added noise there will be and how it will affect the residence quality of life in College Park East.

17-236

On the weekends AYSO plays soccer games in Arbor Park. Currently there is not enough parking for the AYSO and Arbor Park visitors, so they fill up the West Ed parking lot. If they no longer have access to this parking lot due to your development then where will they park? Even if there are 50 more spots added to Arbor park it would still not be enough. I believe these guests would be forced to park in the neighborhoods of College Park East. This would create a lot of added noise from people Parking in front of our homes,unloading their cars and gear, and talking right outside our windows. The added noise from AYSO parking in front of our homes will disrupt the quality of life for our residents and interrupt people trying to rest on the weekends.

17-237

How will this be prevented? More cars driving through College Park East equals more pollution, affecting our breathing, affecting nature and negatively affecting aesthetics bringing down our property values. How will you prevent this? Please conduct a study on how much parking is needed for all park patrons and AYSO guests. Also please conduct a study on how this added air pollution will affect the residence and property values in College Park East.

17-237 (CONT.)

Currently it does not look like you have enough parking for all your residents, their teenage drivers, their caretakers, their visitors & their public transportation. Parking will be a very big problem. How do you plan to enforce your parking? If there is not enough parking for your residents they will park in front of College Park East homes. We will then have to hear cars pulling up, people getting out of their cars, people talking on their cell phones and people talking to their children morning noon and night, disrupting our quiet peaceful neighborhood and ruining the quality of our lives.

17-238

Lighting from your development will also be a major concern for the community of College Park East and for the environment/wildlife. Lights from your three story apartments,cluster homes, townhomes, vehicles and parking structures will cause major light to shine. These lights will shine into nearby homes, trees, and areas where animals reside. This bright light will distract drivers. disrupt sleep and confuse animals. Animals will begin looking for food sources where it is now visible, endangering civilians. The light will also attract tons of insects from the base and they will die from exhaustion while fluttering around light sources. Our current sound wall is short and outdated and will not block the light from your development. These bright lights will take away from the beautiful and peaceful view of nature replacing it with bright lights from three story apartment buildings, cluster homes and townhomes. This development will be an eyesore taking away from the natural landscape that gives our properties value. How will you prevent our property values and quality of life from going down? How will you prevent the dangers that this light will cause to animals and humans? I'm requesting the 3-D renderings of how this development will look from the College Park East backyards from Heather to Rose street. I would like a daytime and nighttime model done for all residents who back up to Lampson Avenue in College Park East between these streets..

17-239

The light that will reflect into the trees and bushes will also affect wildlife. This light may cause confusion to animals and causes animals to wander out of their natural habitat into the neighborhoods of College Park East to find new homes. This could be very dangerous to children and to people living in College Park East. Please let me know how you plan to prevent this. Please do a full study on the impacts these lights will have on our wildlife.

I would also like to have a shade study Analysis done. How much light will be blocked by these oversized apartment buildings? Will there be solar panels on your homes/apartment to help with California's energy crisis? Too much shade could prevent trees and nature from growing properly and creating muddy grassy areas. Again this will affect nature and quality of life for humans and wildlife.

17-240

I am also concerned that there is no traffic light being put in. This will push all the cars to go West towards Heather Street. Then they will have to make a U-turn to go east towards Garden Grove. This could be very dangerous and cause many accidents. There are many children that ride their bikes near this intersection. How will you prevent accidents and congestion? Will a traffic light be put in? Please conduct a traffic study on how this will affect traffic throughout the day and night along Lampson Ave. All College Park East residents must take a Lampson to exit for school, work, shopping and emergencies . No traffic light and more traffic will create overcrowding, accidents, frustration and tardiness. How will you prevent this?

17-241

Pollution is another Environmental hazard that will affect College Park East and its Neighboring cities. We already suffer from pollution from airplanes, fighter jets, military vehicles, police helicopters, school buses and traffic. Lampson Avenue links three cities in a very small proximity. More pollution from your construction and vehicles will have major effects on these cities. My son has severe allergies to dust. The Dust and fumes created by your construction and heavy equipment can be extremely dangerous for him causing severe illness or hospitalization. There are also many people with compromised immune systems and weak respiratory systems who reside in College Park East. Adding toxic pollution from vehicles and construction can be life-threatening to them.. It can also shorten the lives of animals, birds and trees that live nearby. Pollution will also be released into the air if you cut down trees. How many trees will be cut down? This is an environmental emergency that can be prevented by not putting your housing development in this unappropriate area. Please conduct a study to see how this added pollution will affect the cities of College Park, Los Alamitos, SealBeach, Rossmoor and Garden Grove.

17-242

In your proposed development there are no playgrounds, no shopping centers, no grocery stores, no walking paths, no library's, no business centers, no pools, no tennis courts, no golf courses and no public transportation hubs. Where do you predict your residence to go for these needs? Your lack of resources will put extreme pressure on College Park East, Seal Beach, Rossmoore and West Garden Grove to provide recreation and basic needs for your residence. Our roads, parks, playgrounds, and sidewalks cannot handle this amount of overcrowding and will suffer from extreme wear and tear. What city will pay for the damages caused to our community's resources? This is a very delicate situation. Adding housing for one group of people will hurt the quality of life and resources for another group of people. The huge amount of negative effects that your housing development will bring to College Park East and its surrounding cities/environment will outweigh the small amount of positivity it will bring to Los Alamitos. There needs to be a balance between your development and our communities . We need to protect the environment and the people who already live in these cities. I don't see compromise helping due to your lack of parking and resources. Please find a new more appropriate location for your poorly planned project.

17-243

Anjanette Kupfer
4549 Ironwood Ave
Seal Beach, CA 90740
barbie14@mac.com

From: Chris Eble
To: Tom Oliver
Cc: ssustarsic@sealbeachca.gov
Subject: Lampson Project
Date: Thursday, October 20, 2022 9:29:04 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender chrisheble@gmail.com

Mr. Oliver,

I wanted to voice my family's concerns about the Lampson project. I will be as brief as possible as I'm sure you will be getting many emails about this.

The obvious concern is traffic and parking. To have possibly a thousand people housed in such a compact space is very concerning. If I have the numbers correct 557 parking spaces for 246 homes. The biggest concern would be the 77 affordable multi family homes with only 98 parking spaces. How do you see this working? Even if these are mostly one bedroom units there would obviously be many with couples living there. Larger units could house four or five people. Even if the families have small children those children will quickly grow up and be driving. That could easily mean that the affordable housing would need more than twice as many parking spaces than is planned. Without enough spaces those residents will come to College Park East to park. There is not enough parking already on Ironwood and I can see Heather being inundated with unwanted cars. That's just the affordable housing. The same problem to a lesser extent will be true of the rest of the residences. There is no way that there is enough parking for this project. 17-244

I realize that the more housing that is planned the more motivated investors will be and more taxes will be paid. It is a money maker for the developer and the city and the state and housing is at a premium right now. With that said, building 35 ft tall buildings close to Lampson- because you'll have to build close to the street in order to fit that many units on the property, means that they will over look the houses and yards directly across Lampson in College Park East. So not only will we feel crowded because of traffic and parking we will literally feel eyes on us anytime we go into our yards. 17-245

Probably the most important issue will be safety. Lampson is a dangerous thoroughfare running parallel to the 405 freeway. Not more than a few weeks ago a driver was killed on Lampson. I have only lived in this area for four years and I personally have seen 5 major accidents on Lampson. When you double or triple the traffic on this four lane road it will only get worse. 17-246

There are other issues- Where will the Soccer families park, where will the dog park people park- I assume that these current parking spaces behind the property will be prime targets for the new residents for the necessary overflow of cars that haven't been planned into the development. The impact of parking and use of the College Park East parks and green spaces is also a concern. The new residents will obviously cross the street to use our tennis courts, playgrounds and parks because the green space and parks in the new development will not be sufficient for as many residences that have been planned.

This is a terrible idea for all of College Park East. It's just too many people squeezed into too small of an area. Keep the feel and zoning of the area that already exists for your development rather than shoe horning as many cubicles as possible into the space. We are a great neighborhood of single family homes with some "more affordable" condos at one end. This development will destroy what was the reason most of us moved into College Park East. Its a neighborhood, not a hive. 17-247

Thank you for your time and consideration,

Chris Eble

From: Christopher Derry
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments - 4665 Lampson
Date: Tuesday, November 1, 2022 10:33:22 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender christopherderry@yahoo.com

As a 25 year resident of College Park East in Seal Beach I have some serious concerns about the proposed high density housing project at 4665 Lampson.

1. At first glance, 246 housing units and 500 plus people and all of their cars crammed into 12.3 acres seems ridiculous. It feels like cruel and unusual punishment to those who would live in the new development, and those who live near it. 17-248

2. Ingress and egress for the 500 plus residents into and out of the project would be onto Lampson Ave at uncontrolled intersections. Many drivers travel on Lampson at freeway speeds and safety would be a real issue. 17-249

3. Where is the open space/park/recreational area for the residents of the project? 17-250

4. Where is the parking for guests of the project's residents? 17-251

5. What exactly does "Affordable" housing mean? I think many of our area's residents have concerns about what that term means and would be opposed to subsidized housing. 17-252

6. How much will demolition and construction affect those of us who live near the site? Will Lampson, our only artery to the outside world, be torn up and blocked again? If so, for how long? The constant parade of trucks and construction equipment, noise, and disruption to the quiet surrounding neighborhoods will be painful. 17-253

7. The purpose of zoning and urban planning is to segregate incompatible use of land, to prevent new development from interfering with existing uses and to preserve the character of a community. The character of the community surrounding this project is a quiet, bedroom community of single family homes. The developer should have to create a project within the existing zoning. The city should not change the zoning to fit what a developer wants to do. This project is incompatible with the surrounding community. 17-254

8. This project will have a direct negative impact on College Park East in the form of construction noise, pollution, road closures, increased traffic, increased parking issues, increased use of Heather Park, increased crime, and lowered property values.

For the above reasons, I oppose the development of this project as it is currently planned, and you should too. 17-255

Christopher Derry
4840 Dogwood Ave
Seal Beach, CA 90740

(657)203-3385

From: Justin Osburn
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments - Justin Osburn - 3860 Rose St. Seal Beach 90740
Date: Tuesday, November 1, 2022 1:45:21 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender josburn@triplelift.com

Hello Los Alamitos City Officials,

I am writing you this email to inform you of my concerns and disagreement with the project on Lampson, located at the current California Department of Fish and Wildlife building. I'm a homeowner who lives very close by in the College Park East neighborhood in Seal Beach and this will negatively impact the well being of my family. 17-256

I understand the desire to create affordable housing, but I don't think this is the proper location to construct such a massive project, for the following reasons:

- **Traffic Safety**: Lampson St. is already very crowded with many cars, lots of traffic and not to mention, accidents. Adding a 240+ housing development will only make this worse, with additional cars flooding into other parallel streets, causing danger to kids who play in the neighborhood and pedestrians. Traffic is also pushed one way, which will force users to make u turns at Heather Park, where many children currently play and walk around surrounding areas as pedestrians. 17-257
- **Air Quality**: will also be affected as a result of the increased traffic and cars. We already have enough issues with air quality with the various helicopters and planes roaming the area from the base. 17-258
- **Noise pollution**: The area already has enough noise coming from the 405 and 22 freeways, adding more traffic on Lampson will only magnify this and cause issues for residents who seek peace and quiet at their residence. 17-259
- **Parks and Recreation challenges**: When College Park East was built in the late 60's, it didn't get assigned the proper amount of parks for the total size of the housing tract area. It's already crowded at our current parks and with no parks in this project, this will only make things worse and decrease the quality of life for kids that live in this neighborhood (such as my daughter) with kids from other areas coming to overcrowd the parks. 17-260
- **Parking**: With limited parking in the housing project, this will in turn create issues and an overflow of people parking cars in the surrounding neighborhoods. College Park East already has limited parking. 17-261
- **Fire/Police/Medical Response**: with ongoing labor shortages and adding more people to the surrounding area, this will increase overall response time for first responders, creating more risk for current residents.

I hope you will take my concerns into consideration and appreciate your time. Please reach out with any questions. 17-262

Thanks,

Justin Osburn
3860 Rose St.
Seal Beach, CA 90740

From: Sophia Osburn
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments - Sophia Osburn - 3860 Rose St. Seal Beach 90740
Date: Tuesday, November 1, 2022 2:54:28 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender sophia.osburn@gmail.com

Hello Los Alamitos City Officials,

I am writing you this email to inform you of my concerns and disagreement with the project on Lampson, located at the current California Department of Fish and Wildlife building. I'm a homeowner who lives very close by in the College Park East neighborhood in Seal Beach and this will negatively impact the well being of my family. 17-263

I understand the desire to create affordable housing, but I don't think this is the proper location to construct such a massive project, for the following reasons:

- **Traffic Safety**: Lampson St. is already very crowded with many cars, lots of traffic and not to mention, accidents. Adding a 240+ housing development will only make this worse, with additional cars flooding into other parallel streets, causing danger to kids who play in the neighborhood and pedestrians. Traffic is also pushed one way, which will force users to make u turns at Heather Park, where many children currently play and walk around surrounding areas as pedestrians. 17-264
- **Air Quality**: will also be affected as a result of the increased traffic and cars. We already have enough issues with air quality with the various helicopters and planes roaming the area from the base. 17-265
- **Noise pollution**: The area already has enough noise coming from the 405 and 22 freeways, adding more traffic on Lampson will only magnify this and cause issues for residents who seek peace and quiet at their residence. 17-266
- **Parks and Recreation challenges**: When College Park East was built in the late 60's, it didn't get assigned the proper amount of parks for the total size of the housing tract area. It's already crowded at our current parks and with no parks in this project, this will only make things worse and decrease the quality of life for kids that live in this neighborhood (such as my daughter) with kids from other areas coming to overcrowd the parks. 17-267
- **Parking**: With limited parking in the housing project, this will in turn create issues and an overflow of people parking cars in the surrounding neighborhoods. College Park East already has limited parking. 17-268
- **Fire/Police/Medical Response**: with ongoing labor shortages and adding more people to the surrounding area, this will increase overall response time for first responders, creating more risk for current residents.

I hope you will take my concerns into consideration and appreciate your time. Please reach out with any questions. 17-269

Thanks,

Sophia Osburn
3860 Rose St.
Seal Beach, CA 90740

There are no attachments in this message. Learn more.

"Melendres, Maria" <MMelendres@acta.org>
Lampson Project Comments
Nov 3, 2022 at 3:17:35 PM
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>
"Shelley Hasselbrink" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8b26f8a001cb40229bb0b67a5e8f16d7-She
"Tanya Doby" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2c3618357e604e5689629dee69e42c31-Tanya Dob
"Mark Chirco" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=92c9fce2ce814436a2e49a3acb77cbc0-Mark Chircc
"Jordan Nefulda" </o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d5bdba0683304e6e8b20a7255623306b-Jordan
"jkalmick@sealbeachca.gov" <jkalmick@sealbeachca.gov>, "mvaripapa@sealbeachca.gov" <mvaripapa@sealbeachca.gov>,
"tmoore@sealbeachca.gov" <tmoore@sealbeachca.gov>, "ssustarsic@sealbeachca.gov" <ssustarsic@sealbeachca.gov>,
"smassalavitt@sealbeachca.gov" <smassalavitt@sealbeachca.gov>, "StopLampsonProject@Gmail.com" <StopLampsonProject@Gmail.com>

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender MMelendres @ acta.org

To whom it may concern,

We have been residents of College Park East since 2002. This letter is to request that you stop the Lampson Project. The project is not taking into consideration many negative environmental effects on our community.

The project will not add anything to our community but will affect the quality of life for our families. Lampson is not designed to take the proposed project. It is a small street that already causes traffic issues. We moved to CPE because of its location, which is not on a main thoroughfare. Moving forward with such a project will create noise pollution and will become unsafe for our children.

Thank you for your consideration.

Regards,

Scott & Maria Melendres
4716 Candleberry Ave
Seal Beach, CA 90740
(562) 799-9389

17-270

From: Alison Toda
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 11:38:31 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender alison.toda@yahoo.com

To the Proposed Lampson Project Developer,

As a College Park East resident in Seal Beach, I am very concerned about the many negative impacts the proposed new project will have on our community.

We already have a lot of noise from the freeway and overhead from the Joint force training base. Adding so many new houses with residents probably having at least two cars per family would increase the noise pollution level dramatically. The increased air pollution would also be detrimental to our health. In essence we would be sandwiched between the pollution from the freeway and the high density housing.

17-271

Lampson already has potholes when trucks over a certain weight are supposed to be prohibited. Adding the new housing, heavy road equipment, and all the additional cars would certainly degrade the roads even more causing more frequent road closures and repairs. This would end up costing the CPE residents more in time and money for car repairs and maintenance.

Traffic is getting worse along Seal Beach Blvd. and Valley View. Those are the two major entry roads into our neighborhood as you are aware. Adding even more commuting time just to get through Lampson sounds very frustrating. We could potentially have traffic until we literally arrive at our driveway.

17-272

Lampson has only two lanes in each direction. I'm certain cars will be cutting through the residential streets to take short cuts since the cars will be congested on Lampson. This means neighborhood children, walkers, runners, dog walkers, etc. will be more put more in harm's way with drivers rushing about. U turns will have to be made at Heather Park, which is my major cross street. That means the wait time at that light will definitely increase each time I drive back and forth to my house.

The physical safety of residents is also at stake. I've lived here a long time and seen numerous cars crash into the cinder block walls of neighbors' backyards along Lampson. There have even been fatalities due in part to the curve along the road on Lampson. An increased number of cars and traffic will increase the likelihood of this happening more often.

17-273

Since ample parking and parks are not provided for the proposed project, we are worried that cars will need to come into CPE to park . The residential streets are crowded enough. CPE parks only have a limited amount of resources: tennis courts, playground equipment, open grassy areas, etc. It will not be as enjoyable if there are too many people there. More cars and more people likely means more crime, especially if there are affordable apartment units where people are more in transitional phases.

Please take into consideration that this new project will adversely affect our quality of life in more ways than I have the time to list.

17-274

Sincerely,
Alison Toda
Fir Avenue
Seal Beach

From:	Nimfa Santos
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 8:59:38 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender nbsaint@gmail.com

Hello,

I am concerned about the high density housing development being planned in Lampson Avenue. This project could negatively affect our community. Some examples are below.

17-275

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services

Recreation, as I have toddlers who play in park and I am pregnant as well

Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-276

Please consider my concerns.

Thank You,
Nimfa Taylor
Seal Beach, CA
(415) 740-1852

From: Grace Nam
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 8:44:06 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender buvvles@gmail.com

To Whom it May Concern,

My name is Grace Hughes and I live in College Park East. These are my questions/concerns about the lampson project: 17-277

1. As you know, there are no schools in CPE. During school drop off and pick up times, there is a lot of traffic to Rossmoor. It is already nearly impossible to take a right onto Seal Beach Blvd and a left onto St. Cloud Dr from 745am-8am. How is the developer planning to help alleviate the congestion during school drop off hours? 17-278

2. Parking - in the completed high density housing project off of Chestnut st and Sausalito St, there is never any parking. Although the developers are abiding by parking requirements, in practice, there are always more cars per unit than anticipated. How will the developer plan for overflow/guest parking? 17-279

3. During demo of the existing building, how can we make sure the air quality remains safe for families and children? 17-280

Thanks,
Grace Hughes
4764 Fir Ave
Seal beach, CA 90740

From:	Ksatria Williams
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; Councilwoman Sandra Massa-Lavitt; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 7:44:51 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ksatria@gmail.com

Hello,
I am concerned by the planned housing development on Lampson and the impacts it will have on the surrounding area.

I would like studies to be done to ensure that there is sufficient park space for the residents within the development and parking in the new development to avoid impacting College Park East and any other neighborhoods. Additionally, that area has no essential services like groceries or schools in walking distance to the planned development. I request that environmental studies be done on the increased traffic and pollution (noie and smog) that will be generated by the development to ensure that it stays within regulatory limits.

Thank you,
Ksatria Williams
4173 Ironwood Ave, Seal Beach, CA 90740
(424) 634-1578

17-281

From: Traci Smith
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 7:13:21 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender traciasmith73@gmail.com

I am a concerned resident in opposition of this project. This project will negatively affect the neighborhood and surrounding communities. I am highly concerned about the increased traffic impact it will have on surrounding streets. We already have high traffic incidents and congestion on Seal Beach Blvd and Valley View. This project will negatively impact the traffic on surrounding streets and create a dangerous driving environment.

Not only that, but rezoning the park for residential, will take away the opportunity for hundreds of children from our community and surrounding communities use the park to play soccer and practice. It is a wonderful, inviting, and inclusive family environment. I would hate to see that taken away.

Traci Smith
12142 Chianti Drive
Los Alamitos, CA 90720

17-282

From: Julie King
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 6:24:28 PM
Importance: High

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kingsvacations@hotmail.com

To whom it may concern:

My family and I have lived in College Park East for 24+ years. This project will have a negative effect to our neighborhood for many reasons .There will be many negative effects; coastal property values will be effected, construction& road closures ,public services (fire/police/medical response) , traffic - safety & noise on Lampson ,air quality & green house gas emissions , street parking in the neighborhood, pressure on the schools & parks , rodents & sanitation , just to name a few. 17-283

Effect on property values is a big issue. There are limited coastal communities, we invested in coastal property which is always at a premium, this project will have a negative impact. Low income housing does not belong in this area. This should be a consideration. 17-284

With construction road closures are always part of the formula. Lampson is a very busy street and is the only street feeds into College Park East as well as into the neighboring Garden Grove neighborhoods and into the Los Alamitos townhomes on Lampson. Definitely a foreseeable problem. 17-285

Public services such as police, fire and medical response is concerning. With increased traffic, construction road closures this will put the current residents at risk of decreased responses to potential needs. 250 homes equals at a minimum 500 more cars traveling multiple times a day on a road with very heavy traffic road. This increased traffic leads to less safety for our children and increased noise. The increased traffic also has an ill effect on air quality and green house gas emission. Street parking will then become a problem in College Park East. 17-286

With the addition of 250 home comes an increase of children, putting pressure on the schools and parks. There is already not enough parks to handle local sports for the kids (AYSO, baseball, softball, 17-287

football, Lacrosse).

The construction will also effect the sanitation of the area, pushing existing rodents, racoons & cayotes into the neighboring neighborhoods. Just to name a few concerns. This project was thrown upon us without a conversation or vote.

17-287
(CONT.)

Julie & William King

4533 Elder Ave

Seal Beach, Ca 90740

(562)243-5772

kingsvacations@hotmail.com

COMMENT CARD
4665 Lampson Avenue
Scoping Meeting
October 20, 2022

Please identify any areas of concern you may have regarding the scope and content of the 4665 Lampson Avenue Draft EIR, including any additional environmental topic areas, potential mitigation measures, or project alternatives (please print):

1. The mixed use density of 20 dwelling units is too high to accommodate adequate parking. Spill over parking onto College Park East residential streets will result. The AYSO games will be impacted and not be able to continue with limited parking. 17-288

2. Vehicle access to the project site via two driveways on Lampson is not safe. Ingress and egress are severely limited due to the greenbelt divider on Lampson. This limitation becomes a safety issue for school buses and emergency vehicles. Cars will be making U-turns at Heather and at Rose to accommodate driving on Lampson for the development. 17-289

3. Project open space area should be converted into a recreational park with playground equipment for neighborhood children. If doing so results in fewer housing units, then so be it. Without a designated play area, the Kids will be dangerously crossing Lampson via walking or biking to access Heather Park.

4. Vehicle miles travelled (VMT) will significantly increase within the development, on Lampson, Seal Beach Blvd and Valley View at a minimum. The current Park N Ride lot that supports carpooling and vanpooling will be eliminated, increasing VMT. Adding a formal telework center in the project for those living in or near the development might mitigate by giving an option to reduce their commute to work, saving mobile source emissions and ensuing mobile source air pollution. 17-290

5. California State law requires solar roof panels on new housing and zero emission electric vehicle charging infrastructure. Neither are mentioned in the proposed draft plan and are not indicated on the schematics.

6. This development should be state of the art so project and CPE residents can be proud of it! 17-291

Name: Catherine Showalter
Representing Agency or Organization:
Address: 4609 Hazelnut Avenue
City/State/Zip: Seal Beach, CA 90740-2919
Email: clshowalter@roadrunner.com

From: Shannon Shondeff
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 5:32:49 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender shannon.r.shondeff@gmail.com

Dear Personnel:

We have recently purchased a home in Rossmoor. We are absolutely hands down against a new development and hundreds of new homes adding traffic to our daily commute to sports practices and preschool in Seal Beach.

17-292

This will negatively affect so many things in our community including but not limited to:

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems

17-293

Our children also play soccer at Arbor Park and our family uses the dog park. This would have a huge impact on this area in all the ways described.

This area is a lovely and relatively quiet community where most households are families. Where we feel safe and it's not congested by traffic, pollution or too much housing squeezed into a small area. This is absolutely a HUGE loss to the hundreds of families already calling College Park east and the surrounding area home. Only a win for the developer.

Please listen to the residents and consider stopping this potentially devastating change to our community.

Regards,

Shannon Shondeff
12141 Ballantine Drive
Los Alamitos, CA 90720
949-870-8128

There are no attachments in this message. Learn more.

"Rhea Ashlynn Photography" <rheaaphoto@gmail.com>
Lampson Project Comments
Nov 2, 2022 at 4:43:03 PM
"toliver@cityoflosalamitos.org" <toliver@cityoflosalamitos.org>
"shasselbrink@cityoflosalamitos.org" <shasselbrink@cityoflosalamitos.org>,
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IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rheaaphoto @ gmail.com

Lampson Project Concern

Arbor Park is a huge part of the Seal Beach - CPE community. This project would affect current residents, parking as well as sports activities. The affected sports activities would be felt in multiple communities since families all over cypress, long beach, Seal Beach, CPE all use the park for organized sports and events.

There will not be enough parking available at Arbor Park or the dog park. There would be major parking overflow into surrounding neighborhoods and Lamposn is a dangerous street to have children and families crossing to get to the soccer fields and dog parks.

There would not be enough parking for new residents and that would lead more traffic into the CPE neighborhood and lampson as well. There is not street parking so people would be forced to park in neighboring residences.

17-294

CPE has less park acreage than other neighborhoods in Seal Beach, Los Alamitos or Rossmoor. Arbor Park has helped fill that void by providing a large grass area to support organized and unorganized sports including soccer and baseball. Playground equipment in CPE is small and outdated. New development would increase traffic to the small playgrounds in CPE.

The area is not walkable for kids traveling to school or for families with no cars. Public transportation in the area is lacking. There are no walkable convenience stores, restaurants or grocery stores.

I believe with increased foot traffic and vehicles in the area could and would lead to additional targeting for crimes such as car break ins, porch thefts, vandalism.

Home values in the area would decline in the higher income housing. I also think that because of the higher end community that minorities and low income families would be excluded by neighboring residents.

17-295

Rhea Brown
12400 Montecito Rd, Seal Beach 90740
5623438957

Emailed to: toliver@cityoflosalamitos.org

November 2, 2022

Tom Oliver
Los Alamitos Planning Division
3191 Katella Avenue
Los Alamitos, CA 90720

Dear Tom,

I am writing regarding the city's request for comments and concerns related to the 4655 Lampson Avenue Project.

I write to you as a 6 year resident of Seal Beach (College Park East), a 47 year resident of OC (grew up in Huntington Beach), an AYSO Region 159 soccer coach, husband and a father of a 5 year old daughter.

I appreciate your time in reviewing my comments and those of my neighbors throughout our wonderful community that extends well past my neighborhood into Los Al, Rossmoor, Cypress, and Garden Grove nearby.

Like many I have spoken with in person and read in comments on social media (NextDoor and Facebook), the Lampson Project proposal is not only unpopular, it does NOT make sense. My concerns are as follows:

17-296

Transportation and Traffic

Lampson Avenue is not only used by the over 1,700 households in College Park East, but those who live nearby in Rossmoor, Los Al, and Garden Grove to go shopping, drop/pickup kids at school, and bypass freeway, for example. Lampson is only a two-lane street with constant use and at times, extremely congested causing long lines and waits for those turning north and south on Seal Beach Blvd. By adding an estimated 615 residents (246 units x estimate from consultant at scope meeting of 2.5 per household) and potentially over 500 additional cars daily, travel on Lampson Avenue will be a nightmare and for those of us who live in College Park East, we have no other options to enter/exit our neighborhood.

The plans drawn up for the new project show that the residences will only be able to turn right onto Lampson towards Seal Beach Blvd. For those who need to head east towards Garden Grove, they will need to make a U-turn at Heather Street, or Seal Beach Blvd, which will only exacerbate the traffic problem.

17-297

You do not have to talk to College Park East residents old or new for very long before the topic of conversation turns to safety. Lampson between Seal Beach Blvd and Rose St. is notorious for excessive speeding, traffic accidents, and fatalities. I live closer to Lampson and Basswood near the gas station, and I see people running the red lights all the time. I spoke with the owner of the car repair shop located at the gas station and he sees accidents at the intersection numerous times a month. Lampson in this area is known as "Dead Man's Curve" due to all the fatalities. There is a reason large rocks were put in the median on Lampson. Adding more cars in the area will only make things worse and by that being

foreseen, opens up potential litigation to both Seal Beach and Los Alamitos. As far as a reasonable alternative and mitigation measure, that is up to the paid professionals to come up with, but the only ideas I have is either you completely stop the project or reduce the number of residences drastically.

I would also like to bring up parking for the new residences and their guests. There has not been enough parking planned for the new residences and their guests, which means they will walk across a busy Lampson street into the College Park East neighborhood and take up their parking spaces used for themselves or their guests. This will force Seal Beach to enforce permit parking, which will take Seal Beach city dollars to enforce. In speaking with neighbors near Heather Park (some are former and current police officers), they are concerned about people parking there as it invites crime. People not from around here will see open garages, nice homes, etc, which may lead to unwanted criminal activity.

17-297 (CONT.)

Recreation

As I mentioned earlier, I am an AYSO Region 159 coach and have been involved and influenced by AYSO since I first played soccer 44 years ago. Arbor Park has hosted countless soccer games for thousands of the communities' kids. Almost every kid in our community has experienced soccer and the sense of a team sport at one time or another due to AYSO. I can't stress enough how important this exposure is to our kids even if they decide not to further their soccer endeavors. It's a gateway to other sports and activities that are important to our kids, our community and ultimately leads to stronger students both academically and athletically.

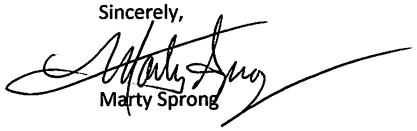
We have used the site on Lampson as parking for many years because clearly, with 100 or less parking spots available currently at Arbor Park, it wouldn't be possible for us to play, or we would have to park in College Park East. That is not only a nuisance to the residences, but also very dangerous for those crossing the very busy Lampson Avenue. This needs to be avoided. As proposed, the Lampson project does not leave enough parking for the new residences and their guests, nor considers the people who use Arbor Park for soccer, general recreation, and use of the dog park. It's imperative that ample parking is made available for those that have used Arbor Park all these years.

Traffic, Safety, Parking, and Recreation – These are my main concerns that I am addressing here, but obvious issues like noise, additional pollution from more cars, stress on public services in both Los Al and Seal Beach are some of the others that I look forward to reading about in the EIR.

17-298

Thank you again for taking the time to review my comments. As a Seal Beach resident who lives in the community across from the proposed project, this is a big deal to me and my neighbors. I hope that you see that this will impact a few cities, not just yours and some will be impacted more than others; None more than your neighbors in Seal Beach. I ask that you take a moment and put yourself in my shoes. If this project goes through, it cannot be undone. I ask that you put our health, safety, and happiness in our community into consideration.

Sincerely,



Marty Sprong

3531 Dahlia Circle
Seal Beach, CA 90740
msprong@yahoo.com

From: Heath Creighton
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 2:34:59 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender heathcreightonrn@gmail.com

Dear Mr. Oliver,
I am writing to you to express my concerns over the Lampson project. There are many concerns regarding this project that are alarming. We are already challenged with medical response times and medical facilities are overcrowded. Adding additional volumes to this already overburdened system is very concerning. With the increased traffic that would be forced to use Lampson and make U-Turns at Heather Street only increases the risk for serious or fatal accidents. The lack of parks and play areas will overcrowd Heather Park which is already undersized for the CPE community. 17-299

The other area of concern that I have is related to the increased traffic. Lampson is the only street that connect to Seal Beach Blvd. this is the only access to all of the elementary schools that will be affiliated with this project. The traffic in the mornings is already very hectic and backed up on Lampson every school morning. Adding all of these additional residents would make it impossible to turn onto Lampson from Heather or Candleberry. With all of these additional vehicles I would request that an environmental study be conducted to see what the true impact is, not only with traffic, accident risk, but also emissions. Thank you for taking the time to read my concerns. I am very passionate about my community and am very concerned about the harm this project would cause to the community that I serve. 17-300

Thank you,
Heath Creighton
4424 Dogwood Avenue
Seal Beach,CA
90740
310-213-7115

From:	Daniel Brandt
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 2:20:52 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender dbrandt660@gmail.com

Good morning,

I am writing to you as a resident of the City of Seal Beach, who is concerned about the proposed project at 4665 Lampson Ave. My name is Daniel Brandt and I have lived at 3761 Oleander Street for the past 6 years. Our neighborhood in the Seal Beach subdivision is referred to as College Park East (CPE). This neighborhood is a quiet suburb of single family residences. My wife and I moved to CPE from Long Beach to get away from the busy city life and enjoy a neighborhood which is safe for my children to grow up. We feel safe allowing our young children to ride their bikes in the street and play in our small, but quaint parks. I heard about the project when I saw a post on Nextdoor less than 2 weeks ago. I was shocked that the commenting period for the draft EIR was coming up on November 2nd. It appeared that there was no public outreach other than the mandated 500 feet notifications from the project site.

17-301

I attended the project scoping meeting, which was held at the Los Alamitos City Council Chambers on October 20th. Since the meeting, I have thoroughly reviewed the project proposal, met with the developer (George Voit), and met with the owner of C&C development (affordable apartment's developer). The glaring fact was that there was not enough parking for the density of the project. I was also concerned that with the increased number of vehicles that will be on Lampson, and no additional traffic control devices added to Lampson Ave. Lampson Ave. has been a dangerous street and has been the scene of many serious/deadly traffic collisions.

17-302

During my meeting with the owner of C&C development, he went over the scope of the development and provided me with information on their other prior affordable housing developments. I subsequently looked up the C&C development website and did a deep dive into their other affordable housing projects. What I concluded was that none of their prior projects were similar to the proposed Lampson Ave. project. Their other projects were located in true commercial areas, with plentiful street parking, away from residential neighborhoods. Other projects had much more parking and some even had underground parking structures and many of the projects were located near mass transit stations. A lot of the projects were affordable housing for seniors, which does not require as many parking spots. My

17-303

conclusion was that this high-density affordable housing build would be a first of a kind for this developer. The impacts of this development that they would be unable to quantify based on the unique location of the proposed development.

I understand that Lampson Ave. is technically considered a "commercial corridor," but the reality is that this area is a residential area, surrounded by two golf courses. First, there is no street parking on Lampson Ave. Second, Lampson Ave. is a two-lane highway, with many curves and only one sidewalk. Lastly, the area of the proposal is not walkable or safe for bicyclists (little to non-existent bike lanes). Furthermore, Lampson Ave. is already overused and underdeveloped to handle additional vehicles.

17-303 (CONT.)

After my meetings with the developers and reviewing the proposed plans, I have identified many potential negative impacts on the communities surrounding the proposed development at 4665 Lampson Ave. I will address those potential negative environmental impacts and require and answer to each of the following concerns:

Traffic

I believe there will be approximately 500 plus vehicles that will be utilized by residents of the project, based on the potential occupancy levels, which I will describe later in this email. I will specifically address the potential impacts the additional vehicles will have on Lampson Ave.

1) Lampson Ave. is a two-lane east/west asphalt street with a posted speed limit of 45 MPH. Between Seal Beach Blvd. and Valley View Ave. on Lampson Ave. there are six curves, which decreases visibility and braking reaction times for drivers approaching intersections on Lampson Ave. In the past, there have been many traffic collisions on Lampson Ave. between Seal Beach Blvd. and Valley View St. Many of these collisions have occurred at intersections with drivers making U-turns from westbound Lampson Ave. to eastbound Lampson Ave. In addition to the curves in the roadway, there are raised center medians with large trees and boulders, which also decreases visibility of drivers. Due to these trees and boulders, vehicles traveling eastbound Lampson Ave. approaching Candleberry Ave. and Heather Dr. have reduced visibility of vehicles traveling westbound on Lampson Ave. Based on the fact that vehicles exiting the project must make right turns out of the project, vehicles will be forced to make U-turns at either Basswood St., Candleberry Ave., and Heather Dr. if the drivers wants to travel to Valley View St. They will likely make U-turns at the three aforementioned intersections to drive towards Valley View St. Based on the speed limit of 45

17-304

MPH on Lampson Ave., the curves on the roadway, the reduced visibility from the boulders and trees in the center medians, I believe the added vehicles will be a safety hazard and will result in additional traffic collisions. I am requesting technical studies on the braking reaction times for vehicles traveling eastbound Lampson Ave. at the intersections of Basswood St., Candleberry Ave. and Heather Dr. I would like the study to address any additional traffic control signals devices or modifications needed to the existing devices.

2) During the morning hours, traffic becomes heavily congested for vehicles traveling westbound Lampson Ave. at the intersection of Seal Beach Blvd. In this area, there are two dedicated left turn lanes and one dedicated right turn lane for vehicular traffic intending to turn northbound or southbound Seal Beach Blvd. Just south of Lampson Ave. at Seal Beach Blvd. is the 405 Freeway. With the additional traffic intending on traveling to the 405 freeway, I am concerned about the two-left turn lanes on Lampson Ave. at Seal Beach Blvd. will not have the capacity to handle the additional vehicles. There will be additional congestion in the two dedicated left turn lanes for vehicles traveling to the 405 Freeway.

17-304 (CONT.)

Also, many of the residents of the development will have young kids, who will attend schools in the Los Alamitos Unified School District. The schools are located in the cities of either Rossmoor, Los Alamitos, or Seal Beach. In order to transport their children, they will need to travel westbound on Lampson Ave. towards Seal Beach Blvd. The new residents will increase the traffic congestion during the morning hours. Based on the fact that only one elementary school is located south of Lampson Ave. and the fact that the other five elementary schools, two middle schools, and one high school are located north of Lampson Ave., drivers will most likely travel northbound on Seal Beach Blvd. from Lampson Ave. The already congested one dedicated right turn lane westbound Lampson Ave. at Seal Beach Blvd. will become increasingly congested. I believe a second dedicated right turn lane should be added to handle the addition vehicles making right turns onto northbound Seal Beach Blvd. I am requesting a technical study on the phasing of the traffic control devices at Lampson Ave. and Seal Beach Blvd. and whether a right turn lane should be added.

Lastly, the vehicles stopped in the westbound lanes of Lampson Ave. in the right turn lane at Seal Beach Blvd. frequently back up to the intersection Lampson Ave. and Old Ranch Plaza. This additional traffic would impact the intersection of Lampson Ave. and Old Ranch Plaza. I am requesting a technical traffic times study of the traffic control devices at the intersection of Old Ranch Plaza and Lampson Ave. and would like to know what changes or modifications to these traffic control devices would be.

17-305

3) In the morning and afternoon hours, traffic from southbound Seal Beach Blvd. to eastbound Lampson Ave. is often congested. There are two dedicated left turn lanes at this location. I am concerned that traffic will be backed up to St. Cloud Dr. and cause a safety issue for those at the intersection of Seal Beach Blvd. and St. Cloud Dr. I do not believe the two dedicated left turn lanes are sufficient for the influx of vehicles wanting to make a left turn onto eastbound Lampson Ave. in the mornings and afternoons. I am requesting a study of the traffic control devices at southbound Seal Beach Blvd. at Lampson Ave. and additional lanes or modifications to the traffic control devices. I believe the two-way left turn lanes need to be lengthened to handle the additional vehicles making left turns.

4) Lampson Ave. is a two-lane highway in each direction between Seal Beach Blvd. and Valley View Dr. The marked bicycle lanes have a width of a few feet to non-existent in some locations. I am concerned that the additional traffic from the development will be a safety hazard for bicycles traveling on Lampson Ave. in the bicycle lane. I do not believe that the bicycle lanes are safe to use and should not be considered as a transportation source for new residents at the proposed development.

17-306

5) Lampson Ave. only has a narrow sidewalk on the south side of the street on Lampson Ave. between Seal Beach Blvd. and Tulip Dr., with the exception of a sidewalk on the north side in front of the proposed development. I am concerned about pedestrians crossing Lampson Ave. to walk to Heather Park in Seal Beach. The development does not have a planned park and Arbor Park does not have any play structures. It is likely that residents will use Heather Park as their primary recreational activity location. In addition, California's “jaywalking” law will change in January of 2023 and allow for people to cross any street, as long as they safely cross, without impeding vehicular traffic. I believe this will lead pedestrians crossing from the development to cross Lampson Ave. outside of the crosswalk. I am concerned that with the decreased visibility of drivers traveling eastbound Lampson Ave. due to the curves in the roadway, as well as the boulders and trees in the center medians, there will be an increase in pedestrian injuries /fatalities. I am requesting a study on the impact of foot traffic on Lampson Ave. due to the development. I also would like a sidewalk added to the north side of Lampson Ave. between Seal Beach Blvd. and Tulip Dr.

17-307

6) Valley View St. is a major arterial highway, which intersects with Lampson Ave. and this intersection is located east of the development. The eastbound Lanes of Lampson Ave. already become congested at the intersection. Eastbound Lampson Ave. at Valley View St. consist of two dedicated straight

17-308

lanes for eastbound traffic and one dedicated left turn lane for vehicles traveling northbound Valley View St. Based on the additional added vehicles of the development, I am requesting a technical study on the traffic signal time and where additional traffic signal devices need to be added or modified. Also, based on the additional traffic will add congestion to the number two lane of eastbound Lampson Ave. at Valley View St. Vehicle intending on traveling southbound Valley View St. in order to drive to the 405 Freeway / 22 Freeway will be slowed. I am requesting a dedicated right turn lane be added in this area for vehicles making a right turn from Lampson Ave. to southbound Valley View Dr.

7) Vehicles leaving the project intending to travel to Valley View St. will take the quickest route possible. Many vehicles traveling eastbound Lampson Ave. towards Valley View St. currently make a right turn onto Blackmer St. and to cut through the residential neighborhood to reach Valley View St. The vehicles will exit on Cerulean Ave. or Tiffany Ave. (Garden Grove) to Valley View Dr. in order to bypass traffic congestion on eastbound Lampson Ave. at Valley View Dr. I believe the additional vehicles from the development will impact the safety of the following street in Garden Grove: Blackmer St., Trinette Ave., Cerulean Ave. Tunstall St., St. Mark St., and Tiffany Ave. Based on the additional vehicle cut through traffic, I am requesting a technical traffic study on the aforementioned streets in Garden Grove.

17-308 (CONT.)

Parking

In addition to traffic issues, below I have broken down the potential occupancy of the apartment development, as well as the cluster/townhomes development.

Apartment Occupancy

	Quantity	Occupancy	Minimum	Maximum
77 total units				
(1) bedrooms	36	1-3 people		
36	108			
(2) bedrooms	20	2-5people		
40	100			
(3) bedrooms	21	3-7people	63	
147				
Total:	77			139
355				

Possible registered occupants range is 139-355 residents in only 77 apartment

17-309

units.

Lack of parking:

- 98 parking spots for between 139-355 residents.

- 30 assigned garages and 68 open parking spaces (first come, first serve)

Conclusion: The lack of parking will lead to residents and guests parking in CPE and surrounding communities. There is no parking on Lampson Ave.

17-309 (CONT.)

Cluster and Town Homes Occupancy
Cluster Homes
55 total units/ 220 total bedrooms
Townhomes
114 units / 321 bedrooms

Lack of parking:

- 54 driveways

- 90 open parking spaces

- 338 garage spaces

Conclusion: There is no street parking in the proposed neighborhood and garages many times are not used for parking. Enforcement of using garages would have to be carried out by the planned HOA for the cluster and townhouse communities. HOA's are ineffective in enforcing people to keep their garages open for parking. Many of the vehicles will be parking in CPE and surrounding communities. The lack of parking will not impact the City of Los Alamitos, but will impact residents of Seal Beach (CPE).

17-310

I believe that based on the number of occupants in these developments and the limited amount of planned parking, there will be approximately 250 plus vehicles parked on CPE streets on a daily/nightly basis. This lack of parking will increase vehicular traffic on the streets of CPE. I would like a comprehensive study on the potential occupancy of both developments and how many vehicles would be associated with the residents. The additional vehicles parking in the streets nightly will have an impact on roadways in CPE. I would like a technical study of how the extra vehicular traffic from the development will have cause wear and tear of the streets within CPE and Lampson Ave.

Parks

17-311

The proposed development only has a 14,000 open area for recreational activities. There are no play structures proposed except for a "tot lot" in the apartment building Arbor Park has open fields and a dog park, but no play equipment. Without a park

being built in the community, Heather Park across the street from the development will be heavily impacted. Heather Park is the most used park in CPE. The additional residents in the proposed development will primarily utilize Heather Park, making an aging and overused park more crowded. Due to the lack of parking in the development, many of those vehicles will take up the street parking surrounding Heather Park, restricting access to Heather Park by CPE residents.

Parking spaces at Arbor Park will also be used by residents and guests of the development rather than visitors of Arbor Park and the dog park.

I am requesting a technical study on the impact of parking at Arbor Park, which will be impacted by the development and restrict park use.

17-311 (CONT.)

Public Service

The development is located in the City of Los Alamitos, which is located far away from the Los Alamitos Police Department. The distance from the Los Alamitos Police Department will decrease response time for the residents in the proposed development. In addition, the Los Alamitos Police Department (LAPD) and the Seal Beach Police Department (SBPD) utilize the same radio frequency and respond to each other's calls for service. I believe that the Seal Beach Police Department will be utilized to respond to priority calls to the development in Los Alamitos and decrease the service level to Seal Beach residents. I am requesting a technical study of the impact the development will have on the SBPD services being deployed to the development to assist LAPD.

Residents of the development will be parking on CPE streets in the daytime and overnight hours due to the lack of parking in the development. SBPD will have increased calls for service from residents regarding illegally parked vehicles. These increased service call volumes will decrease the capacity of SBPD to respond to priority calls in the City of Seal Beach. I would like a technical study on whether additional police officers will need to be hired by the Seal Beach Police Department.

The Orange County Fire Department (OCFA) services many cities in Orange County, including Los Alamitos, Rossmoor and Seal Beach. The closest OCFA station is at Seal Beach Blvd. and Beverly Manor (Station 48). This station primarily services Leisure World, which is a large senior community, which places a high demand on this fire station. With the addition of approximately 800 residents in the development, the services from OCFA will be strained and residents of CPE and the surrounding communities will be impacted. Additional response time to Leisure World and their elderly population will be decreased because of the reallocation of service calls to the development. The next closest OCFA fire station is in Los Alamitos, which primarily services Los Alamitos and Rossmoor. I am requesting a technical study on the impact of the additional residents and the response times of the OCFA to the proposed development residents and residents of CPE and Leisure World.

17-312

Road impacts from heavy equipment

The City of Seal Beach prohibits trucks with a gross vehicle weight over 6,000 pounds from traveling on Lampson Ave., with limited exceptions. This prohibition is due to the damage heavy vehicles can do to the roadway. I would like this weight limit to be enforced during the demolition and construction of the proposed development. I would like a comprehensive study of how the developer would manage the demolition, removal of debris, and transportation of construction equipment and materials. This study should include the impact of the heavy equipment and loads will have to the integrity of Lampson Ave.

Construction Noise and road closure

The backyards of the homes on Ironwood Ave. directly across from the development will be severely impacted by construction noise and excess debris (dirt). The cinder block walls along the Lampson Ave between the sidewalk and their residents are short and need to be reconstructed to decrease the impact of construction noise. The residents between 4509 Ironwood Ave. and 4701 Ironwood Ave. will be impacted and need to have their cinder block walls rebuild higher. I am also requesting a technical study on the construction decibel noise levels and the impact on the Ironwood Ave. resident's health. What will be in place to monitor the decibel levels during construction?

Due to the road closures during the construction there will be an increase in cut through traffic in the CPE neighborhood. Lampson is only a two lane highway situated between to major arterial highways (Valley View St. and Seal Beach Blvd.). If there is construction and lane closures on Lampson Ave. vehicles cut through CPE and Garden Grove to reach Valley View St. or Seal Beach Blvd.This cut through traffic will decrease the safety of CPE and Garden Grove residents. I would like a study on cut through traffic in CPE and Garden Grove from construction on Lampson Ave.

17-313

Aesthetics

The front of the development directly off of Lampson Ave. will be two-stories high. Then all of the other residences will be three stories high. The affordable apartment building will be 3 stories high facing Lampson Ave. Based on the height of the construction and the low cinderblock walls of residents on Ironwood Ave. there will be several impacts to their environment.

One impact will be on the glare from the sun, which is overhead to the south in the afternoon. This will cause a bright glare from the reflection off the windows of the two and three story building of the development into the residents located between 4509 Ironwood Ave. and 4701 Ironwood Ave. I am requesting a technical study of

17-314

the impact of the angle of the sun and the potential glare from the developments residents and the Ironwood Ave. residents.

Secondly, the height of the two and three-story construction of the development and the short cinder block walls will lead to a lack of privacy for the Ironwood Ave. residents. I am requesting a visual simulation from the residents between 4509 Ironwood Ave. and 4701 Ironwood Ave.

17-314 (CONT.)

Rodents

During large construction projects rodents are dispersed into nearby residential neighborhoods. What are the plans to control and abate the influx of rodents in the Los Alamitos (Parkewood), CPE, and Garden Grove neighborhoods? Rodent displacement occurs during the excavation portion of the development, construction phase, and at the completion of the construction. I am requesting a comprehensive study on the rodent population in the development and the impacts to the surrounding communities.

17-315

Wildlife

The Joint Forces Training Base (JFTB) is home to a large coyote and rabbit population. I am concerned about the developments impact on their eco-system and I am requesting a technical study on the construction of the development and the impacts to the coyote and rabbit population on JFTB, which is located adjacent to the development.

17-316

Lighting

There is limited lighting on Lampson Ave. between Valley View St. and Seal Beach Blvd., with limited public transportation in the area of the development. There is a sidewalk in front of the development on the north side of Lampson Ave., but not east and west of the development. The sidewalk on the south side of Lampson is small, with limited lighting. Based on the need for residents of the new development to walk across Lampson or ride their bicycle in limited bicycle lanes, I am requesting a technical study on the street lighting in the area.

17-317

Thank you for listening to my concerns regarding this development and I look forward to answers to my issues and concerns, including the studies to lessen the impacts of this development.

Please feel to contact me with any questions:

Daniel Brandt

3761 Oleander St.

Seal Beach, CA 90740

dbrandt660@gmail.com

17-317
(CONT.)

From: Katie Coughlin
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 1:58:50 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender katecoughlin21@gmail.com

Dear Personnel:
We have recently purchased a home in College Park East. We are absolutely hands down against a new development and hundreds of new homes adding traffic to our daily school commute to old town Seal Beach. As part of this community we never would have purchased our home in August if we knew hundreds of new households with cars and added traffic would be soon converging onto Lampson Ave every day. This will negatively affect so many things in our community including but not limited to:

17-318

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-319

Our children also play soccer at Arbor Park and our family uses the dog park. This would have a huge impact on this area in all the ways described. We already have a commute to McGaugh that is about 10-15 minutes. With this disproportionately large (relative to the area) addition of households to the proposed area this could add a huge burden for families already here in terms of commute time to school as well as be problematic in all the areas listed above.

This (on Lampson aka College Park East) area is a lovely and relatively quiet community where most households are families. Where we feel safe and it's not congested by traffic, pollution or too much housing squeezed into a small area. This is absolutely a HUGE loss to the hundreds of families already calling College Park east and the surrounding area home. Only a win for the developer.

Please listen to the residents and consider stopping this potentially devastating change to our community.

17-320

Regards,
Katie Coughlin
3881 Wisteria Street
Seal Beach CA 90740
415-425-3140

From: Linsei Lingo
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 1:40:43 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender linsei2000@gmail.com

This is doing damage to many kids taking away a place for them to learn grow and play on top of a long list of other reason. Please stop this project from happening.

17-321

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-322

Linsei Lingo
8451 Sterling Way
Westminster ca 92683
714-860-9074

From: Teryl A. Hubert
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 1:08:32 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender THubert@da.lacounty.gov

To Whom it May Concern,

I was born in Los Alamitos 53 years ago living in Carrier Row, Rossmoor and now College Park East. I was recently made aware of a building project that is set to go in on Lampson across from College Park East. Development is inevitable. I understand that. Our community is growing and being that we are Los Alamitos/Seal Beach, we will always continue to be a hotspot for young families. But I was appalled to hear that this project is moving quickly with little resistance or compliance to impact studies.

17-323

Since this is my first time ever addressing city officials regarding a development in our town, I want you to know that this project should have to submit to every study possible before being granted permission to build. Nobody should be above the rules and you folks should have all of the information as it pertains to environment, traffic, Fire and Police services, parking, overall population impact as well as school impact on our already overpopulated school district. This decision should not be taken lightly.

I would like to see our City of Seal Beach politicians getting involved in this fight against this project. How convenient is it for Los Al to approve this build when the majority of the impact is on the community College Park East (CPE). We would deal with the noise pollution, air quality, traffic and parking issues that come with building that many new homes not the City of Los Alamitos.

Somebody over there in the City of Seal Beach needs to stand up and fight for us in this neighborhood. **I DO NOT WANT THIS BUILD TO HAPPEN IN OUR NEIGHBORHOOD WITHOUT ALL THE PROPER IMPACT STUDIES DONE AND REVIEWED.**

17-324

Respectfully,

Terri Hubert

4249 Birchwood Ave

562 244-9772

From: Nick Papadakis
To: Tom Oliver
Subject: Re: Lampson Project Comments
Date: Tuesday, November 1, 2022 9:35:30 AM
Attachments: image003.png
image002.png

Good morning Tom,

The tone of my comments may overshadow the message. I would like to amend my comment to the following extent:

Please delete the last paragraph of the email I sent to you. I think the first paragraph I wrote conveys the message clearly. The last paragraph begins with, "Many of the residents…." Please delete this paragraph.

Thank you,
Nick Papadakis

17-325

Sent from my iPhone

On Oct 31, 2022, at 2:13 PM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Nick,

Good afternoon. Thanks for your response. The City will consider these issues as a part of the Environmental Impact Report.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303





From: Nick Papadakis <nepapadakis@gmail.com>
Sent: Monday, October 31, 2022 11:42 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Lampson Project Comments

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender nepapadakis@gmail.com

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

17-326

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-327

Low income housing may include Section 8 government supported housing. Unfortunately there is a high incidence of crime associated with Section 8 tenants. Whether the proposed housing is Section 8 or not, why would any responsible city government permit low income housing to exist adjacent to relatively low crime neighborhoods such as Los Alamitos, Rossmoor, Seal Beach? Why would a responsible city council permit such an element into this area? Nonsense.

17-328

Many of the residents of this area own fire arms for good reason. Crime is rampant generally. People own fire arms for personal protection because the police have been hand cuffed. Imagine turning loose a low or no income population in the streets of the areas mentioned above. Such people are looking for opportunities to steal and maybe worse. Guns will be used.
Does the city council want gunfights in the streets? Keep the undesirable element away from this area. That is part of your job as public officials. As public servants you should protect your constituents from crime we see on TV occurring in other cities.

17-329

Sent from my iPhone

From: Ellen Goldenberg
To: Tom Oliver
Subject: Lampson Project Comments
Date: Monday, October 31, 2022 11:30:25 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender edorf562@gmail.com

We have lived in College Park East for over 27 years. Our daughters went to McGaugh Elementary, McAuliffe Middle School and Los Alamitos High School. Our nice, quiet, peaceful area is going to be ruined by overbuilding on Lampson. I saw this happen when they tore down the movie theater on Seal Beach Blvd and put in more shops and stores and built The Target Center across the street. They have overbuilt and that brings more traffic which causes more car accidents just in sheer volume alone. They are ruining the area with over building and making it turn into a miniature Los Angeles. We moved to this part of Orange County to escape the LA congestion and traffic and if this project goes forward we will be truly following in the footsteps that have made living in Los Angeles a nightmare for so many. Either stop the project altogether and leave the open space on Lampson as it is or scale back the project in a huge way. Otherwise our beautiful small town will truly turn into Los Angeles. It is already heading in that direction, judging by the construction on continual construction on Katella.
Thank you for listening.

Ellen Goldenberg
3840 Fir Circle
Seal Beach

17-330

Sent from my iPhone, please excuse any typos

From:	DENNIS BARNES
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 11:53:35 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender dbmermer@aol.com

As a concerned citizen, mother and grandmother, I can't even believe that this project would even be considered. I have lived in this community for 36 years and have seen changes and growth for the most part that has been beneficial to the community. This project is definitely not beneficial to anyone except maybe the developer! There are so many negatives more than positive features that it is truly hard to imagine that a project like this could even be considered. 17-331

Air quality has already been compromised by the expansion of the freeway. My daughters live in College Park East and I have seen the traffic increase on Lampson in the last 5 years. The accidents have also increased even if some have only been fender benders. Where is the extra water supply going to come from for all these units? Arbor Park has been a great resource for the youth of our community for many years. My children and now my grandchildren have played soccer and even baseball there. Where would the parking be for the participants and spectators if housing was built on that property where there would probably already be not enough parking for the residents of the new project? The College Park East residents already know that parking is at a premium.Our children need a place to exercise and maintain a healthy lifestyle. The parks that are available cannot handle the extra influx of people. Please, please reconsider this project and vote down this horrendous idea!! 17-332

Kathleen Barnes
11722 Harrisburg Rd
Los Alamitos CA 90720

From:	Lisa Gilbertson
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 11:35:56 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lisagilbertsoncc@aol.com

Please reconsider this project. We live in College Park East and would be directly impacted by the additional traffic of this project.

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

Lisa Gilbertson
4316 Ironwood Avenue
Seal Beach, CA 90740
Lisagilbertsoncc@aol.com
310-505-1357

17-333

From: Shannon Powell
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 11:00:11 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender skfpowell@gmail.com

Good morning,

I am writing in regards to the proposed housing development on Lampson Avenue. As a resident of College Park East living in a home which backs directly up to Lampson Avenue our family has first-hand knowledge of the traffic, noise and safety of this already busy section of road. In fact, a car once lost control and crashed through our back wall and into our back yard several years ago. Fortunately, no one was seriously injured in that case. The many other traffic accidents that occur, however, haven't had the same outcome. Such a large increase in traffic on an already busy road will undoubtedly increase these accidents, injuries and fatalities, and this is not acceptable. 17-334

In addition to the increase in accidents, the increase in traffic noise as well as construction noise and pollution will be greatly detrimental to the quality of life for those of us in the surrounding areas. The air quality will be negatively affected as well. 17-335

While these are some of the biggest concerns we have, they are definitely not the only detriments this project will force on the current residents, both human and animal alike. There is already a scarcity of green space available for human recreation, as well as area wildlife, including many bird species and the burrowing owl. For an area that is already densely populated and resource thin, the addition of this high number of new residents is not supported. We strongly object to this proposed development and ask that this project be halted. 17-336

Charles & Shannon Powell
4749 Ironwood Ave
Seal Beach, CA
714-402-9990
714-402-9872

Sent from my iPhone

From:	jarnette lee
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 9:50:45 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jarnettelee@yahoo.com

Dear City Officials,

I recently moved to College Park East from Los Angeles. Having lived in various parts of LA my entire life, I was ready for a better quality of life. So I made the move to the beautiful city of Seal Beach. I wanted to leave behind the overpopulated streets and parks, traffic, noise and air pollution, and crime. So I was very disheartened when I heard about the Lampson project. I know what it's like to drive for 50 minutes to go 3 miles on surface streets. On really bad days, my husband used to park his car on the street in rush hour traffic and walk home because the cars wouldn't move. He'd go back at 10pm to get his car. There is already a long line to turn right onto Seal Beach Blvd. from Lampson in the mornings when I take my kids to school. If the housing development goes up, there will be too many cars, people driving more recklessly, and more accidents.
I don't want to see 4 cars turning left at the end of the signal light when it should be 2. I don't want angry drivers and people. I don't want the parks and schools to get overcrowded. In short, I don't want our neighborhood to turn into LA.

I earnestly urge you to please consider how detrimental this housing development would be not only to the current residents but to the environment as well. Please help us to keep Seal Beach a safe and beautiful place to call home. Thank you very much.

Sincerely,

Jarnette Lee

4757 Candleberry Ave
Seal Beach CA 90740
213.700.6673

17-337

From: Shanna
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 7:23:33 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender shanna.hart@yahoo.com

As a resident of college park east I am worried about Noise Pollution (vehicles on Lampson). Parking in our neighborhood will be impacted severely along with Road impacts from heavy equipment. 17-338

Most importantly I'm worried about Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc) lampson is such a dangerous street as is I feel like this is not the right area for this new development. Because there is no parks in the plan! The parks in college park east will be impacted. these parks are already needing safety updates and renovation 17-339

Thanks
Shanna vititow
4608 fir ave seal beach
714-686-8300

Sent from my iPhone

From: Suzy Mokhtari
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, November 2, 2022 6:26:35 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender suzyrizi@gmail.com

Dear Mr Oliver and the City of Los Alamitos Planning Division,

My name is Suzy Mokhtari I wanted to voice my concern for the proposed development at Arbor Park. While it is a beautiful concept to provide safe housing opportunities for lower income families, we all deserve a plan for parking, open play spaces, and traffic rules. As a pediatrician, CPE homeowner, mom of 3, and human rights advocate, I am concerned this project has not been fully thought out in providing safe living spaces for all.

I appreciate your diligence in keeping our community safe!

Suzy Mokhtari, MD, MPH

17-340

Sent from my iPhone

From:	Jennifer Halls
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 6:11:47 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jenniferhalls2@yahoo.com

Please don't allow this project to move forward. It will have a lasting impact that will negatively affect our city.

Why do we need more housing like this? The revenue from it is not worth the:
Additional Traffic which impacts Air Quality

Construction Noise and road closure in order to build it

Noise Pollution (vehicles on Lampson)

Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)

Loss of Parking in our neighborhood

Last but not least, the impact to our Schools. Increased class size is not ok.

Thank you for your consideration.
Jennifer Halls
131 13th Street
Seal Beach, CA 90740
562-619-1828

17-341

From:	Tiffany Joyner
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 12:04:25 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tiffanyjoyner13@gmail.com

To The Cities of Los Alamitos and Seal Beach,

I wanted to voice my opinion and concerns about the Lampson Project. I currently reside at 4448 Hazelnut Ave in Seal Beach. We are located directly across from Heather park.

We have 2 small children, ages 7 and 10, who play at heather park as well as play outside and ride bikes outside our house. I am concerned for their safety as the project will increase traffic and cars significantly in our neighborhood. I am also concerned about the impact it will have on our already run down parks in college park east as well as parking. Another huge concern is the safety on Lampson, as it is already a dangerous stretch of road with MANY accidents and even fatalities.

This project will also impact College Park East housing prices in a negative way and will make this community lose its feeling of being a small quiet community.

17-342

Other concerns are;

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

Please hear our voices of concern as the whole neighborhood and surrounding areas do NOT want this to happen.

Thanks you,
Tiffany Joyner

17-343

From:	Fred Schutz
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 4:16:41 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender fredschutz@roadrunner.com

I am writing you to disclose how your Lampson Project will create a negative effect to my personal health. I have respiratory issues. As my backyard sits on Lampson, the dust during the construction will be intolerable. In addition, the dust from the additional traffic after the construction is complete will further contribute to my breathing issues. 17-344

Beyond my personal health, not one neighbor has welcomed this plan.

There is no plan for the increased traffic on Lampson. No additional traffic lights. No left turn signals. Cars traveling east will need to make U turns on Rose or Heather Street going west. It is likely these new neighbors will increase traffic inside CPE because Lampson was not designed for so much more traffic. And there is no plan for increasing lanes on Lampson. And even if there is, who wants to live behind a 6 lane road? It would be like living behind Beach Blvd. 17-345

The current level of noise is barely acceptable. When we bought our house, we were told the price was lower than the houses a few streets inside CPE because we were on Lampson, and it might be a little more noisy. Now that you are planning on having 550 cars (not to mention the guests of these new neighbors) in addition to what we have been suffering, I can only imagine how much more my home will depreciate, and how much more outside noise we will have to tolerate. 17-346

CPE has delightful little parks. Based upon the projected map of the project, there are no parks included. Which means we can expect to have a few thousand new neighbors overcrowding the small parks we have. 17-347

I haven't seen any proposal for additional fire or police. Even though our neighborhood will be increasing by several thousand people. Speaking of which, aren't projects like this one reserved for non-residential areas? Clearly one building does not define a commercial area. 17-348

What will happen when I can't even park in front of my house because there won't be enough spaces in the proposed development?

I do not feel a change in this community should be left to one investor or a few city managers. You have no right to affect my health or quality of life. At the very least, it should be put on a ballot. And not a Los Alamitos ballot, but a Seal Beach one. 17-349

Thank you for your time.

Regards,

Fred Schutz

From: Jessica Polye
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 9:30:38 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jessica.polye78@gmail.com

Mr. Oliver,

I am a resident of the College Park East community in Seal Beach and I am writing to express my grave concern regarding the impacts of a potential housing development slated to be built at 4665 Lampson Avenue in Los Alamitos ("Lampson Avenue Project").

This new, high-density development will have a myriad of negative impacts on our community both from a quality of life AND environmental standpoint. As a College Park East resident who lives on Ironwood Avenue, which runs parallel to Lampson Avenue, I already experience a great deal of sound pollution from the ever-increasing traffic just beyond my backyard wall. Adding a development to accommodate 800+ additional residents, along with their guests, will only add to the sound pollution from the added traffic and make the northside Ironwood Avenue residents' backyards unbearable during certain times of day.

17-350

Just as concerning as the sound pollution from additional vehicles on Lampson is the increased traffic as a result. Lampson is already a very dangerous road with numerous accidents occurring on a regular basis. The area of Lampson that runs along the community of College Park East has historically been known as "The Alley of Death," due to the significant number of fatalities that have occurred in the area. With no space to expand Lampson, the increased traffic will only add to the number of dangerous and deadly accidents. Below are some examples worth noting of accidents in this area of Lampson. One of these is from this past month (October 2022). Another involves a child. I have 3 children of my own, who often ride their bikes in the area, and I do not want their abilities to ride in the area to be hindered by uncontrollable traffic that cannot be accommodated by the Lampson intersections.

General safety and pedestrian safety should be a top priority for both the city of Los Alamitos and Seal Beach. An increase in injury and death rates in the area should not be on anyone's conscience.

https://www.sunnews.org/drunk-driver-gets-15-to-life-for-lampson-avenue-death/
https://www.latimes.com/archives/la-xpm-1989-09-11-me-1559-story.html
https://www.oc-breeze.com/2022/10/04/219326_seal-beach-police-investigating-serious-traffic-collision-involving-two-vehicles-on-lampson-avenue/
https://www.laweekly.com/rider-hospitalized-motorcycle-crash-lampson-avenue-seal-beach-ca/
https://www.ocregister.com/2013/06/17/lampson-speeds-scrutinized-after-accidents/

17-351

While dangerously increasing traffic and noise pollution are of utmost concern, there are also several other factors that are essential for the City of Los Alamitos to investigate. Below is a list of concerns that MUST be addressed in the environmental impact assessments:

- Aesthetics (visual perception of environment)
  - Daytime glare and its impact on drivers, cyclists and neighboring homes
  - Nighttime illumination
  - Existing visual characteristics

17-352

- Property Values
  - Existing home values are likely to decrease and be adversely impacted due to additional multi-family dwellings alleviating housing pressure in an area that is primarily single family homes
- Air Quality and Environmental Conditions
  - Increased carbon monoxide emissions
  - Increased particulate matter
  - Increased greenhouse gas emissions
- Biological Impacts
  - The appropriate agencies must investigate how this development will impact local wildlife
  - There are a large number and variety of birds in the area – hawks, falcons and other large birds of prey, as well as squirrels and other varieties of smaller birds
    - Do any of these birds nest and feed in the vicinity of the development site?
    - Do any of these birds of prey have special environmental protective or endangered status?
  - How many trees will be eliminated for this project and how will this impact shade and air quality?
- Geology and Soils
  - Impact on drainage in the area
  - Runoff concerns
  - How will the local soccer field conditions be impacted?
- Public Protection Services Impact
  - Fire protection
    - High population density requires additional fire protection services
    - Multi-family dwellings tend to require more fire protection
  - Police protection
    - High population density requires additional fire protection services
    - Is there an expectation that crime may increase in the general vicinity due to a higher population density?
    - Additional police support from the City of Seal Beach will be required as a result of a development that is taking place in a separate city (Los Alamitos), which will impact Seal Beach taxes
- Other Public Services
  - Library
    - Can local libraries accommodate the additional residents?
  - Parks and Recreation (There are no planned parks or play areas for the residents of this development which will directly impact College Park East parks)
    - Can local parks accommodate the additional residents causing an increased rate of wear and tear?

17-353

17-354

17-355

17-356

17-357

As the leader of the city council in Los Alamitos, it is imperative that you perform the necessary steps and due diligence to halt the Lampson Project. I urge you to disapprove the current proposed development plan, reassess and preserve the well-being of the surrounding communities.

Regards,

Mike and Jessica Polye

4201 Ironwood Avenue
Seal Beach, CA 90740

973-517-3963

17-358

From:	Matthew Stachowiak
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 8:54:21 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mstachowiak93@gmail.com

Hello,
I strongly oppose the Lampson housing project. The project will cause many problems such as traffic congestion on Lampson, parking problems for nearby home owners, noise pollution, increased need for fire/police resources, construction noise and impact public services. There will be a large impact to the homeowner of the College Park East neighbor with no benefit to them.

I hope you consider these effects on the nearby homeowners in the neighborhood and oppose this new development.

Thank you,

Matthew Stachowiak
4424 Ironwood Ave
Seal Beach CA 90740
714-702-6258

17-359

From: Chrysanthi Davilas
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 7:48:21 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender cvdavilas@gmail.com

Dear City of Los Alamitos,

I have been living in Seal Beach College Park East for 3.5 years now. We moved here for larger space and the school district for my three little girls. The many things I love about this area is the beautiful environment, places to play and ride around, and the easy flow of traffic on Lampson to get my kids to school on time. Unfortunately, I am fearful of this Lampson Project going through for two main reasons:

1. My house happens to be on Ironwood, the closest street from Lampson, where most outside cars will inevitably have to park.
2. Impact on Lampson traffic. Lampson is a quick flowing street which tends to back up if there is any hiccup. Adding more housing to this street, practically a one-way- out street will make everything more difficult for all involved in a daily basis.

I am hoping to be heard on this issue. I love this area and didn't settle into this expensive home to be impacted so much in such a negative way.

I am hoping the plans get revamped or moved altogether, in an area where it makes more sense.

Thank you for your time.

Sincerely,
Chrysanthi & Nick Davilas
4280 Ironwood Ave
Seal Beach, ca 90740
714-785-3249

17-360

Sent from my iPhone

From: Jaclyn Power Hudzietz
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 7:34:25 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jaclynpow@gmail.com

To whom this may concern,

You cannot build the projected Lampson Ave. development for multiple reasons. I am a young mother living in College Park East with two young children aged 7 and 4. Our 4 year old son has environmental allergies and skin eczema, which is impaired with poor air quality. When the air quality is poor, he suffers from asthma attacks. His skin also flairs up with itchy eczema. The machinery and vehicles needed for the development on Lampson Ave. will produce pollutants and impact the air quality. This will cause an asthma attack that could send my son to the emergency room, which is a financial burden, even having health insurance. His skin will be itchy and he itches until he bleeds when it's bad. Will you provide financial assistance to cover this cost?

What about those living nearby without the resources that I have, such as health insurance? What can you provide for them? I have transportation, it will be halted by your project and cause a burden to them. What about those without health insurance and the impact the air quality you produce will cause them? That will be a huge detriment to them.

17-361

The absurd amount of traffic we will all experience is going to be horrific. We have 9 schools in Seal Beach, Rossmoor and Los Alamitos that are impacted with kids coming and going to school. As a mother who drives her kids to and from school, I do not welcome any road closures. The parking within College Park East is going to be completely insane. Car break ins are going to increase! Crime is going to increase near my home with my small children! No!! If my husband works late, I cannot imagine having to experience criminals in our neighborhood alone.

Closing the road will hurt emergency responders helping anyone in need who live off of Lampson Ave. and nearby. My children and my family are my world and if anything happened and God forbid I had to call 911 for help, your project would lengthen the time it would take him to get to us. Every second counts in an emergency. Whether a child is choking, bleeding badly, having an asthma attack, etc.

17-362

There are a lot of new families close the projected area on Lampson. As a mother, I know very well how important the quiet is for (a baby especially) sleep. If there are loud noises from this that wake up sleeping babies, toddlers, children, adolescents, young adults needing to go to work, that would be a huge stress and burden to all of those families. My family included.

17-363

Traffic safety on Lampson with this project is going to be critically low. The u-turns needing to be made, road rage it will cause, the cut-thru traffic into the neighborhood I live in is unwelcome. There will be extra cars with more frustrated drivers and that is a dangerous combination.

17-364

The Lampson Ave. is already a busy street that goes through many cities. It is heavily trafficked and does not need any more traffic. Especially right by our small neighborhood. It is NOT welcomed and will produce more pollution, car accidents, traffic, unsafe driving, and delay commutes for everyone.

17-364 (CONT.)

Youth sports at Heather Park and Arbor Park will be stopped during this project. AYSO soccer plays at Heather Park and your project will stop and relocate all of hose practices and games. That is a burden of time for all of those children and their families, please respect us local families and our time.

This is not a positive project either. The housing and population you want is completely unwelcome by my whole family and many of my neighbors and friends. Please do not do this project, please. My family is my world and my life savings have gone into our home. If you make our home a lower value from this project, we will be devastated. Please do not build low income homes there. We are a nice city with high property value that we paid for. We are good people with honest jobs, kids in school and pets in our home. My parents and grandparents live in college park East on Sunflower and on Ironwood. We live on Dogwood and cherish this small city and quaint neighborhood. Please do not put in low income housing on Lampson Ave. I beg of you. We do not want it. Please stop this project. We do not see any positives from it, and only many negatives that I have mentioned above.

17-365

Jaclyn Power Hudzietz
4508 Dogwood Ave
Seal Beach, CA 90740

Cell 562-754-3044

From:	MARILYN RIORDAN
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 5:14:09 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lampas@aol.com

To: The City of Los Alamitos,
From: Marilyn Riordan
Resident of CPE,
Seal Beach, CA

I am strongly opposed to the proposed housing project on Lampson Avenue between Seal Beach Boulevard and Valley view Boulevard in Los Alamitos. I am a tax paying homeowner with many objections. The following are my concerns:

Aesthetics
Air Quality
Water
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

Awaiting your reply,

Marilyn Riordan
CPE Home owner
Seal Beach, CA

17-366

Sent from my iPhone

From: Kerem Gulec
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 9:29:28 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ckgulec@gmail.com

Dear All

It is remarkable to propose this location for such a high density, boilerplate housing project. The idea of state mandating housing is rather ridiculous by itself and most likely won't achieve the results it is intended to, but proposing this right next to a neighborhood with completely different characteristics defies pretty much every urban planning principle in the book. Self inflicted wound is perhaps best way to describe this, very short sighted. Destroying livability is essentially akin to asking those who live there to move somewhere else. Perfect way to diminish the attractiveness of the city in the long term by making life miserable for those who live there.

17-367

Clearly this can have a significant impact on our neighborhood and such consequences will be unacceptable and unfair but ultimate losers will also include the city of los Alamitos and city of seal beach.

This project location appears to be ill conceived in many ways. Right next to Arbor and Dog parks, which are two of the busiest recreation areas in the city, with arbor park hosting soccer events every week. There is absolutely no way lampson can handle this added traffic due to this development. There is absolutely no way our parks can handle this additional demand from the new condensed housing. It will create parking issues in our neighborhood, crime will go up. It will be a disaster from urban planning perspective and not only diminish value of our neighborhood but our city as well.

17-368

As a CPE resident, and an engineer/consultant who has contributed to many planning studies as part of numerous developments across California, I strongly recommend reconsidering the proposed location for the high density housing. This will certainly have a significantly negative impact to its neighbors. And those "neighbors" will likely use every legal tool they have to oppose this development location of which not only defies common sense but likely would not pass any objective criteria/test either. Hopefully, this idea goes away but if not an extensive due dilligence process should be expected and planned. Studies by reputable consultants/experts that investigate and quantify the short/long term impact of the proposed location on its surrounding communities and the city overall should be performed. If these studies are done by the developer, they should be independently peer reviewed by the city and findings should be objectively reconciled. Community members also should be given access to these studies and also an opportunity to perform independent peer reviews, and city should collect their comments. All comments need to should be addressed satisfactorily.

17-369

Thank you,

CK GULEC, PhD, PE

3701 Fuchsia Street, Seal Beach

From: Kari Scheer
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 9:07:04 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender karilscheer@gmail.com

To whom it may concern,

I am a resident of the College Park East neighborhood and strongly oppose building housing of any kind off of Lampson. I have lived in the area since I was 12 years old, went to Pacifica High School and then CSULB. My first job was at the shopping center in Rossmoor. I love this area so much I bought my first home here at 4424 Ironwood ave in 2019. I walk my dog to the dog park daily and watch fireworks in the open field on fourth of July. Putting housing here will destroy my neighborhood for all of the reasons below, do not let this happen!

17-370

Aesthetics - this will be a major eye sore and disrupt all our mature greenery and open space that we enjoy
Air Quality - more emissions from new drivers will cause terrible air quality
Cultural Resources - low income housing will only bring crime and addiction and problems to our quiet neighborhood. Even normal housing will cause a strain on our natural and government resources as it is
Construction Noise and road closure - Lampson is the only route through this area and will force countless people all the way to Katella and major traffic problems. The noise will be unbearable and we already have problems with the base and airplanes at all hours we cannot accept any more noise
Road safety - this road is not safe for a higher volume of drivers and it will become extremely unsafe for pedestrians and kids in the area
Fire / Police / Medical Response - los alamitos response time to emergencies is frightening and already causes Seal beach to assist calls, this will strain neighboring city resources
Greenhouse Gas Emissions - cars are terrible for the environment we cannot accept any more emissions on top of what we handle from the 405 and airport
Hazards & Hazardous Materials - the runoff from new buildings will be a major problem and we already have a flooding issue in this area, more water and sewage will only exacerbate this problem
Land Use & Planning - we dont have enough natural resources for more bodies and Lampson cannot handle additional drivers
Noise Pollution (vehicles on Lampson) - low income housing will bring people who have noisy cars and work odd hours causing too much noise
Population & Housing - there are too many people here we dont want a higher population
Parking in our neighborhood
Public Services - police and fire are already understaffed they cannot handle more of a burden which means we are all in greater danger
Recreation - this will drastically impact the dog park and the ayso fields and the green space in our community. We cannot accept more people in our limited spaces.
Road impacts from heavy equipment - lampson will get destroyed
Schools / Libraries - the schools are already overburdened and wont get any additional funding from this for years to come
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc) this is a major concern as this area is already extremely dangerous!
Utilities & Service Systems - we dont have the natural resources to support more families in this area
Views from our backyards - will destroy my view of the Base and the fields

17-371

Kari Scheer-Stachowiak
909-809-8503

From: Pauline Creighton
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 5:02:19 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender paulinecreightonrn@yahoo.com

Hi !
I am writing an email to stop the Lampson project! This project will negatively affect our community.
Here are my concerns :

Air Quality/ noise pollution/transportation and traffic- the housing project will create more traffic and congestion on Lampson Ave which is already congested to begin with . This can affect the neighborhood air quality /noise pollution in addition to the 405 freeway close to our neighborhood. More traffic on Lampson is dangerous and can create more accidents. I've seen a lot of accidents on Lampson because it is a busy street. There is a lot of traffic especially in the morning when parents are rushing to get their kids to school on time. There are times when I leave 20 min early to drop off my kid to school, my kid has been late to school because the amount of traffic on Lampson and on Seal Beach Blvd . There is only 1 Turing lane to get to the schools on Lampson. Imagine 1 turning lane for all the families who live in the neighborhood to get to school.

With the amount of traffic added due to the Lampson project, I wouldn't feel safe to walk or jog in the neighborhood. Our street is already narrow and most of the sidewalks in College Park East are partial so we are compelled to walk on the street. More traffic equals more air pollution and is unhealthy for us and our children who plays outside. My child already suffers from asthma.

And what about parking? The housing plan may not have enough parking spaces for tenants. People will use the neighborhood for parking and will create congested with more cars on the street which can be dangerous for our kids who ride their bikes and walk on the streets.

17-372

Hazards & Hazardous Materials: building new homes can create dust and hazardous materials into our neighborhood. We take pride in keeping our neighborhood clean and safe.

17-373

Land Use & Planning: the housing plan is to create more housing in such a small space . We need the area for our kids to play and use the field for recreation purposes such as utilizing the field for soccer games and for our dogs to play. Our family also use the field to picnic and enjoy the wide space for activities.

Low income housing : low income housing will increase crime in our neighborhood.

Please, do not build this housing project on Lampson! It is not safe and will lot work with our already congested neighborhood. Thank you!

17-374

Pauline Creighton
4424 Dogwood Ave
Seal Beach , ca 90740

562-305-6808

From: Chris Stone
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 4:35:47 PM

IRONSCALES finds this email suspicious! We know Chris Stone by name, but the email was sent from an unfamiliar address cmstone4525@yahoo.com | Know this sender?

I am writing to express my deep concern re: the Lampson Project. I live in College Park East. Lampson is already a busy street with a high accident rate; adding more traffic does not make sense. I anticipate drivers will elect to cut through our neighborhood using Ironwood and Hazelnut to avoid the inevitable delays along Lampson. This will put our children at risk. I'm also concerned the increased traffic and additional residents will affect our police and fire response in emergencies.
I can only imagine the nightmare it will be during construction.
I hope you will consider the negative impact this Los Alamitos project will have on the citizens of Seal Beach. Residents of Los Alamitos will not be affected at all, yet Seal Beach residents will truly suffer.
Sincerely,
Christine Stone

17-375

THIS IS A TEMPLATE, PLEASE REVIEW AND WRITE YOUR OWN EMAIL USING THE SUGGESTED TOPICS BELOW

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-376

From: Mike Polye
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Avenue Project - Comments and Concern
Date: Tuesday, November 1, 2022 9:02:25 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mike.polye@gmail.com

Mr. Oliver,

I am a resident of the College Park East community in Seal Beach and I am writing to express my grave concern regarding the impacts of a potential housing development slated to be built at 4665 Lampson Avenue in Los Alamitos ("Lampson Avenue Project").

This new, high-density development will have a myriad of negative impacts on our community both from a quality of life AND environmental standpoint. As a College Park East resident who lives on Ironwood Avenue, which runs parallel to Lampson Avenue, I already experience a great deal of sound pollution from the ever-increasing traffic just beyond my backyard wall. Adding a development to accommodate 800+ additional residents, along with their guests, will only add to the sound pollution from the added traffic and make the northside Ironwood Avenue residents' backyards unbearable during certain times of day.

17-377

Just as concerning as the sound pollution from additional vehicles on Lampson is the increased traffic as a result. Lampson is already a very dangerous road with numerous accidents occurring on a regular basis. The area of Lampson that runs along the community of College Park East has historically been known as "The Alley of Death," due to the significant number of fatalities that have occurred in the area. With no space to expand Lampson, the increased traffic will only add to the number of dangerous and deadly accidents. Below are some examples worth noting of accidents in this area of Lampson. One of these is from this past month (October 2022). Another involves a child. I have 3 children of my own, who often ride their bikes in the area, and I do not want their abilities to ride in the area to be hindered by uncontrollable traffic that cannot be accommodated by the Lampson intersections.

General safety and pedestrian safety should be a top priority for both the city of Los Alamitos and Seal Beach. An increase in injury and death rates in the area should not be on anyone's conscience.

https://www.sunnews.org/drunk-driver-gets-15-to-life-for-lampson-avenue-death/
https://www.latimes.com/archives/la-xpm-1989-09-11-me-1559-story.html
https://www.oc-breeze.com/2022/10/04/219326_seal-beach-police-investigating-serious-traffic-collision-involving-two-vehicles-on-lampson-avenue/
https://www.laweekly.com/rider-hospitalized-motorcycle-crash-lampson-avenue-seal-beach-ca/
https://www.ocregister.com/2013/06/17/lampson-speeds-scrutinized-after-accidents/

17-378

While dangerously increasing traffic and noise pollution are of utmost concern, there are also several other factors that are essential for the City of Los Alamitos to investigate. Below is a list of concerns that MUST be addressed in the environmental impact assessments:

- Aesthetics (visual perception of environment)
    - Daytime glare and its impact on drivers, cyclists and neighboring homes

17-379

- Nighttime illumination
- Existing visual characteristics

- Property Values
  - Existing home values are likely to decrease and be adversely impacted due to additional multi-family dwellings alleviating housing pressure in an area that is primarily single family homes
- Air Quality and Environmental Conditions
  - Increased carbon monoxide emissions
  - Increased particulate matter
  - Increased greenhouse gas emissions
- Biological Impacts
  - The appropriate agencies must investigate how this development will impact local wildlife
  - There are a large number and variety of birds in the area – hawks, falcons and other large birds of prey, as well as squirrels and other varieties of smaller birds
    - Do any of these birds nest and feed in the vicinity of the development site?
    - Do any of these birds of prey have special environmental protective or endangered status?
  - How many trees will be eliminated for this project and how will this impact shade and air quality?
- Geology and Soils
  - Impact on drainage in the area
  - Runoff concerns
  - How will the local soccer field conditions be impacted?
- Public Protection Services Impact
  - Fire protection
    - High population density requires additional fire protection services
    - Multi-family dwellings tend to require more fire protection
  - Police protection
    - High population density requires additional fire protection services
    - Is there an expectation that crime may increase in the general vicinity due to a higher population density?
    - Additional police support from the City of Seal Beach will be required as a result of a development that is taking place in a separate city (Los Alamitos), which will impact Seal Beach taxes
- Other Public Services
  - Library
    - Can local libraries accommodate the additional residents?
  - Parks and Recreation (There are no planned parks or play areas for the residents of this development which will directly impact College Park East parks)
    - Can local parks accommodate the additional residents causing an increased rate of wear and tear?

As the leader of the city council in Los Alamitos, it is imperative that you perform the necessary steps and due diligence to halt the Lampson Project. I urge you to disapprove the current proposed development plan, reassess and preserve the well-being of the surrounding communities.

Regards,

Mike and Jessica Polye

4201 Ironwood Avenue
Seal Beach, CA 90740
973-517-3963

17-379 (CONT.)

17-380

17-381

17-382

17-383

17-384

17-385

From:	Matthew Stachowiak
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 8:54:21 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mstachowiak93@gmail.com

Hello,
I strongly oppose the Lampson housing project. The project will cause many problems such as traffic congestion on Lampson, parking problems for nearby home owners, noise pollution, increased need for fire/police resources, construction noise and impact public services. There will be a large impact to the homeowner of the College Park East neighbor with no benefit to them.

I hope you consider these effects on the nearby homeowners in the neighborhood and oppose this new development.

Thank you,

Matthew Stachowiak
4424 Ironwood Ave
Seal Beach CA 90740
714-702-6258

17-386

From: Chrysanthi Davilas
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 7:48:21 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender cvdavilas@gmail.com

Dear City of Los Alamitos,

I have been living in Seal Beach College Park East for 3.5 years now. We moved here for larger space and the school district for my three little girls. The many things I love about this area is the beautiful environment, places to play and ride around, and the easy flow of traffic on Lampson to get my kids to school on time. Unfortunately, I am fearful of this Lampson Project going through for two main reasons:

1. My house happens to be on Ironwood, the closest street from Lampson, where most outside cars will inevitably have to park.
2. Impact on Lampson traffic. Lampson is a quick flowing street which tends to back up if there is any hiccup. Adding more housing to this street, practically a one-way- out street will make everything more difficult for all involved in a daily basis.

I am hoping to be heard on this issue. I love this area and didn't settle into this expensive home to be impacted so much in such a negative way.

I am hoping the plans get revamped or moved altogether, in an area where it makes more sense.

Thank you for your time.

Sincerely,
Chrysanthi & Nick Davilas
4280 Ironwood Ave
Seal Beach, ca 90740
714-785-3249

17-387

Sent from my iPhone

From: Jaclyn Power Hudzietz
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 7:34:25 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jaclynpow@gmail.com

To whom this may concern,

You cannot build the projected Lampson Ave. development for multiple reasons. I am a young mother living in College Park East with two young children aged 7 and 4. Our 4 year old son has environmental allergies and skin eczema, which is impaired with poor air quality. When the air quality is poor, he suffers from asthma attacks. His skin also flairs up with itchy eczema. The machinery and vehicles needed for the development on Lampson Ave. will produce pollutants and impact the air quality. This will cause an asthma attack that could send my son to the emergency room, which is a financial burden, even having health insurance. His skin will be itchy and he itches until he bleeds when it's bad. Will you provide financial assistance to cover this cost?

What about those living nearby without the resources that I have, such as health insurance? What can you provide for them? I have transportation, it will be halted by your project and cause a burden to them. What about those without health insurance and the impact the air quality you produce will cause them? That will be a huge detriment to them.

17-388

The absurd amount of traffic we will all experience is going to be horrific. We have 9 schools in Seal Beach, Rossmoor and Los Alamitos that are impacted with kids coming and going to school. As a mother who drives her kids to and from school, I do not welcome any road closures. The parking within College Park East is going to be completely insane. Car break ins are going to increase! Crime is going to increase near my home with my small children! No!! If my husband works late, I cannot imagine having to experience criminals in our neighborhood alone.

Closing the road will hurt emergency responders helping anyone in need who live off of Lampson Ave. and nearby. My children and my family are my world and if anything happened and God forbid I had to call 911 for help, your project would lengthen the time it would take him to get to us. Every second counts in an emergency. Whether a child is choking, bleeding badly, having an asthma attack, etc.

17-389

There are a lot of new families close the projected area on Lampson. As a mother, I know very well how important the quiet is for (a baby especially) sleep. If there are loud noises from this that wake up sleeping babies, toddlers, children, adolescents, young adults needing to go to work, that would be a huge stress and burden to all of those families. My family included.

17-390

Traffic safety on Lampson with this project is going to be critically low. The u-turns needing to be made, road rage it will cause, the cut-thru traffic into the neighborhood I live in is unwelcome. There will be extra cars with more frustrated drivers and that is a dangerous combination.

17-391

The Lampson Ave. is already a busy street that goes through many cities. It is heavily trafficked and does not need any more traffic. Especially right by our small neighborhood. It is NOT welcomed and will produce more pollution, car accidents, traffic, unsafe driving, and delay commutes for everyone.

17-391 (CONT.)

Youth sports at Heather Park and Arbor Park will be stopped during this project. AYSO soccer plays at Heather Park and your project will stop and relocate all of hose practices and games. That is a burden of time for all of those children and their families, please respect us local families and our time.

This is not a positive project either. The housing and population you want is completely unwelcome by my whole family and many of my neighbors and friends. Please do not do this project, please. My family is my world and my life savings have gone into our home. If you make our home a lower value from this project, we will be devastated. Please do not build low income homes there. We are a nice city with high property value that we paid for. We are good people with honest jobs, kids in school and pets in our home. My parents and grandparents live in college park East on Sunflower and on Ironwood. We live on Dogwood and cherish this small city and quaint neighborhood. Please do not put in low income housing on Lampson Ave. I beg of you. We do not want it. Please stop this project. We do not see any positives from it, and only many negatives that I have mentioned above.

17-392

Jaclyn Power Hudzietz
4508 Dogwood Ave
Seal Beach, CA 90740

Cell 562-754-3044

From: Kenai Ramsey
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 7:02:15 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kenairamsey@gmail.com

I am writing to you about the Lampson Project. Even though I live in Huntington Beach, I use Lampson almost everyday to go to my daughter or my mom's house. I also pick up my grandchildren from a school in Rossmoor and travel to and from the school on Lampson. I am concerned about an increase in the traffic which not only includes many vehicles, but also more car noise, and traffic safety.

I am also concerned about the impact to the schools in Rossmoor. The possibility of more busses, cars, and pedestrian traffic will negatively impact the roads in Rossmoor. In addition, the schools will have the possibility of being overcrowded.

I respectfully ask that you carefully consider how this development project will impact College Park East, Rossmoor, and those of us who use Lampson on a daily basis.

Sincerely,
Debbie Ramsey

17-393

THIS IS A TEMPLATE, PLEASE REVIEW AND WRITE YOUR OWN EMAIL USING THE SUGGESTED TOPICS BELOW

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-394

From:	MARILYN RIORDAN
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 5:14:09 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lampas@aol.com

To: The City of Los Alamitos,
From: Marilyn Riordan
Resident of CPE,
Seal Beach, CA

I am strongly opposed to the proposed housing project on Lampson Avenue between Seal Beach Boulevard and Valley view Boulevard in Los Alamitos. I am a tax paying homeowner with many objections. The following are my concerns:

17-395

Aesthetics
Air Quality
Water
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-396

Awaiting your reply,

Marilyn Riordan
CPE Home owner
Seal Beach, CA

Sent from my iPhone

From: Fred Schutz
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 4:16:41 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender fredschutz@roadrunner.com

I am writing you to disclose how your Lampson Project will create a negative effect to my personal health. I have respiratory issues. As my backyard sits on Lampson, the dust during the construction will be intolerable. In addition, the dust from the additional traffic after the construction is complete will further contribute to my breathing issues.

Beyond my personal health, not one neighbor has welcomed this plan.

There is no plan for the increased traffic on Lampson. No additional traffic lights. No left turn signals. Cars traveling east will need to make U turns on Rose or Heather Street going west. It is likely these new neighbors will increase traffic inside CPE because Lampson was not designed for so much more traffic. And there is no plan for increasing lanes on Lampson. And even if there is, who wants to live behind a 6 lane road? It would be like living behind Beach Blvd.

17-397

The current level of noise is barely acceptable. When we bought our house, we were told the price was lower than the houses a few streets inside CPE because we were on Lampson, and it might be a little more noisy. Now that you are planning on having 550 cars (not to mention the guests of these new neighbors) in addition to what we have been suffering, I can only imagine how much more my home will depreciate, and how much more outside noise we will have to tolerate.

17-398

CPE has delightful little parks. Based upon the projected map of the project, there are no parks included. Which means we can expect to have a few thousand new neighbors overcrowding the small parks we have.

17-399

I haven't seen any proposal for additional fire or police. Even though our neighborhood will be increasing by several thousand people. Speaking of which, aren't projects like this one reserved for non-residential areas? Clearly one building does not define a commercial area.

What will happen when I can't even park in front of my house because there won't be enough spaces in the proposed development?

I do not feel a change in this community should be left to one investor or a few city managers. You have no right to affect my health or quality of life. At the very least, it should be put on a ballot. And not a Los Alamitos ballot, but a Seal Beach one.

Thank you for your time.

Regards,

Fred Schutz

17-400

From: TKV Nolan
To: Tom Oliver
Subject: 4665 Lampson
Date: Tuesday, November 1, 2022 10:38:46 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tkvnolan@gmail.com

I am a resident of this community. I grew up in Seal Beach in College Park East. I lived there for 4 years as a parent and am still in the area for community events.

My children do soccer at Arbor Park every weekend. My children play at Heather Park near your proposed project site.

I am very concerned about your proposed project will negatively affect our neighborhood. This is our community and I don't want to ruin our community and keep it true to our roots.

Please strongly consider my concerns for our community. I strongly oppose this project.

Loan Nolan
Rossmoor resident

17-401

From: Mariane Gabriel
To: Tom Oliver
Subject: Lampson Project Concerns
Date: Monday, October 31, 2022 1:54:13 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mwagabriel@yahoo.com

Dear Mr. Oliver,

Please see planning issues regarding the proposed Lampson property development below

Significant concerns are the loss of open space for wildlife and traffic impact with no alternative route.

Great Blue Herons, Great Egrets, Osprey, Hawks (several varieties) Barn Owls (protected), doves, finches and many migrating birds are all seen using the quiet lawn/redwood tree areas on the current California Dept of Fish and Game/former WestEd property.
This doesn't begin to consider the mammals and reptiles which use the site.

Los Alamitos has no other uncrowded open space area, epecially along this corridor.

17-402

The adjacent human population will also be impacted...traffic, no alternative route for College Park East, Parkewood Los Alamitos, West Garden Grove.Lampson, a curving 2 lane per side street, already heavily traveled, is the only access. This was especially evidenced in 1995 when drainage culverts overflowed in a dramatic rainstorm. Lampson was closed from Manley Ave in Garden Grove to Seal Beach/Los Alamitos Blvd in Los Alamitos. Many residents could not return home. This impacted nearby Rossmoor also, since many were stuck there. FEMA responded to the flooding.

I realize that my concerns, as a College Park East/Seal Beach resident, may be of little importance to Los Alamitos. I understand the federal guidelines for affordable housing are valid. However, to place so many with no major road access is imprudent. The area near Oak Middle School or the Los Alamitos race track could be considered since major streets are available.

Perhaps Orange County planners can be helpful.

Thank you for your attention.

Mariane H Gabriel, PharmD
4597 Dogwood Ave
Seal Beach, CA 90740
(562) 598-7906

17-403

From: Jeff Smith
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Concerns
Date: Tuesday, November 1, 2022 4:37:10 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jeffreycsmith32@gmail.com

Hello Representatives of Seal Beach and Los Alamitos,

I am writing this email to express my deep concerns about the Lampson Project. I have been a College Park East resident since 2016 and love the neighborhood that I have decided to raise my family of five in.

To start, I was born and raised in Los Alamitos (Suburbia Estates neighborhood) and graduated from Los Alamitos High School. I know and understand the deep connection between Seal Beach and Los Alamitos.

That being said, what I don't understand is how a housing development from one city (Los Alamitos) is able to have such a profound impact on the residents of another city (Seal Beach).

Such would be the case if this development comes to fruition. While there are merits to building residential housing, the size and stature, as well as the location, will have a detrimental impact to the residents and overall community of College Park East.

17-404

Here are my concerns that I would like addressed:

- **Traffic** - The number of cars on Lampson would increase exponentially. This is one of the main thoroughfares to get from Seal Beach Blvd to Valley View. If you increase the car population by hundreds, I believe traffic would get significantly worse. Additionally, the speed limit is 45mph and as you know, that is exceeded by a number of drivers. I believe my safety and the safety of my family and community members would be in jeopardy. I would like to get a report on the number of tickets that are written for speeding and to see if there is a higher percentage of tickets on Lampson than in other like areas. Additionally, I would like to receive a report on accidents along Lampson in relation to other like areas.
    - Traffic to and from school - As previously mentioned, I have a family of five (three children) who all attend schools in Los Alamitos Unified. I believe this development would dramatically affect my ability to get my children to and from school in a timely manner. Other than leaving earlier, which is difficult since my wife and I both work and have three children, what can you do to address this?
    - Only right turn out of the development - The fact that residents of this proposed development can only make a right turn (west direction) will lead to a traffic backup on Heather, the very street I take to enter my neighborhood. Many families in our neighborhood walk to Arbor to play AYSO and use the dog park and having hundreds of cars daily make a U-turn to then head east on Lampson creates a safety hazard. How do you plan to address this issue?
    - Emergency Response - this is a major sticking point. More traffic leads to a less

17-405

quick response and when you are dealing with emergencies and every second counts, this impact cannot be overlooked. How will response times be affected with this new development?

- **Parking** - The amount of parking spots in relation to residences for this new development is grossly under-represented. Additionally, the garage parking spots that are being allocated for the single family homes will not actually be used for parking, but instead used for storage, further reducing the amount of available spots. I live right off of Heather St. and know that from this development, the parking in College Park East will be 100% impacted, thus not allowing me to park within a reasonable range of my house. While the convenience of being able to park by my house is extremely important, it isn't actually the number one concern for parking. My number one is that with having our streets flooded with cars that do not live in the neighborhood, nor the city of Seal Beach, my children's ability to play in the streets would be negatively impacted. You may say, they can play at the park. Yes that is true, but not all games/activities can be played at Heather Park. My sons like to play roller hockey, basketball, and ride bikes (etc). They will not be able to do those things or at least not to the extent as they currently are able to.
    - With more people parking in our neighborhoods, I am fearful that our children, and even adults, will suffer from potentially being struck by cars pulling in and out. The stop sign on Heather and Hazelnut is routinely run. I know that because I see police by my house watching for that specific traffic violation. The law of averages suggest that with an exponential increase in traffic/parking, the risk of accidents (car to car and car to human) will increase. How do you plan to address this?
- **Recreation** - In looking at the plans, I see that the new development has a common area (open space). While common areas are nice, kids, especially little kids, will not find it all that attractive. There is currently no play structure at Arbor Park. The residents of this Los Alamitos Development will nonetheless use Heather Park as their "go to" means of recreational activity, thus overcrowding the area. Heather Park is already a very dated park and that will only increase with the amount of new individuals frequenting it. I know there are plans to rejuvenate Heather Park, but with an increase in hundreds of kids, the park and its new facilities will quickly wear, thus creating a less enjoyable experience and potential safety hazards. How do you plan to address this?
- Construction Noise and Road Closure - I chose to live in College Park East to provide a great quality of life for my family; having a development of this scale will surely impact our quality of life for a number of years. Construction has collateral damage. With the heavy machinery, road closures, workers coming to and from, the amount of noise, etc. will undoubtedly have a negative impact on my family and others in our community. How will this be addressed?

I kindly ask that you please reconsider this development and the negative impact that it WILL have on the residents of College Park East and the surrounding area. I will patiently await a response to my concerns listed in this email.

Thank you for your time and consideration

Jeff Smith
4456 Hazelnut Ave., Seal Beach, 90740
562-243-3323

17-405 (CONT.)

17-406

17-407

17-408

From: Jennifer Graham
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Saturday, October 29, 2022 4:01:44 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jengrahammd@gmail.com

To whom it may Concern,

I am writing in response to the proposed Lampson housing project.

My name is Jennifer Graham and I have been a homeowner in College Park East since 2009. I also grew up in West Garden Grove(right off Lampson/Valley View). I believe the proposed project will negatively impact the area. This will significantly increase the traffic on Lampson in both directions. Over the years, there has been issues with speeding, leading to terrible accidents on Lampson(some fatal). The timing of the signal at Candleberry has also lead to horrible t-bone accidents for cars leaving the neighborhood(it is a blind corner exiting the neighborhood with a very short transition from red on Lampson to green on Candleberry, Lampson drivers speed through the light). Also, on a busy morning for AYSO and the dog park, Lampson becomes dangerous due to increased traffic and people not knowing what driveway to turn into. The left hand turn into these driveways often spills out of the turn lane into traffic reducing it to one lane in the east direction.

17-409

My questions are:
1)Are additional traffic signals being planned?
2)Is the overflow parking expected to be College Park East? If so, is Seal Beach planning overnight permit parking only in College Park East?

17-410

3)Is Los Alamitos planning to compensate Seal Beach for increased use of its Public Services(i.e. police who patrol and investigate accidents on Lampson)? Will the Los Al police/fire departments be responsible for responding to incidents in the proposed neighborhood, and will potential tenants be informed on potentially longer response times due to distance from the rest of of Los Al?
4)How will this affect public utilities(especially in summer months)? Is the proposed project on the Los Al grid or Seal Beach electrical grid?

Thank you in advance for your attention on this important issue. I look forward to your response.

17-411

Sincerely,
Jennifer Graham M.D.
4532 Birchwood Ave
Seal Beach, CA 90740
714-330-5562

From: Tom Papoulias
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 4:00:24 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tom@tompapoulias.com

Dear City… I would like to voice my concern on this project which should never start.

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

17-412

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-413

Tom Papoulias
Commercial Real Estate
Los Angeles & Scottsdale

Tom@TomPapoulias.com
562.858.7476
Ca Lic: 01145581
AZ Broker Lic: BR631650000
Serving The Commerical Realstate Industry For 30 Years.

From: Don Munro
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; Valerie Munro
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 3:28:59 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender dmmunro@gmail.com

Hello Mr. Oliver,

As residents of College Park East in Seal Beach, we have concerns about the new housing development planned along Lampson Avenue in Los Alamitos.

As we're sure you've received many letters, we hope that the concerns are taken seriously. We understand that demands for additional housing are being placed on cities. That we have accepted.

Our concern lies in how the new development will negatively impact the quality of life for residents living in the surrounding areas. And in this scenario, it is hard to come up with a positive outcome for nearby residents in Seal Beach and Los Alamitos.

17-414

As plans are evaluated, please consider the following:

- Visibility: The 3-story portions of the development will be visible from homes. These buildings will not only be seen from people's front and back yards, but from inside the house as well. This seems like an unreasonable level of infringement just to be able to add density to a project that will end up having 2-3x the density of the surrounding neighborhoods. Please consider: (1) scaling back the height of the project or (2) including landscaping to help screen buildings.

17-415

- Traffic: This is a very real concern. Not only is the traffic on Lampson dangerous, but residents tend to use the inlets/outlets as an extension of Lampson. So not only should the traffic on Lampson be a consideration, traffic within the existing and proposed communities should be as well. Many will attest to the number of fatal and serious accidents along Lampson, and we too have seen the aftermath of many. Additionally, Lampson is the only way in and out of the neighborhood. Anytime there is an accident or nearby construction, traffic gets routed to Lampson, creating additional traffic. With the anticipated increase in traffic on Lampson, please consider: (1) adding signals (2) additional policing of the roads and (3) improvement of center medians to reduce risk of crossing across medians.

17-416

- Parking: This is something that we deal with already. What is the contingency, should the new development lack adequate parking for residents, roommates and visiting guests? Also, what happens during weekend soccer tournaments? There are currently times when people park in CPE on the weekends. Since we park our cars in our garage, we already know the frustration of empty curbs being filled by CPE residents with 4+ cars per household. Who wants a street lined with parked cars? Or without a place for guests to park?

17-417

- General overflow into neighborhood: The proposed community appears to lack many amenities that could improve the quality of life for the new residents as well as increase property values. There appears to be very little grass, no playground, and no sports courts (basketball, volleyball, etc.). As a community, how does that fit with the values of Los Alamitos? While it's speculation, there will likely be overflow into CPE for use of parks and dog walking.

  We are concerned with the additional CPE foot traffic and park use that will surely come as a result. Please consider: (1) Adding additional parks or greenbelts for people to relieve their dogs. (2) Some sort of playground equipment and courts for the residents of the community. Make it a community that is worthy of the values of the city. Not just another high-density project that will appease the state.

17-418

There are many other ways we believe the new development will have an adverse impact on the existing community, but we will leave it at these four. Please consider, seriously, all the concerns sent to you as many are rooted in safety and a reduced quality of life for neighboring communities. While we understand the state requires additional density, we believe cities need to push back in any way possible to make these new developments livable and reflect the standards and values of the community.

Thanks for your time and consideration.

Best Regards,

Valerie and Don Munro

From:	Rebekah Smith
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 3:26:06 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rebekah.smith2011@gmail.com

Hello,
My parents moved to college park East when I was in 3rd grade. I lived here until I went to college. Then, when my husband and I had our second (of three) children, we wanted to move to a safe, quiet neighborhood and we decided to move back. We are completely against adding additional housing especially the volume currently projected. This will cause additional traffic and pollution. This will crowd our parks and our neighborhood with cars and change our quiet neighborhood. Our area is not equipped for this plan and will likely cause people to move out of our neighborhood.
Thank you for your time,
Rebekah Smith
4456 Hazelnut Ave, Seal Beach 90740
562.743.6831

17-419

From:	Matt Owens
To:	Tom Oliver
Cc:	jkalmick@sealbeachca.gov; Jordan Nefulda; Mark Chirco; mvaripapa@sealbeachca.gov; Shelley Hasselbrink; smassalavitt@sealbeachca.gov; Tanya Doby; tmoore@sealbeachca.gov
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 3:19:42 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender the.mj.owens@gmail.com

Good Afternoon,
I am writing to you as a concerned parent, who, over the course of thirty-eight years living in CPE, has watched the traffic on Heather St become increasingly more congested and the drivers too become increasingly more dangerous. Please take the time to watch this phenomenon for yourselves at 5pm PST on ANY weekday. The parade of cars returning from work is seemingly never ending. And there, right on the side of the street, zooming down the slope (directly next to the mailbox) is your constituents on their scooters and skateboards. I know this because I used to skate that very same slope into the street. A collision is inevitable. Injuries TO KIDS is inevitable. The addition of residents to 'The Lampson Project' as they look for a means to park their cars and u-turn their vehicles will make this even MORE likely and MORE frequent. You have a chance to prevent it from happening.

17-420

I appreciate your consideration.

PS. I debated bringing this to your attention, but it too is a legitimate concern of mine, I am worried about the plague of gophers this project will unearth. I've sprained many an ankle in gopher holes way too many times at WestEd. Im mortified at the thought of how many gophers are living under that grass. Where will they relocate to?

17-421

Matt Owens
CPE Resident

From: Frank Yang
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 2:02:27 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender fy44@yahoo.com

To Whom It May Concern:

I am writing regarding the Lampson housing project. My understanding is that this will create a total of 246 housing units for 800+ residents. I am extremely concerned that this development would create more traffic on Lampson, which is already congested during rush hour. Lampson is the only street College Park East residents can utilize in order to get to the freeways and adding so many more residents would only increase traffic on the street.

17-422

I recently moved to College Park East from Los Angeles and one of the main reasons for moving down here was to live in a safe neighborhood where our children can ride their bikes or walk around without constantly having to worry about getting hit by cars. I am worried that more cars would be on the road putting our children in danger. Additionally, more people would mean more cars and more cars would lead to more pollution and noise.

I hope you take these areas of concern from the residents of College Park East before proceeding with the project. Please let me know if you would like me to address any other concerns. Thank you for your consideration.

17-423

Sincerely,
Frank Yang
4757 Candleberry Ave.
Seal Beach, CA 90740
Cell: 310-741-1115

From: Teresa Werner
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 12:55:38 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender shellandheathersmom@yahoo.com

Please consider all the traffic for lampson. We are very much against a large development that this was not zoned for. Seal beach Blvd is already too crowded and this will even cause more problems. Can our schools handle all of this too? Our college park neighborhood doesn't want the traffic it will cause either! I know California is working to provide housing but this high density hurts everyone. We did not pay high housing prices to have this happen to our area. Do we have enough emergency services, parks, libraries, schools? I hope the community is more important than developers making a lot of money. Please consider all of this in your plans. Thank you. Teresa Werner 3800 wisteria street seal beach. 562 822-2012.

17-424

Sent from my iPhone

From: Gregg Stone
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 12:23:15 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender greggstone55@yahoo.com

Dear City of Los Alamitos,

As a resident in College Park East in Seal Beach for over thirty years, the planned development north of Lampson causes me great concerns.
1. Lampson Avenue is a heavily traveled thoroughfare from West Garden Grove to Los Alamitos/Seal Beach. Adding this number of housing units/residents to the area north of Lampson Avenue will only exacerbate an already congested street. There does not appear any access to the proposed development other than off of Lampson.
2. Parks and open spaces add to the quality of life. This proposed development does not add additional parks and diminishes open space.
3. Should this proposed development come to fruition, the traffic density on Lampson at peak times will lead to the use of College Park East residential streets (i.e., Ironwood and Hazelnut) to be used by drivers as alternate "cut through" routes to avoid Lampson traffic.
4. While there may be plans that I have not seen, what resources in terms of fire and police service are included with this proposal?

I would like to request the results of an environmental impact / technical studies regarding how the proposed development will impact the area.

Please reconsider how this development proposed by the City of Los Alamitos will negatively impact their neighbors in College Park East (Seal Beach), West Garden Grove, and Rossmoor.

Sincerely,
Gregg Stone
4525 Guava Avenue
Seal Beach, CA 90740
(562) 972-2463
greggstone55@yahoo.com

17-425

From:	Christina Pottios
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 11:47:50 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender cpottios@gmail.com

To whom it may concern:
I am a resident and home owner in Los Alamitos. I have three young daughters, all active in AYSO soccer, which utilizes Arbor Park for practices and games 3 times a week (each child!) during the Spring and Fall seasons. Arbor Park is one of the only parks in Los Alamitos large enough to accommodate the cities youth sports, such as AYSO. Additionally, the parking is already an issue during the soccer season. Fish and Game has generously allowed the use of their parking lot to accommodate parking issues, but what is this going to look like when this new development comes in? Has this been taken into consideration?

17-426

My concerns specifically are with:

Aesthetics
Construction Noise and road hazards
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Recreation
Road impacts from heavy equipment
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Views from our backyards

17-427

Christina Pottios
12122 Reagan Street
Los Alamitos, Ca 90720
562) 505-0345

From: brent rider
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 11:13:03 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender brider34@gmail.com

Please stop this development lampson street is already over crowded and hundreds of animals are being killed on a yearly basis this will only make things worse we have to remember we've taken away all the nature from the creatures around our area please do not take more they need a place to live as much as we do also both my grandparents died of lung cancer from the carcinogens neither of them smoked a day in there life just from the traffic from the freeway alone let alone another 500 cars a day on Lampson It will put my family at risk as well the noise from traffic is already almost forcing me out on lampson this area used to be the most Desired place to live now alone with the added traffic from the freeway construction and new phone apps that take people around traffic we have enough as it is you're bringing the property value of my property down

17-428

THIS IS A TEMPLATE, PLEASE REVIEW AND WRITE YOUR OWN EMAIL USING THE SUGGESTED TOPICS BELOW

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-429

From:	Pam Sasuga
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Tuesday, November 1, 2022 11:06:18 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender pamelasasuga@gmail.com

Opposed to the Lampson project, housing development.

I've lived in Seal Beach off of
Lampson for more than 25 years and have enjoyed our neighborhood.

This would lead to more traffic on Lampson in addition to more accidents on Lampson. Alot of parking congestion in addition to more noise pollution, construction issues, poorer air quality, crowded parks, more crime to our vehicles and our homes,, more vehicles in our neighborhood, lower house values, and more rodents due to construction and hurt the aesthetics we have known for many years.

Please consider stopping the Lampson Project.

Thank you.

17-430

From: ysumam
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 9:12:57 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ysumam@aol.com

From: Marjorie Morley, Dogwood Ave CPE

Aesthetics- As a resident of CPE for 20 yrs I purchased my home because of the beautiful drive down Lampson which will be forever changed with this new development. No more country setting! Will be too city-like!

Air quality is already bad with constant 405 widening! This area already has a bad AQMD rating. I have constant black dust in my house. Driveway & pavers also black when rinsed down. It will only be worse with pollution all around our tract.

Construction Noise and road closure -Too much traffic & accidents without the increased amount. Lampson is a speedway as is. Years of accidents will now increase. Noise of medical vehicles will be the norm.

Fire / Police / Medical Response-Will it be Los Al located? Not use SB city services.

Greenhouse Gas Emissions- Will the development be built with with Green Emmisions in mind?

Hazards & Hazardous Waste- Hopefully up to code &`properly stored/disposed of!

17-431

Land Use & Planning- Hopefully the beginning of this deveoplment will be set back away from the street! Worried about my property value being decreased. Katella developments are enough & ugly looking driving down that street. A mish- mash of looks! I don't want our area looking commercialized.

Noise Pollution (vehicles on Lampson) And how long will this development take from start to finish? Like years?

Population & Housing- Will the new tenants be told of the noise they will have from the Joint Base, eg: helicopters taking off & landing frequently, training sessions, air show yearly. Those planes rumble my house while they practice. Noise level high. Still too many people in a small area.

Parking in our neighborhood should not be allowed in CPE or use of our parks. Don't want dogs polluting our common areas. Want a protocol fir eliminating this problem.

Public Services -Street sweeping & trash pickup will add to noise & pollution. Maybe rodents & such.

17-432

Recreation- should be contained within the new development.

Road impacts from heavy equipment- what will Lampson road condition look like. Will we get flat tires from construction debris. Have to dodge construction debris & be involved in an accident. To the new tenants. Driving from Valley View is very dangerous during the time the sun is at its worst location & you can't see what's coming down the road.

Schools / Libraries- Can Los Al handle an increase in students?

Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc) Just increased incidents off accidents.

Taxes- Hope this development doesn't effect any of my already high taxes.

Utilities & Service Systems Will all be underground & out of site?

Views from our backyards- Im sure those houses on Lampson will be affected. Those on corners(Rose) more so! Glad I dont live close to Lampson

This new development will change the lives of the entire CPE community! And not in a positive way!

17-433

Sent from my Verizon, Samsung Galaxy Tablet

From: Robbi Maurer
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Tuesday, November 1, 2022 5:27:05 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender robbi_maurer@yahoo.com

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
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Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-434

Sent from my iPhone

From: bob moehling
To: Tom Oliver
Cc: stoplampsonproject@gmail.com; Julie R. Hughes
Subject: Lampson Project Comments
Date: Monday, October 31, 2022 9:09:08 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender rkmoehling1@gmail.com

Mr. Tom Oliver,

I have several questions and comments on The Lampson Project proposed in Los Alamitos:

Site Access- Can the project utilize the existing traffic signal at Rose Street by acquiring needed land from the Navy Golf Course to allow a full access entrance at the existing signal- much safer for everyone.

Left turn access at the proposed east entrance- is the proposed left turn lane long enough to handle trips/stacking distance for PM peak hours?

Vehicles exiting site and wanting to travel east have to either make a dangerous left turn out across the WB lanes and incoming EB left turn or go west and make a u-turn at Heather Street- can the WB left turn lane at Heather Street handle all these u-turns (length of left turn lane and traffic signal timing)? Is there an impact at this intersection (Lampson and Heather) due to more than 50 trips in the peak am or pm hour?

17-435

Isn't the proposed west entrance too close to the existing driveway to the dog park/soccer fields (200feet)? The WB left turn lane at the entrance to the dog park/soccer field is only 40 feet long and results in vehicles entering the left turn into the dog park to back out into the EB thru lane.

WB vehicles entering the west entrance turn right from a 45 MPH travel lane into a parking lot that has vehicles possibly backing out of a parking space directly into the entry drive aisle and possibly causing a collision between a car entering and a car backing out of their parking stall. Possibly require a deceleration lane into each/both entrances for WB traffic. West entry should have a sufficient throat distance to allow vehicles to enter the site while safely getting out of the WB lane of travel, without possibly encountering a vehicle backing out or parked in the drive aisle.

17-436

What are the regulations that govern development adjacent to the Joint Forces Training Base (JFTB)?

What are the regulations that govern the Airport Land Use Committee regarding JFTB and proposed developments adjacent to the JFTB?

17-437

What is the impact on Police and Fire response for Los Alamitos emergency programs? I assume the existing Federal building pays zero property tax to Los Alamitos; does property tax on proposed housing units pay for emergency services required? Roof tax = community facilities district to offset financial impacts to city?

17-438

Is the developer proposing financial assistance from the Statewide Community Infrastructure Program (SCIP) or another financing mechanism and/or eligible for other subsidies for housing projects to entice home building and address Los Alamitos' Regional Housing Needs Allocation (RHNA) requirements?

Will the cost of private and public improvements be financed by a community facilities district/Mella Roos Act in effect and passed onto the future home buyer?

17-439

Are internal drive aisles wide enough for fire apparatus/vehicles and are there sufficiently sized vehicle turnaround areas for large fire vehicles?

Are internal streets/drive aisles private and privately maintained or public and City responsibility? Will parking be prohibited on internal drive aisles to maintain proper clear space for emergency vehicles? Emergency vehicle access easements?

17-440

Does Los Alamitos have a tree ordinance regarding mature trees on a development site?

17-441

How is the impervious surface area proposed to be treated to meet water quality requirements for priority development projects?

17-442

Is the project requesting a parking concession due to the project providing affordable housing? Where will the project residents park when there is no parking left on site? Will they park on College Park East streets and cross at the Heather and Rose Street intersections and/or in between the signals on Lampson?

17-443

Are proposed Green House Gas emissions significant and/or unacceptable for this change in land use designation?

Thank you for the opportunity to comment on the project and I look forward to your response.

Bob Moehling

3930 Wisteria Street
Seal Beach CA 90740

17-444

From:	Sarah Tello
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Monday, October 31, 2022 8:25:40 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender smtello@me.com

I am a concerned citizen and would like to voice my concern for this project. It will increase traffic and have a negative environmental impact on our community.
Thank you,
Sarah Tello

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
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Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems
Views from our backyards

17-445

Sent from my iPhone

From: Sarah Wood
To: Tom Oliver
Subject: Lampson Project Comments
Date: Monday, October 31, 2022 7:13:26 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender vrytouching@yahoo.com

To whom it may concern,

I am writing in protest of the plan to build a 500 unit complex off Lampson Blvd by the Navy Golf Course.

17-446

This area cannot sustain the congestion of cars this would create, not to mention, The safety of the bicyclists that use Lampson on a regular basis.

The noise pollution and major impact of the surrounding neighborhoods would become high. There would not be enough park space for all the people that would be moving in. We regularly use the dog park and area next to it which would be taken away.

17-447

What would happen with the wild life and Rodents that occupy that area? How would there be a guarantee this would not spill over to the neighboring area?

I have lived in this area for over 15 years and do not want to have to watch how this would destroy this area.

I ask that this be stopped..

17-448

Best regards,
Sarah Kennedy
12123 Stonegate Ln
Garden Grove, CA 92845

Sent from Yahoo Mail on Android

From: Gmail2
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Monday, October 31, 2022 5:59:35 PM

IRONSCALES finds this email suspicious! The sender of this email Gmail2 is similar by name to your contact Gmail, this might be an impersonation attempt. | Know this sender?

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

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Utilities & Service Systems
Views from our backyards

17-449

Please reconsider the development planned for Lampson in Seal Beach. Adding this community would negatively affect Seal Beach, Los Alamitos and Rossmoor.

First, our schools are already overcrowded and by adding these additional homes and apartments will only add to our current problem. Have you visited the high school recently and seen the amount of portable classrooms they currently have? Have you heard of the parking issues for students at the high school? I think it's important that you address the community and let us know good plans for how the school district will plan for the additional families moving to the neighborhood.

17-450

Also, the increased traffic on Seal Beach Blvd / Los al Blvd during the morning and afternoon hours will be horrible. Try driving to the high school at 8:00 am any Monday through Friday and then imagine adding an additional 100 families to the neighborhood taking that same path.

Our small community is built with one major roadway and by adding these additional homes you will drastically change the lives of current community members for the worse.

17-451

Ryan Marshall
Resident of Rossmoor for the past 16 years.

From: Nick Papadakis
To: Tom Oliver
Subject: Re: Lampson Project Comments
Date: Tuesday, November 1, 2022 9:35:30 AM
Attachments: image003.png
image002.png

Good morning Tom,

The tone of my comments may overshadow the message. I would like to amend my comment to the following extent:

Please delete the last paragraph of the email I sent to you. I think the first paragraph I wrote conveys the message clearly. The last paragraph begins with, "Many of the residents…." Please delete this paragraph.

Thank you,
Nick Papadakis

17-452

Sent from my iPhone

On Oct 31, 2022, at 2:13 PM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Nick,

Good afternoon. Thanks for your response. The City will consider these issues as a part of the Environmental Impact Report.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303



From: Nick Papadakis <nepapadakis@gmail.com>
Sent: Monday, October 31, 2022 11:42 AM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Subject: Lampson Project Comments

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender nepapadakis@gmail.com

The developer is required to review each Environmental concern.

They are counting on us not saying anything and breezing through the process.

Now is our time to stop this. Mention as many examples and be specific in asking for environmental/technical studies.

Please be generous when providing examples of how this project could negatively affect our community. Some examples are below, and don't forget to include your name, address, and contact information!

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Utilities & Service Systems
Views from our backyards

17-453

Low income housing may include Section 8 government supported housing. Unfortunately there is a high incidence of crime associated with Section 8 tenants. Whether the proposed housing is Section 8 or not, why would any responsible city government permit low income housing to exist adjacent to relatively low crime neighborhoods such as Los Alamitos, Rossmoor, Seal Beach? Why would a responsible city council permit such an element into this area? Nonsense.

17-454

Many of the residents of this area own fire arms for good reason. Crime is rampant generally. People own fire arms for personal protection because the police have been hand cuffed. Imagine turning loose a low or no income population in the streets of the areas mentioned above. Such people are looking for opportunities to steal and maybe worse. Guns will be used.
Does the city council want gunfights in the streets? Keep the undesirable element away from this area. That is part of your job as public officials. As public servants you should protect your constituents from crime we see on TV occurring in other cities.

17-455

Sent from my iPhone

From: Ellen Goldenberg
To: Tom Oliver
Subject: Lampson Project Comments
Date: Monday, October 31, 2022 11:30:25 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender edorf562@gmail.com

We have lived in College Park East for over 27 years. Our daughters went to McGaugh Elementary, McAuliffe Middle School and Los Alamitos High School. Our nice, quiet, peaceful area is going to be ruined by overbuilding on Lampson. I saw this happen when they tore down the movie theater on Seal Beach Blvd and put in more shops and stores and built The Target Center across the street. They have overbuilt and that brings more traffic which causes more car accidents just in sheer volume alone. They are ruining the area with over building and making it turn into a miniature Los Angeles. We moved to this part of Orange County to escape the LA congestion and traffic and if this project goes forward we will be truly following in the footsteps that have made living in Los Angeles a nightmare for so many. Either stop the project altogether and leave the open space on Lampson as it is or scale back the project in a huge way. Otherwise our beautiful small town will truly turn into Los Angeles. It is already heading in that direction, judging by the construction on continual construction on Katella.
Thank you for listening.

Ellen Goldenberg
3840 Fir Circle
Seal Beach

17-456

17-457

Sent from my iPhone, please excuse any typos

Dear Los Alamitos City Council,

I am writing to you as a College Park East resident who is concerned about the proposed project at 4665 Lampson Avenue. After reviewing the plans, and discussing some of the details with neighbors, it appears that the project developers have underestimated the potential negative impact on surrounding communities regarding traffic safety, parking, and quality-of-life issues. One project design aspect that I find concerning is that the housing development will only have two entry points (right hand turns essentially), if traveling west on Lampson Ave. towards Seal Beach Blvd. The lack of additional entry points will result in drivers making dangerous U-turns near Heather Park. As College Park East residents know, the section of Lampson Ave. between Heather and Tulip already experiences numerous auto accidents—many involving U-turns. Likewise, this project design issue will result in increased traffic on residential streets closest to Lampson. Streets such as Ironwood, Hazelnut, and Fir Ave. will experience more usage as Lampson Project residents attempt to bypass congestion and access their homes and apartments using alternative routes. This type of increased traffic on residential streets will not support the peaceful and safe environments that residents have come to expect in communities such as Los Alamitos and Seal Beach. 17-458

With a housing development that will include 240 units, many with multiple tenants, the issue of parking availability has naturally caught the attention of College Park East residents. While the development firm has included parking availability in their proposal, the number of spaces does not realistically meet the potential need. According to the most recent numbers for the project, a total of 557 parking spaces have been allotted. 459 spaces are connected to the cluster homes and townhomes; while 98 are associated with 77 multifamily apartment homes. At first glance this might seem like enough parking spaces for the number of proposed units, but many of these spaces are confined to traditional garages. As many of us know, garages are often used for household storage purposes and quickly lose the capacity to house even a modestly sized car. Also, 98 parking spaces assigned to 77 multifamily apartment homes will most likely be insufficient to meet the needs of families who own multiple cars. Given these problems, a likely outcome would include Lampson Project residents parking on nearby residential streets. With many College Park East streets already lined with the cars of its own residents, any additional cars would be difficult to incorporate without feeling a sense of parking overflow. 17-459

Even though the proposed project is a matter primarily for the City of Los Alamitos and its representatives to decide, I believe it would be short-sighted to ignore the historical ties that exist between the communities of Seal Beach, Rossmoor, and Los Alamitos. Our residents share schools, parks, libraries, and other public spaces. Our children have friends in these communities, where we socialize and patronize local businesses. With this in mind, I hope the leaders of the City of Los Alamitos will recognize and strengthen our collective well-being by taking into consideration the safety and quality-of-life issues at stake for their College Park East neighbors. More specifically, I would like to see the City of Los Alamitos (and surrounding cities and related public entities) initiate further study as to how the proposed Lampson Ave. development will impact use of public resources. As someone who regularly visits and supports our local public libraries with their children, I wonder if adding 240 units of housing will place an undue burden on the OCPL branch libraries in Rossmoor and Garden Grove. Also, as someone who regularly visits Heather Park, Arbor Park, and other local public parks, I question whether these locations (which are in states of disrepair) can accommodate new groups of families and children safely. I believe only further study can answer these questions and put the minds of College Park East residents at ease. 17-460

Sincerely,
Tim Ream
4641 Fir Ave.
Seal Beach, CA 90740
timream34@gmail.com, (310) 923-6334

From:	Dave Avila
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject:	Lampson Project Comments
Date:	Sunday, October 30, 2022 9:06:11 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender avtekker@hotmail.com

To whom it may conern,

As a College Park East resident i have the following environmental concerns with the intended proposal:

Construction Noise and road closure (Lampson ave) during construction period.
Overflow Parking in CPE.
Road impacts from usage of heavy construction equipment.
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Noise Pollution and overall traffic impacts due to excessive amount of vehicles on Lampson.
Public Services/Recreation: Parks (Heather Park usage)

Dave

17-461

From:	nuhuuu
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject:	Lampson Project Comments
Date:	Sunday, October 30, 2022 8:53:05 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender the.laramie.price@gmail.com

I am writing as a concerned resident of Seal Beach with respect to the new housing development project on Lampson Avenue. I would like to request environmental/technical studies to address the issues listed below.

I am especially concerned with the traffic disruption of the only street that provides access to College Park East. The morning traffic around school times already cause large backups and with added housing will magnify the impact. Additionally, Lampson is a street that causes violent car accidents with vehicles traveling at high rates of speed. Having new access points directly entering Lampson that are heavily used by residents will create many new violent accidents.

17-462

Aesthetics
Air Quality
Cultural Resources
Construction Noise and road closure
Fire / Police / Medical Response
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise Pollution (vehicles on Lampson)
Population & Housing
Parking in our neighborhood
Public Services
Recreation
Road impacts from heavy equipment
Rodents
Schools / Libraries
Traffic Safety (u-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc)
Utilities & Service Systems

17-463

Thank you,
Laramie Price
4524 Hazelnut Ave
Seal Beach, CA 90740
949-375-2837
the.laramie.price@gmail.com

From:	Maren Dermody
To:	Tom Oliver
Cc:	StopLampsonProject@gmail.com; jkalmick@sealbeachca.gov; Jordan Nefulda; Mark Chirco; mvaripapa@sealbeachca.gov; Shelley Hasselbrink; smassalavitt@sealbeachca.gov; ssustarsic@sealbeachca.gov; Tanya Doby; tmoore@sealbeachca.gov
Subject:	Lampson Project Comments
Date:	Sunday, October 30, 2022 2:59:35 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender marendermody@gmail.com

To Whom is May Concern:

My name is Maren Jackson and I live at 4557 Ironwood Ave. in Seal Beach with my husband, six year old daughter and two month old son. I can be reached via email or on my cell at 760-604-0404. We just recently learned that there are plans to put a 240 unit complex almost directly behind our home. I am extremely troubled by this news. Further, there are so many unknown factors related to how this construction will affect the environment, the rodent issues, the visibility into our backyard, the increased traffic behind our home, and more. 17-464

What studies/projects have been done to assess what the effect will be for the local residents? In the city my parents live in, they put up a small flag to the height that the proposed construction will be so that local residents can see how their property will be viewed by the new build. Has this been done? Further, we have a terrible rodent problem in this neighborhood and this construction and displacement of these rodents will only cause an influx of them in our neighborhood.

I am also very concerned about traffic, noise, hazardous materials, thr lack of parks in the community causing the 240 units to use the local neighborhood parks, accidents and the environmental impact. What has been done to asses these? 17-465

Please advise ASAP at the contact info listed above.

From:	gizem oksuz gulec
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject:	Lampson Project Comments
Date:	Sunday, October 30, 2022 12:07:57 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender gizemoksuz@msn.com

Hi City Staff Members,

Please stop the Lampson project. This project unfavorably impact our kids future with more traffic, cars and reduce the parks and open green spaces per person. This new housing will make Rossmoor, Los Alamitos and Seal Beach less desirable places to live and have a long term unfavorable impact on house prices (less taxes for the city in the long term).

Other unfavorably impacts are:
Poor Aesthetics
Worsening Air Quality and Greenhouse Gas Emissions
Increasing Hazards & Hazardous Materials
Increasing Noise, Population & Housing

Please stop this project for our kids' future.

Thanks,

Gizem Gulec
3701 Fuchsia St, Seal Beach
Gizemoksuz@msn.com

17-466

From: Onur Mudanyali
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Project Comments
Date: Sunday, October 30, 2022 10:55:35 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender onurmudanyali@icloud.com

To politicians and city officials behind this proposal,

You are proposing to destroy a community with your greed.

In return, you will destroy the aesthetics of such green space with nice family neighborhoods around it and more importantly worsen the air quality which is already unhealthy due to existing traffic.

We just went through the worst pandemic, that will have long term impact on our children's health, and your proposed project will cause more respiratory issues, potentially lead to mutations and much serious respiratory diseases. CDC already published their opinion on the long term impacts. You would be guilty even proposing this development

Moreover, you are proposing an attack to our culture and livelihood here. You are proposing to destroy decades of unique tradition and culture

We, including our children, will never forget you, politicians and investors, who are behind this terrible proposal.

You are proposing to benefit a 'small group of people', financially, and they are not even the future residents of the proposed development.

If you are with the people of your city, you withdraw this proposal. Then you will have our support, otherwise we will never give up

Onur Mudanyali
4688 Fir Ave Seal Beach CA 90740

310-402-4993

17-467

From: Angela Lyons
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Project Comments
Date: Sunday, October 30, 2022 10:33:24 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lyons.angela@gmail.com

Hello,

I live in College Park East at 4748 Fir Ave.

I am incredibly concerned about the planned high-density housing development in the works and the impact it will have on our environment, traffic, recreation services and noise levels in the area.

We have spent countless hours in the area watching birdlife and animals in the open green space. The elimination of the field along lampson will be a huge loss and feeding ground. The elimination of parking and park and drive lot will be incredibly difficult for AYSO members and dog park goers.

17-468

We already experience a high level of traffic along lampson due to the size of the neighborhoods. Adding up to 500+ cars to the neighborhood will become incredibly problematic from spill over parking coming into the neighborhood and backup coming in and out of Lampson (the only way to get in and out of the neighborhood).
Explain how this project will negatively affect our community.

The huge appeal of this neighborhood is the quiet atmosphere which will be greatly hindered by the addition of over 200 new homes and large increase in vehicle traffic.

Don't forget to include your name, address, and contact information!

Please do not ruin this beautiful natural environment and impinge this neighborhood with increased safety risks with such a huge volume of traffic in a small area.

17-469

Sincerely,

Angela Lyons
805-573-0765

Hello Tom,

We are against this Project because it will have significant impact on environmental resources, and it will disturb our quiet and green community.

This project will help in the increase of Greenhouse Gas (GHG) emissions within a local area of the project. Some construction work may result in the exceed of some hazardous waste thresholds established by the California Code of Regulation (CCR) and may produce toxic fumes when heated which is very dangerous on Health.

Some soil disturbance may result in Aerially Deposited Lead (ADL) which is very contaminated substance and toxic to human health. Soil disturbance also may result in toxic dust.

Please keep our community safe, sustainable and green to enhance our health and livability.

Regards,

Abraam & Mirna

3881 Rose St.

Seal Beach, CA 90740

17-470

From: pythames
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject: Lampson Project Comments
Date: Saturday, October 29, 2022 4:35:29 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender pythames@aol.com

Dear Sir,

I am writing because I have been worried ever since the Lampson Project came up, even though I am happy to see this parcel used for badly needed housing.

But I am not happy about the planned density. I would like to believe that the plans can be reworked to include more parking and a playground for children so that CPE is not used for those needs by default.

We already have parking issues ourselves because few people use their garages for parking cars -- a practice I fear the new residents there will follow as well.

And I hope children will not be tempted to cross dangerous Lampson on their own to come to Heather Park.

Lampson is already known as Death Alley. I hate to think what the added traffic will mean. Are there any plans to mitigate this problem?

Thank you for considering my comments.

Pamela Thames

4400 Hazelnut Ave.
Seal Beach, CA 90740

562-240-3839 cell

17-471

From: lornacloke@icloud.com
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Friday, October 28, 2022 8:04:30 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lornacloke@icloud.com

To whom it may concern,

The Lampson Project is a bad idea. Lampson Avenue serves three communities—Los Alamitos, Seal Beach, and Garden Grove— as well as several dense housing areas between Seal Beach/Los Alamitos Blvd and Valley View Blvd.

Adding more homes, cars, and people to this family residential area will create traffic issues severely impacting our commutes to work, school, and local shopping. It will negatively impact our quality of life by overcrowding the area causing increased noise and traffic, and stressing local utilities and service systems. Furthermore, Lampson Avenue is a busy roadway where there are several traffic accidents each year, some being severe. If more housing is added along Lampson, there will likely be more accidents, making an already existing issue worse.

17-472

Los Alamitos already has several mixed areas of housing that include apartments, condos, duplexes, and single family homes. The aesthetic quality of those areas is poor and demonstrates poor planning. The housing along Lampson Avenue currently makes up a nice family housing area. Please do not make the same mistake by making this a mixed housing area too. It will change the feel of the neighborhood and cause our home values to decrease//diminish. And it will diminish the Lampson corridor's reputation of being a desirable residential area.

Lampson avenue is an important thoroughfare for several communities. What you choose to do with this project goes far beyond the borders of the city of Los Alamitos. If you want more housing to increase your tax base, annex Rossmoor, which is an unincorporated area of Orange County and a community already using school district and community resources. That would be far less expensive and more profitable for our city.

17-473

Please be a good neighbor to us all.

Sincerely,

Lorna Cloke
562-810-2425
5182 Olympic Drive, Los Alamitos, CA 90720

From: Jo Melis
To: Tom Oliver
Subject: Lampson Project Comments
Date: Friday, October 28, 2022 6:39:09 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jothebeast2@yahoo.com

Hi! I live in College Park Estates and am very concerned about the impact that the proposed housing development on Lampson would have on my area. That seems like a LOT of people to add to such a small piece of land. Traffic is going to be a nightmare and our already stressed water resources would be severely taxed.
Jo Melis
4624 Hazelnut Ave
Seal Beach, 90740
562 431-4402

17-474

From:	Justin Bragg
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Friday, October 28, 2022 6:09:56 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender justin_bragg@yahoo.com

I am very concerned about the impact this planned community will have on our existing community, including Los Alamitos, Seal Beach, Rossmoor and West Garden Grove.

Traffic in the mornings is already tremendously busy on Lampson. Adding several hundred cars a day will only increase congestion, noise, pollution, and accidents.

There does not appear to be adequate parking within the proposed developments and I fear the excess parking will fill into Arbor Park and across the street into College Park East.

17-475

Additionally, there are over 1000 families that are involved in AYSO Region 159 soccer every year, the organization plays and practices at Arbor year round and they use the Existing parking lot to provide parking for games and practices at Arbor.
With the proposed development, AYSO will lose 350 parking spaces, meaning hundreds of cars will have to park across busy and dangerous Lampson into College Park East creating a parking nightmare and dangerous street crossing for parents and small children.

Additionally, there is no playground for all the new residents, meaning they will also be regularly crossing a busy Lampson road and inundating Heather park with families.

I strongly oppose this project.

Justin

17-476

From: Meredith Barnes
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Project Comments
Date: Friday, October 28, 2022 1:36:52 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender meredithbellbarnes@hotmail.com

The Lampson project is a very big concern not only for the residents of College Park East but surrounding communities. Lampson Ave is already prone to problems and the addition of 240+ units would make it worse. Unfortunately with the way College Park East was designed Lampson has very little clearance for residents coming out of the neighborhood to see oncoming traffic which results in accidents. The development of so many new units would impact the street of Lampson even more. I grew up in Rossmoor and now live in College Park East. The speeding down Lampson was always a concern and I remember those boulders/rocks being put into the center dividers to prevent speeding cars into oncoming traffic (or at least that is what I was told). What is the City of Los Alamitos going to provide to better this street? There are no turn signals at the lights except where old ranch country club is and the major cross streets, the streets flood and the speeding is always a problem. The traffic at Seal Beach Blvd. and Lampson is already bad and with additional housing this is only going to be a nightmare to try and get kids to school on time! Also what parks are these residents going to use? College Park East's parks, which was even a fight to get in the development to begin with?Where are residents going to park? There is not enough parking with what is proposed and there is no parking along Lampson. Are they going to park in the tract of College Park East where parking is already limited. The residents of Parkewood in Los Alamitos already come into College Park East to walk their animals since Parkewood does not allow animals in the common area. Is this going to happen with this new development too? What about Arbor Park and AYSO soccer that benefits the kids of Los Alamitos, Seal Beach and Rossmoor? Where would anyone park? I am all for making a better and inclusive community but within reason and to benefit all the residents/surrounding residents not just developers and cities pockets.

17-477

17-478

Thank you,

Meredith Mayosky
4617 Fir Ave
Seal Beach, CA 90740

From:	Julianna Kirby
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject:	Lampson Project Comments
Date:	Friday, October 28, 2022 1:12:33 PM
Importance:	High

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jkirby@tfpgroup.com

This project directly threatens the quality of life of everyone in College Park East and surrounding West Garden Grove and Rossmoor. While we are in Seal Beach, we directly face the proposed project, as you know, and would have to share the already busy Lampson Avenue with over 500 new vehicles daily. Not to mention bringing this many new residents and cars to one of the busiest freeway intersections in the country.

Lampson cannot accommodate this traffic, and the project as proposed does not include enough parking for the proposed # of housing units and guests. There is no place for anyone to park other than in College Park East (CPE) when the new neighborhood fills with cars.

CPE has already been encroached upon by the 405 freeway expansion. This proposed development also negatively impacts this quiet neighborhood where some residents have lived their whole lives. My parents were original owners, and my mom is in her 3rd home in CPE. Many current residents returned here to raise their families in the neighborhood they grew up in, myself included, not to raise their families in what will become an overflow parking lot for the City of Los Alamitos.

17-479

The initial negative impacts that are apparent include:

- The noise, dirt, and traffic caused by the construction itself
- The lack of adequate parking - leaving the new residents nowhere to park but across an already busy street and in the CPE neighborhood
- The dramatic increase in traffic will contribute to poor air quality, increased noise, increased commute time to school and work, and increased chance of accidents on an already dangerous “Lamspon curve.”
- An increase in illegal parking and u-turns on Lampson, which would also endanger the lives of the many active residents in CPE who exercise along Lampson
- Overuse and overcrowding of the parks in CPE, which are maintained with City of Seal Beach tax dollars
- The influx of new residents that will overflow onto the already busy Seal Beach Blvd and Valley View (to the west and east) will severely overcrowd the surrounding areas
- An increase in crime – within CPE, we already see an increase in car break-ins and non-residents trolling the streets in the late night hours; adding to the volume of homes in

17-480

close proximity will provide a bigger target for criminals. The proposed high-density housing plan is an easy target for these criminals to be in and out and jump right across the street to CPE

17-480 (CONT.)

None of the plans we can see, or have been shared to date with the public, have improvement plans for Lampson, additional ingress/egress for the new residents that could avoid Lampson, or any consideration for the neighboring community. No proposal to provide funding to make CPE a gated community to secure us from the public parking fiasco this project will create. No consideration for this community in the planning at all.

We have always considered Los Alamitos, a good neighboring community, and this blatant disregard for the CPE community is disheartening.

While we all grew up with "SWRL," no one expected the land never to be developed. But the proposed plan is unreasonable, overreaching, and unduly burdens the residents of CPE.

I urge the City Council of Los Alamitos to work with the developer team to modify the proposal. To eliminate the negative impact on CPE and create a quality of life for your new residents that does not diminish the quality of life for CPE residents in any way.

I urge the City Council of Seal Beach to stand up for its CPE residents to the fullest extent possible, including legal action if necessary.

17-481

Thank you.

Julianna (Fusco) Kirby

CPE Resident

4249 Birchwood Avenue

Seal Beach, CA 90740

jkirby@tfpgroup.com

562.209.2949

From:	Bruce Klein
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject:	Lampson Project Comments
Date:	Friday, October 28, 2022 12:22:16 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender bruceklein0000@gmail.com

Don’t ruin our beautiful housing area with total bullshit
Who really benefits
Not the residents!

Money and Greed!!
So what
I’m against this pure upgrade bullshit crap

Bruce

Explain how this project will negatively affect our community.

Don't forget to include your name, address, and contact information!

Examples can include :
Aesthetics
Air Quality

17-482

Cultural Resources
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise
Population & Housing
Public Services
Recreation
Transportation & Traffic
Utilities & Service Systems
Sent from Mail for Windows

17-482
(CONT.)

Virus-free.www.avast.com

From:	Matt Rush
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Friday, October 28, 2022 11:22:12 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mrush2827@yahoo.com

Good Morning,

My name is Matthew Rush and I currently live at 4564 Ironwood Ave in the College Park East area of Seal Beach. I email you to voice my concern of the effects the Lampson Project will have on not only College Park East but surrounding neighborhood as well. My wife and I purchased this home just over a year ago in the hopes that it would be a place we could really lay down roots. We had a baby on the way who is now 1 years old and felt like this was the perfect neighborhood to start our family. A hidden gem in a beautiful city that is safe and family oriented with many like minded people. We, like many others in recent years, paid we over asking price in order to get into this prestigious neighborhood. The Lampson project counteracts many of the great values of this neighborhood. I have been a firefighter for the city of Los Angeles for over 8 years and have seen first hand what a large housing project can do to a small, safe, family neighborhood. The most obvious problem is the traffic. Being that Lampson is the only way in or out poses a glaring traffic issue not only in regard to congestion but also in accidents. If you have ever driven Lampson in this area you know that there are a lot of blind turns and cars seem to like to drive very fast. Recently there was an accident near the intersection of Heather and Lampson closing traffic in both ways for nearly all Lampson from Seal Beach Blvd to Valley View. This type of accident, with the addition of 200plus more homes would pose a chaotic problem. The addition of this many home/tenants/cars seems grossly irresponsible to those who live in the neighborhood. Additionally, the proposed family gathering area for such a large complex is unrealistic to say the least and will do nothing more than flood a Heather Park that is outdated and needing of upgrades. A Heather Park that is the main gathering area of a community, the epicenter of family and community gatherings (ie Christmastime, movies at the park, Halloween, Etc) with one portapotty for an entire neighborhood is borderline gross negligence. The idea of cramming more people into our parks is a recipe for disaster. The project plans also lack sufficient parking for the new housing. Most families do not have the space or luxury to be able to park one, let alone multiple cars in the driveway/garage resulting in mass street parking. Being that there is no parking in this new complex poses yet another problem that will soon become College Park East's. Crossing the street will be the only way tenants and visitiors of tenants will be able to park their car leading me to my last and most important issue, safety. I'm sure whoever reads this can agree safety is the biggest factor for moving to a neighborhood. As the father of a 1 year old it would be irresponsible and ignorant to think that this housing project would have no effect to the safety of my family and my neighborhood for reasons I have already discussed. Traffic, overcrowding and an influx of people parking in our streets pose an immediate threat to our safety as well as our current way of life, and our home value. If this were just a matter of changing our day to day a bit this would not be something the community would feel so strongly about. I hope that you can see, because it is so obvious, that this is so much more than that. I appreciate your time in reading and allowing the community to voice its concerns.

17-483

17-484

17-485

17-486

Sincerely,
The Rush Family
4564 Ironwood Ave
(562)217-2163

From: Luie Rodriguez
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; "jkalmick@sealbeachca.gov"; "mvaripapa@sealbeachca.gov"; "tmoore@sealbeachca.gov"; "ssustarsic@sealbeachca.gov"; "smassalavitt@sealbeachca.gov"; "StopLampsonProject@Gmail.com"
Subject: Lampson Project Comments
Date: Friday, October 28, 2022 11:04:45 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lrodriguez@fcawis.com

Hello,

My name is Luie Rodriguez, I live at 4580 Ironwood Ave. Please DO NOT approve the housing project being considered off Lampson and Rose.

The impact to our wonderful community would be upsetting to say the least. Not to mention how it would affect the safety of our children and general population.

I plead with you to reconsider as this would be a great detriment to the fine residents CPE and West Garden Grove.

Thank you for listening and I am available to discuss further if you wish.

Regards,

Luie Rodriguez

714.342.6856

17-487

Logo

Luie Rodriguez | VP of Marketing

First Capital - AWIS, LLC
5675 Ruffin Road, Ste 100 San Diego, CA 92123
(714) 342-6856
lrodriguez@fcawis.com | www.fcawis.com | disclaimer

From:	Dora Stathopoulos
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Thursday, October 27, 2022 7:39:38 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender dorastat1@gmail.com

One of the reasons I moved to this area was due to abundance of space and beauty this neighborhood has to offer.

I can't even stomach the idea of all that housing and traffic it will bring. This city in the past few years seems to only care about the mighty dollar. I understand that money brings wealth but to what expense.

Please don't move forward with this disaster. It really will be a huge disaster. Please think of your community, not the money. Please put us first.

Dora Stathopoulos
818 429-1980.

17-488

From: Ana Popa
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments
Date: Thursday, October 27, 2022 11:36:09 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ana.popa02@gmail.com

STOP THE LAMPSON PROJECT
THIS WILL BRING BAD:
Aesthetics
Air Quality
Cultural Resources
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise
Population & Housing
Public Services
Recreation
Transportation & Traffic
Utilities & Service Systems

Ana Reed
Weatherby rd
Los Alamitos

17-489

From: amira agc7.com
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; stoplampsonproject@gmail.com
Subject: Lampson Project Comments
Date: Wednesday, October 26, 2022 11:35:31 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender amira@agc7.com

Good evening,

My name is Amira Michael. I live in Birchwood Ave, Seal Beach and I strongly believe that this project will bring nothing but chaos to CPE, Seal Beach city and all the neighboring cities. This project will bring more traffic than it's already congested on our everyday life. I already have hard time driving through Lampson during rush hours with the amount of residents we have now. The schools are crowded with large numbers of students, our parks will also be taken and used by others. Lastly our safety will be jeopardized. Please stop this nonsense greedy project and protect our Seal Beach beautiful city.

17-490

Other things affected by this nonsense project:
Aesthetics
Air Quality
Cultural Resources
Greenhouse Gas Emissions
Hazards & Hazardous Materials
Land Use & Planning
Noise
Population & Housing
Public Services
Recreation
Transportation & Traffic
Utilities & Service Systems.

Amira Michael

17-491

Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android

From:	tim.sams@nm.com
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, October 26, 2022 8:28:20 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tim.sams@nm.com

To whom this may concern,

Writing to voice concern for the Lampson Project. Please stop the project.

We believe this will negatively impact our community where were are raising our three young children by:

Creating overpopulation in this small, safe area. Overstress the resources. Creating massive traffic and access issues to/from our home.

17-492

With Gratitude,

Tim Sams

4865 Candleberry Ave, Seal Beach, CA 90740. (619) 719-2146

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Northwestern Mutual
720 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4797.

From:	Heath Creighton
To:	Tom Oliver
Cc:	Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject:	Lampson Project Comments
Date:	Wednesday, November 2, 2022 2:34:59 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender heathcreightonrn@gmail.com

Dear Mr. Oliver,
I am writing to you to express my concerns over the Lampson project. There are many concerns regarding this project that are alarming. We are already challenged with medical response times and medical facilities are overcrowded. Adding additional volumes to this already overburdened system is very concerning. With the increased traffic that would be forced to use Lampson and make U-Turns at Heather Street only increases the risk for serious or fatal accidents. The lack of parks and play areas will overcrowd Heather Park which is already undersized for the CPE community. 17-493

The other area of concern that I have is related to the increased traffic. Lampson is the only street that connect to Seal Beach Blvd. this is the only access to all of the elementary schools that will be affiliated with this project. The traffic in the mornings is already very hectic and backed up on Lampson every school morning. Adding all of these additional residents would make it impossible to turn onto Lampson from Heather or Candleberry. With all of these additional vehicles I would request that an environmental study be conducted to see what the true impact is, not only with traffic, accident risk, but also emissions. Thank you for taking the time to read my concerns. I am very passionate about my community and am very concerned about the harm this project would cause to the community that I serve. 17-494

Thank you,
Heath Creighton
4424 Dogwood Avenue
Seal Beach,CA
90740
310-213-7115

Sent from my iPhone

From: Scott Schwartz
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda
Subject: Lampson Project Concerns
Date: Sunday, October 30, 2022 10:19:43 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender swschwar@yahoo.com

Mr. Oliver,

I am concerned about the housing project the City of Los Alamitos is considering along Lampson Avenue. While it will not directly impact the residents of Los Alamitos, it will heavily impact those who live in the adjacent area. I am requesting environmental/technical studies address, at a minimum, the items listed below.

1) Traffic on Lampson. Lampson Ave is already busier than usual with those who use Lampson to bypass the freeways. This will not be alleviated with the addition of toll lanes. Lampson is also already busy during peak hours with parents taking their kids to school.

2) Traffic Safety. U-turns at Heather St. are already an issue with users of the Arbor Dog Park. A community of the planned size will create additions traffic hazards.

17-495

3) Noise Pollution. Additional vehicles along Lampson will create additional noise at all hours of the day for the surrounding community.

4) Air Quality. Additional vehicles along Lampson will create additional pollution in the surrounding community.

17-496

5) Parking. Enough parking needs to be provided for residents and guests such that they do not impact adjacent non-Los Alamitos neighborhoods. These roads are maintained and monitored with non-Los Alamitos funds.

17-497

6) Environmental Drainage. Parts of Lampson are already subject to flooding when there are heavy rains. This development could cause more run-off onto Lampson.

17-498

7) Public Space for Recreation. Not enough recreation areas for residents will lead to them using parks and courts in adjacent neighborhoods that are paid for by other cities.

17-499

8) Aesthetics - Views from along Lampson. Impact of property values in dissimilar single-family neighborhoods next to the project.

I look forward to the results of your environmental/technical studies in this matter.

17-500

Scott Schwartz
4524 Elder Ave.
Seal Beach
swschwar@yahoo.com

From: david and kam kalish
To: Tom Oliver
Subject: Lampson Project concerns
Date: Saturday, October 29, 2022 6:16:07 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kdkalish2@yahoo.com

Hi, I live in College Park East, right across Lampson Avenue from where this proposed project will be. Our neighborhood has concerns regarding the extra traffic, particularly in the morning rush hour, this will create by the intersection of Lampson and Seal Beach Boulevard. That is the ONL Y Way we can get from our neighborhood to all the area schools. They will also be the only way for people living in this new development to get to those same schools. We only have two ways to get out of our development. We also have to deal with all the traffic cutting through Lampson Avenue when there's an accident on the 405. I also fear that when the 405 construction is done, there will be log jams where the freeway narrows going into Long Beach, causing even more cars to take shortcuts on Lampson Avenue. I hope your environmental impact study will take this into account. 17-501

I also have concerns about inadequate parking, which is going to cause people to come across the street and park in our neighborhood. I also have concerns that you are not building tennis courts. We only have two for entire development, and I'm sure people in this new development will come across the street and play on our tennis courts, financed by the city of Seal Beach. You really need to provide tennis courts for your own development, to prevent this from happening. It is the only fair thing to do, since it is already hard enough for us to get an empty court. I have to sit there with my daughter for over an hour sometimes waiting. We shouldn't have to wait longer because we paid for the upkeep of this court with our Seal Beach tax dollars, and people from another city will be using our facilities at our detriment, if you don't provide adequate recreational facilities for your residents. Yes, it would be less land to build more houses, which means less tax revenue, but please be fair to your neighbors in Seal Beach! 17-502

I want you to remember when the people of Rossmoor complained about the LA fitness that was proposed to go into the shops at Rossmoor, within the city of Seal Beach, many people in Seal Beach had their backs (I was one of them), and fought with them to help defeat that proposed construction. We didn't have to do that, because that location didn't really affect our day-to-day lives. Just like this development happens to be in a location that won't affect anyone else from Los Alamitos, so it's easy for you to just push the development where it impacts residents of other cities, not your own city. I'm not saying you shouldn't build anything in that area, but I think the project should be much less ambitious than what you are proposing, to not result in a huge detriment to your neighbors in Seal Beach. 17-503

Sincerely,
David Kalish

Hello, good day.

I would like to suggest building a sound wall on the Los Alamitos side of the Lampson Project to help muffle the noise which so many new residents will inevitably generate into the now peaceful neighborhood of Seal Beach College Park.

I would like to suggest not building quite as many new homes, thereby making room for a park in the new development.
It is important.

17-504

Lastly I would ask that the developers provide funding for anyone in the Seal Beach College Park area, whose backyard fence borders Lampson, so that those residents may heighten their backyard fences to the maximum height allowable at no cost to the residents themselves.
The developers should also provide funding for air purifiers for those Seal Beach residents, as the air quality will suffer greatly with the influx of so many additional vehicles.

17-505

Thank you,
C Reynolds
4681 Ironwood Avenue
Seal Beach CA 90740
(562) 230 6719

From: Kellie DuRose
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson Project Feedback
Date: Tuesday, November 1, 2022 6:59:30 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender kellien@gmail.com

I am writing to express my concerns about the Lampson Housing Project. I live in the College Park East neighborhood and have lived here for 5 years and think the plans proposed for the West Ed location do not make sense for the area and should not be approved. I have concerns about parking, safety, traffic, noise, and services.

17-506

The proposed number of parking spots allocated to the community is highly insufficient. A little over 2 parking spaces per home is not sufficient for any neighborhood. Prior to moving to Seal Beach my husband and I lived in the 360 at South Bay planned community in Hawthorne, CA. It was new construction consisting of condos, townhouses, and single family homes. Each home had a garage and there were also street parking spots (both parallel parking along streets as well as pull-in spots on side streets). We parked our cars inside our garage and only needed street parking for our guests. Even with this, parking was a nightmare. We had many occasions where we had to have guests park outside the community and we had to go pick them up and shuttle them to our home. The amount of parking proposed at this location seems very similar and therefore very inadequate. Residents and guests are going to end up parking in the College Park East neighborhood and trying to cross a very dangerous street, Lampson. Even in our single family home community I find that our street is always full of cars because people don't use their garages and have more than 2 cars, filling our streets with overflow from another community will only make it worse. If this is to proceed then I think fewer homes should be planned and more space allocated to parking so that all of the residents and their guests can easily park in the community without needing our streets for overflow.

17-507

Earlier I mentioned Lampson being a dangerous street and this community would make it even worse. In my short 5 years here there have been an extreme amount of accidents on Lampson, including fatalities. People drive too fast and don't notice people pulling out of the CPE community and the West Garden Grove community and adding a new community is not going to change that. Additionally, the project indicates no traffic light will be added meaning people that need to head south on Lampson will need to make a right and then a u-turn on Heather. Forcing tons of cars into u-turn situations is extremely dangerous and opening the street up to more accidents than it already has, and it already has too much.

I also have concerns about traffic. The intersections of Seal Beach Blvd and Lampson and Valley View and Lampson are very congested today with the existing communities and the traffic they produce that adding many more people and homes is only going to make it worse. Additionally, if a portion of this community is truly allocated for low income housing (I have my doubts that any of these properties will actually be affordable for low income families but that is beside the point) then public transportation will need to be easily accessible. To my knowledge there are no bus stops along Lampson and if they were to be introduced (if they aren't, people are going to walk 1.5 miles to Seal Beach Blvd or 1.1. miles to Valley View to catch the bus one way?!?!) then that would make traffic even more of a problem along

17-508

Lampson.

17-508 (CONT.)

My additional concern is the noise that this new community will create. We have been dealing with the base jack hammering for the last 4 weeks starting at 6:15am with no information on an end date and no explanation as to why the jack hammering needs to start earlier than 7am. I have reached out to my city representative and have received no response. This location would be even closer to my home and therefore even louder. We have endured massive amounts of freeway construction noise, now this base construction, and now we're going to deal with this? The communication has been great regarding the freeway construction but we received no notification of the base project and no notification about this proposed project either. I find this highly unacceptable and don't feel like we need this on top of everything else that has and hasn't been communicated to us.

17-509

Finally, I feel as if we do not have the appropriate amount of services in the area to accommodate a new community. We have very few grocery stores in the area and some of them are very old. The stores in the strip malls at Valley View and Lampson which would be the closest for this community are closing down, are very run down, or have been left empty for years. People in the community have raised concerns to the city of Garden Grove and to the owners of the properties and nothing is being addressed. We also have very old infrastructure for electricity, internet, cable, etc. and are well overdue for upgrades for the existing communities. And now we're proposing adding new residents and communities with no plans to address any of these issues. It feels like we're maxed out based on the current population unless changes to services are made and I think the priority should be the existing residents instead of new ones.

There are other concerns in addition to these but I feel like this is a long and very concerning list as it is. I do not think this is the right solution and the whole plan needs to be revamped and really should not be approved at all.

17-510

Thank you,
Kellie DuRose
4416 Hazelnut Ave
Seal Beach

From: Christina Zandi
To: Tom Oliver
Subject: Lampson Project Parent Concerns
Date: Wednesday, November 2, 2022 12:46:59 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender clyonmft@aol.com

To Whom it May Concern:

My daughter participates in the AYSO Region 159 program that is held weekly at Arbor park and we want to echo their concerns about the proposed Lampson project as follows:

AYSO Region 159 environmental concerns regarding the proposed 246 Residential Unit Project for 4665 Lampson Ave a.k.a. West Ed Property

17-511

1. Arbor Park has approximately 100 parking spots, with 30 of those parking spaces located on the south side of the dog park. Region 159 has always strived to provide adequate parking for the dog park, which leaves roughly 70 parking spaces available on Saturdays. Therefore, Region 159 families and volunteers utilizing Arbor Park on Saturdays routinely park in the 4665 Lampson Avenue parking lot. That parking lot provides over 300 parking spaces that are essential to our use of Arbor Park and ensure soccer families are not parking in the nearby neighborhood of College Park East (CPE). The proposed project at 4665 Lampson Avenue states it will provide 557 parking spaces that will be entering and leaving the property from Lampson Avenue between traffic lights at Heather Street and Rose Street. The lack of signal control currently planned for traffic in and out of the development will adversely impact traffic safety on Lampson. It is already a dangerous street with a history of serious accidents. The number of planned parking spaces is insufficient for the number of planned residences. Garage spaces will be used as storage, or other purposes other than parking. Many of the homes will have more than two or three cars and drivers. These homes will have guests that will need parking as well. Region 159 is concerned Arbor Park or CPE residential streets will then become overflow for the planned development.

17-512

2. CPE has less park acreage than other neighborhoods in Seal Beach, Los Alamitos or Rossmoor. Arbor Park has helped fill that void by providing a large grass area to support organized and unorganized sports including soccer and baseball. The proposed new development details do not show any park space, such as a playground for residents. Region 159 requests the EIR include a listing of existing parks within a ½ mile of the planned development. In addition, we request the EIR include an evaluation if the planned development should include park space, such as a playground, basketball court, etc. for the residents of the planned development, to not further impact already limited nearby park facilities.

17-513

3. Arbor Park is currently home to many recreational activities, some of which begin in the early hours of the morning, plus a portion of Arbor Park is used for a very popular dog park. Region 159 requests that the EIR include an evaluation of noise at Arbor Park during busy weekends when the park is filled with soccer matches and the dog park is being utilized. To avoid future complaints from the new residents of the planned development about noise from soccer Saturdays and the dog park, noise impacts should be studied and if necessary, mitigation measures proposed. The noise study should be conducted to include all hours of the day on Saturdays when whistles, loud voices, cheering and other noises are made.

17-514

Thank you for your time and consideration in this important matter.

Sincerely,

Christina Zandi

From: Mauricio Furtado
To: Tom Oliver
Subject: Lampson project Parking and Park
Date: Wednesday, November 2, 2022 11:38:52 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender mautado@gmail.com

Hi!

As a resident of CPE I support the development of the new neighborhood off of Lampson, but I'd like to bring attention to a few things:

Parks: Our parks in Seal Beach need a lot of TLC and it's very important that the new neighborhood has a great recreational area with a park.

Dog park: Talk to the city of Seal Beach and see if one of the parks in CPE could have a dog park area.

Parking: Make sure there's enough parking available for residents in new neighborhood.

Bike lane: the bike lane on lampson needs to be widened and segregated. There are just too many accidents on Lampson including cyclists.

Lampson x Seal Beach blvd.
No stop right turn to Seal Beach blvd North would be essential to keep morning traffic flowing when everyone is trying to get their kids to school in Los Alamitos and Rossmor.
--
Mauricio Furtado

17-515

From: Alan De La Vara
To: Tom Oliver
Subject: Lampson Project Proposal
Date: Wednesday, November 2, 2022 3:21:52 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender alandelavara@gmail.com

Good afternoon Mr. Oliver,
I am Alan De La Vara, homeowner at 4565 Ironwood Ave, Seal Beach, CA 90740.
My home's back wall faces Lampson Ave., almost directly across the street from where the proposed project is to be located.
I would like to inquire as to what steps the city and developer have taken to address many of the concerns of the community residence, environment, pets, nature and natural resources.

17-516

- Has a study been conducted regarding traffic loads on Lampson?
- Can the current drainage etc handle the increased homes?
- Is there a completed design of the project and consideration to privacy for those who may have back yards with children viewed from residents in the new construction?

17-517

- Has a study been conducted regarding; dust, pollution, noise to be created by the additional residence

17-518

- Will the walls along Lampson be raised to combat increased noise pollution? Who pays for this? The city? the developer?
- Are the roads on Lampson equipped to accommodate the increased vehicle traffic

17-519

- Will the developer conduct studies to the noise levels created by increased traffic on Lampson
- Have any animal rights groups been contacted to test noise levels / pollution levels and potential life threatening harm to the pets that live in homes along lampson who reside in backyards that now will have their

I believe this is a VERY bad idea for this particular area.
Lampson is already prone to accidents as it is used as a thoroughfare between two major streets and is an almost exclusive access point to thousands of residents.
Congestion, accidents and possibly deaths from people now entering and exiting to and from the development to Lampson are sure to follow.

17-520

Please don't let your name go in history as someone who was attached to this horrible idea.

Best,
Alan De La Vara

From: Tamee MacKay
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov
Subject: Lampson St. Project
Date: Wednesday, November 2, 2022 12:46:39 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tameejean@pm.me

Dear City of Los Alamitos and Seal Beach,

As a resident of College Park East in Seal Beach, I strongly oppose the Lampson St. housing project. This high density housing project, as planned, will cause major traffic issues (safety, backed-up traffic, etc.), impede parking in our own neighborhood by the overflow of cars in the proposed neighborhood, make the soccer field and dog park less accessible, cause a burden on the school district and it doesn't just impact CPE, it impacts West Garden Grove as well.

Please stop this project or at least enforce a plan with less homes and more parking for the new community.

Thanks,

Tamee MacKay

Sent from Proton Mail for iOS

17-521

From: Ryan Trajan Vergara
To: Tom Oliver
Subject: Please Stop the Lampson Project
Date: Tuesday, November 1, 2022 2:32:04 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender vergarar@gmail.com

Good Afternoon,

I'm writing to voice my objection to the Lampson high density housing project. As a current resident in College Park East, I feel that this project will negatively impact not only our neighborhood, but Seal Beach and Los Alamitos as a whole.

Aesthetically, these mid-rise buildings will dilute the intimate neighborhood setting that we currently have. But that's almost the least of our potential issues.

17-522

Construction will produce pollution on various levels. Years of air pollution with the dust, on site field fabrication and construction will affect breathing conditions for everyone, including the elders and children of the neighborhood, The noise will be a hindrance to residents living in CPE. Traffic will be congested on Lampson. With those roads only being two lanes each way with no space to expand, there will be a noticeable difference in driving conditions.

17-523

I'm mostly concerned about what adding close to a thousand more residents will do. More traffic means less safety along Lampson and nearby major intersections. Higher population means overloading nearby grocery stores, restaurants, local businesses, and local resources like libraries. A potentially higher number of students would make a higher student to teacher ratio at our schools, which would impact our education system. Without its own dedicated park, we could be seeing higher traffic and use of the parks we have in CPE that already need improvements with the younger families moving in. We already have an increased younger family population moving into CPE which is great for the neighborhood and community, but we need to continue to keep it safe by limiting overall population in the surrounding area. We already have a healthy, steady growth and adding such high density housing will quickly create a situation that the infrastructure and resources cannot quickly keep up with.

17-524

I feel extremely blessed and grateful for our small community here in Seal Beach and Los Alamitos, and hold CPE close to my heart as a resident. It's the last small pocket of a city that resides close to the beach that is tucked away between Long Beach and Huntington Beach, and I strongly hope that you, your colleagues, and city recognize that we want to keep our community safe, maintained, and it's unique intimate personality where everyone knows everyone.

Thank you for your time in reading this.

A grateful resident of CPE,

Ryan Vergara
916-548-0564
vergarar@gmail.com
4572 Fir Ave
Seal Beach, CA 90740

17-525

From: Barbara Carroll
To: Tom Oliver
Subject: Project at 4665 Lampson
Date: Wednesday, November 2, 2022 12:57:00 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender bcarrollx@gmail.com

> Mr. Oliver-
>
> Please consider the negative impact the housing project at 4665 Lampson will have on Arbor Park, which is widely used by the community and specifically for AYSO purposes. AYSO has served the families of our community for over 40 years and taking away the fields will have an adverse effect on families and the community. For those players that don't have the skill set to play for a club team, or their family does not have the resources to spend on playing club soccer, AYSO is the only recreational option.
>
> Thank you,
> Barbara Carroll
> AYSO Region 159 Coach/Soccer Mom

17-526

From: Derek Berger
To: Tom Oliver
Subject: PROPOSED 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE
Date: Wednesday, November 2, 2022 11:53:13 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender dberger@crescentsolutions.net

Hello Tom,

I am a resident of College Park East in Seal Beach and I would like to write you to oppose the project for 4665 Lampson Avenue for the following reasons:

- The new project would increase traffic on Lampson to an unsafe level
- Overflow parking from the new residents would overflow into CPE, reducing available street parking to CPE residents.

17-527

- Arbor Park will not have enough parking spots for the hundreds of families who attend AYSO soccer at Arbor Park. AYSO region 159 is an amazing organization who has been in the community for decades and have used Arbor Park for decades as well. The reduction of parking caused by the proposed unit project would jeopardize the success of playing soccer at Arbor Park and will negatively affect the children and families of our community.

I am hoping you will take into account the concerns of CPE residents and the detrimental effect this project would have on AYSO region 159 and the children.

17-528

Thank you,

Derek Berger

714-931-3397 (you can call me if you want to discuss)

From: Jeffrey Grgas
To: Tom Oliver
Subject: PROPOSED 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE
Date: Wednesday, November 2, 2022 1:19:49 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jgrgas@westmont.edu

Tom
As a long time resident of Seal Beach and College Park East (CPE) I am very concerned, for a number of reasons, about the proposed development of the former West Ed property. My concerns include:

1. elimination of the parking historically made available by the property to support AYSO and other Arbor Park activities.
2. the proposed development has inadequate parking planned for the number of units so it is highly likely overflow will migrate into adjacent CPE
3. the proposed development does not include reasonably safe access to Lampson Ave (access is not via traffic signals) and will also substantially increase traffic both during construction as well as post construction
4. the proposed development does not include an adequate park (playground, basketball courts, etc.) for the size of the development and so families will be flocking to the CPE (Seal Beach) parks

I hope you will take these into consideration for any approvals for development of the property.

Sincerely

Jeff Grgas

17-529

17-530

From: Tony Sun
To: Tom Oliver
Subject: PROPOSED 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE A.K.A. WEST ED PROPERTY
Date: Wednesday, November 2, 2022 6:54:46 PM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender tonysun12345@yahoo.com

Hello,

I am a soccer parent new to the AYSO region 159 serving kids and family for decades. I just wanted to share couple of my concerns with this new project. First, the impact on traffic when Arbor Park is in full operations during peak soccer seasons and the neighboring dog park. I don't think residents of the new units, as well as neighboring communities, would appreciate the potential delays and stresses that come with such situations. Not to mention the risk increase of accidents when traffic may be at such a high density.

The second is the impact of noise for neighboring communities as well as for the new residents. Noise not only from activities of the park during busy times on the weekends, but also from the Los Alamitos Joint Forces Training Base which is virtually right next door. The airfield traffic consists of certain civilian, law enforcement and military traffic, with occasional visits from tactical jets. When these tactical jets break overhead to enter the traffic pattern, their flightpath goes right over the proposed units. Believe me, the sudden blast of jet noise from these jets will be quite alarming and has the effect of disturbing the peace, waking children and babies from their naps to even causing adverse medical conditions for any elderly residents. From history, airport neighborhoods that complain about airplane noises were always built well AFTER the establishment of the airfield/airport and this situation is looking like yet another example of airport vs. neighboring communities.

Please consider these factors before preceeding,

Thank you,
Tony Sun
Garden Grove, CA

17-531

From: Anthony M. Aboseif
To: Tom Oliver
Subject: PROPOSED 246 RESIDENTIAL UNIT PROJECT FOR 4665 LAMPSON AVENUE A.K.A. WEST ED PROPERTY
Date: Wednesday, November 2, 2022 11:29:41 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender anthony.aboseif@gmail.com

Good morning Mr. Oliver,

I am a parent whose children participate in AYSO159 in both the fall and spring and I would also like to echo the concerns expressed by AYSO 159 (below) regarding the proposed project at 4665 Lampson Ave. I am also concerned about increased traffic and noise as well as overall pedestrian safety on Lampson that would result from the proposed project. 17-532

1. Arbor Park has approximately 100 parking spots, with 30 of those parking spaces located on the south side of the dog park. Region 159 has always strived to provide adequate parking for the dog park, which leaves roughly 70 parking spaces available on Saturdays. Therefore, Region 159 families and volunteers utilizing Arbor Park on Saturdays routinely park in the 4665 Lampson Avenue parking lot. That parking lot provides over 300 parking spaces that are essential to our use of Arbor Park and ensure soccer families are not parking in the nearby neighborhood of College Park East (CPE). The proposed project at 4665 Lampson Avenue states it will provide 557 parking spaces that will be entering and leaving the property from Lampson Avenue between traffic lights at Heather Street and Rose Street. The lack of signal control currently planned for traffic in and out of the development will adversely impact traffic safety on Lampson. It is already a dangerous street with a history of serious accidents. The number of planned parking spaces is insufficient for the number of planned residences. Garage spaces will be used as storage, or other purposes other than parking. Many of the homes will have more than two or three cars and drivers. These homes will have guests that will need parking as well. Region 159 is concerned Arbor Park or CPE residential streets will then become overflow for the planned development. 17-533

2. CPE has less park acreage than other neighborhoods in Seal Beach, Los Alamitos or Rossmoor. Arbor Park has helped fill that void by providing a large grass area to support organized and unorganized sports including soccer and baseball. The proposed new development details do not show any park space, such as a playground for residents. Region 159 requests the EIR include a listing of existing parks within a ½ mile of the planned development. In addition, we request the EIR include an evaluation if the planned development should include park space, such as a playground, basketball court, etc. for the residents of the planned development, to not further impact already limited nearby park facilities. 17-534

3. Arbor Park is currently home to many recreational activities, some of which begin in the early hours of the morning, plus a portion of Arbor Park is used for a very popular dog park. Region 159 requests that the EIR include an evaluation of noise at Arbor Park during busy weekends when the park is filled with soccer matches and the dog park is being utilized. To avoid future complaints from the new residents of the planned development about noise from soccer Saturdays and the dog park, noise impacts should be studied and if necessary, mitigation measures proposed. The noise study should be conducted to include all hours of the day on Saturdays when whistles, loud voices, cheering and other noises are made. 17-535

Thank you for your consideration.

Sincerely,
Anthony Aboseif

From: ddelaterre@aol.com
To: Tom Oliver
Subject: Proposed Housing Project on Lampson Ave.
Date: Monday, October 31, 2022 10:53:06 AM

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender ddelaterre@aol.com

Hi Tom.

Just want to touch base with you regarding the proposed project on Lampson Ave. I would like to know where the water is going to come from to service the residents of this proposed project? We are constantly told we must save water. Yesterday I saw a news article stating our federal government is warning Western States it may impose Colorado River cuts. My husband and I are very involved with the Aquarium of the Pacific. We have heard many scientists speak about this. It is not a hoax as some seem somehow to believe. In addition, there is a problem the adequacy of the electric grid. 17-536

In addition, there is the matter of the traffic on Lampson. Is the City of Los Alamitos Police Department even going to bother to patrol the area? How is all of the traffic going to be handled. It appears to me there is no concern for this. 17-537

This development as it stands is way too large for the area. If it does happen it needs to be drastically scaled down.

One more thing, I do not feel there is any such thing as affordable housing in this area. What are the proposed prices?

Also I do not feel that the parking alloted is anywhere near what would be needed. We do not want these people parking in our College Park East neighborhood. We do not have enough parking as it is when the holidays are here. Also we do not want the children of these people using our parks and playgrounds. The City of Los Alamitos will not pay for anything damaged or any thefts, etc. that occur as a result of people from the proposed project. 17-538

Thank you for your consideration.

Diane Delaterre
4849 Dogwood Ave.
Seal Beach, CA 90740
562-431-4602
ddelaterre@aol.com

July 15, 2024
Ms. Nicole Morse
T&B Planning Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

4665 LAMPSON AVENUE VEHICLE MILES TRAVELED (VMT) ANALYSIS

Ms. Nicole Morse,

Urban Crossroads, Inc. has completed the following Vehicle Miles Traveled (VMT) Analysis for the 4665 Lampson Avenue (**Project**), which is located in the City of Los Alamitos.

PROJECT OVERVIEW

The Project consists of the development of 55 single-family detached residential dwelling units (cluster homes), 114 multi-family (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). A preliminary site plan for the proposed Project is shown in Exhibit 1.

EXHIBIT 1: PRELIMINARY SITE PLAN



BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's

Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) (**Technical Advisory**) (1). On December 19, 2022, the City adopted VMT thresholds of significance for purposes of analyzing transportation impacts under CEQA, consistent with OPR's Technical Advisory.

VMT SCREENING

As part of the Technical Advisory, a project may be determined to have a less than significant impact and may be screened out of requiring a detailed VMT analysis if either the daily vehicle trips generated by the project criteria, or the land use type criteria are met.

The following screening criteria are described within the Technical Advisory:

- Small Project Screening
- Map Based Screening
- Transit Priority Area (TPA) Screening
- Affordable Residential Development Screening
- Local Community Serving Project Type Screening

A land use project need only meet one of the above screening criteria to result in a less than significant impact.

SMALL PROJECT SCREENING

The Technical Advisory indicates that projects generating fewer than 110 daily vehicle trips may be presumed to have a less than significant impact. Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021 (2). The proposed Project is anticipated to generate 1,658 vehicle trip-ends per day, which exceeds the 110 vehicle trips per day threshold. (See Attachment A.)

Small Project screening criteria is not met.

MAP BASED SCREENING

As noted in the Technical Advisory, "residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT." It is our understanding that the City of Los Alamitos has not established screening maps to depict areas of low VMT within the City. Alternatively, the Orange County Transportation Model (**OCTAM**) was utilized to obtain the Project's transportation analysis zone (TAZ) existing VMT information. The Project was located in the OCTAM model, and the Project was found to be located in TAZ 634. Project TAZ 634 was identified to have an existing VMT per capita of 22.71. The OCTAM model was then used to calculate the County of Orange regional average VMT per capita of 17.42. The Project is not located in a low VMT area.

Map Based screening criteria is not met.

TPA SCREENING

The Technical Advisory states that projects located within a TPA, ½ mile of an existing "major transit stop,"[1] or an existing stop along a "high-quality transit corridor"[2] will have a less than significant impact on VMT.

Once a project is determined to be within a TPA, the Technical Advisory also recommends consideration of secondary screening checks. For example, a proposed land use project is **not** eligible for TPA screening if the project meets any of the following sub-criteria:

1) Has a Floor Area Ratio (FAR) of less than 0.75;
2) Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
3) Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
4) Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Utilizing Graphical Information System (GIS) data obtained from Southern California Council of Governments (SCAG), the Project's location relative to its proximity to TPA area was mapped. The mapped results identify the Project is not located within a TPA. (See Attachment B.)

TPA screening criteria is not met.

AFFORDABLE RESIDENTIAL DEVELOPMENT SCREENING

The Technical Advisory states "Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT." Furthermore, "low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available." In areas where existing jobs-housing match is closer to optimal, low-income housing nevertheless generates less VMT than market-rate housing. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. The Project is proposing 77 affordable housing units, or 31% of the total 246 dwelling units. As previously discussed, since the City of Los Alamitos has not formally adopted thresholds to determine the amount of affordable housing applicable to screening within the City, an affordable housing screening qualification cannot be made.

Affordable Residential Development screening criteria is not met.

[1] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").
[2] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

LOCAL COMMUNITY SERVING RETAIL SCREENING

The Technical Advisory indicates local serving retail uses are presumed to have a less than significant impact absent substantial evidence to the contrary. By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. The Project does not intend to develop any local serving retail uses.

Local Community Serving Project Type screening criteria is not met.

The Project does not meet any of the Screening Criteria for land use projects which would allow a determination of a less than significant impact on VMT. Therefore, a project-specific VMT assessment is required.

VMT ANALYSIS

VMT MODELING

The Technical Advisory indicates the correct tool to perform a VMT analysis should be consistent with the tool that was used to generate the jurisdictional averages for which a project resides, for an apples-to-apples comparison. The OCTAM sub-regional model is the appropriate tool for conducting VMT analysis for land use projects in Orange County, as it considers interaction between different land uses based on socio-economic data, such as population, households, and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. Therefore, the vehicle trips and average daily trip length for project-related vehicle trips are model derived from the OCTAM model.

VMT METRIC AND SIGNIFICANCE THRESHOLD

The Technical Advisory includes the following threshold recommendations for assessment of residential projects:

> "Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the [Sustainable Communities Strategy] SCS for that city, and should be consistent with the SCS.
>
> Residential development that would generate vehicle travel that is 15 or more percent below the existing residential VMT per capita, measured against the region or city, may indicate a less-than-significant transportation impact. In MPO areas, development measured against city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the population or number of units specified in the SCS for that city because greater-than-planned amounts of development in areas above the region-based threshold would undermine the VMT containment needed to achieve regional targets under SB 375."

Based on the State-recommended threshold for residential projects and the existing regional VMT, as discussed below, a VMT impact is considered significant if a residential project generates more than 15% below the existing regional residential VMT per capita.

The existing regional average VMT per capita was calculated using the OCTAM model for the regional area, in this case Orange County. Table 1 identifies a summary for Orange County's county-wide average VMT per capita.

TABLE 1: COUNTY-WIDE VMT PER SERVICE POPULATION

Orange County	County-wide Average
Population	3,177,628
Home-Based VMT	55,361,825
VMT per capita	17.42

For Orange County, the VMT significance threshold for VMT impacts will be **14.8 VMT per capita**, which is 15% below the 17.42 VMT per capita regional average**.**

A significant cumulative impact would occur if the Project increased the total regional VMT compared to the cumulative no project condition. Furthermore, for all land use and transportation projects a significant impact would occur if the project were inconsistent with the RTP/SCS.

PROJECT LAND USE CONVERSION

In order to evaluate VMT, standard land use information must first be converted into an OCTAM compatible dataset. The OCTAM model utilizes socio-economic data (**SED**) (e.g., population, households, employment, etc.) instead of land use information for the purposes of vehicle trip estimation. The Project's land use information, such as dwelling units, must first be converted to SED for input into the OCTAM model. Adjustments in SED have been made to the appropriate Project TAZ within the OCTAM model to reflect the Project's proposed land use information. The population conversion factors were obtained from the State of California Department of Finance E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark (3). Table 2 summarizes the SED inputs used to reflect the proposed Project.

TABLE 2: POPULATION ESTIMATES

	Project
Households	246
Population	647

PROJECT-GENERATED VMT

PRODUCTION/ATTRACTION VMT METHOD

Consistent with the Technical Advisory, project-level VMT analysis should evaluate home-based (HB) VMT divided by a project's population. HB VMT is calculated from OCTAM's Production/Attraction (**PA**) trip matrices and then divided by a project's population to derive the VMT efficiency metric VMT per capita. The method for calculating VMT sums all weekday VMT

generated by trips with at least one trip end in the study area (Project's TAZ) by trip purpose. The PA method tracks trips with at least one trip end in the analysis area to/from their ultimate destination unless that destination is outside of the model boundary area. Productions are land use types that generate trips (residences) and attractions are land use types that attract trips (employment). Productions and attractions are converted from person trips to vehicle trips for the purposes of calculating VMT. Table 3 presents the project-generated HB VMT utilizing the OCTAM model.

TABLE 3: MODEL-BASED PROJECT- GENERATED VMT

	Baseline (2022)	Long Range (2045)
HB VMT	13,824	13,439

VMT REDUCTION STRATEGIES

The California Air Pollution Control Officers Association (**CAPCOA**) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021) (**Handbook**) (4) has been utilized to determine trip reduction measures that may be applicable to the Project. The Handbook describes methods to quantify reductions in greenhouse gas emissions and in the case of Transportation measures, the associated reductions to VMT. This evaluation will focus on a review of the Handbook's Transportation measures that are determined to be applicable to the Project.

SELECTING MEASURES

To determine which Transportation measures should be considered from the Handbook, land use type, scale and locational context are each identified as key factors for determining an individual measure's applicability to a project. The Handbook contains a factsheet for each measure that describes the measure, locational context, scale of application, implementation requirements, and other considerations that should be reviewed to determine a measure's applicability.

PROJECT TYPE

Project type is an important consideration when determining which measures are applicable for consideration. For example, measures associated with neighborhood design are not applicable to an office project, whereas trip reduction programs intended to reduce employee commute VMT would not be applicable to a residential project.

SCALE

The Handbook identifies that measures can be applied at different scales or geographic levels, however, "some measures may only be applicable at the project-level, whereas others may be more appropriate within a broader planning context such as for a general plan or climate action plan." The geographic levels considered in the Handbook include Project/Site and Plan/Community. Project/Site applies to measures that can reduce VMT at the scale of an

individual development project or employer. Plan/Community refers to measures that reduce VMT at the scale of a specific plan, general plan or climate action plan. Transportation measures can be quantified at either the Project/Site scale or the Plan/Community scale, but never both.[3]

LOCATIONAL CONTEXT

The Handbook describes locational context as "used to identify trip reduction measures within the transportation sector that are appropriate in certain types of neighborhoods differentiated by transportation characteristics and level of development (e.g., rural, suburban, and urban)." More specifically, rural, suburban, and urban are defined as follows:

Rural: An area characterized by little development. Compared to urban and suburban areas, rural areas have a lower density of residences, higher numbers of single-family residences, and higher numbers of vehicle-dependent land use patterns. Where applicable, the Handbook provides three land use distinctions within the rural locational context category—R_a, R_b, and R_c. R_a refers to rural areas within a master-planned community. These rural areas often include a broad offering of amenities and services, which may be accessed by walking or other alternative forms of transportation. R_b refers to rural areas adjacent to a commuter rail station with convenient rail service to a major employment center. As the name implies, these rural areas have greater access to commuter rail as an alternative mode of transportation. R_c refers to rural areas with transit service and that are near jobs/services.

Suburban: An area characterized by dispersed, low-density, single-use, automobile dependent land use patterns, usually outside of the central city. Also known as a suburb.

Urban: An area located within the central city with higher density land uses than in the suburbs. Often characterized by multi-family housing, tall office buildings and dense retail.

The City of Los Alamitos is often considered suburban due to its surroundings and borderline urban as the City contains a diverse mix of land uses and abundant amount of multi-family housing, dense retail, and employment-related uses. VMT reduction measures will herein evaluate the Project's locational context as urban. Attachment C provides a matrix of VMT mitigation measures available to an urban residential project.

PROJECT DESIGN FEATURES - VMT REDUCTIONS

As the reduction in trips and associated VMT could not be accurately accounted for by the calculations conducted using the OCTAM model, these adjustments are made through the following calculations as described in the 2021 Handbook.

T-1 Increase Residential Density

This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of dwelling units compared to the average residential density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they

[3] Handbook, Page 37

choose. Increasing residential density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in VMT.

As the land use information that represents the Project was input into the OCTAM model, any increased density over the National average that would reduce VMT is included in the VMT estimates in Table 3 and no additional VMT reduction credit is assumed.

T-4 Affordable Housing

Specifically, "Land Use – T-4. Integrate Affordable and Below Market Rate Housing" requires multi-family residential units to be permanently dedicated as affordable for lower income families. The California Department of Housing and Community Development (2021) defines lower-income as 80 percent of area median income or below, and affordable housing as costing 30 percent of gross household income or less.[4] Table 4 provides the calculation variables and formula used to calculate VMT reduction.

TABLE 4: T-4. AFFORDABLE HOUSING CALCULATION VARIABLES

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from Project/Site VMT for multifamily residential developments	0-28.6	%	calculated
User Inputs				
B	Percent of multifamily units permanently dedicated as affordable	0-100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in VMT for qualified units compared to market rate units	-28.6	%	ITE 2021

$$A = B \times C$$

$$-8.87\% = 31\% \times -28.6\%$$

The Project is proposing 77 affordable housing units, or 31% of the total 246 dwelling units. As shown, the Project would reduce its project-generated VMT by 8.87% or 1,226 VMT.

T-15 Limit Residential Parking Supply

Limiting residential parking supply will reduce the total parking supply available at a residential project or site. Limiting the amount of parking available creates scarcity and adds additional time and inconvenience to trips made by private autos, thus disincentivizing driving as a mode of travel. Reducing the convenience of driving results in a shift to other modes and decreased VMT. Table 5 provides the calculation variables and formula used to calculate VMT reduction.

[4] 2021 Handbook; Page 80

TABLE 5: T-15. LIMIT RESIDENTIAL PARKING SUPLY CALCULATION VARIABLES

ID	Variable	Value	Unit	Source
A	Percent reduction in GHG emissions from VMT	0-13.7	%	calculated
User Inputs				
B	Residential parking demand	589	Parking Spaces	user input
C	Project residential parking supply	577	Parking Spaces	user input
D	Percentage of project VMT generated by residents	100	%	user input
Constants, Assumptions, and Available Defaults				
E	Percent of household VMT that is commute based	37	%	Caltrans 2012
F	Percent reduction in commute mode share by driving among households in areas with scarce parking	37	%	Chatman 2013

$$A = \frac{B - C}{B} \times D \times E \times F$$

$$-0.28\% = \frac{589 - 587}{589} \times 37\% \times 37\% \times 100\%$$

As proposed, the Project's parking supply will be limited to 577 parking spaces, which is 12 parking spaces below the 589 parking spaces required by the lead agency. As shown, the Project would reduce its project- generated VMT by 0.28% or 39 VMT.

PROJECT-GENERATED VMT COMPARISON WITH CITY THRESHOLD

The Project is estimated to reduce VMT by 1,265 VMT (1,226+39 VMT) with the inclusion of VMT-reducing project design features, as previously discussed. Table 5 shows the results of the project-generated HB VMT with the inclusion of VMT-reducing project design features, subsequent HB VMT per capita, and comparison to the City's adopted thresholds.

TABLE 5: PROJECT GENERATED VMT RESULTS

	Baseline (2022)	Long Range (2045)
Population	647	647
HB VMT	12,559	12,174
VMT per capita	19.4	18.8
Threshold	14.8	14.8
Percent Above Threshold	+30.1%	+27.0%
Potentially Significant?	Yes	Yes

As shown in Table 5, the Project would generate VMT per capita exceeding the City's adopted VMT impact threshold by 30.1% in the baseline condition and 27.0% in the cumulative condition. The Project is considered to have a significant VMT impact.

CUMULATIVE EFFECT ON VMT

The Project is not proposing a general plan amendment nor a change of zone. As the Project is consistent with the underlaying land use assumptions of the General Plan and Zoning the cumulative no project would the same as the cumulative with project. Therefore, the cumulative impact would be less than significant.

SUMMARY

Based on the results of this analysis, the following findings are made:

- The Project was evaluated against screening criteria as outlined in the Technical Advisory. The Project was not found to meet any available screening criteria, and a VMT analysis was performed.
- The Project's VMT analysis found the Project to exceed the regional (Orange County) VMT per capita threshold by 30.1% for baseline (2022) conditions and 27.0% for buildout (2045) conditions. Therefore, the Project is found to have a **significant and unavoidable VMT impact**.
- The Project is consistent with the City's General Plan underlaying land use assumptions and the cumulative no project would be the same as the cumulative with project. The Projects cumulative effect is found to be **less than significant cumulative impact on VMT.**

If you have any questions, please contact me directly at aso@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.



Alexander So
Senior Associate

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
3. **State of California Department of Finance.** *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark.* May 2021.
4. **CAPCOA.** *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity .* December 2021.

ATTACHMENT A
PROJECT TRIP GENERATION

TABLE A-1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
Single Family Detached	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily Housing (Low-Rise) (2-3 Floors)	DU	220	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Affordable Housing	DU	223	0.10	0.26	0.36	0.27	0.19	0.46	4.81

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] DU = Dwelling Units

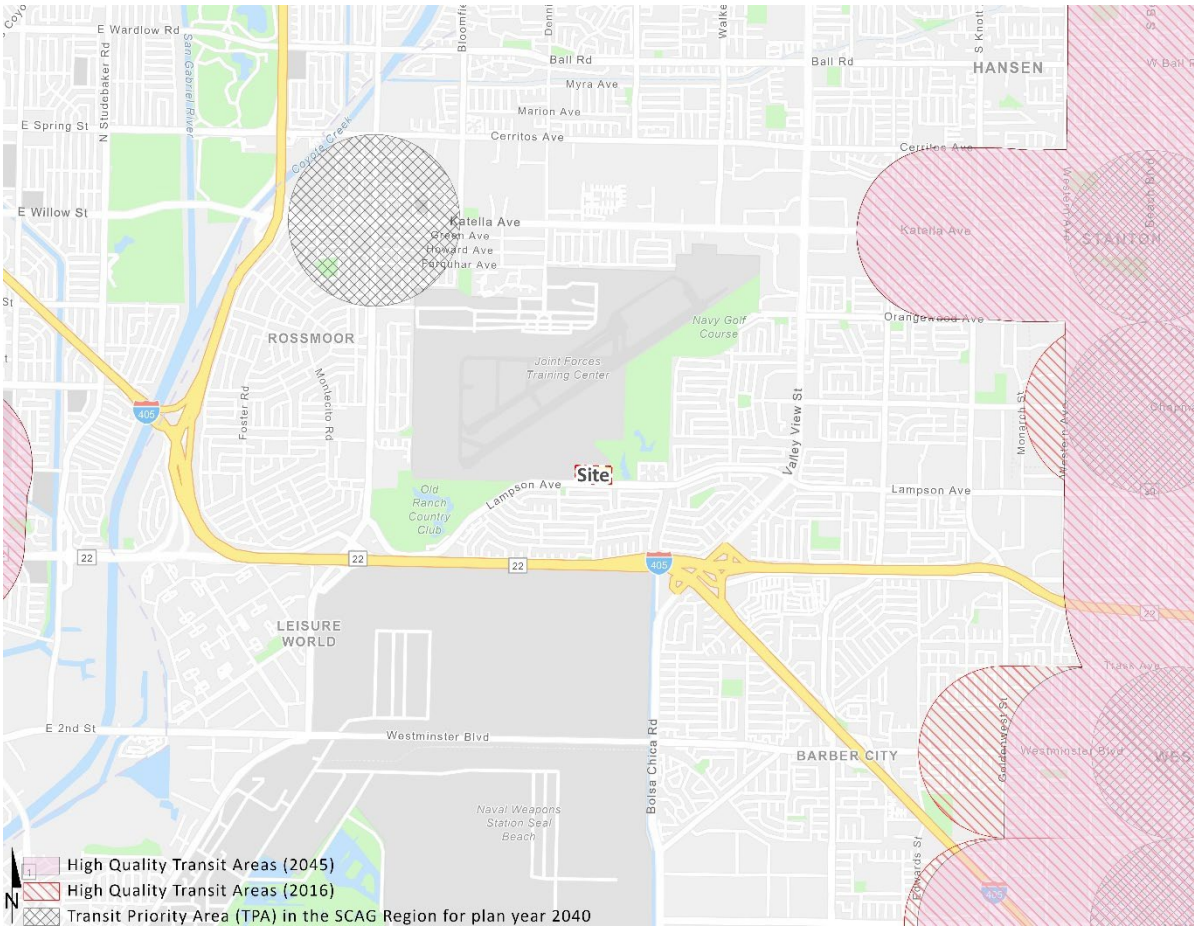
TABLE A-2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
Single Family Detached	55	DU	10	28	38	33	19	52	520
Mulifamily Housing	114	DU	11	35	46	37	22	59	768
Affordable Housing	77	DU	8	20	28	21	15	36	370
Project Total Trips			**29**	**83**	**112**	**91**	**56**	**147**	**1,658**

[1] DU = Dwelling Units

ATTACHMENT B

TPA MAP


E Wardlow Rd
N Studebaker Rd
E Spring St
E Willow St
Ball Rd
Myra Ave
Marion Ave
Cerritos Ave
Katella Ave
Orangewood Ave
HANSEN
STANTON
ROSSMOOR
Navy Golf Course
Joint Forces Training Center
Foster Rd
Montecito Rd
Valley View St
Monarch St
Site
Lampson Ave
Old Ranch Country Club
LEISURE WORLD
E 2nd St
Westminster Blvd
Bolsa Chica Rd
BARBER CITY
Naval Weapons Station Seal Beach
405
22
High Quality Transit Areas (2045)
High Quality Transit Areas (2016)
Transit Priority Area (TPA) in the SCAG Region for plan year 2040
N

ATTACHMENT C
VMT REDUCTION MATRIX

Subsector	Measure	Scale of Application	Applicable Locational Context	Applicability to Project
Land Use	**T-1 Increase Residential Density** This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of dwelling units (du) compared to the average residential density in the U.S.	Project/Site	Urban, Suburban	Applicable.
	T-2 Increase Job Density This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of jobs compared to the average job density in the U.S.	Project/Site	Urban, Suburban	Not Applicable, Project is not employment related.
	T-3 Provide Transit-Oriented Development This measure would reduce project VMT in the study area relative to the same project sited in a non-transit-oriented development (TOD) location.	Project/Site	Urban, Suburban	Not Applicable due to the Project's location to available transit.
	T-4 Integrate Affordable and Below Market Rate Housing This measure requires below market rate (BMR) housing.	Project/Site	Urban, Suburban	Applicable.
	T-17 Improve Street Connectivity This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of vehicle intersections compared to the average intersection density in the U.S.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
Parking or Road Pricing Management	**T-14 Provide Electric Vehicle Charging Infrastructure** Install onsite electric vehicle chargers in an amount beyond what is required by the 2019 California Green Building Standards (CALGreen) at buildings with designated parking areas (e.g., commercial, educational, retail, multifamily).	Project/Site	Urban, Suburban, Rural	Not Applicable, no reduction to VMT.
	T-15 Limit Residential Parking Supply This measure will reduce the total parking supply available at a residential project or site.	Project/Site	Urban, Suburban	Applicable.
	T-16 Unbundle Residential Parking Costs from Property Cost This measure will unbundle, or separate, a residential project's parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost.	Project/Site	Urban, Suburban	Applicable, but not feasible as increases in housing costs would not be consistent with State housing affordability goals.
	T-24 Implement Market Price Public Parking (On-Street) This measure will price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
Neighborhood Design	**T-18 Provide Pedestrian Network Improvement** This measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive.	Plan/Community	Urban, Suburban, Rural	Not Applicable in at the Project level.
	T-19A Construct or Improve Bike Facility This measure will construct or improve a single bicycle lane facility (only Class I, II, or IV) that connects to a larger existing bikeway network.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-19B Construct or Improve Bike Boulevard Construct or improve a single bicycle boulevard that connects to a larger existing bikeway network. Bicycle boulevards are a designation within Class III Bikeway that create safe, low-stress connections for people biking and walking on streets.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-20 Expend Bikeway Network This measure will increase the length of a city or community bikeway network. A bicycle network is an interconnected system of bike lanes, bike paths, bike routes, and cycle tracks. Providing bicycle infrastructure with markings and signage on appropriately sized roads with vehicle traffic traveling at safe speeds helps to improve biking conditions (e.g., safety and convenience). In addition, expanded bikeway networks can increase access to and from transit hubs, thereby expanding the "catchment area" of the transit stop or station and increasing ridership.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-21A Implement Conventional Carshare Program This measure will increase carshare access in the user's community by deploying conventional carshare vehicles. Carsharing offers people convenient access to a vehicle for personal or commuting purposes.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-21B Implement Electric Carshare Program This measure will increase carshare access in the user's community by deploying electric carshare vehicles. Carsharing offers people convenient access to a vehicle for personal or commuting purposes.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-22A Implement Pedal (Non-Electric) Bikeshare Program This measure will establish a bikeshare program. Bikeshare programs provide users with on-demand access to bikes for short-term rentals.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-22B Implement Electric Bikeshare Program This measure will establish an electric bikeshare program. Electric bikeshare programs provide users with on-demand access to electric pedal assist bikes for short-term rentals.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-22C Implement Scootershare Program This measure will establish a scootershare program. Scootershare programs provide users with on-demand access to electric scooters for short-term rentals.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
Transit	**T-25 Extend Transit Network Coverage** This measure will expand the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project site.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-26 Increase Transit Service Frequency This measure will increase transit frequency on one or more transit lines serving the plan/community.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-27 Implement Transit-Supportive Roadway Treatments This measure will implement transit-supportive treatments on the transit routes serving the plan/community. Transit-supportive treatments incorporate a mix of roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-28 Provide Bus Rapid Transit This measure will convert an existing bus route to a bus rapid transit (BRT) system. BRT includes the following additional components, compared to traditional bus service: exclusive right-of-way (e.g., busways, queue jumping lanes) at congested intersections, increased limited-stop service (e.g., express service), intelligent transportation technology (e.g., transit signal priority, automatic vehicle location systems), advanced technology vehicles (e.g., articulated buses, low-floor buses), enhanced station design, efficient fare-payment smart cards or smartphone apps, branding of the system, and use of vehicle guidance systems	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
	T-29 Reduce Transit Fares This measure will reduce transit fares on the transit lines serving the plan/community.	Plan/Community	Urban, Suburban	Not Applicable in at the Project level.
Clean Vehicles and Fuels	**T-30 Use Cleaner-Fuel Vehicles**	Plan/Community	N/A	Not Applicable in at the Project level.

June 11, 2024

Nicole Morse
T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

Subject: Technical Memorandum - Response to DTSC Comments
Proposed Residential Development Project
4665 Lampson Avenue
Los Alamitos, California 90720
EFI Global Project No.: 045.10352

Dear Ms. Morse,

As requested, EFI Global, Inc. (EFI) has prepared this Technical Memorandum to address the comments received from the Department of Toxic Substances Control (DTSC), in a letter dated June 5, 2024.

Site Location

The Site is located on the north side of Lampson Avenue, approximately 860 feet west of Lunar Drive, in the city of Los Alamitos. The Site parcel is approximately 12.36 acres in size. The Site is developed with a two-story commercial office structure, which is approximately 88,000 square feet in size, within the central portion of the parcel. This structure, constructed in 1971, is currently occupied by WestEd (a non-profit educational research, development, and services agency), the California Department of Fish and Wildlife, the National Comfort Institute, Inc. (a heating ventilation, and air conditioning training center), and James J. Mentas, Attorney at Law. The remaining portions of the property consist of an enclosed asphalt-paved parking area on the western portion, two driveways via Lampson Avenue to the south, concrete walkways, a large grass field areas to the north and east of the on-site structure and landscaped on all sides.

Comment and Response

1. ***DTSC Comment 1***

Based on the Limited Phase II Environmental Site Assessment (ESA), there was no evidence of a significant release of potential chemicals of concern to the subsurface in the area investigated, which included in the diesel above ground storage tank (AST), elevator equipment room, and parking lot. Although low levels of total petroleum hydrocarbons (TPHd), lead and select organochlorine pesticides (OCPs) were detected in Site soils, the concentrations were well below residential screening levels, and thus, are de minimis in nature and do not warrant further investigation or mitigation.

Also, the Phase II ESA states: "Although the detected concentrations of arsenic found at the Site exceed the residential screening level, no levels are less than the DTSC upper bound background concentration of 12

mg/kg. Therefore, the on-site detections of arsenic are de minimis in nature and do not warrant further investigation or mitigation. Based on the results of the assessment activities detailed herein, the potential chemicals of concern detected in soil in the areas assessed (e.g., diesel AST, elevator equipment room, parking lot release area, and Site wide historical agricultural use) are not indicative of a significant subsurface chemical release has occurred. The detected concentrations found during this investigation are considered to be de minimis in nature for the proposed residential redevelopment, and it is EFI Global's opinion that no further assessment is warranted at this time with respect to the RECs (recognized environmental conditions) identified."

Since potential chemicals of concerns were found in the Phase II ESA and the detected concentrations of arsenic found at the site exceed the residential screening level and remain in excess of DTSCs upper bound background concentration of 12 mg/kg, DTSC recommends that all constituent concentrations meet screening levels in accordance with DTSCs Preliminary Endangerment Assessment (PEA) Guidance Manual. If the constituent concentrations do not meet screening levels in accordance with DTSC guidance, the following comments are also recommended:

Comment 1 - EFI Response

This comment appears to be based on a typographical error in the quoted language above in EFI's Limited Phase II Environmental Site Assessment (Phase II).

The following change will be made to the Phase II to more accurately reflect the fact that the detected arsenic concentrations found at the Site are all below the upper bound concentration of 12 mg/kg, and thus, are trace or background concentrations that do not warrant further investigation or mitigation.

"Although the detected concentrations of arsenic found at the Site exceed the residential screening level, all ~~no~~ levels are less than the DTSC upper bound background concentration of 12 mg/kg."

2. DTSC Comment 2

The City of Los Alamitos enter into DTSC's Standard Voluntary Agreement (SVA) program or seek oversight with your Certified Local Agency - Orange County Health Care Agency - so a proper evaluation of the Project is completed. If entering into an SVA with DTSC, the FLUXX portal link is provided and the page also has a link to the Fluxx User Guide that can help you navigate the system. You will need to create a new profile and once in the system, click "Start a Request for Lead Agency Oversight Application." DTSC recommends that once the SVA is signed, a Preliminary Endangerment Assessment Report (PEA Report) be submitted for DTSC review. The PEA Report shall summarize all existing data and provide an evaluation of the possible risk to current and future users of the site. If you have any questions about the application portal, please contact the DTSC Brownfield Coordinator Gregory Shaffer or contact the Application Portal Inbox.

Comment 2 - EFI Response

This comment was made in connection with DTSC's statement at the bottom of the Comment 1 that "if the constituent concentrations do not meet screening levels in accordance with DTSC guidance, the following comments are also recommended."

As made clear by the change provided above, all constituent concentrations do in fact meet or are lower than the screening levels. As such, the recommendation provided by DTSC in Comment 2 is not required for this Project.

3. DTSC Comment 3

If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos

containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual.

Comment 3 - EFI Response

EFI concurs with the DTSC comment and recommends that a Pre-Demolition asbestos containing material (ACM), lead-based paint (LBP), and universal waste survey be performed as part of proposed future redevelopment activities.

4. DTSC Comment 4

All imported soil and fill material should be tested to ensure any contaminants of concern are within DTSC's and U.S. Environmental Protection Agency (USEPA) Regional Screen Levels (RSLs) for the intended land use. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material meets screening levels outlined in the PEA for the intended land use. The soil sampling should include analysis based on the source of the fill and knowledge of the prior land use. Additional information can be found by visiting DTSC's Human and Ecological Risk Office (HERO) webpage.

Comment 4 – EFI Response

EFI concurs with the DTSC comment regarding an evaluation of fill material prior to importing onto the Site.

We hope that this Technical Memorandum provides the information requested. If you have any questions or comments, please don't hesitate to contact the undersigned at (760) 473-5695.

Thank you,

EFI Global, Inc.

Prepared By:

Brian Brennan

Senior Project Manager

Reviewed By:

Christopher Rude
Senior Project Manager



Brian Martasin, PG
Principal Geologist

following are EFI Global's conclusions and recommendations based on the results of the assessment activities detailed herein:

- Based on the investigation activities performed, evidence of a significant release of potential chemicals of concern to the subsurface in the area areas investigated, which included the diesel AST, elevator equipment room, and parking lot was not identified. Although low levels of TPHd, lead and select OCPs were detected in Site soils, the concentrations were well below residential screening levels, and thus, are *de minimis* in nature and do not warrant further investigation or mitigation.
- Although the detected concentrations of arsenic found at the Site exceed the residential screening level, ~~no~~ the levels are less than the DTSC upper bound background concentration of 12 mg/kg. Therefore, the on-site detections of arsenic are *de minimis* in nature and do not warrant further investigation or mitigation.

Based on the results of the assessment activities detailed herein, the potential chemicals of concern detected in soil in the areas assessed (e.g., diesel AST, elevator equipment room, parking lot release area, and Site wide historical agricultural use) are not indicative of a significant subsurface chemical release has occurred. The detected concentrations found during this investigation are considered to be *de minimis* in nature for the proposed residential redevelopment, and it is EFI Global's opinion that no further assessment is warranted at this time with respect to the RECs identified.

August 1, 2024

Nicole Morse
T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

Subject: Technical Memorandum – Revised Response to Churchill Law Office Comments
Proposed Residential Development Project
4665 Lampson Avenue
Los Alamitos, California 90720
EFI Global Project No.: 045.10352

Dear Ms. Morse,

As requested, EFI Global, Inc. (EFI) has prepared this Technical Memorandum to address the comments received from Churchill Law Office, in a letter dated June 9, 2024. The comment letter pertains to EFI's Phase I Environmental Site Assessment (ESA), dated January 18, 2023, and Phase II ESA, dated August 16, 2022.

Site Location

The Site is located on the north side of Lampson Avenue, approximately 860 feet west of Lunar Drive, in the city of Los Alamitos. The Site parcel is approximately 12.36 acres in size. The Site is developed with a two-story commercial office structure, which is approximately 88,000 square feet in size, within the central portion of the parcel. This structure, constructed in 1971, was occupied by WestEd (a non-profit educational research, development, and services agency), the California Department of Fish and Wildlife, the National Comfort Institute, Inc. (a heating ventilation, and air conditioning training center), and James J. Mentas, Attorney at Law. The structure is currently vacant. The remaining portions of the property consist of an enclosed asphalt-paved parking area on the western portion, two driveways via Lampson Avenue to the south, concrete walkways, a large grass field areas to the north and east of the on-site structure and landscaped on all sides.

Comment and Response

Some of the comments received from Churchill Law Office merely restate or directly quote portions of the ESA. For example, one comments states: "The report states that EFI GLOBAL conducted only 'visual' observations of the site and structures." We do not provide a response below to any of these comments that restate or quote the ESA, and instead provide responses to comments that raise a concern regarding the ESA. All of the emphasized text below, such as the bold and all cap typeface, is from the original comment letter.

1. ***Churchill Law Office Comment 1***

The Consultant's Report is deficient because the property owner/user failed to comply with Section 1.4 entitled User Responsibilities" and deliver to Consultant ***the following public record*** *provided User in connection with the auction conducted by the GSA for the sale of the property User: FINAL Phase I Environmental Site Assessment Report, GSA Southwest Regional Laboratory, 4665 Lampson Avenue, Los Alamitos, California 90720, Contract No. GS-00F-168CA/Award No. GS-10F-0076K, Prepared For: United States General Services Administration Office of Real Property Utilization and Disposal (9PZ) 50 United National Plaza – 4th Floor North San Francisco, California 94102, Prepared By: Tetra Tech, Inc. 45610 Woodland Road, Suite 400, Sterling, VA 20166, May 2016, Tetra Tech Project No: 103G3995003.001.*

Comment 1 - EFI Response

The property owner/user complied with Section 1.4 and provided to EFI a digital copy of the above-referenced report. Upon review of the document, EFI notes that no recognized environmental conditions (RECs) or recommendations for additional investigation was noted. The findings of the above-referenced report do not alter the results of EFI's Phase I ESA, dated January 18, 2023.

2. Churchill Law Office Comment 2

EFI Global recommended a Phase II Environmental Site Assessment. The scope of the work included a geophysical survey and soil sampling of 11 borings on August 16, 2022. The Phase II Environmental Assessment soil samples revealed measurable levels of ***arsenic was detected in all 4 samples and the screening Level was exceeded; as well as lead.*** *The consultant pointed out that screening levels at Air Force Bases are significantly higher than for RESIDENTIAL USE.* ***The concentration found in the soil was 4.65 mg/kg, which is 42 TIMES the level allowed for residential use, identified by Consultant at 0.11 mg/kg.***

Given the intended use of the property for "residential" use *and outdoor recreation by residents in the soil, and the high water table underlying the property, liquefaction reported in the Hydrology and Geotechnical Reports, and the location of a ground water well belonging to the City of Seal Beach Department of Water, there is a risk to public safety and the need to assure* ***ground water supplies and storm drains are not contaminated by run off, and air borne contaminates are not released during construction.***

Comment 2 - EFI Response

For clarification, the arsenic screening levels were not compared to an Air Force Base land use scenario. It is well documented and accepted by regulatory agencies, including the Department of Toxic Substances Control (DTSC) that background or trace concentrations of naturally occurring arsenic in soil throughout the state of California often exceeds the DTSC screening level (SL) value of 0.11 milligrams per kilogram (mg/kg). With respect to Air Force Bases, a statistical analysis was performed at 14 Air Force installations in California to evaluate background levels of naturally occurring arsenic. As described in the Phase II, as a result of this analysis, an upper bound background concentration of 12.7 mg/kg can be used as an initial screening level for arsenic concentrations.

Furthermore, in a study titled *Determination of a Southern California Regional Background Arsenic Concentration in Soil* (Chernoff, et al., 2008), which was prepared by DTSC staff, the authors concluded, "A Probability Plot and statistical analysis of a large data set from school sites in Los Angeles County gave an upper-bound arsenic concentration of 12 mg/kg. A Probability Plot for school sites from 5 counties in Southern California also gave an upper-bound background arsenic concentration of 12 mg/kg." The study concluded, "This finding suggests that 12 mg/kg [may be] a useful screening number for evaluating arsenic as a chemical of potential concern."

Based on the aforementioned studies, which included both Air Force Base installations and school sites in California, it has been determined that 12 mg/kg is a useful screening number for evaluating arsenic as a chemical of potential concern. All arsenic concentrations in the soil samples analyzed at the Site were detected at concentrations less that the upper-bound arsenic concentration of 12 mg/kg, and therefore, arsenic is not considered a significant environmental concern that would warrant further investigation or mitigation, or result in an unacceptable health risk due to release during construction or to future occupants.

3. Churchill Law Office Comment 3

*Additional chemical analysis of the soil for **other hazardous materials** that may become **wind borne during construction should be conducted, mitigation measures identified**, and the results shared with the City of Seal Beach and City of Los Alamitos and any other governmental agency entitled to those results, before the EIR is approved.*

Comment 3 – EFI Response

Based on the results of EFI's Phase I ESA and subsequent Phase II ESA, no additional hazardous substances or hazardous materials were identified that would require further investigation and/or mitigation or reporting to local and state regulatory agencies. EFI notes that construction Best Management Practices (BMPs) will be employed as part of the proposed future redevelopment to minimize fugitive dust and/or runoff as a result of site improvements.

4. Churchill Law Office Comment 4

*The 12 acre site will be graded to provide building pads to address flooding on the site, will create dust and wind borne contaminates such as lead, arsenic and asbestos, necessitates **rigid ongoing monitoring** and reporting to the City of Seal Beach and City of Los Alamitos.*

*Consultant identified **asbestos** within the building to be removed that requires special precautions to prevent contamination of the site. Mitigation measure includes asbestos Operation and Maintenance Plan in addition to asbestos abatement PRIOR TO any renovation/ demolition that would disturb the building materials.*

Lead based paint,** possible **radon concentrations. Mitigation measures include construction personnel be properly trained in lead related construction.

*Additional Testing is required for TPHd -diesel in soil sample, **evidence of flooding and storm drain run off** that could carry untreated contaminants into the ocean, all must to be addressed by the Consultant in terms of mitigations measures before and during construction to protect the water supply, prevent air pollution, and protect the public's safety.*

Comment 4 - EFI Response

EFI notes that lead and arsenic were not detected at concentrations that would pose an unacceptable health risk to future Site occupants, the surrounding community or underlying groundwater. Furthermore, and as noted above, construction BMPs will be employed as a part of the proposed future redevelopment project to mitigate fugitive dust. Therefore, ongoing monitoring and reporting would not be warranted.

Prior to any future demolition or Site improvements, the Site structures will undergo routine abatement for asbestos and lead based paint, which will be performed by a properly licensed contractor. Furthermore,

such activities will be performed in compliance with South Coast Air Quality Management District (SCAQMD) requirements for the removal and disposal of any suspect asbestos containing material or lead-based paint.

As noted in EFI's Phase I ESA, dated January 18, 2023, based on research by the USEPA, the average radon concentrations for Orange County are less than 2.0 picocuries per liter (pCi/L), which is below the 4.0 pCi/L action level set by the USEPA. Furthermore, the *Radon Potential Zone Map for Orange County, California, dated 2015* notes that the subject property and surrounding area are located in an area of "Low Potential for Indoor Radon Levels Above Four PicoCuries per Liter" (https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_232-Radon-Map.pdf). Therefore, radon is not an environmental concern for the proposed future development, and further investigation or mitigation is not warranted.

The project will result in the demolition of the currently existing vacant office building in order to allow for project construction, and thus radon testing associated with the existing office building would not result in any relevant results as to the project. Even after demolition of the building, as a general rule it is not industry standard to test a vacant lot for radon and receive accurate results representative of what future construction conditions may be and given that the project site is located within a low potential area for radon, no testing of radon after construction would be required.

Based on the results of our Phase II ESA, the concentrations of TPH-d detected in site soils does not warrant further investigation. Furthermore, the concentrations do not pose an unacceptable health risk to site occupants, the environment, water supply, or groundwater.

We hope that this Technical Memorandum provides the information requested. If you have any questions or comments, please don't hesitate to contact the undersigned at (760) 473-5695.

Thank you,

EFI Global, Inc.

Prepared By:



Brian Brennan

Senior Project Manager

Reviewed By:





Brian Martasin, PG
Principal Geologist

NICK JOHNSON

PRESIDENT & CEO – JOHNSON AVIATION, INC

TOTAL YEARS EXPERIENCE: 35 YEARS – 20 YEARS WITH JA, INC

Nick Johnson is a Complex Strategy Advisor leading airport land use compatibility, regulatory, facilities entitlement and financial project solutions. He has 35 years of experience in airport planning and development at and near airports and military airfields of all sizes. This experience includes project development on airports, off-airports and adjacent "through-the-fence" by applying a broad array of expertise from business and financial analysis to airspace and operational procedures improvement. He does so as a collaborator with teams of all sizes to meet client needs and expectations. Specialties include master plans, land use compatibility plans, lease negotiations, business strategy, facilities planning, ownership transfer, environmental entitlements, regulatory certification, aviation safety analysis, security planning, real estate strategy and construction planning. Nick founded Johnson Aviation in 2004 providing leadership on high profile and contentious airport master planning and environmental projects.

Nick is currently developing a Vertiport Feasibility Study at John Wayne Airport, Orange County California for fixed-base operator ACI Jet Orange County as part of its comprehensive facilities renovation project. The FAA, through its planning, design and advisory process has acknowledged that Advanced Air Mobility (AAM) is an emerging aviation ecosystem that leverages new aircraft and array of innovative technologies to provide the opportunity for more efficient, sustainable, and equitable transportation options, including serving airport passenger access. The purpose of the study is to draw together the uncertain and developing AAM possibilities with safe, efficient, and compatible needs of constrained airport infrastructure. Building stakeholder consensus on vertiport facilities is an added objective of the study.

Nick has also worked closely with the San Diego County Regional Airport Authority (SDCRAA) on its Airport Development Program (ADP) to complete the long-term redevelopment of San Diego International Airport. He worked as part of the Authority's team to entitle a replacement to Terminal 1, develop airfield improvements to optimize the efficiency of the busiest single-runway airport in the U.S. and optimize landside access. The project is currently under construction. He has also supported the Authority's CFR Part 150 study update to reduce community noise impacts and improve nearby land use compatibility.

From 2011 to 2018, Nick worked closely with the City of Ontario and the Ontario International Airport Authority (OIAA) to transfer ownership and operation of Ontario International Airport (ONT). He worked with a small team to develop the strategic business plan adopted in 2013 that defines and guides the Authority's mission. In 2015 and 2016, Nick led a large and diverse ownership transfer team to meet all regulatory, operational, financial, environmental, and legal requirements of the FAA. That team successfully transferred the ownership and operation of the Airport in 15 months. Johnson Aviation staff continued as the Airport's planning and development program managers for 20 months during the staffing transition negotiating long-term leases for the airport's FBO redevelopment and for a FedEx Regional Sorting Hub relocation and expansion that is now fully operational.

Since 2017 Nick has assisted Google with the Master Planning and development of their Proposed San Jose Campus in the City of San Jose, California and within the Mineta San Jose International Airport (SJC), Airport Influence Area (AIA) in Santa Clara County California. The Google Campus has the potential to transform Downtown San Jose with many new and expanded live/work development options. By focusing on the expansion of the existing Diridon Station, the Google Campus will complete station infrastructure for the California High Speed Rail, Bay Area Rapid Transit (BART) and Valley Transit Authority (VTA) systems. The project will both improve and potentially modify SJC air service depending on the various building heights and locations on the site. The total campus development is likely to exceed 10 million square feet of office, residential and retail uses that will be developed over the coming years.

Property redevelopment and land use compatibility on and near airports taking full advantage of the airport economic engine is one of Nick's unique contributions to airport communities. In addition to a land use compatibility plan for the joint use Colorado Springs Airport and Peterson Space Force Base, he has also served the City of Perris, California and various developers near March Air Reserve Base in Riverside County to both preserve and expand the vitality of the Base and its civilian cargo operations. He has worked with Boeing and their development successors to redevelop manufacturing facilities at Long Beach Airport, El Segundo, Seal Beach and Mesa Arizona. Other current airport land use compatibility planning includes the City of Goleta, City of San Luis Obispo, San Diego International Airport, Marine Corps Air Station Miramar, Naval Air Station North Island, City of Pleasanton and Fairfax County Virginia.

Nick assisted the FAA on updates and revisions to its key airport planning guidance documents. The FAA's Master Plan Advisory Circular (AC) was revised and updated to address innovations and lessons learned in the field of airport planning. The FAA's Airport Land Use Compatibility AC was completely rewritten to address the challenges of effective land use planning near airports to ensure the safe and compatible use of nearby land while maximizing the economic development characteristics of these surrounding areas. The FAA's Solar Guidance document was updated to consider the most recent findings of solar panel glare analyses and the effects on safe air navigation.

Nick worked closely with Los Angeles World Airports (LAWA) to secure City Council approval of the LAX Master Plan entitlements that were ultimately approved in December 2004. He provided technical planning support to the legal defense team on the LAX Master Plan when it was sued in State and federal courts. Four legal challenges related to the California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) and to the National Environmental Policy Act (NEPA) ROD were successfully settled in December 2005. Nick also facilitated a required review and approval of key settlement provisions by the Federal Aviation Administration.

Nick worked with LAWA and its consulting team in the early phase of a multi-year study of key components of the LAX Master Plan. Together, they crafted an approach in close coordination with airline and community stakeholders. This planning initiative by LAWA was intended to modernize LAX and expand regional airport capacity throughout Southern California.

Nick provided strategic guidance to a team of airport planners from HNTB Corporation on the San Diego International Airport Master Plan. This plan was developed to meet the immediate needs of the airport and airline community while the policy for the long-term future of the airport was resolved. The Green Build terminal project was the first major plan component completed in 2013.

Prior to starting Johnson Aviation, Nick was a Vice President with Landrum & Brown in the firm's airport planning practice. He served as Landrum & Brown's Project Manager for the Los Angeles International Airport (LAX) Master Plan. He led the way in developing a plan for LAX that balanced the needs of the regional economy while finding practical solutions for the local impact to nearby communities as part of a multi-discipline consultant team. Nick also led various land re-use and property development projects for Landrum & Brown at other major California airports.

Education

Master of Public Administration, Aviation Administration – Southern Illinois University
Bachelor of Science, Aviation Management - Southern Illinois University
Air Traffic Control Internship – Federal Aviation Administration
Aviation Flight Program– Southern Illinois University
General Aviation Private Pilot (9/19/1986)

PRELIMINARY HYDROLOGY STUDY
4665 Lampson Avenue
LOS ALAMITOS, CA
TTM No. 19263

Project Address:

4665 Lampson Avenue
Los Alamitos, California 90720

Prepared For:

MJW Investments, LLC
27702 Crown Valley Parkway,
Suite D-4-197
Ladera Ranch, CA 92694

Prepared By:

C&V Consulting Inc.
9830 Irvine Center Drive
Irvine, CA 92618
Contact: Dane McDougall, P.E.
(949) 916-3800

Prepared: October 2022
Revised: August 2024

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Preliminary Hydrology Study
For
TTM 19263
4665 Lampson Avenue, Los Alamitos

This Preliminary Hydrology Study was prepared by C&V Consulting, Inc. under the supervision of Dane McDougall, P.E.



Dane McDougall, R.C.E. 80705
Principal, C&V Consulting, Inc.

8/23/24
Date

1.0 SITE DESCRIPTION:

The proposed development encompasses one parcel consisting of approximately 12.37 acres (APN: 130-012-35). The project is bounded by Lampson Avenue to the south, a golf course to the east, the Los Alamitos Joint Forces Training Base (JFTB) to the west, and Arbor Park to the north. There are two (2) existing driveways that provide access to the site from Lampson Avenue. Majority of the site consists of an existing paved parking lot and 2-story office building with walkways and various landscaping. The remaining portion of the site consists a large, vacant brush filled open space area. Per the City of Los Alamitos General Plan, the site is located within the Limited Multiple Family Residential designation. According to the city of Los Alamitos Zoning Map the site is located within the Multi-Family Residential (R-3) zone.

2.0 PURPOSE OF STUDY:

The purpose of this report is to provide quantitative information to verify the design of the storm drain infrastructure and hydrologic methodology of the project site. This report demonstrates that the subject site is designed and planned in accordance with the Orange County Hydrology Manual, the City of Los Alamitos and City of Seal Beach drainage requirements.

3.0 EXISTING CONDITIONS:

Per the existing topography, the site elevations range from approximately 21 to 26’ above mean sea level. The existing site generally flows in an east to westerly direction, however directs stormwater in the southerly direction to an existing westerly flowing concrete-lined channel along the site’s southerly property line. The existing concrete channel outlets to an 18” corrugated metal pipe (CMP) storm drain with headwall that flows under the existing offsite private roadway and discharges into an offsite earthen channel within the Los Alamitos Joint Forces Training Base (JFTB) property. Stormwater runoff flows within this earthen channel converge with runoff flows from portions of Arbor Park and JFTB and are then collected by an existing 24” CMP that continues to flow westerly, ultimately draining to the Old Ranch Country Club, located southwest from the site. Stormwater runoff is then ultimately conveyed downstream into the San Gabriel River/ San Pedro-Los Alamitos Bay.

Per field observations conducted by C&V Consulting, Inc., the existing concrete channel along the site’s southerly property line currently ponds up and overflows onto Lampson Avenue near the southwest corner of the site. Overflowing occurs on to Lampson Avenue due to the existing topography of the area. The westerly adjacent private roadway for Arbor Park access drains in the southerly direction directly onto Lampson Avenue. Refer to the Existing Conditions Hydrology Map in Appendix A.1 for additional information. Per conversations with City of Seal Beach staff, historical stormwater flows in Lampson Avenue exceed the top of curb elevation during large storm events. Based on the existing topography of the site, in the event the outlet pipe were to become clogged, the existing overflows from the property would flow onto Lampson Avenue at the low point at the southwest corner of the site.

Refer to the following photographic images of existing ponding during a March 2023 rain event:



Existing JFTB Earthen Channel (looking North)



Existing Onsite Channel/ Existing 18” CMP Outlet
(near southwest corner of site, looking East)



Existing Onsite Channel (looking West)

Per Orange County Flood Protection Goals: Figure 3-1 enclosed in Appendix A:

1. Flooding is allowed over the curb and to the right of way for the 100-year flood level as long as a minimum 1' freeboard from the building pad to the water surface elevation is provided and
2. Flooding is allowed to the top of the curb for 25-year flood level street flows as long as a 12' wide travel lane is provided for emergency vehicles. As shown in the existing street flow calculations enclosed in Appendix C.3, the 25-year water surface level street flows in Lampson Avenue along the project frontage are contained below the top of curb with a 12' wide travel lane provided for emergency vehicles in accordance with Orange County Flood Protection requirements.

In addition, the low point of Lampson Avenue occurs approximately 2,100 feet west of the site near the Old Ranch Country Club. Ponding is anticipated at this location based on the street design and ultimately low point. However, per the existing street flow calculations enclosed within Appendix C.3, the 100-year water surface elevation at this location is approximately 6" which is being held within the curb. Based on the existing topography of Lampson Avenue, flooding is not anticipated along the frontage of the site due to the flow-by nature of the existing

Refer to the Existing Conditions Hydrology Map located within Appendix A.1 of this report for additional information.

4.0 PROPOSED CONDITIONS:

The proposed development will consist of 169 for sale single family residential units (55 detached condos and 114 attached townhome units) and 77 for rent units (3 apartment buildings); for a total of 246 dwelling units. Proposed associated drive aisles, parking and flatwork will increase the overall impervious area compared to the existing condition of the site.

The proposed site's stormwater runoff will be conveyed by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet biofiltration devices or catch basin inlets for water quality treatment. The biofiltration devices include an internal overflow bypass that direct flows via an onsite underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows into the existing 18" storm drain pipe at the southwest corner of the site, which conveys stormwater runoff to the JFTB property located directly west of the site. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing conditions for all storm events. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will be conveyed through a parkway drain discharging flow onto Lampson Avenue, matching historical drainage patterns.

Proposed pad elevations for the onsite buildings shall be set a minimum 1' above the 100-year water surface elevation in accordance with Orange County Flood Protection requirements.

A proposed 10' wide dedication area along the northern the property line is proposed to support the adjacent park. The 10' wide dedication area is outside the proposed residential development and does not flow to the site's proposed storm drain system. Existing conditions show that this area of site currently drains in the northerly direction.

Alternative Drainage System Outlets to Lampson Avenue:

There currently is no existing cross lot drainage arrangement between the JFTB and the subject property allowing for the proposed development's flows to outlet onto the JFTB. The JFTB controls all improvements on their property. If, for whatever reason, proposed flows from the project are not allowed to outlet to the JFTB, then the emergency overflow parkway drain will be utilized as the

primary discharge location. Placement of the proposed parkway drain is near the existing overflow location as described within the Section 3.0 Existing Conditions of this study, therefore closely matches the existing conditions.

A proposed stormwater pump system with upstream detention storage has been incorporated into the onsite drainage design to provide onsite peak flow and volume minimization for the development for all storm events. The pump system will control the outflow discharge rate matching the existing 2-year peak flow at approximately 8.9 cfs. The pump system along with upstream detention will ensure stormwater inundation within Lampson Avenue is minimized and no additional impact is anticipated whether the discharge location is to the existing JFTB 18" CMP storm drain pipe or the proposed park drain on Lampson Avenue.

Approaches to Drainage System Outlets Deemed Infeasible:

As part of this preliminary hydrology study, the following drainage designs with different outlet locations each of which were found to be infeasible upon closer review:

1. **Construct storm drain pipe in Lampson Avenue to west:**
   The proposed installation of approximately 2,400 linear feet (LF) of 30" underground gravity-fed storm drain pipe in Lampson Avenue to directly connect to closest downstream existing 36" storm drain pipe (north of Guava Avenue extended) was found to be infeasible due to conflicts with existing utilities; including existing 16" water, 8" sewer, and 34" gas mains. Installing 2,400 LF of force main, as opposed to gravity main, may also create long-term maintenance concerns. In addition, the installation of 2,400 LF of force main is not desirable due to head losses created by such a long length of pipe.

   Refer to the exhibits in Appendix D.3.

2. **Construct storm drain pipe under Heather Street, Hazelnut Avenue, and Guava Avenue to south and west:**
   Since there is no existing underground storm drain to connect within Heather Street or Hazelnut Avenue, a new storm drain pipe would need to be extended 3,000 LF through these streets to connect to the existing 36" storm drain pipe in Guava Avenue. The existing storm drain system is undersized according to the City of Seal Beach Master Plan of Drainage Update dated August 2008. Future City of Seal Beach capital improvements to the downstream storm drain system are recommended in the Master Plan of Drainage Update at this location (CPE 1A and CPE 1B as shown on Figure 1-3 in Appendix D.2), but there is no current timeline to install any capital improvements. Without the capital improvements in place, redirecting stormwater runoff flows from the site to the currently undersized storm drain system in Guava Avenue is infeasible since it would exacerbate the existing flooding condition at this location adjacent to single family homes.

   Refer to the exhibits in Appendix D.2 and D.3.

3. **Outlet Runoff to Arbor Park to North:**
   Arbor Park is within the JFTB property and drains south to the same earthen channel outlet as the project site. If the proposed flows from the project are not allowed to outlet to the JFTB at the southwest corner of the site, proposed flows from the project would not be allowed to outlet to the JFTB to the north of the site either since they are essentially the same outlet location. In addition, the existing site does not flow in the northerly Arbor Park/ JFTB area as the site drains in the southwesterly direction, therefore directing stormwater runoff to the north would change the historic drainage pattern which can potentially cause downstream flooding.

4. **Outlet Runoff to Golf Course to East:**
   The golf course to the east of the site is withinthe JFTB property and drains east, ultimately to the Bolsa Chica Channel. Discharging to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the site, therefore potentially cause downstream flooding. In addition, the golf course and Bolsa Chica Channel are upstream from the site, therefore not feasible due to elevation differences.

5. **Construct storm drain pipe in Lampson Avenue to East:**
   Discharging to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the site. Additionally, installation of underground storm drain pipe within Lampson Avenue is infeasible for same reasons as noted in #1 above. Similarly to item #4, changing the historical drainage pattern may potentially cause unforeseen drainage impacts.

Refer to the Proposed Conditions Hydrology Map located in Appendix A.2.

5.0 METHODOLOGY:

The existing/proposed subarea was analyzed for acreage, land-use, soil type, peak flow rate, and time of concentration according to the Rational Method.

Recommended perviousness values are based on existing and proposed land use.
Proposed conditions were analyzed using the rational method to determine the detention volume.

Rational Method Analysis identify offsite 25-year storm event flow allowed to prevent flooding of one travel lane of the half-street per Orange County Public Works Flood Local Drainage Manual.

6.0 RESULTS:

Existing Conditions

DA	AREA (AC)	PERVIOUS AREA (AC)	IMPERVIOUS AREA (SF)	PERCENT IMPERVIOUS	Q10 (CFS)	Q25 (CFS)	Q100 (CFS)	100-YR TC (MIN)
X1	0.20	0.20	0	0%	0.45	0.55	0.72	9.09
X2	3.05	3.05	0	0%	4.57	5.83	7.94	14.51
X3	8.87	0.89	7.98	90%	14.11	17.40	22.85	17.43
TOTAL	**12.12**	**4.14**	**7.98**	**66%**	**19.12**	**23.78**	**31.51**	**-**

Existing Offsite Drainage Area Conditions

DA	AREA (AC)	Q2 (CFS)	Q25 (CFS)	25-YR TC (MIN)	Q100 (CFS)	100-YR TC (MIN)
X4	0.44	0.68	1.48	7.69	1.90	7.69
X5	2.51	0.87	2.36	40.00	3.13	38.01
X6	1.92	0.32	0.93	65.21	1.23	61.61
TOTAL	**4.87**	**1.87**	**4.77**	**-**	**6.26**	**-**

Proposed Conditions
(for Existing JTFB 18" Storm Drain Pipe or Lampson Avenue Parkway Drain:

DA	AREA (AC)	Q10 (CFS) [unmitigated]	Q25 (CFS) [unmitigated]	Q100 (CFS) [unmitigated]	100-YR TC (MIN)	Q10 (CFS) [mitigated]	Q100 (CFS) [mitigated]
1	0.73	2.08	2.50	3.22	7.2	-	-
2	6.07	13.29	16.30	21.45	10.0	-	-
3	3.16	6.30	7.76	10.23	10.6	-	-
4	0.64	1.82	2.18	2.81	7.2	-	-
5	1.52	3.21	3.94	5.21	9.5	-	-
TOTAL	**12.12**	**26.15**	**32.06**	**42.15**	**11.3**	**8.90**	**8.90**

Catch Basin Sizing
Catch basin Sizing will be analyzed for the 100-year storm event peak flow and provided during final engineering.

Pipe Sizing
Onsite underground storm drain pipe will be analyzed for the 100-year storm event peak flow rate utilizing WSPG software and provided during final engineering.

100-Year Water Surface Ponding Exhibit/ Calculations
Water surface elevations for the 100-year storm event peak flow rates will verify that the proposed building pad elevations are a minimum 1' above the water surface elevation. A ponding exhibit will be prepared based on the 100-year water surface elevation tributary to each subarea during final engineering.

Detention Calculations
Due to increased peak runoff flows created from the proposed change in land use and increased impervious coverage of the proposed development, stormwater will need to be detained to minimize and ultimately match existing conditions. A 24-hour inflow hydrograph and detention basin routing was analyzed to determine the amount of increased volume runoff to be minimized based on existing vs. proposed flows. However, the existing outlet pipe with headwall limits flow from the site similar to an orifice. Based on the maximum flows conveyed by the outlet pipe based on analyzing the pipe as an orifice, it appears the existing flows may overflow into Lampson Ave (Refer to Appendix C.2 for orifice calculations). To prevent overflow into Lampson Ave, the detention system shall be sized to match the maximum flows conveyed by the outlet pipe.

In addition, a proposed stormwater pump system with upstream detention storage has been incorporated into the onsite drainage design to provide onsite peak flow and volume minimization for the development for all storm events. The pump system will control the outflow discharge rate matching the existing 2-year peak flow at approximately 8.9 cfs. Refer to Appendix C.3 for detention calculations.

Lampson Avenue Street Capacity
An offsite street capacity analysis was performed for Lampson Avenue to determine the tributary area and corresponding peak flows. This information was utilized to determine the existing development is responsible of potential flooding of Lampson Avenue during larger storm events. Two (2) areas were analyzed; Section A-A is located near the southwest corner of the site and Section B-B at the existing low-point sump catch basin approximately 2,100 LF from the site near the Old Ranch Country Club. Both street capacity analysis indicate that the 100-year water surface elevation is held within the street and less than the existing top of curb elevations.

Refer to Appendix A.3 Offsite Existing Conditions Hydrology Map and Appendix C.5 for street capacity calculations.

7.0 CONCLUSION:

The results from this preliminary hydrology study demonstrate that the proposed condition of the project site will generate a higher peak runoff flowrate than the existing condition of the site due to an increase in impervious area and change in land use. The proposed detention facilities will be designed to detain at the flows and times indicated by the produced hydrographs in Appendix C.1.

Detained volumes will be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities will not be hydrologically impacted by the proposed project site improvements. Existing historic drainage patterns will be maintained without causing the potential increase of tributary flooding. Proposed discharges from the development will not exceed the existing peak flow rates as described with the proposed conditions and alternative drainage system scenario.

8.0 DESIGN PARAMETERS:

1. The onsite drainage area was analyzed for a 10, 25, 100-year storm event using Rational Method Analysis per the County of Orange Hydrology Manual.

2. The drainage area is classified as Soil Group A (See Appendix E of this report). According to the Geotechnical Investigation report prepared by LGC Geotechnical, Inc. (dated December 21, 2021), the site is underlain by alluvial fan deposits to the maximum depth of 46.5' below existing grade. It consists of clay, clayey sand, silty clay, and silty sand. The soil is to be very moist to wet with depth and soft to stiff and medium dense to dense.

3. Assumed commercial and undeveloped cover for existing land use. A manning's "n" value of 0.040 is applied to undeveloped cover flow path and a value of 0.015 is applied to the concrete gutter.

4. Assumed apartments and condominium for proposed land use.

5. Time of concentration Tc were calculated by using the County of Orange Hydrology Manual to calculate flow rates and volume amounts.

6. There is no offsite run-on tributary to the site.

9.0 REFERENCES:

1. Orange County Hydrology Manual. Orange County Environmental Management Agency. dated October 1986.

2. Orange County Flood Control District Design Manual. County of Orange Public Facilities and Resources Department. November 2000.

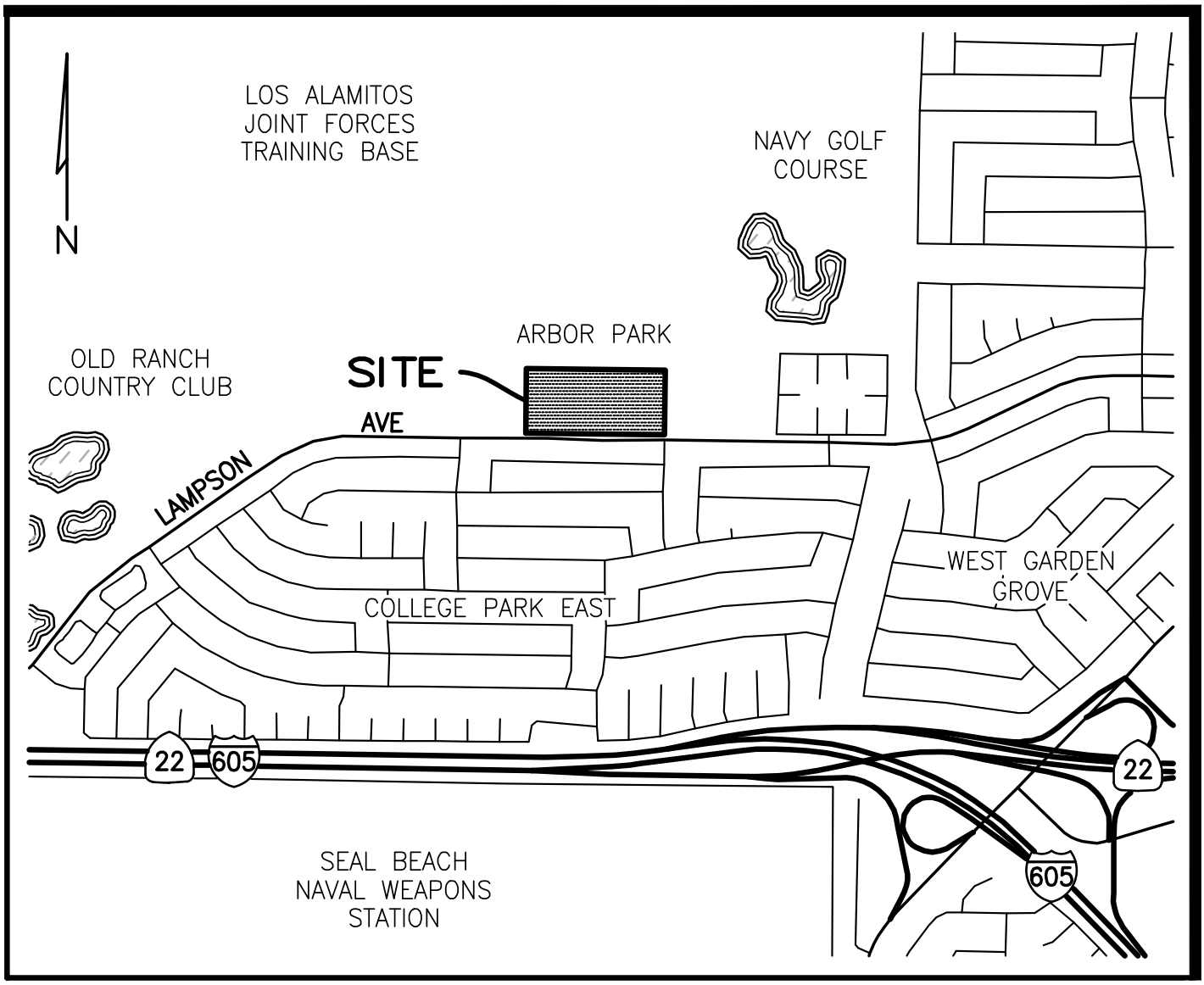
3. HydraFlow Express Extension. Autodesk AutoCAD Civil 3D

4. Existing Storm Drain As-Built Plans.

5. Orange County Technical Guidance Document.

6. U.S. Department of Transportation, Federal Highway Administration, Hydraulic Toolbox, Version 5.4.0

APPENDIX A
HYDROLOGY MAPS



VICINITY MAP

N.T.S.

National Flood Hazard Layer FIRMette

FEMA

118°3'12"W 33°47'7"N



118°2'34"W 33°46'38"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/18/2022 at 12:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

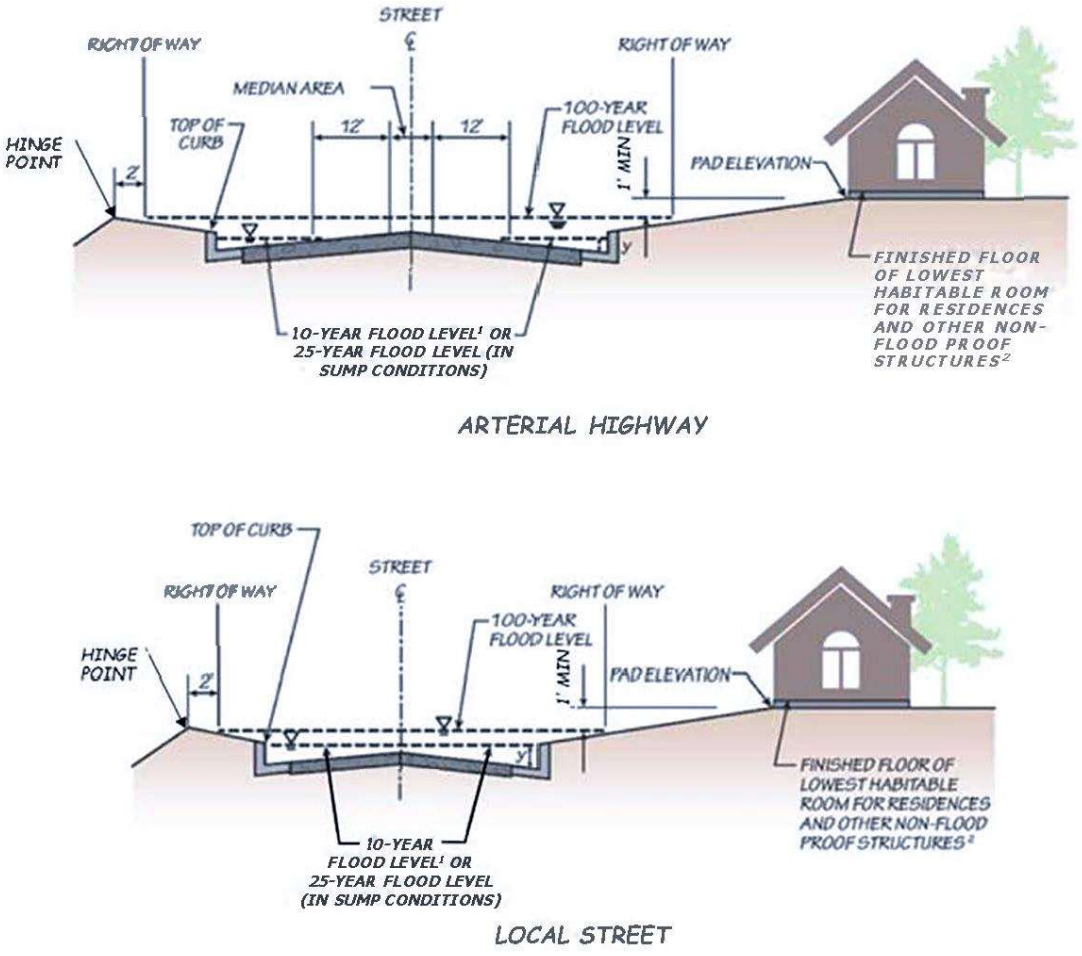
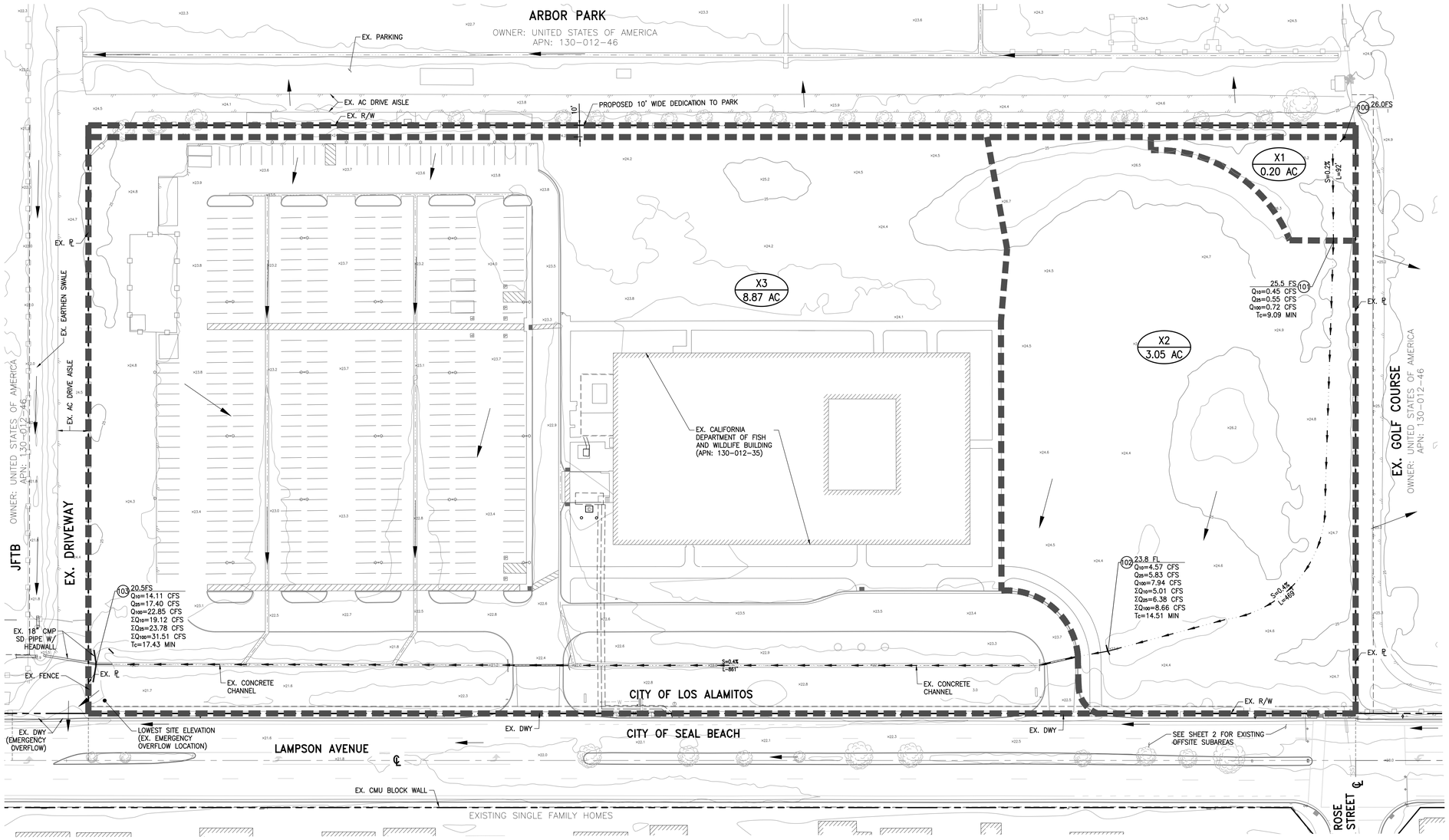
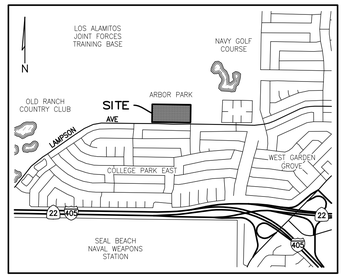


Figure 3-1: Flood Protection Goals

A.1 - Existing Conditions Hydrology Map

ONSITE EXISTING CONDITIONS HYDROLOGY MAP
TENTATIVE TRACT MAP NO. 19263
4665 LAMPSON AVENUE
CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA





VICINITY MAP
NTS

LEGEND

- EXISTING RIGHT-OF-WAY/ BOUNDARY
- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED MWS BIOFILTRATION VAULT
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

EXISTING DRAINAGE AREA SUMMARY (ONSITE)

DA	AREA (SF)	AREA (AC)	PERVIOUS AREA (AC)	IMPERVIOUS AREA (AC)	PERCENT IMPERVIOUS	Q10 (CFS)	Q25 (CFS)	Q100 (CFS)	100-yr Tc (MIN)
X1	8,627	0.20	0.20	0	0%	0.45	0.55	0.72	9.09
X2	133,051	3.05	3.05	0	0%	4.57	5.83	7.94	4.51
X3	386,268	8.87	0.89	7.98	90%	14.11	17.40	22.85	17.43
TOTAL	527,946	12.12	4.14	7.98	66%	19.12	23.78	31.51	

SCALE: 1" = 40'

0 20 40 80

REVISIONS					
NUMBER	DATE	INITIALS	DESCRIPTION	APPROVED	INSTALLED

PLANS PREPARED BY:

C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
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VESTING TENTATIVE TRACT MAP NO. 19263
EXISTING CONDITIONS HYDROLOGY MAP
4665 LAMPSON AVENUE

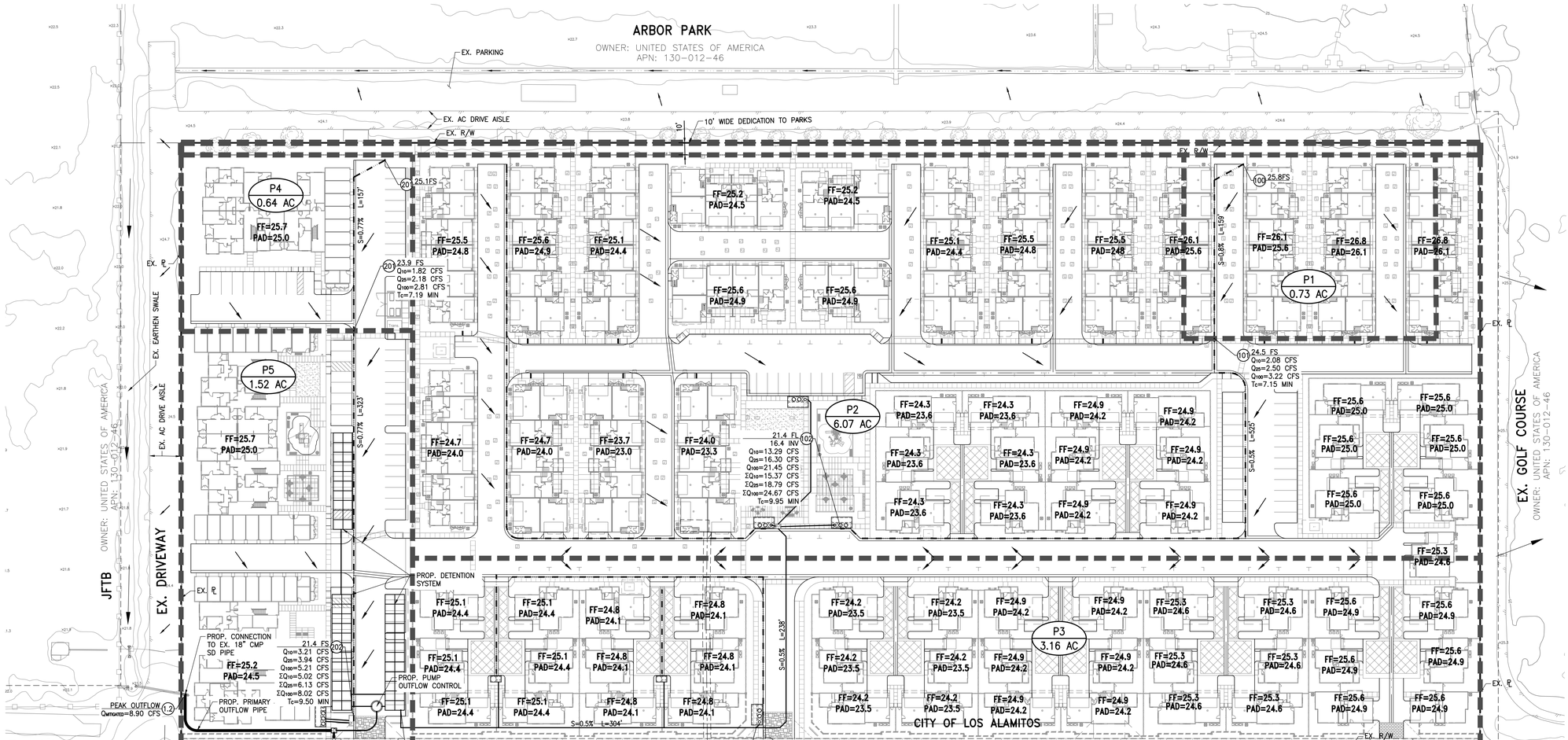
PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

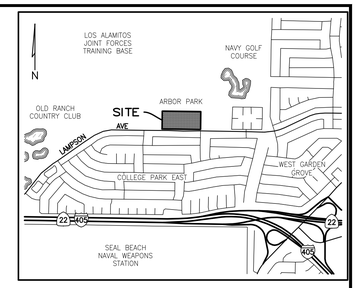
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A.2 - Proposed Conditions Hydrology Map

ONSITE PROPOSED CONDITIONS HYDROLOGY MAP
TENTATIVE TRACT MAP NO. 19263
4665 LAMPSON AVENUE
CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA





VICINITY MAP
NTS

LEGEND

- EXISTING RIGHT-OF-WAY/ BOUNDARY
- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED MWS BIOFILTRATION VAULT
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

PROPOSED DRAINAGE AREA SUMMARY

DA	AREA (SF)	AREA (AC)	Q10 (CFS) [unmitigated]	Q25 (CFS) [unmitigated]	Q100 (CFS) [unmitigated]	100-yr Tc (MIN)	Q10 (CFS) [mitigated]	Q100 (CFS) [mitigated]
1	31,826	0.73	2.08	2.50	3.22	7.2	–	–
2	264,358	6.07	13.29	16.30	21.45	10.0	–	–
3	137,683	3.16	6.30	7.76	10.23	10.6	–	–
4	28,039	0.64	1.82	2.18	2.81	7.2	–	–
5	66,043	1.52	3.21	3.94	5.21	9.5	–	–
TOTAL	527,949	12.12	26.15	32.06	42.15	11.3	8.9	8.9

SCALE: 1" = 40'

0 20 40 80

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C&V CONSULTING, INC.
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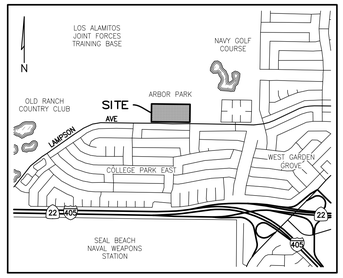
VESTING TENTATIVE TRACT MAP NO. 19263
PROPOSED CONDITIONS HYDROLOGY MAP
4665 LAMPSON AVENUE

PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

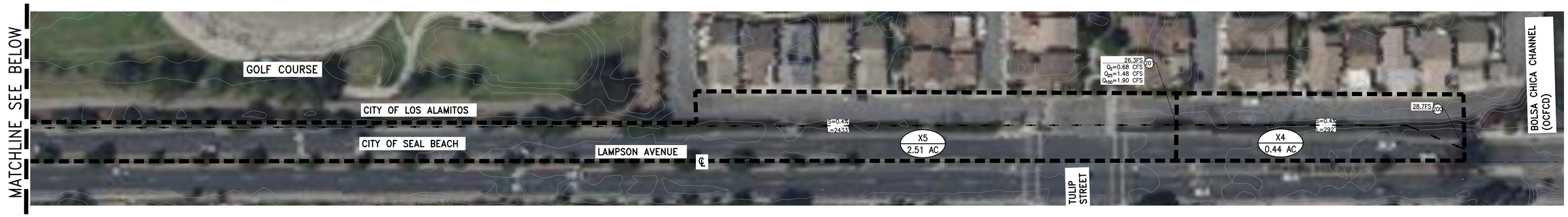
SHEET 1 OF 1

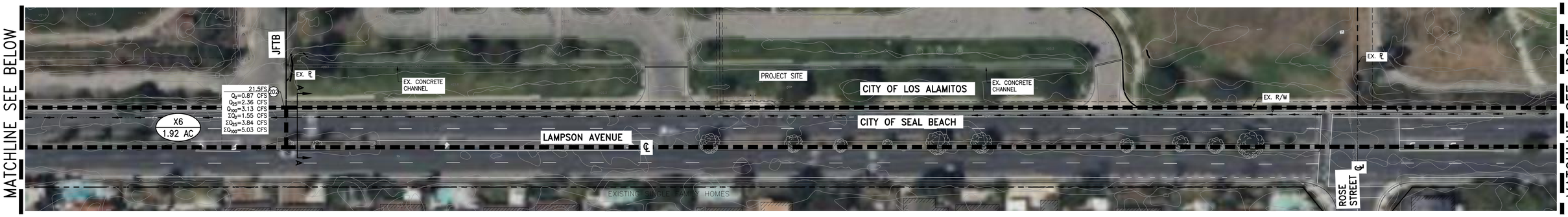
A.3 – Offsite Existing Conditions Hydrology Map

OFFSITE EXISTING CONDITIONS HYDROLOGY MAP
TENTATIVE TRACT MAP NO. 19263
4665 LAMPSON AVENUE
CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA



VICINITY MAP
NTS







EXISTING DRAINAGE AREA SUMMARY (OFFSITE)

DA	AREA (SF)	AREA (AC)	Q25 (CFS)	25-yr Tc (MIN)	Q100 (CFS)	100-yr Tc (MIN)
X4	19,130	0.44	1.48	7.7	1.90	7.7
X5	109,210	2.51	2.36	40.0	3.13	38.0
X6	83,762	1.92	0.93	65.2	1.23	61.6

LEGEND

- EXISTING RIGHT-OF-WAY/ BOUNDARY
- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED MWS BIOFILTRATION VAULT
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

SCALE: 1" = 40'
0 20 40 80

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VESTING TENTATIVE TRACT MAP NO. 19263
EXISTING CONDITIONS HYDROLOGY MAP
4665 LAMPSON AVENUE

PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

SHEET 2 OF 2

APPENDIX B
HYDROLOGY CALCULATIONS

B.1 - Existing Conditions Hydrology Calculations (10, 25, 100-year Storm Event)

Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07x10.roc

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LOS ALAMITOS
TTM 19263
EXISTING Q10

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 10.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

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Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.400(In/Hr)
Initial subarea data:
Initial area flow distance = 92.000(Ft.)
Top (of initial area) elevation = 26.000(Ft.)
Bottom (of initial area) elevation = 25.500(Ft.)
Difference in elevation = 0.500(Ft.)
Slope = 0.00543 s(%)= 0.54
TC = k(0.525)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 9.092 min.
Rainfall intensity = 2.882(In/Hr) for a 10.0 year storm

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Effective runoff coefficient used for area (Q=KCIA) is C = 0.775
Subarea runoff =      0.447(CFS)
Total initial stream area =        0.200(Ac.)


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Process from Point/Station      101.000 to Point/Station      102.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =    25.500(Ft.)
Downstream point elevation =    23.800(Ft.)
Channel length thru subarea  =   469.000(Ft.)
Channel base width      =    5.000(Ft.)
Slope or 'Z' of left channel bank =   0.000
Slope or 'Z' of right channel bank =   0.000
Estimated mean flow rate at midpoint of channel =      2.778(CFS)
Manning's 'N'    = 0.040
Maximum depth of channel  =    1.400(Ft.)
Flow(q) thru subarea =      2.778(CFS)
Depth of flow =   0.464(Ft.), Average velocity =   1.197(Ft/s)
Channel flow top width =    5.000(Ft.)
Flow Velocity =    1.20(Ft/s)
Travel time  =    6.53 min.
Time of concentration =   15.62 min.
Critical depth =      0.213(Ft.)
 Adding area flow to channel
UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 67.00
Pervious ratio(Ap) = 1.0000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.400(In/Hr)
Rainfall intensity =      2.113(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.730
Subarea runoff =      4.565(CFS) for    3.050(Ac.)
Total runoff =      5.012(CFS)  Total area =        3.25(Ac.)
Area averaged Fm value =    0.400(In/Hr)
Depth of flow =   0.680(Ft.), Average velocity =   1.474(Ft/s)
Critical depth =      0.316(Ft.)


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Process from Point/Station      102.000 to Point/Station      103.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =    23.800(Ft.)
Downstream point elevation =    20.500(Ft.)
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Channel length thru subarea  =   861.000(Ft.)
Channel base width      =    3.000(Ft.)
Slope or 'Z' of left channel bank =   0.000
Slope or 'Z' of right channel bank =   0.000
Estimated mean flow rate at midpoint of channel =     12.039(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.500(Ft.)
Flow(q) thru subarea =     12.039(CFS)
Depth of flow =   0.942(Ft.), Average velocity =   4.259(Ft/s)
Channel flow top width =    3.000(Ft.)
Flow Velocity =    4.26(Ft/s)
Travel time  =    3.37 min.
Time of concentration =   18.99 min.
Critical depth =      0.797(Ft.)
 Adding area flow to channel
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.040(In/Hr)
Rainfall intensity =      1.890(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.835
Subarea runoff =     14.111(CFS) for    8.870(Ac.)
Total runoff =     19.123(CFS)  Total area =       12.12(Ac.)
Area averaged Fm value =    0.137(In/Hr)
Depth of flow =   1.317(Ft.), Average velocity =   4.841(Ft/s)
Critical depth =      1.078(Ft.)
End of computations, total study area =           12.12 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.341
Area averaged SCS curve number (AMC 2) =  41.4
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Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07x25.roc

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LOS ALAMITOS
TTM 19263
EXISTING Q25

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 25.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

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Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.400(In/Hr)
Initial subarea data:
Initial area flow distance = 92.000(Ft.)
Top (of initial area) elevation = 26.000(Ft.)
Bottom (of initial area) elevation = 25.500(Ft.)
Difference in elevation = 0.500(Ft.)
Slope = 0.00543 s(%)= 0.54
TC = k(0.525)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 9.092 min.
Rainfall intensity = 3.439(In/Hr) for a 25.0 year storm

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Effective runoff coefficient used for area (Q=KCIA) is C = 0.795
Subarea runoff =      0.547(CFS)
Total initial stream area =        0.200(Ac.)


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Process from Point/Station      101.000 to Point/Station      102.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =    25.500(Ft.)
Downstream point elevation =    23.800(Ft.)
Channel length thru subarea  =   469.000(Ft.)
Channel base width      =    5.000(Ft.)
Slope or 'Z' of left channel bank =   0.000
Slope or 'Z' of right channel bank =   0.000
Estimated mean flow rate at midpoint of channel =      3.490(CFS)
Manning's 'N'    = 0.040
Maximum depth of channel  =    1.400(Ft.)
Flow(q) thru subarea =      3.490(CFS)
Depth of flow =   0.537(Ft.), Average velocity =   1.299(Ft/s)
Channel flow top width =    5.000(Ft.)
Flow Velocity =    1.30(Ft/s)
Travel time  =    6.02 min.
Time of concentration =   15.11 min.
Critical depth =      0.246(Ft.)
 Adding area flow to channel
UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 67.00
Pervious ratio(Ap) = 1.0000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.400(In/Hr)
Rainfall intensity =      2.579(In/Hr) for a    25.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.760
Subarea runoff =      5.828(CFS) for    3.050(Ac.)
Total runoff =      6.375(CFS)  Total area =        3.25(Ac.)
Area averaged Fm value =    0.400(In/Hr)
Depth of flow =   0.797(Ft.), Average velocity =   1.599(Ft/s)
Critical depth =      0.367(Ft.)


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Process from Point/Station      102.000 to Point/Station      103.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =    23.800(Ft.)
Downstream point elevation =    20.500(Ft.)
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Channel length thru subarea  =   861.000(Ft.)
Channel base width      =    3.000(Ft.)
Slope or 'Z' of left channel bank =   0.000
Slope or 'Z' of right channel bank =   0.000
Estimated mean flow rate at midpoint of channel =     15.074(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.500(Ft.)
Flow(q) thru subarea =     15.074(CFS)
Depth of flow =   1.107(Ft.), Average velocity =   4.540(Ft/s)
Channel flow top width =    3.000(Ft.)
Flow Velocity =    4.54(Ft/s)
Travel time  =    3.16 min.
Time of concentration =   18.27 min.
Critical depth =      0.922(Ft.)
 Adding area flow to channel
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.040(In/Hr)
Rainfall intensity =      2.316(In/Hr) for a    25.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.847
Subarea runoff =     17.404(CFS) for    8.870(Ac.)
Total runoff =     23.779(CFS)  Total area =       12.12(Ac.)
Area averaged Fm value =    0.137(In/Hr)
Depth of flow =   1.539(Ft.), Average velocity =   5.150(Ft/s)
!!Warning: Water is above left or right bank elevations
ERROR - Channel depth exceeds maximum allowable depth
Critical depth =      1.250(Ft.)
End of computations, total study area =           12.12 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.341
Area averaged SCS curve number (AMC 2) =  41.4
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Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07x100.roc

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LOS ALAMITOS
TTM 19263
EXISTING Q100

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

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Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 67.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.400(In/Hr)
Initial subarea data:
Initial area flow distance = 92.000(Ft.)
Top (of initial area) elevation = 26.000(Ft.)
Bottom (of initial area) elevation = 25.500(Ft.)
Difference in elevation = 0.500(Ft.)
Slope = 0.00543 s(%)= 0.54
TC = k(0.525)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 9.092 min.
Rainfall intensity = 4.392(In/Hr) for a 100.0 year storm

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Effective runoff coefficient used for area (Q=KCIA) is C = 0.818
Subarea runoff =      0.719(CFS)
Total initial stream area =        0.200(Ac.)


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Process from Point/Station      101.000 to Point/Station      102.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =    25.500(Ft.)
Downstream point elevation =    23.800(Ft.)
Channel length thru subarea  =   469.000(Ft.)
Channel base width      =    5.000(Ft.)
Slope or 'Z' of left channel bank =   0.000
Slope or 'Z' of right channel bank =   0.000
Estimated mean flow rate at midpoint of channel =      4.723(CFS)
Manning's 'N'    = 0.040
Maximum depth of channel  =    1.400(Ft.)
Flow(q) thru subarea =      4.723(CFS)
Depth of flow =   0.654(Ft.), Average velocity =   1.444(Ft/s)
Channel flow top width =    5.000(Ft.)
Flow Velocity =    1.44(Ft/s)
Travel time  =    5.41 min.
Time of concentration =   14.51 min.
Critical depth =      0.301(Ft.)
 Adding area flow to channel
UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 67.00
Pervious ratio(Ap) = 1.0000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.400(In/Hr)
Rainfall intensity =      3.361(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.793
Subarea runoff =      7.942(CFS) for    3.050(Ac.)
Total runoff =      8.660(CFS)  Total area =        3.25(Ac.)
Area averaged Fm value =    0.400(In/Hr)
Depth of flow =   0.979(Ft.), Average velocity =   1.769(Ft/s)
Critical depth =      0.453(Ft.)


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Process from Point/Station      102.000 to Point/Station      103.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =    23.800(Ft.)
Downstream point elevation =    20.500(Ft.)
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```
Channel length thru subarea  =   861.000(Ft.)
Channel base width      =    3.000(Ft.)
Slope or 'Z' of left channel bank =   0.000
Slope or 'Z' of right channel bank =   0.000
Estimated mean flow rate at midpoint of channel =     20.110(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.500(Ft.)
Flow(q) thru subarea =     20.110(CFS)
Depth of flow =   1.367(Ft.), Average velocity =   4.905(Ft/s)
Channel flow top width =    3.000(Ft.)
Flow Velocity =    4.90(Ft/s)
Travel time  =    2.93 min.
Time of concentration =   17.43 min.
Critical depth =      1.117(Ft.)
 Adding area flow to channel
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.040(In/Hr)
Rainfall intensity =      3.025(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.859
Subarea runoff =     22.847(CFS) for    8.870(Ac.)
Total runoff =     31.507(CFS)  Total area =       12.12(Ac.)
Area averaged Fm value =    0.137(In/Hr)
Depth of flow =   1.822(Ft.), Average velocity =   5.764(Ft/s)
!!Warning: Water is above left or right bank elevations
ERROR - Channel depth exceeds maximum allowable depth
Critical depth =      1.500(Ft.)
End of computations, total study area =           12.12 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.341
Area averaged SCS curve number (AMC 2) =  41.4
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B.2 - Offsite Existing Conditions Hydrology Calculations For Lampson Avenue (2, 25, 100-year Storm Event)

Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07xo2.roc

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LOS ALAMITOS
TTM 19263
EXISTING Q2
OFFSITE - LAMPSON AVE

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 2.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

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Process from Point/Station 200.000 to Point/Station 201.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.040(In/Hr)
Initial subarea data:
Initial area flow distance = 292.000(Ft.)
Top (of initial area) elevation = 28.700(Ft.)
Bottom (of initial area) elevation = 26.300(Ft.)
Difference in elevation = 2.400(Ft.)
Slope = 0.00822 s(%)= 0.82
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.692 min.
Rainfall intensity = 1.768(In/Hr) for a 2.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.880

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Subarea runoff =      0.684(CFS)
Total initial stream area =        0.440(Ac.)


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Process from Point/Station      201.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =    26.300(Ft.)
End of street segment elevation =    21.500(Ft.)
Length of street segment  =  2400.000(Ft.)
Height of curb above gutter flowline  =    8.0(In.)
Width of half street (curb to crown)  =  36.000(Ft.)
Distance from crown to crossfall grade break  =  34.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      1.151(CFS)
Depth of flow =   0.328(Ft.), Average velocity =   1.013(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  10.043(Ft.)
Flow velocity =   1.01(Ft/s)
Travel time =   39.47 min.     TC =   47.17  min.
 Adding area flow to street
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.040(In/Hr)
Rainfall intensity =      0.624(In/Hr) for a     2.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.842
Subarea runoff =      0.867(CFS) for    2.510(Ac.)
Total runoff =      1.551(CFS)  Total area =        2.95(Ac.)
Area averaged Fm value =    0.040(In/Hr)
Street flow at end of street =      1.551(CFS)
Half street flow at end of street =      1.551(CFS)
Depth of flow =   0.355(Ft.), Average velocity =   1.086(Ft/s)
Flow width (from curb towards crown)=  11.410(Ft.)
End of computations, total study area =            2.95 (Ac.)
```

The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number (AMC 2) = 32.0

Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07xo25.roc

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LOS ALAMITOS
TTM 19263
EXISTING Q25
OFFSITE - LAMPSON AVE

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 25.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

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Process from Point/Station 200.000 to Point/Station 201.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.040(In/Hr)
Initial subarea data:
Initial area flow distance = 292.000(Ft.)
Top (of initial area) elevation = 28.700(Ft.)
Bottom (of initial area) elevation = 26.300(Ft.)
Difference in elevation = 2.400(Ft.)
Slope = 0.00822 s(%)= 0.82
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.692 min.
Rainfall intensity = 3.780(In/Hr) for a 25.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.890

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Subarea runoff =      1.481(CFS)
Total initial stream area =        0.440(Ac.)


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Process from Point/Station      201.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =    26.300(Ft.)
End of street segment elevation =    21.500(Ft.)
Length of street segment  =  2400.000(Ft.)
Height of curb above gutter flowline  =    8.0(In.)
Width of half street (curb to crown)  =  36.000(Ft.)
Distance from crown to crossfall grade break  =  34.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      2.697(CFS)
Depth of flow =   0.413(Ft.), Average velocity =   1.238(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  14.323(Ft.)
Flow velocity =   1.24(Ft/s)
Travel time =   32.31 min.     TC =   40.00  min.
 Adding area flow to street
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.040(In/Hr)
Rainfall intensity =      1.487(In/Hr) for a    25.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.876
Subarea runoff =      2.360(CFS) for    2.510(Ac.)
Total runoff =      3.841(CFS)  Total area =        2.95(Ac.)
Area averaged Fm value =    0.040(In/Hr)
Street flow at end of street =      3.841(CFS)
Half street flow at end of street =      3.841(CFS)
Depth of flow =   0.457(Ft.), Average velocity =   1.348(Ft/s)
Flow width (from curb towards crown)=  16.498(Ft.)
End of computations, total study area =            2.95 (Ac.)
```

The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number (AMC 2) = 32.0

Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07xo100.roc

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LOS ALAMITOS
TTM 19263
EXISTING Q100
OFFSITE - LAMPSON AVE

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

++

Process from Point/Station 200.000 to Point/Station 201.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.040(In/Hr)
Initial subarea data:
Initial area flow distance = 292.000(Ft.)
Top (of initial area) elevation = 28.700(Ft.)
Bottom (of initial area) elevation = 26.300(Ft.)
Difference in elevation = 2.400(Ft.)
Slope = 0.00822 s(%)= 0.82
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.692 min.
Rainfall intensity = 4.834(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.893

```
Subarea runoff =      1.898(CFS)
Total initial stream area =        0.440(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =    26.300(Ft.)
End of street segment elevation =    21.500(Ft.)
Length of street segment  =  2400.000(Ft.)
Height of curb above gutter flowline  =    8.0(In.)
Width of half street (curb to crown)  =  36.000(Ft.)
Distance from crown to crossfall grade break  =  34.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      3.510(CFS)
Depth of flow =   0.445(Ft.), Average velocity =   1.319(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  15.919(Ft.)
Flow velocity =   1.32(Ft/s)
Travel time =   30.32 min.     TC =   38.01  min.
 Adding area flow to street
COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.1000  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.040(In/Hr)
Rainfall intensity =      1.935(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      3.133(CFS) for    2.510(Ac.)
Total runoff =      5.032(CFS)  Total area =        2.95(Ac.)
Area averaged Fm value =    0.040(In/Hr)
Street flow at end of street =      5.032(CFS)
Half street flow at end of street =      5.032(CFS)
Depth of flow =   0.494(Ft.), Average velocity =   1.440(Ft/s)
Flow width (from curb towards crown)=  18.350(Ft.)
End of computations, total study area =            2.95 (Ac.)
```

The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number (AMC 2) = 32.0

B.3 - Proposed Conditions Hydrology Calculations (10, 25, 100-year Storm Event)

Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07p10.roc

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LOS ALAMITOS
TTM 19263
PROPOSED Q10

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 10.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.3500 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.140(In/Hr)
Initial subarea data:
Initial area flow distance = 159.000(Ft.)
Top (of initial area) elevation = 25.800(Ft.)
Bottom (of initial area) elevation = 24.500(Ft.)
Difference in elevation = 1.300(Ft.)
Slope = 0.00818 s(%)= 0.82
TC = k(0.360)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.151 min.
Rainfall intensity = 3.307(In/Hr) for a 10.0 year storm

```
Effective runoff coefficient used for area (Q=KCIA) is C = 0.862
Subarea runoff =      2.081(CFS)
Total initial stream area =        0.730(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =    24.500(Ft.)
End of street segment elevation =    21.400(Ft.)
Length of street segment  =   525.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  16.500(Ft.)
Distance from crown to crossfall grade break  =  14.500(Ft.)
Slope from gutter to grade break (v/hz) =   0.010
Slope from grade break to crown (v/hz)  =   0.010
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      8.766(CFS)
Depth of flow =   0.425(Ft.), Average velocity =   2.597(Ft/s)
Note:  depth of flow exceeds top of street crown.
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  16.500(Ft.)
Flow velocity =   2.60(Ft/s)
Travel time =    3.37 min.     TC =   10.52  min.
 Adding area flow to street
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Rainfall intensity =      2.651(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.852
Subarea runoff =     13.286(CFS) for    6.070(Ac.)
Total runoff =     15.366(CFS)  Total area =        6.80(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Street flow at end of street =     15.366(CFS)
Half street flow at end of street =     15.366(CFS)
Depth of flow =   0.511(Ft.), Average velocity =   3.206(Ft/s)
```

```
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    0.53(Ft.)
Flow width (from curb towards crown)=  16.500(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      103.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =    16.400(Ft.)
Downstream point/station elevation =    15.210(Ft.)
Pipe length  =   238.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    15.366(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    15.366(CFS)
Normal flow depth in pipe =   18.87(In.)
Flow top width inside pipe =   19.68(In.)
Critical Depth =   16.97(In.)
Pipe flow velocity =      5.80(Ft/s)
Travel time through pipe =    0.68 min.
Time of concentration (TC) =    11.20 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      103.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Time of concentration =    11.20 min.
Rainfall intensity =      2.557(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.851
Subarea runoff =      6.298(CFS) for    3.160(Ac.)
Total runoff =     21.665(CFS)  Total area =        9.96(Ac.)
Area averaged Fm value =    0.140(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station        1.100
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =    15.210(Ft.)
```

```
Downstream point/station elevation =    13.690(Ft.)
Pipe length  =   304.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    21.665(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    21.665(CFS)
Normal flow depth in pipe =   21.87(In.)
Flow top width inside pipe =   21.18(In.)
Critical Depth =   19.55(In.)
Pipe flow velocity =      6.28(Ft/s)
Travel time through pipe =    0.81 min.
Time of concentration (TC) =    12.01 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station        1.100
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      9.960(Ac.)
Runoff from this stream =     21.665(CFS)
Time of concentration =   12.01 min.
Rainfall intensity =     2.457(In/Hr)
Area averaged loss rate (Fm) =    0.1400(In/Hr)
Area averaged Pervious ratio (Ap) = 0.3500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Initial subarea data:
Initial area flow distance =   157.000(Ft.)
Top (of initial area) elevation =    25.120(Ft.)
Bottom (of initial area) elevation =    23.900(Ft.)
Difference in elevation =     1.220(Ft.)
Slope =    0.00777  s(%)=       0.78
TC = k(0.360)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.187 min.
Rainfall intensity =      3.297(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.862
Subarea runoff =      1.819(CFS)
Total initial stream area =        0.640(Ac.)
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =    23.900(Ft.)
End of street segment elevation =    21.400(Ft.)
Length of street segment  =   323.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  16.500(Ft.)
Distance from crown to crossfall grade break  =  14.500(Ft.)
Slope from gutter to grade break (v/hz) =   0.010
Slope from grade break to crown (v/hz)  =   0.010
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      3.460(CFS)
Depth of flow =   0.328(Ft.), Average velocity =   1.947(Ft/s)
Note:  depth of flow exceeds top of street crown.
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  16.500(Ft.)
Flow velocity =   1.95(Ft/s)
Travel time =    2.77 min.     TC =    9.95  min.
 Adding area flow to street
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Rainfall intensity =      2.736(In/Hr) for a    10.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.854
Subarea runoff =      3.205(CFS) for    1.510(Ac.)
Total runoff =      5.024(CFS)  Total area =        2.15(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Street flow at end of street =      5.024(CFS)
Half street flow at end of street =      5.024(CFS)
Depth of flow =   0.355(Ft.), Average velocity =   2.258(Ft/s)
Note:  depth of flow exceeds top of street crown.
Flow width (from curb towards crown)=  16.500(Ft.)
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      202.000 to Point/Station        1.100
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.150(Ac.)
Runoff from this stream =      5.024(CFS)
Time of concentration =    9.95 min.
Rainfall intensity =     2.736(In/Hr)
Area averaged loss rate (Fm) =    0.1400(In/Hr)
Area averaged Pervious ratio (Ap) = 0.3500
Summary of stream data:

Stream  Area  Flow rate      TC     Fm       Rainfall Intensity
 No.    (Ac.)   (CFS)       (min) (In/Hr)     (In/Hr)


1      9.96    21.665     12.01    0.140      2.457
2      2.15     5.024      9.95    0.140      2.736
Qmax(1) =
           1.000 *    1.000 *    21.665) +
           0.892 *    1.000 *     5.024) + =      26.148
Qmax(2) =
           1.121 *    0.829 *    21.665) +
           1.000 *    1.000 *     5.024) + =      25.141

Total of 2 streams to confluence:
Flow rates before confluence point:
      21.665       5.024
Maximum flow rates at confluence using above data:
       26.148       25.141
Area of streams before confluence:
        9.960        2.150
Effective area values after confluence:
       12.110       10.403
Results of confluence:
Total flow rate =     26.148(CFS)
Time of concentration =    12.010 min.
Effective stream area after confluence =     12.110(Ac.)
Study area average Pervious fraction(Ap) =  0.350
Study area average soil loss rate(Fm) =    0.140(In/Hr)
Study area total (this main stream) =      12.11(Ac.)
End of computations, total study area =           12.11 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.350
```

Area averaged SCS curve number (AMC 2) = 32.0

Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07p25.roc

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LOS ALAMITOS
TTM 19263
PROPOSED Q25

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 25.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.3500 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.140(In/Hr)
Initial subarea data:
Initial area flow distance = 159.000(Ft.)
Top (of initial area) elevation = 25.800(Ft.)
Bottom (of initial area) elevation = 24.500(Ft.)
Difference in elevation = 1.300(Ft.)
Slope = 0.00818 s(%)= 0.82
TC = k(0.360)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.151 min.
Rainfall intensity = 3.939(In/Hr) for a 25.0 year storm

```
Effective runoff coefficient used for area (Q=KCIA) is C = 0.868
Subarea runoff =      2.496(CFS)
Total initial stream area =        0.730(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =    24.500(Ft.)
End of street segment elevation =    21.400(Ft.)
Length of street segment  =   525.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  16.500(Ft.)
Distance from crown to crossfall grade break  =  14.500(Ft.)
Slope from gutter to grade break (v/hz) =   0.010
Slope from grade break to crown (v/hz)  =   0.010
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     10.691(CFS)
Depth of flow =   0.451(Ft.), Average velocity =   2.810(Ft/s)
Note:  depth of flow exceeds top of street crown.
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  16.500(Ft.)
Flow velocity =   2.81(Ft/s)
Travel time =    3.11 min.     TC =   10.26  min.
 Adding area flow to street
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Rainfall intensity =      3.211(In/Hr) for a    25.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.861
Subarea runoff =     16.296(CFS) for    6.070(Ac.)
Total runoff =     18.792(CFS)  Total area =        6.80(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Street flow at end of street =     18.792(CFS)
Half street flow at end of street =     18.792(CFS)
Depth of flow =   0.560(Ft.), Average velocity =   3.295(Ft/s)
```

```
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    3.02(Ft.)
Flow width (from curb towards crown)=  16.500(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      103.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =    16.400(Ft.)
Downstream point/station elevation =    15.210(Ft.)
Pipe length  =   238.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    18.792(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    18.792(CFS)
Normal flow depth in pipe =   19.26(In.)
Flow top width inside pipe =   24.41(In.)
Critical Depth =   18.20(In.)
Pipe flow velocity =      6.19(Ft/s)
Travel time through pipe =    0.64 min.
Time of concentration (TC) =    10.90 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      103.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Time of concentration =    10.90 min.
Rainfall intensity =      3.102(In/Hr) for a    25.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.859
Subarea runoff =      7.763(CFS) for    3.160(Ac.)
Total runoff =     26.556(CFS)  Total area =        9.96(Ac.)
Area averaged Fm value =    0.140(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station        1.100
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =    15.210(Ft.)
```

```
Downstream point/station elevation =    13.690(Ft.)
Pipe length  =   304.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    26.556(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    26.556(CFS)
Normal flow depth in pipe =   22.58(In.)
Flow top width inside pipe =   25.89(In.)
Critical Depth =   21.07(In.)
Pipe flow velocity =      6.70(Ft/s)
Travel time through pipe =    0.76 min.
Time of concentration (TC) =    11.66 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station        1.100
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      9.960(Ac.)
Runoff from this stream =     26.556(CFS)
Time of concentration =   11.66 min.
Rainfall intensity =     2.987(In/Hr)
Area averaged loss rate (Fm) =    0.1400(In/Hr)
Area averaged Pervious ratio (Ap) = 0.3500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Initial subarea data:
Initial area flow distance =   157.000(Ft.)
Top (of initial area) elevation =    25.120(Ft.)
Bottom (of initial area) elevation =    23.900(Ft.)
Difference in elevation =     1.220(Ft.)
Slope =    0.00777  s(%)=       0.78
TC = k(0.360)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.187 min.
Rainfall intensity =      3.928(In/Hr) for a    25.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.868
Subarea runoff =      2.182(CFS)
Total initial stream area =        0.640(Ac.)
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =    23.900(Ft.)
End of street segment elevation =    21.400(Ft.)
Length of street segment  =   323.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  16.500(Ft.)
Distance from crown to crossfall grade break  =  14.500(Ft.)
Slope from gutter to grade break (v/hz) =   0.010
Slope from grade break to crown (v/hz)  =   0.010
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      4.197(CFS)
Depth of flow =   0.341(Ft.), Average velocity =   2.102(Ft/s)
Note:  depth of flow exceeds top of street crown.
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  16.500(Ft.)
Flow velocity =   2.10(Ft/s)
Travel time =    2.56 min.     TC =    9.75  min.
 Adding area flow to street
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Rainfall intensity =      3.306(In/Hr) for a    25.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.862
Subarea runoff =      3.944(CFS) for    1.510(Ac.)
Total runoff =      6.126(CFS)  Total area =        2.15(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Street flow at end of street =      6.126(CFS)
Half street flow at end of street =      6.126(CFS)
Depth of flow =   0.372(Ft.), Average velocity =   2.444(Ft/s)
Note:  depth of flow exceeds top of street crown.
Flow width (from curb towards crown)=  16.500(Ft.)
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      202.000 to Point/Station        1.100
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.150(Ac.)
Runoff from this stream =      6.126(CFS)
Time of concentration =    9.75 min.
Rainfall intensity =     3.306(In/Hr)
Area averaged loss rate (Fm) =    0.1400(In/Hr)
Area averaged Pervious ratio (Ap) = 0.3500
Summary of stream data:

Stream  Area  Flow rate      TC     Fm       Rainfall Intensity
 No.    (Ac.)   (CFS)       (min) (In/Hr)     (In/Hr)


1      9.96    26.556     11.66    0.140      2.987
2      2.15     6.126      9.75    0.140      3.306
Qmax(1) =
           1.000 *    1.000 *    26.556) +
           0.899 *    1.000 *     6.126) + =      32.064
Qmax(2) =
           1.112 *    0.836 *    26.556) +
           1.000 *    1.000 *     6.126) + =      30.811

Total of 2 streams to confluence:
Flow rates before confluence point:
      26.556       6.126
Maximum flow rates at confluence using above data:
       32.064       30.811
Area of streams before confluence:
        9.960        2.150
Effective area values after confluence:
       12.110       10.476
Results of confluence:
Total flow rate =     32.064(CFS)
Time of concentration =    11.661 min.
Effective stream area after confluence =     12.110(Ac.)
Study area average Pervious fraction(Ap) =  0.350
Study area average soil loss rate(Fm) =    0.140(In/Hr)
Study area total (this main stream) =      12.11(Ac.)
End of computations, total study area =           12.11 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.350
```

Area averaged SCS curve number (AMC 2) = 32.0

Orange County Rational Hydrology Program

(Hydrology Manual Date(s) October 1986 & November 1996)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2018 Version 9.0
Rational Hydrology Study, Date: 03/12/24 File Name: kb07p100.roc

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LOS ALAMITOS
TTM 19263
PROPOSED Q100

Program License Serial Number 6618

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0

Decimal fraction of study above 2000 ft., 600M = 0.0000
English Units Used for input data

++

Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****

CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Pervious ratio(Ap) = 0.3500 Max loss rate(Fp)= 0.400(In/Hr)
Max Catchment Loss (Fm) = 0.140(In/Hr)
Initial subarea data:
Initial area flow distance = 159.000(Ft.)
Top (of initial area) elevation = 25.800(Ft.)
Bottom (of initial area) elevation = 24.500(Ft.)
Difference in elevation = 1.300(Ft.)
Slope = 0.00818 s(%)= 0.82
TC = k(0.360)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.151 min.
Rainfall intensity = 5.040(In/Hr) for a 100.0 year storm

```
Effective runoff coefficient used for area (Q=KCIA) is C = 0.875
Subarea runoff =      3.220(CFS)
Total initial stream area =        0.730(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =    24.500(Ft.)
End of street segment elevation =    21.400(Ft.)
Length of street segment  =   525.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  16.500(Ft.)
Distance from crown to crossfall grade break  =  14.500(Ft.)
Slope from gutter to grade break (v/hz) =   0.010
Slope from grade break to crown (v/hz)  =   0.010
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     13.972(CFS)
Depth of flow =   0.491(Ft.), Average velocity =   3.125(Ft/s)
Note:  depth of flow exceeds top of street crown.
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  16.500(Ft.)
Flow velocity =   3.13(Ft/s)
Travel time =    2.80 min.     TC =    9.95  min.
 Adding area flow to street
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Rainfall intensity =      4.171(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.870
Subarea runoff =     21.450(CFS) for    6.070(Ac.)
Total runoff =     24.670(CFS)  Total area =        6.80(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Street flow at end of street =     24.670(CFS)
Half street flow at end of street =     24.670(CFS)
Depth of flow =   0.629(Ft.), Average velocity =   3.450(Ft/s)
```

```
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    6.43(Ft.)
Flow width (from curb towards crown)=  16.500(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      103.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =    16.400(Ft.)
Downstream point/station elevation =    15.210(Ft.)
Pipe length  =   238.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    24.670(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    24.670(CFS)
Normal flow depth in pipe =   21.26(In.)
Flow top width inside pipe =   27.26(In.)
Critical Depth =   20.32(In.)
Pipe flow velocity =      6.63(Ft/s)
Travel time through pipe =    0.60 min.
Time of concentration (TC) =    10.55 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      103.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Time of concentration =    10.55 min.
Rainfall intensity =      4.034(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.869
Subarea runoff =     10.234(CFS) for    3.160(Ac.)
Total runoff =     34.904(CFS)  Total area =        9.96(Ac.)
Area averaged Fm value =    0.140(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station        1.100
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =    15.210(Ft.)
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```
Downstream point/station elevation =    13.690(Ft.)
Pipe length  =   304.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    34.904(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =    34.904(CFS)
Normal flow depth in pipe =   25.26(In.)
Flow top width inside pipe =   27.96(In.)
Critical Depth =   23.59(In.)
Pipe flow velocity =      7.15(Ft/s)
Travel time through pipe =    0.71 min.
Time of concentration (TC) =    11.26 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station        1.100
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      9.960(Ac.)
Runoff from this stream =     34.904(CFS)
Time of concentration =   11.26 min.
Rainfall intensity =     3.886(In/Hr)
Area averaged loss rate (Fm) =    0.1400(In/Hr)
Area averaged Pervious ratio (Ap) = 0.3500


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      200.000 to Point/Station      201.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Initial subarea data:
Initial area flow distance =   157.000(Ft.)
Top (of initial area) elevation =    25.120(Ft.)
Bottom (of initial area) elevation =    23.900(Ft.)
Difference in elevation =     1.220(Ft.)
Slope =    0.00777  s(%)=       0.78
TC = k(0.360)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.187 min.
Rainfall intensity =      5.026(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.875
Subarea runoff =      2.814(CFS)
Total initial stream area =        0.640(Ac.)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      202.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =    23.900(Ft.)
End of street segment elevation =    21.400(Ft.)
Length of street segment  =   323.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  16.500(Ft.)
Distance from crown to crossfall grade break  =  14.500(Ft.)
Slope from gutter to grade break (v/hz) =   0.010
Slope from grade break to crown (v/hz)  =   0.010
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      5.443(CFS)
Depth of flow =   0.362(Ft.), Average velocity =   2.332(Ft/s)
Note:  depth of flow exceeds top of street crown.
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  16.500(Ft.)
Flow velocity =   2.33(Ft/s)
Travel time =    2.31 min.     TC =    9.50  min.
 Adding area flow to street
CONDOMINIUM subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 32.00
Pervious ratio(Ap) = 0.3500  Max loss rate(Fp)=     0.400(In/Hr)
Max Catchment Loss (Fm) =     0.140(In/Hr)
Rainfall intensity =      4.284(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.871
Subarea runoff =      5.205(CFS) for    1.510(Ac.)
Total runoff =      8.019(CFS)  Total area =        2.15(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Street flow at end of street =      8.019(CFS)
Half street flow at end of street =      8.019(CFS)
Depth of flow =   0.399(Ft.), Average velocity =   2.720(Ft/s)
Note:  depth of flow exceeds top of street crown.
Flow width (from curb towards crown)=  16.500(Ft.)
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      202.000 to Point/Station        1.100
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      2.150(Ac.)
Runoff from this stream =      8.019(CFS)
Time of concentration =    9.50 min.
Rainfall intensity =     4.284(In/Hr)
Area averaged loss rate (Fm) =    0.1400(In/Hr)
Area averaged Pervious ratio (Ap) = 0.3500
Summary of stream data:

Stream  Area  Flow rate      TC     Fm       Rainfall Intensity
 No.    (Ac.)   (CFS)       (min) (In/Hr)     (In/Hr)


1      9.96    34.904     11.26    0.140      3.886
2      2.15     8.019      9.50    0.140      4.284
Qmax(1) =
           1.000 *    1.000 *    34.904) +
           0.904 *    1.000 *     8.019) + =      42.153
Qmax(2) =
           1.106 *    0.844 *    34.904) +
           1.000 *    1.000 *     8.019) + =      40.591

Total of 2 streams to confluence:
Flow rates before confluence point:
      34.904       8.019
Maximum flow rates at confluence using above data:
       42.153       40.591
Area of streams before confluence:
        9.960        2.150
Effective area values after confluence:
       12.110       10.552
Results of confluence:
Total flow rate =     42.153(CFS)
Time of concentration =    11.257 min.
Effective stream area after confluence =     12.110(Ac.)
Study area average Pervious fraction(Ap) =  0.350
Study area average soil loss rate(Fm) =    0.140(In/Hr)
Study area total (this main stream) =      12.11(Ac.)
End of computations, total study area =           12.11 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.350
```

Area averaged SCS curve number (AMC 2) = 32.0

APPENDIX C
HYDRAULIC CALCULATIONS

C.1 Catch Basin Sizing

(To be provided during Final Engineering)

C.2 WSPG Calculations

(To be provided during Final Engineering)

C.3 Detention Calculations

Hydraulic Analysis Report

Project Data

Project Title: TTM 19263

Designer: C&V Consulting, Inc.

Project Date: Monday, July 8, 2024

Project Units: U.S. Customary Units

Notes:

Detention Basin Analysis: Detention Basin Analysis - Q100

Notes:

Storage Input Parameters

Storage Capacity: Known volume

Elevation ft	Volume acre-ft
0.00	0.00
1.00	0.09
2.00	0.19
3.00	0.28
4.00	0.38
5.00	0.47
6.00	0.57
7.00	0.66
8.00	0.76

Discharge Input Parameters

Known Discharge: Pump

Discharge cfs

0.00	**0.00**
1.00	8.90
2.00	8.90
3.00	8.90
4.00	8.90
5.00	8.90
6.00	8.90
7.00	8.90
8.00	8.90

Storage & Discharge Input Parameters

Elevation - Storage - Discharge

Elevation ft	Storage acre-ft	Discharge cfs
0.00	0.00	0.00
1.00	0.09	8.90
2.00	0.19	8.90
3.00	0.28	8.90
4.00	0.38	8.90
5.00	0.47	8.90
6.00	0.57	8.90
7.00	0.66	8.90
8.00	0.76	8.90

Detention Basin Input Parameters

Inflow Hydrograph

Peak Inflow Discharge: 42.540 cfs, Time to Peak: 970.00 (min), Total Inflow Volume: 185884.50 ft^3

Time (min)	Discharge cfs
5.00	0.06
10.00	0.36
15.00	0.64
20.00	0.72
25.00	0.74
30.00	0.75
35.00	0.75
40.00	0.75
45.00	0.75
50.00	0.76
55.00	0.76
60.00	0.76
65.00	0.76
70.00	0.77
75.00	0.77
80.00	0.77
85.00	0.77
90.00	0.78
95.00	0.78
100.00	0.78
105.00	0.79
110.00	0.79
115.00	0.79
120.00	0.79
125.00	0.80
130.00	0.80
135.00	0.80
140.00	0.81

145.00	0.81
150.00	0.81
155.00	0.81
160.00	0.82
165.00	0.82
170.00	0.82
175.00	0.83
180.00	0.83
185.00	0.83
190.00	0.84
195.00	0.84
200.00	0.84
205.00	0.85
210.00	0.85
215.00	0.85
220.00	0.86
225.00	0.86
230.00	0.87
235.00	0.87
240.00	0.87
245.00	0.88
250.00	0.88
255.00	0.88
260.00	0.89
265.00	0.89
270.00	0.90
275.00	0.90
280.00	0.90
285.00	0.91
290.00	0.91
295.00	0.92
300.00	0.92
305.00	0.93
310.00	0.93
315.00	0.93
320.00	0.94
325.00	0.94
330.00	0.95
335.00	0.95
340.00	0.96
345.00	0.96
350.00	0.97
355.00	0.97
360.00	0.98
365.00	0.98
370.00	0.99
375.00	0.99
380.00	1.00
385.00	1.00
390.00	1.01

395.00	1.01
400.00	1.02
405.00	1.02
410.00	1.03
415.00	1.04
420.00	1.04
425.00	1.05
430.00	1.05
435.00	1.06
440.00	1.07
445.00	1.07
450.00	1.08
455.00	1.09
460.00	1.09
465.00	1.10
470.00	1.11
475.00	1.11
480.00	1.12
485.00	1.13
490.00	1.13
495.00	1.14
500.00	1.15
505.00	1.16
510.00	1.17
515.00	1.17
520.00	1.18
525.00	1.19
530.00	1.20
535.00	1.21
540.00	1.22
545.00	1.22
550.00	1.23
555.00	1.24
560.00	1.25
565.00	1.26
570.00	1.27
575.00	1.28
580.00	1.29
585.00	1.30
590.00	1.31
595.00	1.32
600.00	1.34
605.00	1.35
610.00	1.36
615.00	1.37
620.00	1.38
625.00	1.39
630.00	1.41
635.00	1.42
640.00	1.43

645.00	1.45
650.00	1.46
655.00	1.48
660.00	1.49
665.00	1.51
670.00	1.52
675.00	1.54
680.00	1.55
685.00	1.57
690.00	1.59
695.00	1.61
700.00	1.63
705.00	1.64
710.00	1.66
715.00	1.68
720.00	1.70
725.00	1.76
730.00	1.97
735.00	2.16
740.00	2.24
745.00	2.27
750.00	2.30
755.00	2.33
760.00	2.36
765.00	2.39
770.00	2.42
775.00	2.45
780.00	2.49
785.00	2.52
790.00	2.56
795.00	2.60
800.00	2.64
805.00	2.68
810.00	2.72
815.00	2.77
820.00	2.82
825.00	2.87
830.00	2.92
835.00	2.97
840.00	3.04
845.00	3.10
850.00	3.18
855.00	3.25
860.00	3.33
865.00	3.41
870.00	3.50
875.00	3.60
880.00	3.70
885.00	3.82
890.00	3.99

895.00	4.17
900.00	4.39
905.00	4.62
910.00	4.90
915.00	5.19
920.00	5.55
925.00	5.86
930.00	5.92
935.00	6.08
940.00	6.69
945.00	7.56
950.00	8.85
955.00	10.71
960.00	14.26
965.00	23.26
970.00	42.54
975.00	37.19
980.00	17.67
985.00	9.58
990.00	7.41
995.00	6.08
1000.00	5.34
1005.00	4.74
1010.00	4.27
1015.00	3.91
1020.00	3.65
1025.00	3.45
1030.00	3.28
1035.00	3.13
1040.00	3.00
1045.00	2.89
1050.00	2.78
1055.00	2.69
1060.00	2.61
1065.00	2.53
1070.00	2.46
1075.00	2.40
1080.00	2.34
1085.00	2.25
1090.00	2.01
1095.00	1.79
1100.00	1.70
1105.00	1.65
1110.00	1.61
1115.00	1.58
1120.00	1.54
1125.00	1.51
1130.00	1.48
1135.00	1.45
1140.00	1.43

1145.00	1.40
1150.00	1.37
1155.00	1.35
1160.00	1.33
1165.00	1.31
1170.00	1.29
1175.00	1.27
1180.00	1.25
1185.00	1.23
1190.00	1.21
1195.00	1.19
1200.00	1.18
1205.00	1.16
1210.00	1.14
1215.00	1.13
1220.00	1.12
1225.00	1.10
1230.00	1.09
1235.00	1.08
1240.00	1.06
1245.00	1.05
1250.00	1.04
1255.00	1.03
1260.00	1.02
1265.00	1.00
1270.00	0.99
1275.00	0.98
1280.00	0.97
1285.00	0.96
1290.00	0.95
1295.00	0.94
1300.00	0.94
1305.00	0.93
1310.00	0.92
1315.00	0.91
1320.00	0.90
1325.00	0.89
1330.00	0.89
1335.00	0.88
1340.00	0.87
1345.00	0.86
1350.00	0.86
1355.00	0.85
1360.00	0.84
1365.00	0.84
1370.00	0.83
1375.00	0.82
1380.00	0.82
1385.00	0.81
1390.00	0.80

1395.00	0.80
1400.00	0.79
1405.00	0.79
1410.00	0.78
1415.00	0.77
1420.00	0.77
1425.00	0.76
1430.00	0.76
1435.00	0.75
1440.00	0.75
1445.00	0.69
1450.00	0.38
1455.00	0.10
1460.00	0.02
1465.00	0.01

Initial Storage = 0.0000 acre-ft

Detention Basin Result Parameters

Routed Hydrograph

Peak Outflow Discharge: 8.900 cfs, Time to Peak: 960.00 (min), Total Outflow Volume: 185892.73 ft^3

Time min	Discharge cfs	Storage acre-ft
0.00	0.00	0.000000
10.00	0.10	0.001770
15.00	0.30	0.004129
20.00	0.49	0.005747
25.00	0.61	0.006676
30.00	0.67	0.007202
35.00	0.71	0.007542
40.00	0.73	0.007745
45.00	0.74	0.007848
50.00	0.75	0.007935
55.00	0.75	0.007992
60.00	0.76	0.008026
65.00	0.76	0.008043
70.00	0.76	0.008101
75.00	0.77	0.008131
80.00	0.77	0.008146
85.00	0.77	0.008155
90.00	0.77	0.008211
95.00	0.78	0.008240
100.00	0.78	0.008254
105.00	0.78	0.008314
110.00	0.79	0.008344
115.00	0.79	0.008359
120.00	0.79	0.008367
125.00	0.79	0.008423

130.00	0.80	0.008452
135.00	0.80	0.008466
140.00	0.80	0.008526
145.00	0.81	0.008556
150.00	0.81	0.008572
155.00	0.81	0.008579
160.00	0.81	0.008635
165.00	0.82	0.008664
170.00	0.82	0.008679
175.00	0.82	0.008738
180.00	0.83	0.008768
185.00	0.83	0.008784
190.00	0.83	0.008844
195.00	0.84	0.008874
200.00	0.84	0.008890
205.00	0.84	0.008950
210.00	0.85	0.008980
215.00	0.85	0.008996
220.00	0.85	0.009056
225.00	0.86	0.009086
230.00	0.86	0.009154
235.00	0.86	0.009188
240.00	0.87	0.009206
245.00	0.87	0.009267
250.00	0.88	0.009298
255.00	0.88	0.009314
260.00	0.88	0.009374
265.00	0.89	0.009404
270.00	0.89	0.009472
275.00	0.89	0.009506
280.00	0.90	0.009524
285.00	0.90	0.009585
290.00	0.91	0.009616
295.00	0.91	0.009684
300.00	0.91	0.009718
305.00	0.92	0.009788
310.00	0.92	0.009824
315.00	0.93	0.009842
320.00	0.93	0.009903
325.00	0.94	0.009934
330.00	0.94	0.010002
335.00	0.94	0.010037
340.00	0.95	0.010106
345.00	0.95	0.010142
350.00	0.96	0.010212
355.00	0.96	0.010248
360.00	0.97	0.010318
365.00	0.97	0.010354
370.00	0.98	0.010424
375.00	0.98	0.010460

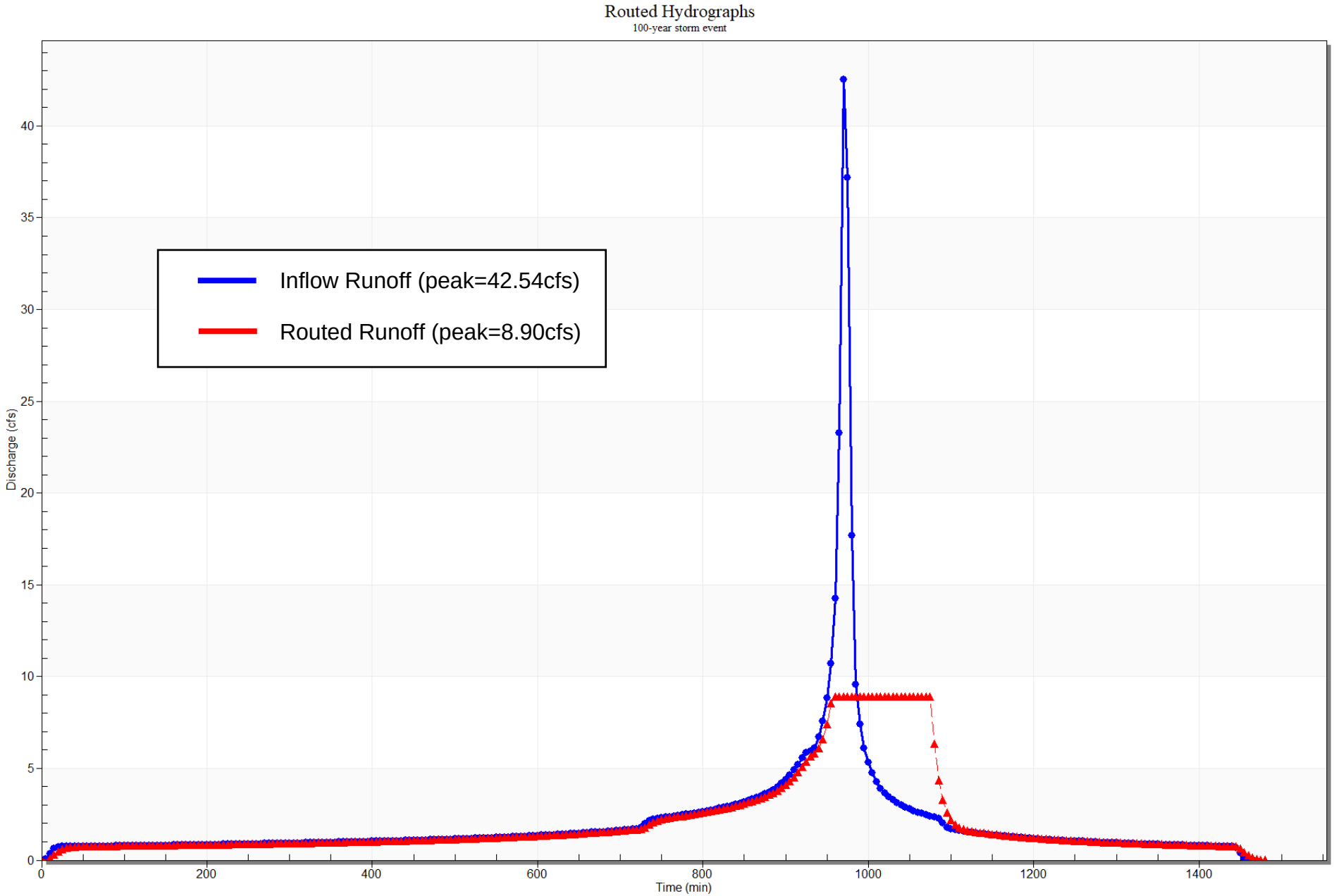
380.00	0.99	0.010530
385.00	0.99	0.010566
390.00	1.00	0.010636
395.00	1.00	0.010672
400.00	1.01	0.010742
405.00	1.01	0.010778
410.00	1.02	0.010848
415.00	1.03	0.010936
420.00	1.03	0.010981
425.00	1.04	0.011055
430.00	1.04	0.011094
435.00	1.05	0.011165
440.00	1.06	0.011253
445.00	1.06	0.011298
450.00	1.07	0.011373
455.00	1.08	0.011464
460.00	1.08	0.011510
465.00	1.09	0.011585
470.00	1.10	0.011676
475.00	1.10	0.011722
480.00	1.11	0.011797
485.00	1.12	0.011888
490.00	1.12	0.011934
495.00	1.13	0.012009
500.00	1.14	0.012100
505.00	1.15	0.012198
510.00	1.16	0.012300
515.00	1.16	0.012352
520.00	1.17	0.012430
525.00	1.18	0.012522
530.00	1.19	0.012621
535.00	1.20	0.012724
540.00	1.20	0.012828
545.00	1.21	0.012881
550.00	1.22	0.012960
555.00	1.23	0.013053
560.00	1.24	0.013152
565.00	1.25	0.013254
570.00	1.25	0.013358
575.00	1.26	0.013463
580.00	1.27	0.013569
585.00	1.28	0.013675
590.00	1.29	0.013781
595.00	1.30	0.013887
600.00	1.32	0.014045
605.00	1.33	0.014177
610.00	1.34	0.014297
615.00	1.35	0.014410
620.00	1.36	0.014519
625.00	1.37	0.014627

630.00	1.39	0.014786
635.00	1.40	0.014919
640.00	1.41	0.015039
645.00	1.43	0.015204
650.00	1.44	0.015340
655.00	1.45	0.015514
660.00	1.47	0.015654
665.00	1.48	0.015830
670.00	1.50	0.015971
675.00	1.51	0.016147
680.00	1.53	0.016289
685.00	1.54	0.016465
690.00	1.56	0.016659
695.00	1.58	0.016862
700.00	1.60	0.017069
705.00	1.62	0.017227
710.00	1.63	0.017412
715.00	1.65	0.017610
720.00	1.67	0.017814
725.00	1.70	0.018231
730.00	1.78	0.019535
735.00	1.92	0.021188
740.00	2.06	0.022446
745.00	2.15	0.023244
750.00	2.22	0.023806
755.00	2.27	0.024249
760.00	2.30	0.024631
765.00	2.34	0.024982
770.00	2.37	0.025316
775.00	2.40	0.025643
780.00	2.44	0.026017
785.00	2.47	0.026364
790.00	2.50	0.026749
795.00	2.54	0.027153
800.00	2.58	0.027567
805.00	2.62	0.027986
810.00	2.66	0.028408
815.00	2.70	0.028883
820.00	2.75	0.029385
825.00	2.80	0.029901
830.00	2.84	0.030424
835.00	2.89	0.030950
840.00	2.95	0.031583
845.00	3.01	0.032217
850.00	3.07	0.032957
855.00	3.14	0.033697
860.00	3.21	0.034491
865.00	3.29	0.035312
870.00	3.37	0.036198
875.00	3.46	0.037170

880.00	3.55	0.038185
885.00	3.65	0.039327
890.00	3.78	0.040792
895.00	3.93	0.042476
900.00	4.10	0.044478
905.00	4.30	0.046694
910.00	4.52	0.049280
915.00	4.78	0.052106
920.00	5.07	0.055418
925.00	5.38	0.058719
930.00	5.63	0.060713
935.00	5.81	0.062562
940.00	6.09	0.066676
945.00	6.60	0.073297
950.00	7.39	0.083379
955.00	8.56	0.098190
960.00	8.90	0.755600
965.00	8.90	0.854498
970.00	8.90	1.086177
975.00	8.90	1.281011
980.00	8.90	1.341410
985.00	8.90	1.346094
990.00	8.90	1.335832
995.00	8.90	1.316410
1000.00	8.90	1.291893
1005.00	8.90	1.263243
1010.00	8.90	1.231356
1015.00	8.90	1.196989
1020.00	8.90	1.160833
1025.00	8.90	1.123298
1030.00	8.90	1.084593
1035.00	8.90	1.044855
1040.00	8.90	1.004222
1045.00	8.90	0.962831
1050.00	8.90	0.920682
1055.00	8.90	0.877914
1060.00	8.90	0.834594
1065.00	8.90	0.790724
1070.00	8.90	0.755600
1075.00	8.90	0.755600
1080.00	6.35	0.728006
1085.00	4.36	0.713470
1090.00	3.27	0.704812
1095.00	2.60	0.699253
1100.00	2.18	0.695952
1105.00	1.93	0.694008
1110.00	1.78	0.692810
1115.00	1.69	0.692043
1120.00	1.63	0.691444
1125.00	1.58	0.690982

1130.00	1.54	0.690591
1135.00	1.50	0.690236
1140.00	1.47	0.689950
1145.00	1.44	0.689649
1150.00	1.41	0.689339
1155.00	1.39	0.689078
1160.00	1.36	0.688840
1165.00	1.34	0.688615
1170.00	1.32	0.688396
1175.00	1.30	0.688181
1180.00	1.28	0.687967
1185.00	1.26	0.687754
1190.00	1.24	0.687541
1195.00	1.22	0.687329
1200.00	1.20	0.687169
1205.00	1.19	0.686983
1210.00	1.17	0.686784
1215.00	1.15	0.686631
1220.00	1.14	0.686501
1225.00	1.12	0.686331
1230.00	1.11	0.686192
1235.00	1.10	0.686069
1240.00	1.08	0.685903
1245.00	1.07	0.685766
1250.00	1.06	0.685644
1255.00	1.05	0.685530
1260.00	1.04	0.685420
1265.00	1.02	0.685259
1270.00	1.01	0.685126
1275.00	1.00	0.685006
1280.00	0.99	0.684893
1285.00	0.98	0.684783
1290.00	0.97	0.684675
1295.00	0.96	0.684568
1300.00	0.95	0.684513
1305.00	0.94	0.684433
1310.00	0.93	0.684341
1315.00	0.92	0.684242
1320.00	0.91	0.684139
1325.00	0.91	0.684035
1330.00	0.90	0.683981
1335.00	0.89	0.683902
1340.00	0.88	0.683810
1345.00	0.87	0.683711
1350.00	0.87	0.683661
1355.00	0.86	0.683583
1360.00	0.85	0.683491
1365.00	0.85	0.683444
1370.00	0.84	0.683369
1375.00	0.83	0.683278

1380.00	0.83	0.683232
1385.00	0.82	0.683156
1390.00	0.81	0.683066
1395.00	0.81	0.683020
1400.00	0.80	0.682944
1405.00	0.80	0.682906
1410.00	0.79	0.682834
1415.00	0.78	0.682745
1420.00	0.78	0.682700
1425.00	0.77	0.682625
1430.00	0.77	0.682587
1435.00	0.76	0.682516
1440.00	0.76	0.682479
1445.00	0.74	0.682149
1450.00	0.64	0.680368
1455.00	0.44	0.678005
1460.00	0.26	0.676384
1465.00	0.14	0.675506
1470.00	0.07	0.675006
1475.00	0.04	0.674751
1480.00	0.02	0.674621


Routed Hydrographs
100-year storm event
Inflow Runoff (peak=42.54cfs)
Routed Runoff (peak=8.90cfs)
Discharge (cfs)
Time (min)
0
5
10
15
20
25
30
35
40
0
200
400
600
800
1000
1200
1400

C.4 Outlet Pipe Orifice Calculations

Submerged Outlet Pipe Analyzed as Orifice

Orifice 1 diameter =	24 IN
Invert elevation of orifice =	19.7 FT
Tailwater EGL =	21.7 FT

Q = flow [CFS] = KA(2gh)^0.5

K = orifice flow coefficient =	0.62
A = cross sectional area of orifice [SF] = 3.14 * r^2	3.140 SF
g = gravitational constant =	32.2 [FT/S^2]

h = hydraulic head [FT] = Headwater elev - Tailwater water surface elevation

Total System Outflow Table

Headwater Surface Elevation [FT]	Orifice Outflow [CFS]
21.7	0.00
22.2	11.05
22.7	15.62
23.2	19.13

C.5 Existing Lampson Avenue Street Capacity Calculations

Channel Report

Q100 Street Flow - SECTION B-B

Gutter

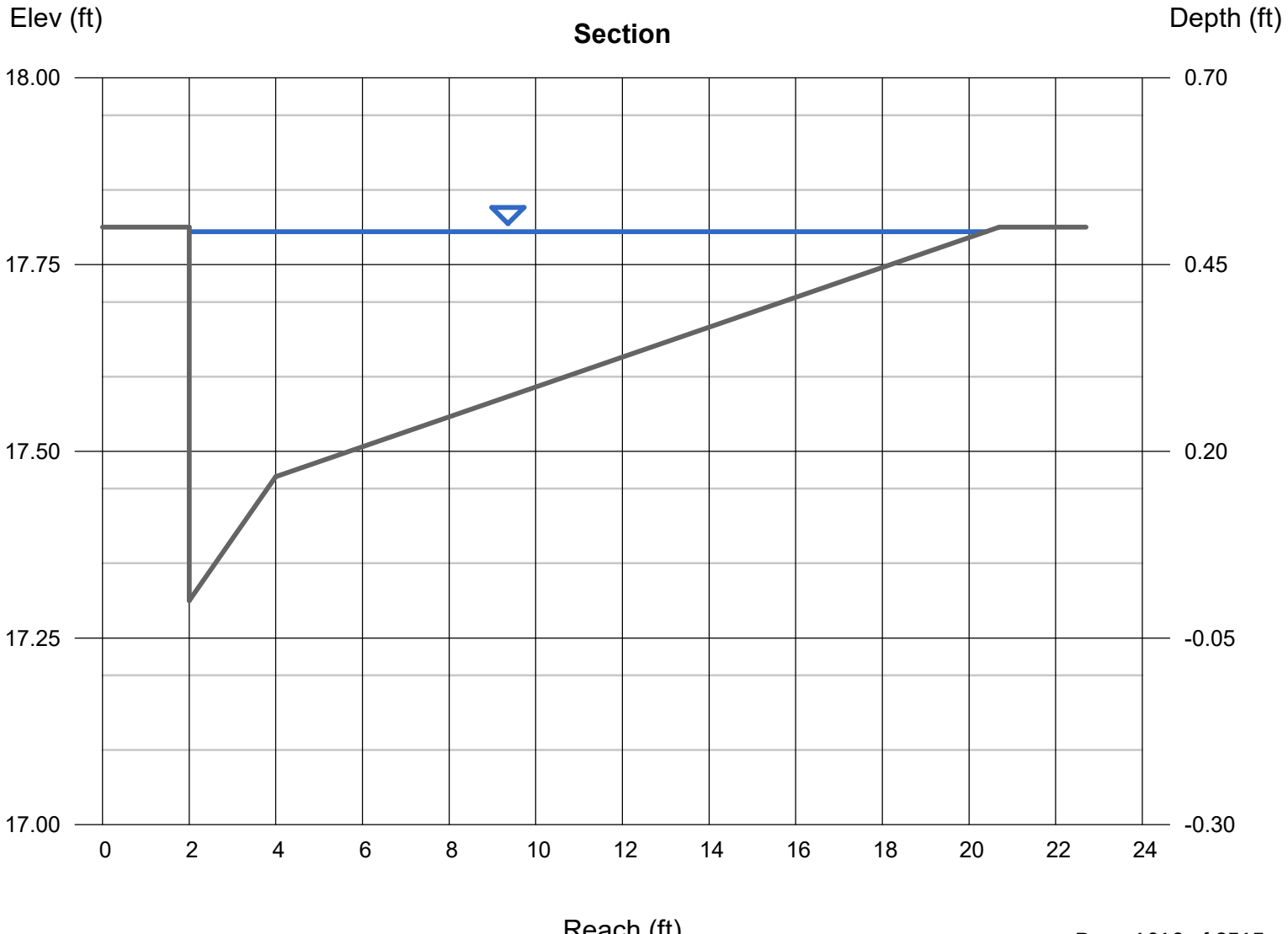
Cross Sl, Sx (ft/ft)	= 0.020
Cross Sl, Sw (ft/ft)	= 0.083
Gutter Width (ft)	= 2.00
Invert Elev (ft)	= 17.30
Slope (%)	= 0.20
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 6.26

Highlighted

Depth (ft)	= 0.49
Q (cfs)	= 6.260
Area (sqft)	= 3.51
Velocity (ft/s)	= 1.78
Wetted Perim (ft)	= 18.90
Crit Depth, Yc (ft)	= 0.45
Spread Width (ft)	= 18.40
EGL (ft)	= 0.54



Inlet Report

Offsite Inlet

Curb Inlet

Location	= Sag
Curb Length (ft)	= 4.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

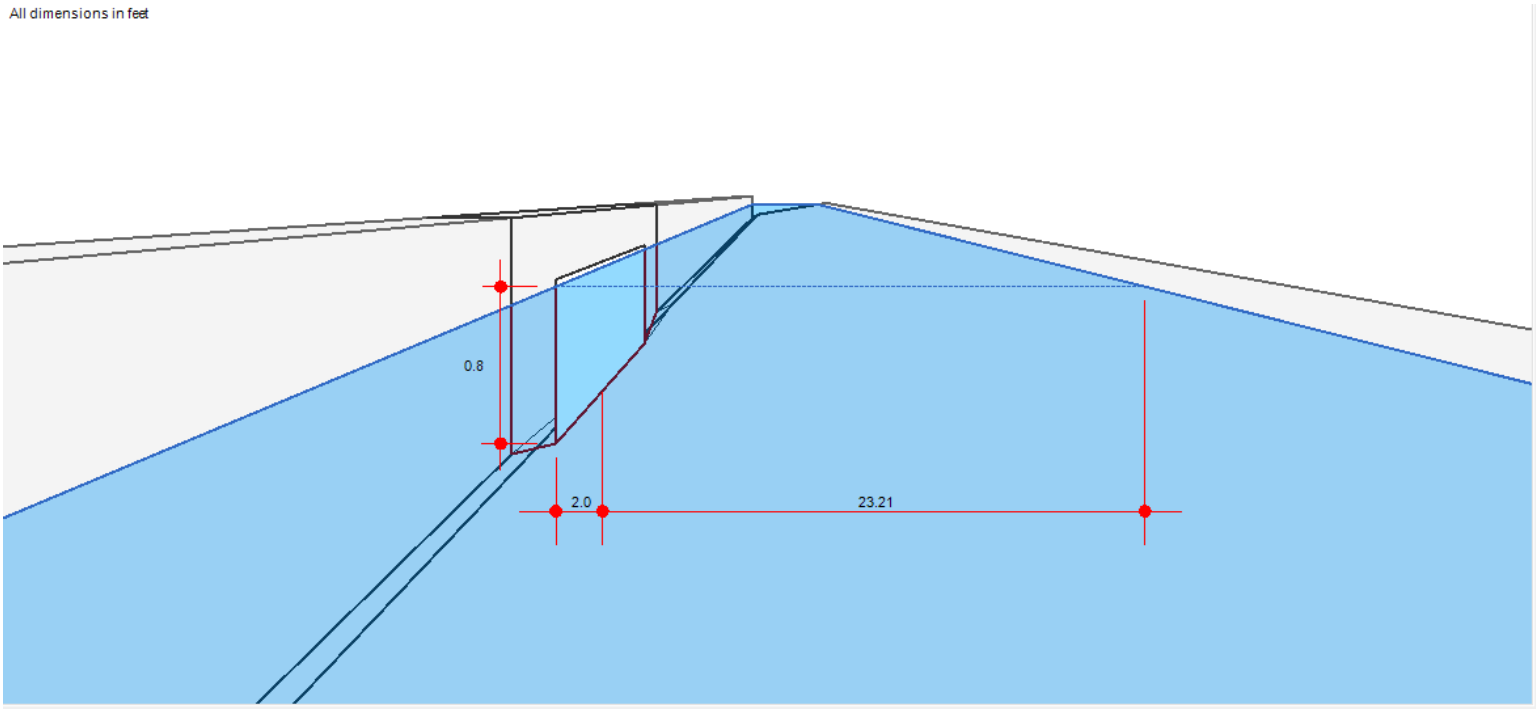
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 2.00
Gutter Width (ft)	= 2.00
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Known Q
Q (cfs)	= 6.26

Highlighted

Q Total (cfs)	= 6.26
Q Capt (cfs)	= 6.26
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 9.56
Efficiency (%)	= 100
Gutter Spread (ft)	= 25.21
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



Channel Report

Q2 Street Flow Depth on North Side of Lampson Ave (Per X4+X5) Section A-A

User-defined

Invert Elev (ft)	= 20.61
Slope (%)	= 0.20
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1.55

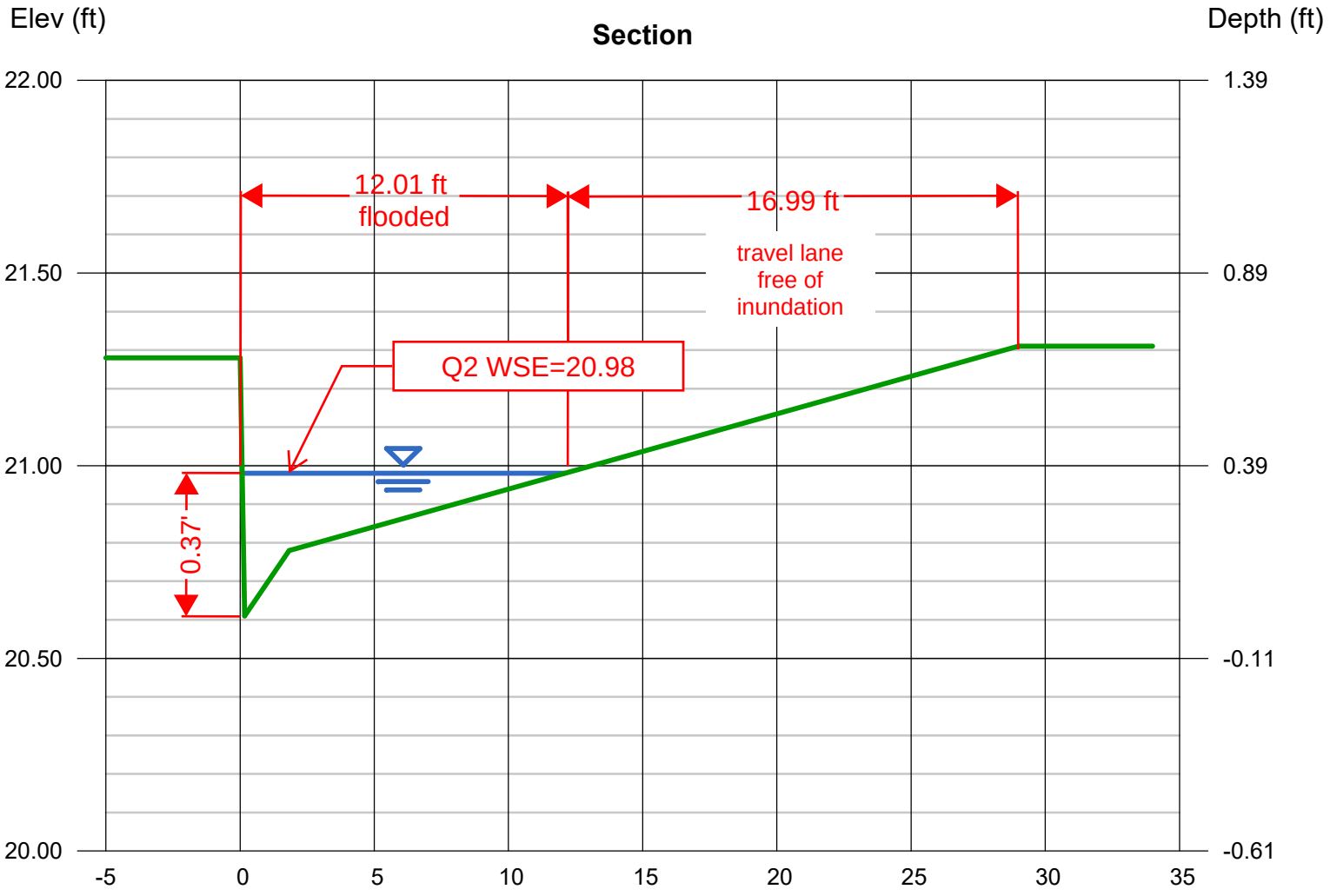
(Sta, El, n)-(Sta, El, n)...

(0.00, 21.28)-(0.17, 20.61, 0.015)-(1.83, 20.78, 0.015)-(29.00, 21.31, 0.015)

Highlighted

Depth (ft)	= 0.37
Q (cfs)	= 1.550
Area (sqft)	= 1.52
Velocity (ft/s)	= 1.02
Wetted Perim (ft)	= 12.31
Crit Depth, Yc (ft)	= 0.31
Top Width (ft)	= 12.01
EGL (ft)	= 0.39

Per DMA X4 + X5 contributing flows, street flooded 12.01 ft, leaving 16.99 ft travel lane free of flooding.



Channel Report

Q25 Street Flow Depth on North Side of Lampson Ave (Per X4+X5) Section A-A

User-defined

Invert Elev (ft)	= 20.61
Slope (%)	= 0.20
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 3.84

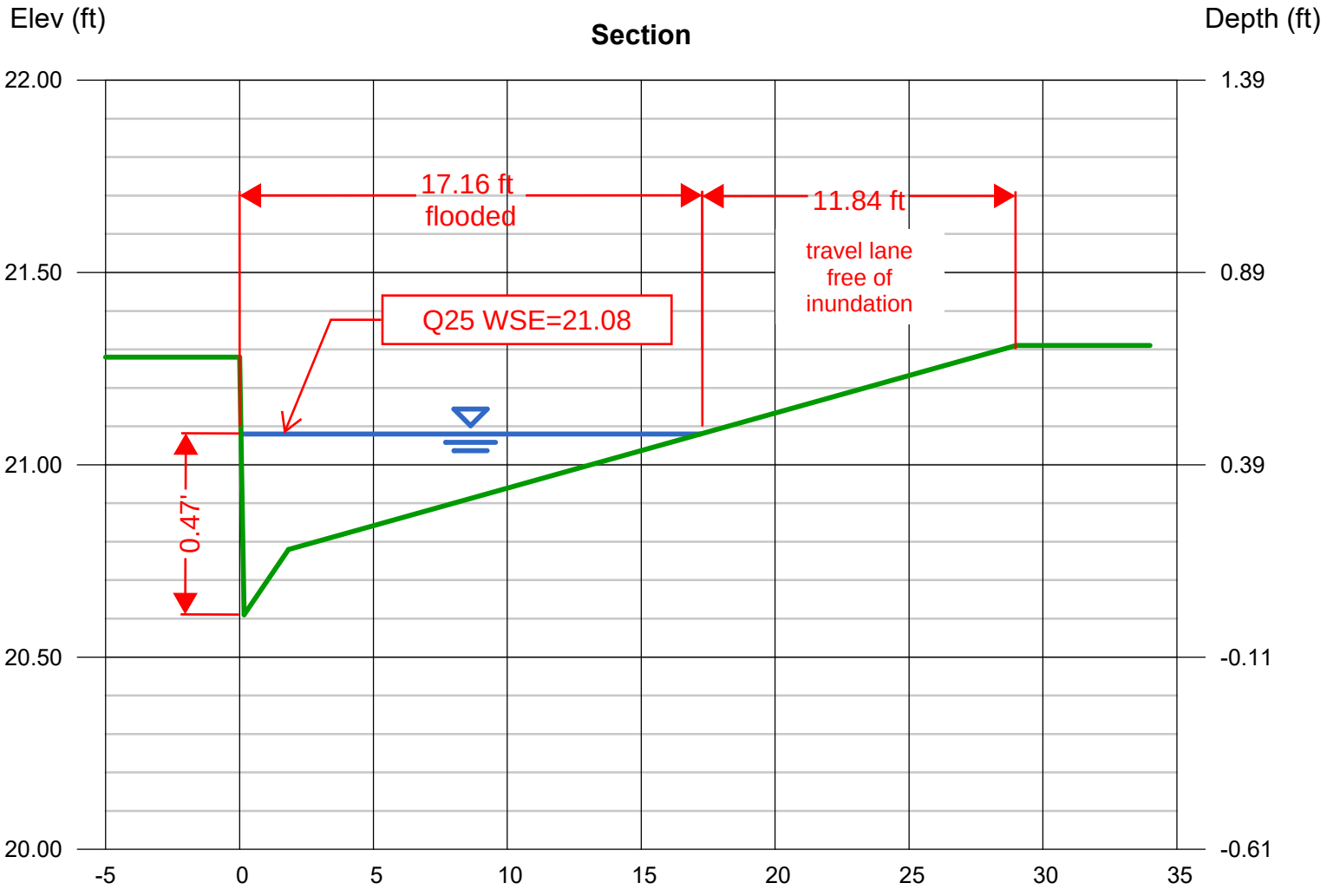
(Sta, El, n)-(Sta, El, n)...

(0.00, 21.28)-(0.17, 20.61, 0.015)-(1.83, 20.78, 0.015)-(29.00, 21.31, 0.015)

Highlighted

Depth (ft)	= 0.47
Q (cfs)	= 3.840
Area (sqft)	= 2.97
Velocity (ft/s)	= 1.29
Wetted Perim (ft)	= 17.54
Crit Depth, Yc (ft)	= 0.40
Top Width (ft)	= 17.16
EGL (ft)	= 0.50

Per DMA X4 + X5 contributing flows, street flooded 17.16 ft, leaving 11.84 ft travel lane free of flooding.



Channel Report

Q100 Street Flow Depth on North Side of Lampson Ave (Per X4+X5) Section A-A

User-defined

Invert Elev (ft)	= 20.61
Slope (%)	= 0.20
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 5.03

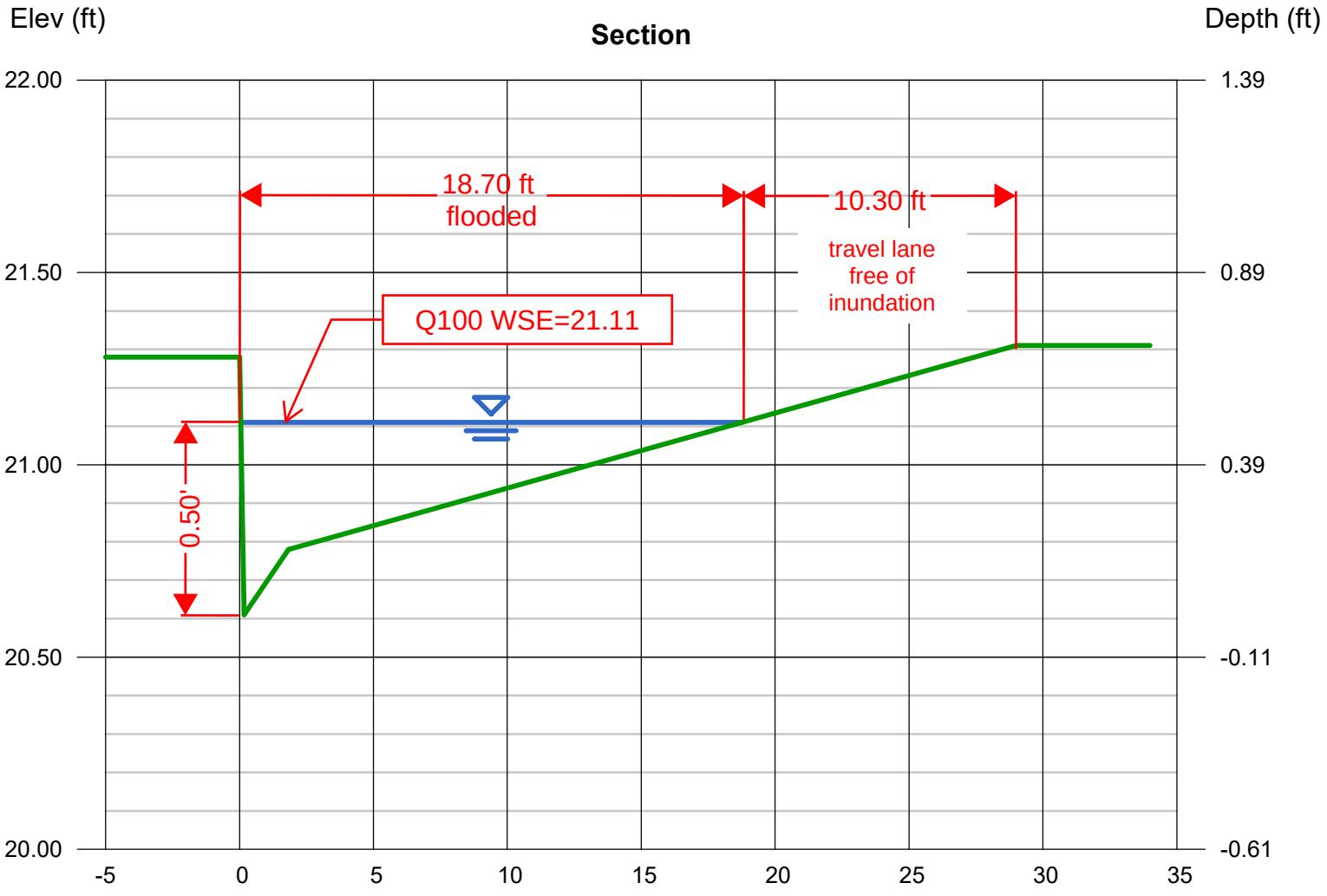
(Sta, El, n)-(Sta, El, n)...

(0.00, 21.28)-(0.17, 20.61, 0.015)-(1.83, 20.78, 0.015)-(29.00, 21.31, 0.015)

Highlighted

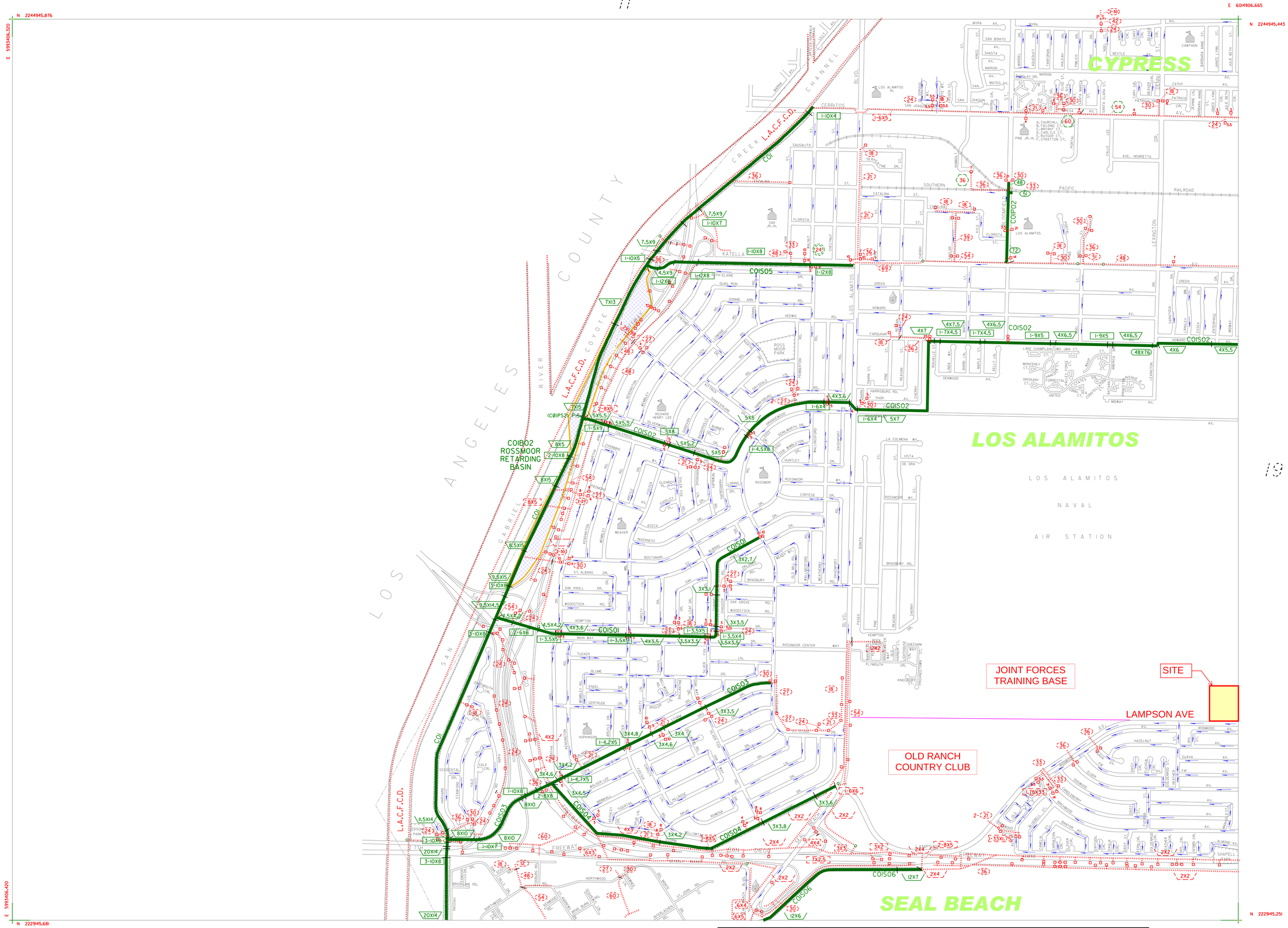
Depth (ft)	= 0.50
Q (cfs)	= 5.030
Area (sqft)	= 3.51
Velocity (ft/s)	= 1.43
Wetted Perim (ft)	= 19.10
Crit Depth, Yc (ft)	= 0.43
Top Width (ft)	= 18.70
EGL (ft)	= 0.53

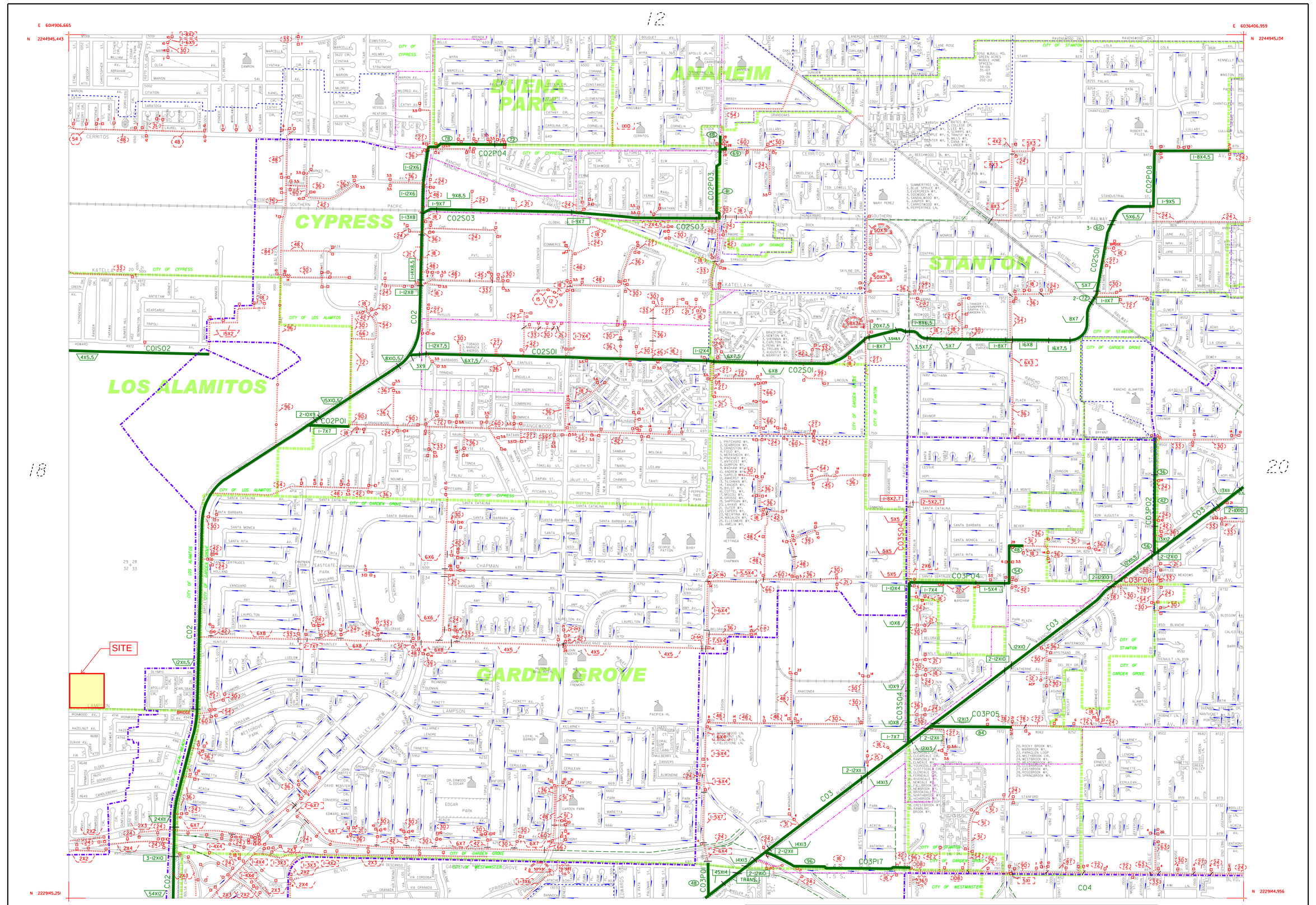
Per DMA X4 + X5 contributing flows, street flooded 18.70 ft, leaving 10.30 ft travel lane free of flooding.



APPENDIX D
REFERENCE MATERIALS

D.1 - Orange County Drainage Facilities Maps


N 2244945.876
E 5993406.320
N 2244945.443
E 6014906.665
N 2229145.681
E 5993406.420
N 2229145.251
E 6014906.805
CYPRESS
LOS ALAMITOS
SEAL BEACH
LOS ALAMITOS NAVAL AIR STATION
JOINT FORCES TRAINING BASE
OLD RANCH COUNTRY CLUB
SITE
LAMPSON AVE
L.A.C.F.C.D.
ANGELES COUNTY
SAN GABRIEL RIVER
COYOTE CREEK CHANNEL
COI
COIPO2
COISO1
COISO2
COISO3
COISO4
COISO5
COISO6
COIBO2 ROSSMOOR RETARDING BASIN
(COIPS2) P-5
FREEWAY
RAILROAD
LOS ALAMITOS BLVD.
LEXINGTON
DOMINGUEZ
PACIFIC
SOUTHERN
PATRICIA
CATHAY
CATALINA
SAUSALITO
FERRITOS
KATELLA
FARQUHAR
HOWARD
GREEN
CHERRY
FLORISTA
ROSSMOOR
BOSTONIAN
INVERNESS
ACECA
WEAVER
ST. ALBANS
BRADBURY
NORTHWOOD
HAMPTON
PLYMOUTH
CHILTHAM
ROSSMOOR CENTER
LA COLMENA
VISTA DE ORA
HARRISBURG
THOR
ROSE MOORE PARK
RICHARD HENRY LEE
HOPKINSON
ROSSMOOR
I-10X4
I-6X5
I-10X7
I-10X5
I-10X8
I-12X8
I-9X5
I-7X4.5
I-6X4
I-5X9
I-4.5X8
I-3.5X5
I-3.5X4
I-4.2X5
I-4.7X5
I-6X6
I-7.6X3.1
7.5X9
4.5X9
7X13
7X15
2-8X5
5X5.5
5X8
8X5
2-10X8
8.5X15
3-10X8
9.5X14.5
4.5X4.2
2-6X6
4X3.6
3X3.5
3X4.8
3X4
3X4.6
3X4.2
3X4.5
4X3
8X10
11.5X14
20X14
4X7
4X7.5
4X6.5
4X6
4X5.5
48X76
5X7
3X2.7
3X3.1
3X3.6
3X3.8
2X4
2X2
7X2.5
12X7
12X6
6X4
6X5
2-8X5
2-13X11.5
0 200 400 600 800
FEET
N
NOTICE
The drainage information has been prepared for information purposes only. The location, ownership, facility information and limits have been determined from available information provided by public agencies, but may not be exact, accurate, or up-to-date. The user of this information is responsible for verifying exact location, ownership, accuracy, and the regional versus local character of drainage facilities.
Additional information may be obtained from public plans and recorded deeds. Facility designations included with this information are for convenience only and are not controlling or intended to imply ownership by the County or the Orange County Flood Control District (OCFCD). The information is being provided as a courtesy and neither the County of Orange nor OCFCD assume any liabilities for inaccuracy of the information.
To notify OC Public Works Flood Control Section of additions or corrections, please contact Sal Gutierrez at (714) 834-5396 or by email at sal.gutierrez@ocpw.ocgov.com
ORANGE COUNTY FLOOD CONTROL DISTRICT
BASE MAP
OF DRAINAGE FACILITIES
IN ORANGE COUNTY
REVISION
DATE
SHEET NO.
DWG. NO.
S. GUTIERREZ
JUN 9, 2008
18
MAPS-113-3
Channel Drainage Area Boundary
Major Sub-Area Drainage Boundary
Minor Sub-Area Drainage Boundary
Existing O.C.F.C.D. Facility
Existing Local Facility
Existing Retarding Basin or Reservoir
Natural Watercourse
City Limits
Greenbelt
Pump Station
Catch Basin (length in feet)
Drop Inlet or Other Entry
OCFCD Basins or Reservoirs
Ownership (If other than City or County): Private = P State = S Federal = F
EXISTING FACILITIES
O.C.F.C.D.
LOCAL
Earth Trapezoidal Channel (base width by height in feet)
Reinforced Concrete Trapezoidal Channel (base width by height in feet)
Reinforced Concrete Rectangular Channel (base width by height in feet)
Reinforced Concrete Box (RCB) (number of barrels-span by height in feet)
Reinforced Concrete Pipe (RCP) (diameter in inches)
Metal Sheet Channel (MSC) (Base width by pile height in feet/Sheet pile total length)
Corrugated Metal Pipe (CMP) (diameter in inches)
Concrete Pipe (diameter in inches)
Concrete Oval Pipe (width by height in inches)
Steel Pipe (diameter in inches)
Reinforced Concrete Arch (base span by height in inches)
Corrugated Metal Arch (base span by height in inches)



NOTICE

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0 200 400 600 800 FEET

ORANGE COUNTY FLOOD CONTROL DISTRICT

BASE MAP OF DRAINAGE FACILITIES IN ORANGE COUNTY

REVISION	DATE	SHEET NO.	DWG. NO.
S. GUTIERREZ	JAN 23,2012	19	MAPS-113-3

- Channel Drainage Area Boundary
- Major Sub-Area Drainage Boundary
- Minor Sub-Area Drainage Boundary
- Existing O.C.F.C.D. Facility
- Existing Local Facility
- Existing Retarding Basin or Reservoir
- Natural Watercourse
- City Limits
- G G Greenbelt
- P.S. P.S. Pump Station
- Catch Basin (length in feet)
- Drop Inlet or Other Entry
- OCFCD Basins or Reservoirs

Ownership (If other than City or County): Private = P State = S Federal = F

EXISTING FACILITIES

O.C.F.C.D.	LOCAL	
		Earth Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Rectangular Channel (base width by height in feet)
		Reinforced Concrete Box (RCB) (number of barrels-span by height in feet)
		Reinforced Concrete Pipe (RCP) (diameter in inches)
		Metal Sheet Channel (MSC) (Base width by pile height in feet.Sheet pile total length)
		Corrugated Metal Pipe (CMP) (diameter in inches)
		Concrete Pipe (diameter in inches)
		Concrete Oval Pipe (width by height in inches)
		Steel Pipe (diameter in inches)
		Reinforced Concrete Arch (base span by height in inches)
		Corrugated Metal Arch (base span by height in inches)

E 5993406.420
N 2229145.681

E 6014906.805
N 2229145.251

L.A.C.F.C.D.

LOS ANGELES COUNTY

COI

COISO6

20XI4

20XI3
BRIDGES

12X6

12X7

12X7.5

2-8X6.5

3-8X4

12X9.5

2-12X7

2-10X7

7X9.5

3-12X3

32XI3

LOS ALAMITOS
PUMPING STATION
COIPSI

LOS ALAMITOS
RETARDING BASIN
COIBOI

WESTMINSTER BLVD.

U.S. GOVERNMENT RAILROAD

1-2XII.5

3X3.7

4X5

U.S. NAVAL WEAPONS STATION

SEAL BEACH

L.A.C.F.C.D.

2-6X3

14X22 ARCH

5XI.5

4XI

2 2.22XI4

COOPO2

COOPSI

PACIFIC OCEAN

ANAHEIM BAY

SLOUGH

94XI2

94XII

94XII.5

CO2

94XI3

N 2213345.578
E 5993406.413

N 2213345.157
E 6014906.821

N

0 200 400 600 800
FEET

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To notify the Resources & Development Management Department (RDMD) of additions or corrections, please contact Sal Gutierrez at (714) 834-5396 or by email at sal.gutierrez@rdmd.ocgov.com

ORANGE COUNTY FLOOD CONTROL DISTRICT

BASE MAP OF DRAINAGE FACILITIES IN ORANGE COUNTY

REVISION	DATE	SHEET NO.	DWG. NO.
S. GUTIERREZ	MAR. 7, 2007	26	MAPS-113-3

- Channel Drainage Area Boundary
- Major Sub-Area Drainage Boundary
- Minor Sub-Area Drainage Boundary
- Existing O.C.F.C.D. Facility
- Existing Local Facility
- Existing Retarding Basin or Reservoir
- Natural Watercourse
- City Limits
- G Greenbelt
- P.S. Pump Station
- Catch Basin (length in feet)
- Drop Inlet or Other Entry
- OCFCD Basins or Reservoirs

Ownership (If other than City or County): Private = P State = S Federal = F

EXISTING FACILITIES

O.C.F.C.D.	LOCAL	
		Earth Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Rectangular Channel (base width by height in feet)
		Reinforced Concrete Box (RCB) (number of barrels-span by height in feet)
		Reinforced Concrete Pipe (RCP) (diameter in inches)
		Metal Sheet Channel (MSC) (Base width by pile height in feet /Sheet pile total length)
		Corrugated Metal Pipe (CMP) (diameter in inches)
		Concrete Pipe (diameter in inches)
		Concrete Oval Pipe (width by height in inches)
		Steel Pipe (diameter in inches)
		Reinforced Concrete Arch (base span by height in inches)
		Corrugated Metal Arch (base span by height in inches)

26

D.2 - City of Seal Beach Master Plan of Drainage Update: Figure 1-3

High Priority Improvement Projects

High Priority Rank	Storm Drain	Downstream Location	Upstream Location	Size	Length	Total Cost	Total Project Cost
5	CPE 1A Alt 1	Westerly extension of Guava Avenue and Old Ranch Golf Course	Lampson Avenue Crossing, near Guava Avenue	Double 6'(W) x 3'(H) RCB	120	339,733	531,378
		Lampson Avenue Crossing, near Guava Avenue	Guava Avenue and Ironwood Avenue R/W (N)	6'(W) x 3'(H) RCB	120	191,644	
6	CPE 2A Alt 1	Westerly extension of Elder Avenue and Old Ranch Golf Course	Lampson Avenue Crossing	Double 6'(W) x 3'(H) RCB	120	339,733	531,378
		Lampson Avenue Crsossing	Elder Avenue and Ironwood Avenue R/W (N)	6'(W) x 3'(H) RCB	120	191,644	
7	CPE 4A Alt 1	Westerly extension of Basswood Avenue and Old Ranch Golf Course	West of Lampson Avenue	9'(W) x 2'9"(H) RCB	31	61,885	1,109,941
		West of Lampson Avenue	Lampson Avenue Crossing, near Basswood Street	9'(W) x 2'9"(H) RCB	95	189,648	
		Lampson Avenue Crossing, near Basswood Street	Basswood Avenue and Aster Street	9'(W) x 2'9"(H) RCB	430	858,407	
8	BC 1A	Bolsa Chica Channel 250' north of freeway	Wisteria Street	6'(W) x 3'(H) RCB	103	164,495	589,148
		Wisteria Street	Violet Street north of Almond Avenue	42" RCP	314	424,654	
9	BC 2A	Bolsa Chica Channel and easterly extension of Fir Avenue	Wisteria Street and Fir Avenue	48" RCP	130	200,928	200,928
		High Priority Totals			**1,583**	**2,962,773**	**2,962,773**

Medium Priority Improvement Projects

Priority	Storm Drain	Downstream Location	Upstream Location	Size	Length	Total Cost	Total Project Cost
Medium	BC 1-1	Wisteria Lane 250' north of freeway	Wisteria Lane and Candleberry Avenue	30" RCP	485	509,250	509,250
Medium	BC 1B	Violet Street north of Almond Avenue	Almond Avenue, east at Teaberry Circle	36" RCP	300	347,760	526,260
		Almond Avenue, east at Teaberry Circle	Almond Avenue east of Sunflower Circle	30" RCP	170	178,500	
Medium	BC 2B	Wisteria Street and Fir Avenue	Wisteria Street at Hazelnut Avenue	3'(W) x2'(H) RCB	250	254,074	471,852
		Wisteria Street at Hazelnut Avenue	Wisteria Street and Ironwood Avenue	2'6"(W) x 1'6"(H) RCB	250	217,778	
Medium	CPE 1B Alt 1	Guava Avenue and Ironwood Avenue R/W (N)	Guava Avenue and Hazelnut Avenue	Double 6'(W) x 2'3"(H) RCB	370	987,078	4,428,511
		Hazelnut Avenue and Guava Avenue	Hazelnut Avenue and Heather Street	Double 6'(W) x 2'3"(H) RCB	1,290	3,441,433	
Medium	CPE 2B Alt 1	Elder Avenue and Ironwood Avenue R/W (N)	Elder Avenue and Fuchsia Street	Double 6'(W) x 2'3"(H) RCB	1,550	4,135,056	4,135,056
Medium	CPE 3-1B Alt 1	Candleberry Avenue and Aster Street	Candleberry Avenue and Fuschia Street	10'8"(W) x 3'(H) RCB	1,800	4,095,093	4,095,093
Medium	CPE 3-4B Alt 1	Birchwood and Aster Street	Birchwood Avenue and Bluebell Street	7'(W) x 2'3"(H) RCB	200	326,667	2,484,481
		Birchwood Avenue and Bluebell Street	Birchwood Avenue and Daisy Circle	6'(W) x 2'3"(H) RCB	1,450	2,157,815	
Medium	CPE 5 Alt 1	Cal Trans Open Channel	Lampson Avenue	24" RCP	75	63,000	63,000
		Medium Priority Totals			**8,190**	**16,713,503**	**16,713,503**

Low Priority Improvement Projects

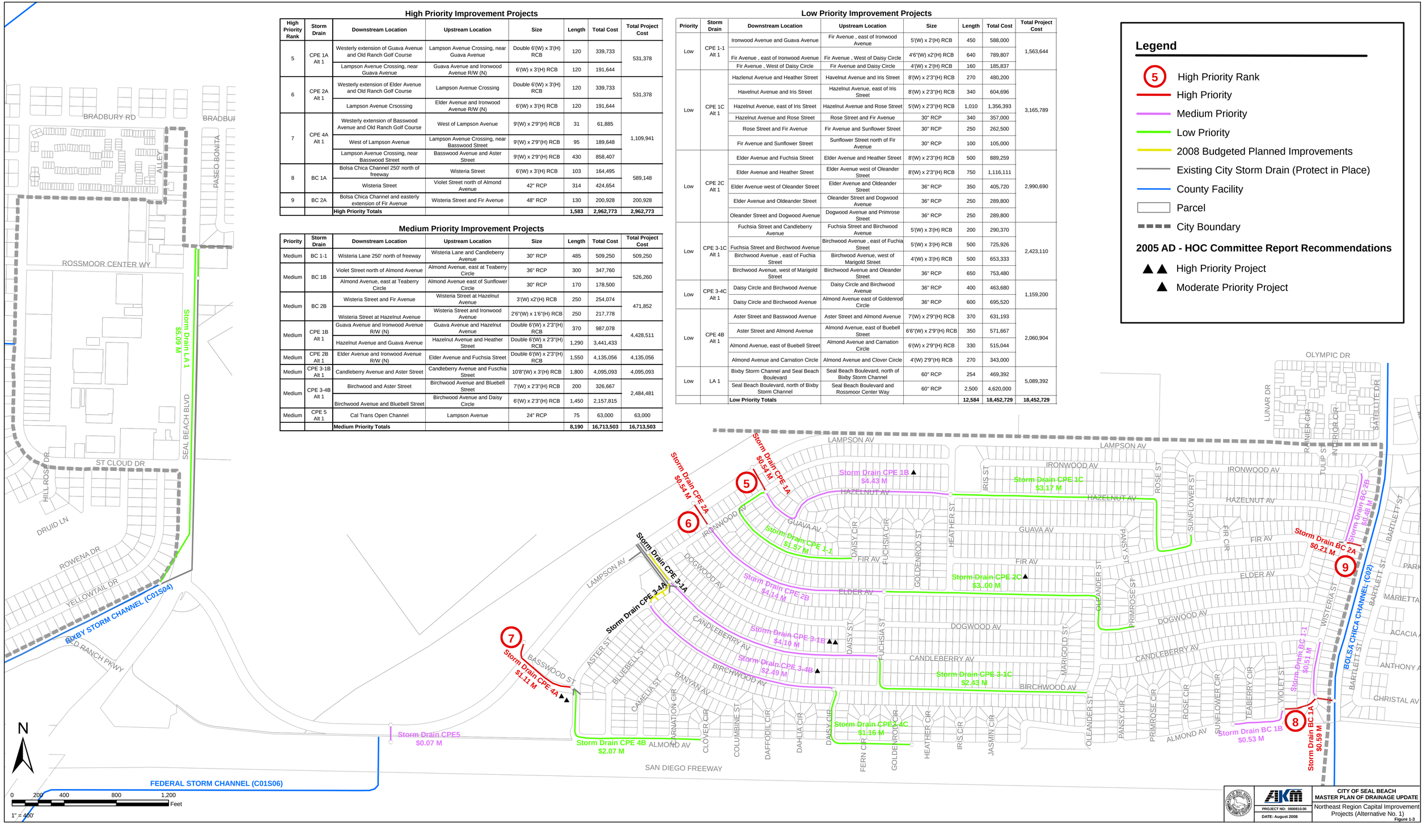
Priority	Storm Drain	Downstream Location	Upstream Location	Size	Length	Total Cost	Total Project Cost
Low	CPE 1-1 Alt 1	Ironwood Avenue and Guava Avenue	Fir Avenue , east of Ironwood Avenue	5'(W) x 2'(H) RCB	450	588,000	1,563,644
		Fir Avenue , east of Ironwood Avenue	Fir Avenue , West of Daisy Circle	4'6"(W) x2'(H) RCB	640	789,807	
		Fir Avenue , West of Daisy Circle	Fir Avenue and Daisy Circle	4'(W) x 2'(H) RCB	160	185,837	
Low	CPE 1C Alt 1	Hazlenut Avenue and Heather Street	Havelnut Avenue and Iris Street	8'(W) x 2'3"(H) RCB	270	480,200	3,165,789
		Havelnut Avenue and Iris Street	Hazelnut Avenue, east of Iris Street	8'(W) x 2'3"(H) RCB	340	604,696	
		Hazelnut Avenue, east of Iris Street	Hazelnut Avenue and Rose Street	5'(W) x 2'3"(H) RCB	1,010	1,356,393	
		Hazelnut Avenue and Rose Street	Rose Street and Fir Avenue	30" RCP	340	357,000	
		Rose Street and Fir Avenue	Fir Avenue and Sunflower Street	30" RCP	250	262,500	
		Fir Avenue and Sunflower Street	Sunflower Street north of Fir Avenue	30" RCP	100	105,000	
Low	CPE 2C Alt 1	Elder Avenue and Fuchsia Street	Elder Avenue and Heather Street	8'(W) x 2'3"(H) RCB	500	889,259	2,990,690
		Elder Avenue and Heather Street	Elder Avenue west of Oleander Street	8'(W) x 2'3"(H) RCB	750	1,116,111	
		Elder Avenue west of Oleander Street	Elder Avenue and Oldeander Street	36" RCP	350	405,720	
		Elder Avenue and Oldeander Street	Oleander Street and Dogwood Avenue	36" RCP	250	289,800	
		Oleander Street and Dogwood Avenue	Dogwood Avenue and Primrose Street	36" RCP	250	289,800	
Low	CPE 3-1C Alt 1	Fuchsia Street and Candleberry Avenue	Fuchsia Street and Birchwood Avenue	5'(W) x 3'(H) RCB	200	290,370	2,423,110
		Fuchsia Street and Birchwood Avenue	Birchwood Avenue , east of Fuchia Street	5'(W) x 3'(H) RCB	500	725,926	
		Birchwood Avenue , east of Fuchia Street	Birchwood Avenue, west of Marigold Street	4'(W) x 3'(H) RCB	500	653,333	
		Birchwood Avenue, west of Marigold Street	Birchwood Avenue and Oleander Street	36" RCP	650	753,480	
Low	CPE 3-4C Alt 1	Daisy Circle and Birchwood Avenue	Daisy Circle and Birchwood Avenue	36" RCP	400	463,680	1,159,200
		Daisy Circle and Birchwood Avenue	Almond Avenue east of Goldenrod Circle	36" RCP	600	695,520	
Low	CPE 4B Alt 1	Aster Street and Basswood Avenue	Aster Street and Almond Avenue	7'(W) x 2'9"(H) RCB	370	631,193	2,060,904
		Aster Street and Almond Avenue	Almond Avenue, east of Buebell Street	6'6"(W) x 2'9"(H) RCB	350	571,667	
		Almond Avenue, east of Buebell Street	Almond Avenue and Carnation Circle	6'(W) x 2'9"(H) RCB	330	515,044	
		Almond Avenue and Carnation Circle	Almond Avenue and Clover Circle	4'(W) 2'9"(H) RCB	270	343,000	
Low	LA 1	Bixby Storm Channel and Seal Beach Boulevard	Seal Beach Boulevard, north of Bixby Storm Channel	60" RCP	254	469,392	5,089,392
		Seal Beach Boulevard, north of Bixby Storm Channel	Seal Beach Boulevard and Rossmoor Center Way	60" RCP	2,500	4,620,000	
		Low Priority Totals			**12,584**	**18,452,729**	**18,452,729**

Legend

- 5 — High Priority Rank
- High Priority
- Medium Priority
- Low Priority
- 2008 Budgeted Planned Improvements
- Existing City Storm Drain (Protect in Place)
- County Facility
- Parcel
- City Boundary

2005 AD - HOC Committee Report Recommendations

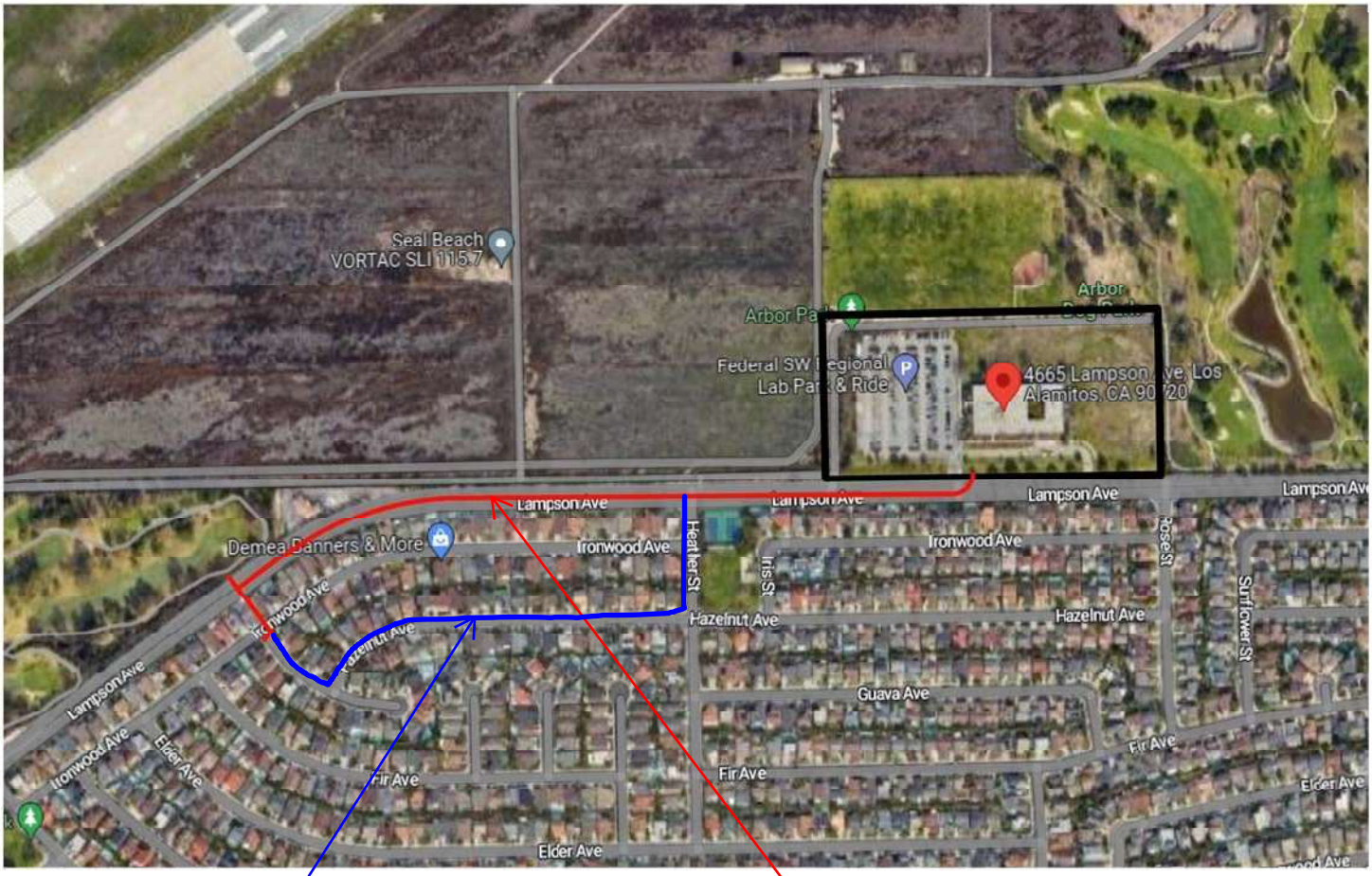
- ▲▲ High Priority Project
- ▲ Moderate Priority Project



CITY OF SEAL BEACH	PROJECT NO: 0800810.00 DATE: August 2008	CITY OF SEAL BEACH MASTER PLAN OF DRAINAGE UPDATE Northeast Region Capital Improvement Projects (Alternative No. 1) Figure 1-3

D.3 - Infeasible Drainage System Outlets 1 and 2 Exhibits

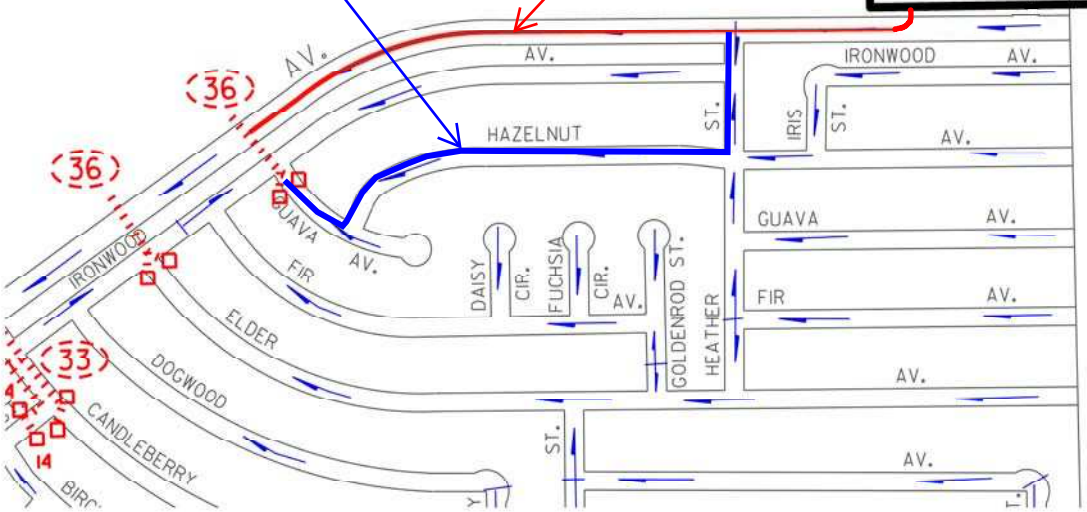
Infeasible Drainage System Outlets #1 and #2



Infeasible Outlet #1

Infeasible Outlet #2

PROJECT SITE



THE CITY OF

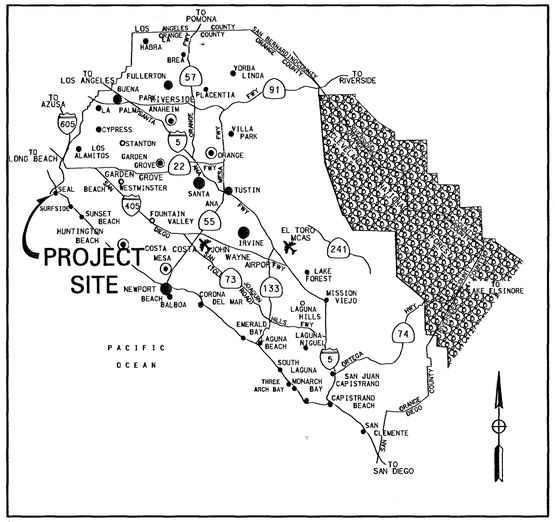
SEAL BEACH, CALIFORNIA

PUBLIC WORKS DEPARTMENT

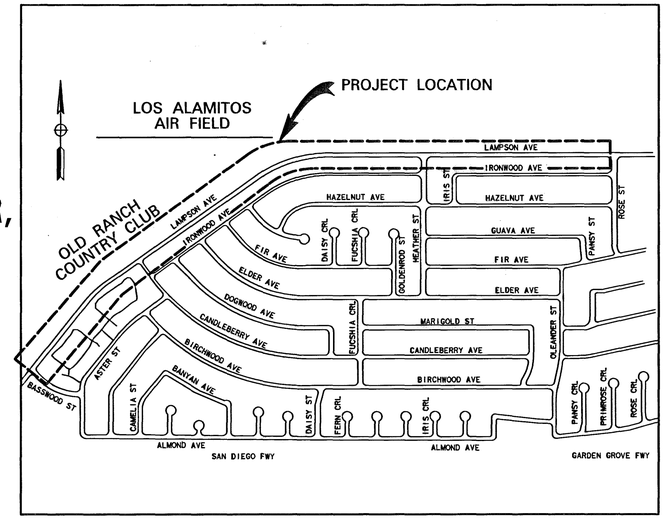
PLANS FOR THE CONSTRUCTION OF

LAMPSON AVENUE WELL, PHASE II–

WATER TRANSMISSION MAIN AND GRAVITY SEWER, PROJECT NO. WT0903



VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.

CITY OF SEAL BEACH INCORPORATED OCTOBER 22, 1915 ORANGE COUNTY CALIFORNIA

INDEX OF SHEETS

SHT NO.	DWG NO.	DESCRIPTION
1.	G–1	TITLE SHEET
2.	G–2	GENERAL NOTES
3.	G–3	WATERLINE SHEET INDEX
4.	G–4	GRAVITY SEWER SHEET INDEX
5.	C–1	16–INCH WATERMAIN PLAN AND PROFILE STA. 9+94.48 TO STA. 20+00.00
6.	C–2	16–INCH WATERMAIN PLAN AND PROFILE STA. 20+00.00 TO STA. 30+00.00
7.	C–3	16–INCH AND 12–INCH WATERMAIN PLAN AND PROFILE STA. 30+00.00 TO STA. 40+00.00
8.	C–4	12–INCH AND 8–INCH WATERMAIN PLAN AND PROFILE STA. 40+00.00 TO STA 50+50.00
9.	C–5	8–INCH WATERMAIN PLAN AND PROFILE STA. 50+50.00 TO STA. 59+33.66
10.	C–6	CONNECTION DETAILS AT STA. 22+37.87, STA. 23+72.79, STA. 49+55.56 AND STA. 59+33.66
11.	C–7	8–INCH SEWER PLAN AND PROFILE STA. 10+00.00 TO STA. 18+00.00
12.	C–8	8–INCH SEWER PLAN AND PROFILE STA. 18+00.00 TO STA. 24+09.00
13.	C–9	CITY OF SEAL BEACH STANDARD DETAILS S–1, S–2, S–3, S–4, S–6, S–8, S–9 AND S–14
14.	C–10	CITY OF SEAL BEACH STANDARD DETAILS S–12, S–15a, S–15b, S–16, S–17, 133–1 AND 182
15.	C–11	CITY OF SEAL BEACH STANDARD DETAILS 705, 706, 707, 710, 711 AND 712

DESIGNED BY: J.T. LEE
DRAWN BY: CADD
CHECKED BY: J. A. LOAGUE
DATE: JULY 2009

REGISTERED PROFESSIONAL ENGINEER JARED T. LEE No. C71422 Exp. 12/31/09 CIVIL STATE OF CALIFORNIA

APPROVED BY: JARED T. LEE RCE NO. C71422 8/3/2009 DATE

AKM Consulting Engineers
553 Wald
Irvine, Ca. 92618
(949) 753-7333

REVISIONS

DATE	BY	
		AS BUILT

FIELD BOOK REF.

CITY OF SEAL BEACH
LAMPSON AVENUE WELL, PHASE II– WATER TRANSMISSION MAIN AND GRAVITY SEWER, PROJECT NO. WT0903

CITY OF SEAL BEACH INCORPORATED OCTOBER 22, 1915 ORANGE COUNTY CALIFORNIA

TITLE: **TITLE SHEET**

Approved: MICHAEL HO, CITY ENGINEER RCE NO.70299 8/6/09 DATE

Recommended: DAVID L. SPITZ, ASSOCIATE ENGINEER RCE NO. 69800 8/6/09 DATE

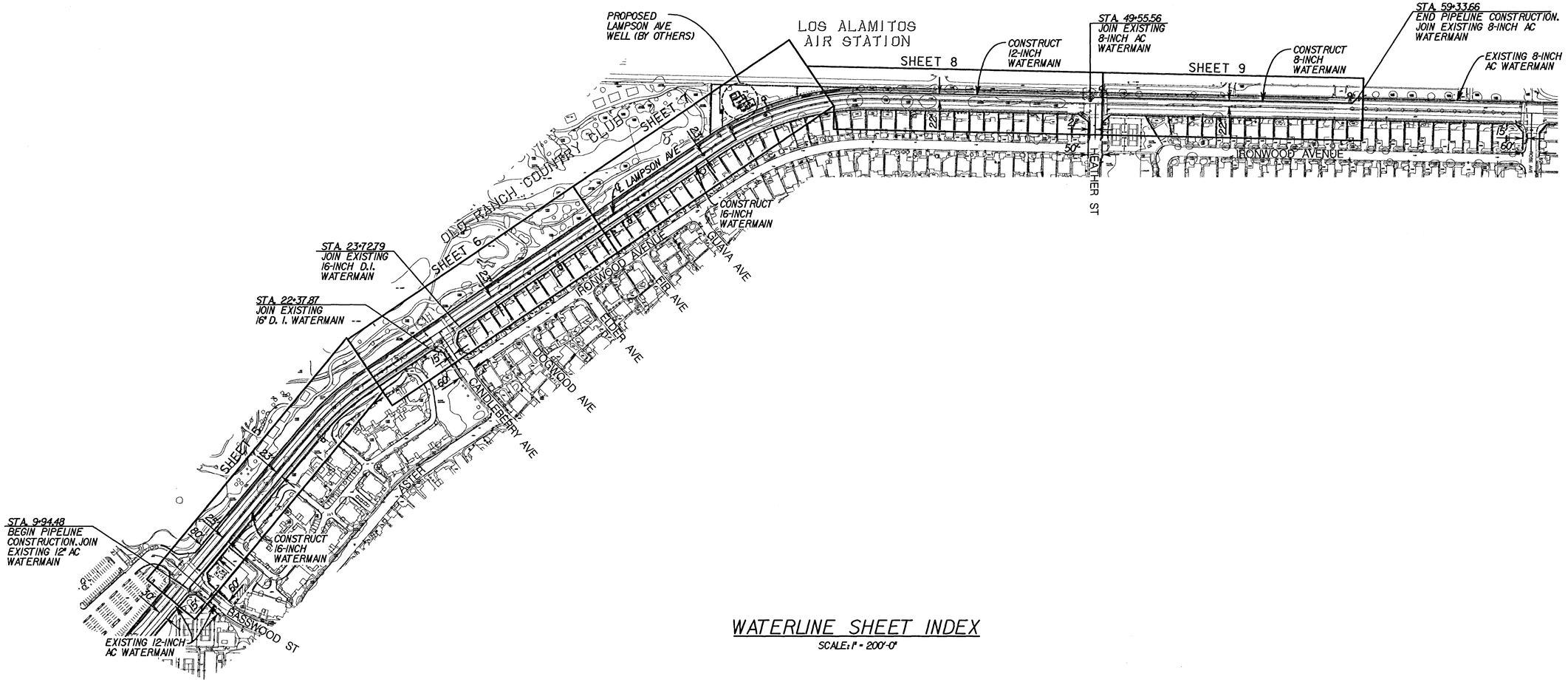
PROJECT NO.

DRAWING NO. G-1

Drawn By: _____ Checked By: _____

SHEET 1 OF 15

N:\0800 Seal Beach\700 Lampson Avenue Well_Offsite Package\01_G-1_title_sht.dgn 8/3/2009



WATERLINE SHEET INDEX

SCALE: 1" = 200'-0"

N

200 100 0 200 400

SCALE IN FEET
1 inch = 200ft.

DESIGNED BY: J.T. LEE
DRAWN BY: CADD
CHECKED BY: J. A. LOAGUE
DATE: JULY 2009

REGISTERED PROFESSIONAL ENGINEER — JARED T. LEE — No. C71422 — Exp. 12/31/09 — CIVIL — STATE OF CALIFORNIA

APPROVED BY: JARED T. LEE RCE NO. C71422 DATE 8/3/2009

AKM Consulting Engineers
553 Wald
Irvine, Ca. 92618
(949) 753-7333

REVISIONS		
DATE	BY	
		AS BUILT

FIELD BOOK REF.

CITY OF SEAL BEACH
LAMPSON AVENUE WELL, PHASE II– WATER TRANSMISSION MAIN AND GRAVITY SEWER, PROJECT NO. WT0903

TITLE: **WATERLINE SHEET INDEX**

Approved: SEE COVER SHEET
MICHAEL HO, CITY ENGINEER RCE NO.70299 DATE

Recommended: SEE COVER SHEET
DAVID L. SPITZ, ASSOCIATE ENGINEER RCE NO. 69800 DATE

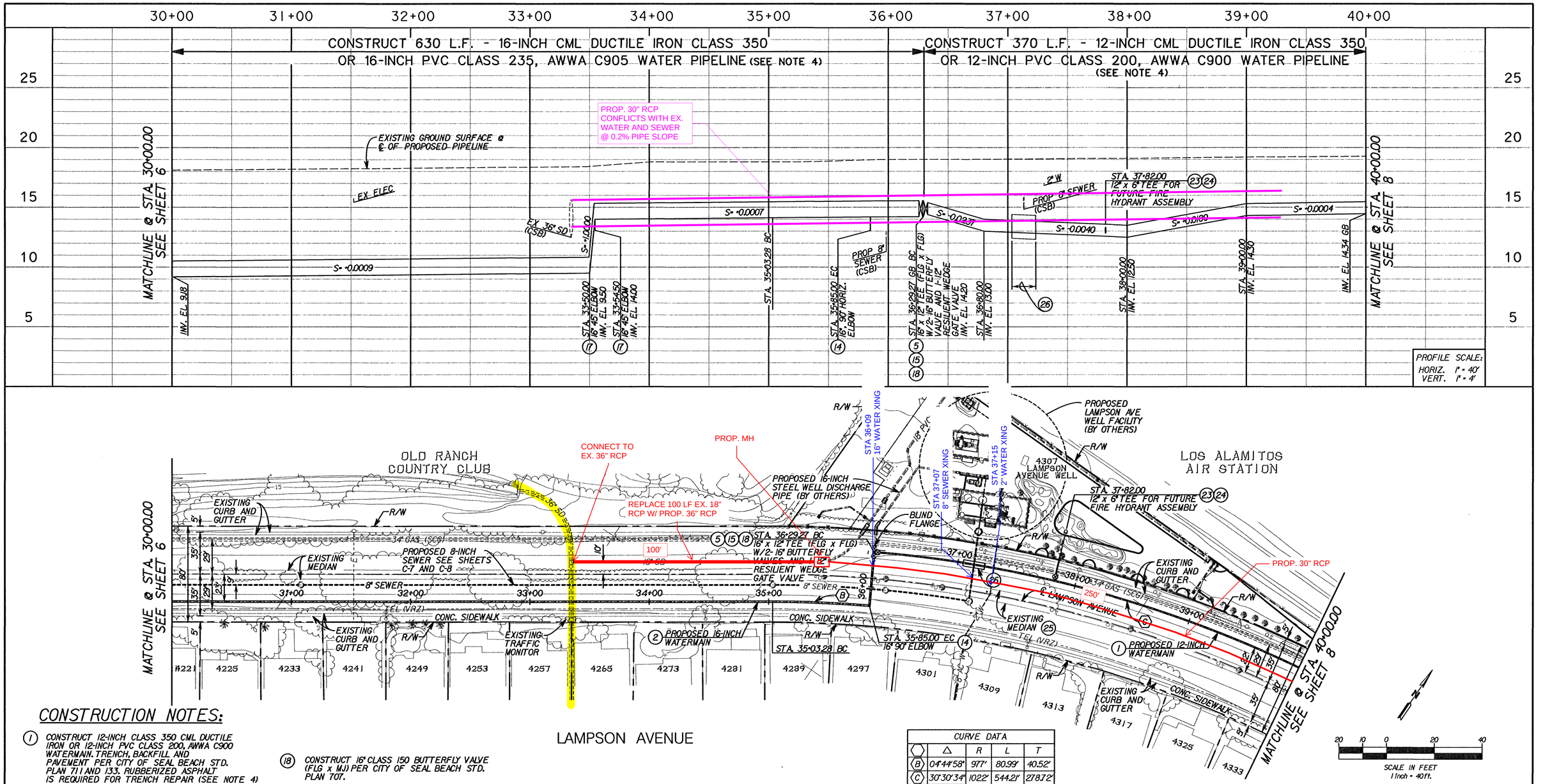
PROJECT NO.

DRAWING NO. G-3

Drawn By: _____ Checked By: _____

SHEET 3 OF 15

N:\0800 Seal Beach\700 Lampson Avenue Well_Offsite Package\03_G-3_waterline_index_map.dgn 8/3/2009



CONSTRUCTION NOTES:

1. CONSTRUCT 12-INCH CLASS 350 CML DUCTILE IRON OR 12-INCH PVC CLASS 200, AWWA C900 WATERMAIN. TRENCH, BACKFILL AND PAVEMENT PER CITY OF SEAL BEACH STD. PLAN 711 AND 133. RUBBERIZED ASPHALT IS REQUIRED FOR TRENCH REPAIR (SEE NOTE 4)
2. CONSTRUCT 16-INCH CLASS 350 CML DUCTILE IRON OR 16-INCH PVC CLASS 200, AWWA C900 WATERMAIN. TRENCH, BACKFILL AND PAVEMENT PER CITY OF SEAL BEACH STD. PLAN 711 AND 133. RUBBERIZED ASPHALT IS REQUIRED FOR TRENCH REPAIR (SEE NOTE 4)
5. CONSTRUCT 12" RESILIENT WEDGE GATE VALVE (FLG x FLG) PER CITY OF SEAL BEACH STD. PLAN 706.
10. CONSTRUCT FIRE HYDRANT ASSEMBLY PER CITY OF SEAL BEACH STD. PLAN 705.
14. CONSTRUCT 16" 90° ELBOW AND THRUST BLOCK PER CITY OF SEAL BEACH STD. PLAN 712.
15. CONSTRUCT 16" x 12" DUCTILE IRON TEE (FLG x FLG) WITH THRUST BLOCK PER CITY OF SEAL BEACH STD. PLAN 712.
17. CONSTRUCT 16" 45° ELBOW (PO x PO) WITH THRUST BLOCK PER CITY OF SEAL BEACH STD. PLAN 712.
18. CONSTRUCT 16" CLASS 150 BUTTERFLY VALVE (FLG x MJ) PER CITY OF SEAL BEACH STD. PLAN 707.
23. CONSTRUCT 12" x 6" TEE (PO x FLG) WITH 6-INCH (FLG x PO) RESILIENT WEDGE GATE VALVE, FOR FUTURE FIRE HYDRANT ASSEMBLY. INSTALL THRUST BLOCKS PER CITY OF SEAL BEACH STD. PLANS 712.
24. CONSTRUCT 6-INCH PVC CLASS 200, AWWA C900 STUB OUT PER CITY OF SEAL BEACH STD. PLAN 711. INSTALL END CAP AND THRUST BLOCK 5-FEET BEYOND RIGHT-OF-WAY ON WELL SITE. REPAIR PAVEMENT PER CITY STD. PLAN 133.
25. REMOVE AND REPLACE EXISTING MEDIAN CURB TO NEAREST JOINT AS REQUIRED FOR CONSTRUCTION. REPLACE EXISTING LANDSCAPING AND IRRIGATION SYSTEM IN KIND.
26. CONSTRUCT 20 L.F. OF 24-INCH x ½" WALL STEEL CASING PER CITY OF SEAL BEACH STD. DWG. S-12 FILL CASING ANNULAR SPACE WITH LOW DENSITY GROUT. CENTER CASING UNDER SEWER.

SHEET NOTES:

1. CONTRACTOR SHALL POTHOLE TO VERIFY DEPTH, AND LOCATION OF ALL CONNECTION POINTS AND CROSSING UTILITIES PRIOR TO SUBMISSION OF SHOP DRAWINGS.
2. WORK IN LAMPSON AVE. REQUIRES A NO FEE ENCROACHMENT PERMIT FROM THE CITY OF SEAL BEACH. THE CONTRACTOR SHALL BE REQUIRED TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN SIGNED AND SEALED BY A REGISTERED TRAFFIC CONTROL ENGINEER TO THE CITY OF SEAL BEACH FOR REVIEW AND APPROVAL.
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4. CONTRACTOR BASE BID SHALL BE FOR FURNISHING AND INSTALLING DUCTILE IRON PIPE. PVC PIPE SHALL ONLY BE PROPOSED AS A BID ALTERNATIVE AND MAY BE IMPLEMENTED AT THE SOLE DISCRETION OF THE CITY.

LAMPSON AVENUE

CURVE DATA				
	Δ	R	L	T
(B)	04°44'58"	977'	80.99'	40.52'
(C)	30°30'34"	1022'	544.21'	278.72'

DESIGNED BY: J. T. LEE
DRAWN BY: CADD
CHECKED BY: J. A. LOAGUE
DATE: JULY 2009

REGISTERED PROFESSIONAL ENGINEER — JARED T. LEE — No. C71422 — Exp. 12/31/09 — CIVIL — STATE OF CALIFORNIA

APPROVED BY: JARED T. LEE RCE NO. C71422 — 8/31/09 DATE

PUBLIC WORKS DEPARTMENT

REVISIONS

DATE	BY	
		AS BUILT

FIELD BOOK REF.

AKM Consulting Engineers
553 Wald
Irvine, Ca. 92618
(949) 753-7333

PROJECT: **CITY OF SEAL BEACH**
LAMPSON AVENUE WELL, PHASE II– WATER TRANSMISSION MAIN AND GRAVITY SEWER, PROJECT NO. WT0903

CITY OF SEAL BEACH — INCORPORATED — ORANGE COUNTY, CALIFORNIA

TITLE: **12–INCH AND 16–INCH WATERMAIN PLAN AND PROFILE STA. 30+00.00 TO STA. 40+00.00**

Approved: SEE COVER SHEET — MICHAEL HO, CITY ENGINEER RCE NO.70299 DATE

Recommended: SEE COVER SHEET — DAVID L. SPITZ, ASSOCIATE ENGINEER RCE NO. 69800 DATE

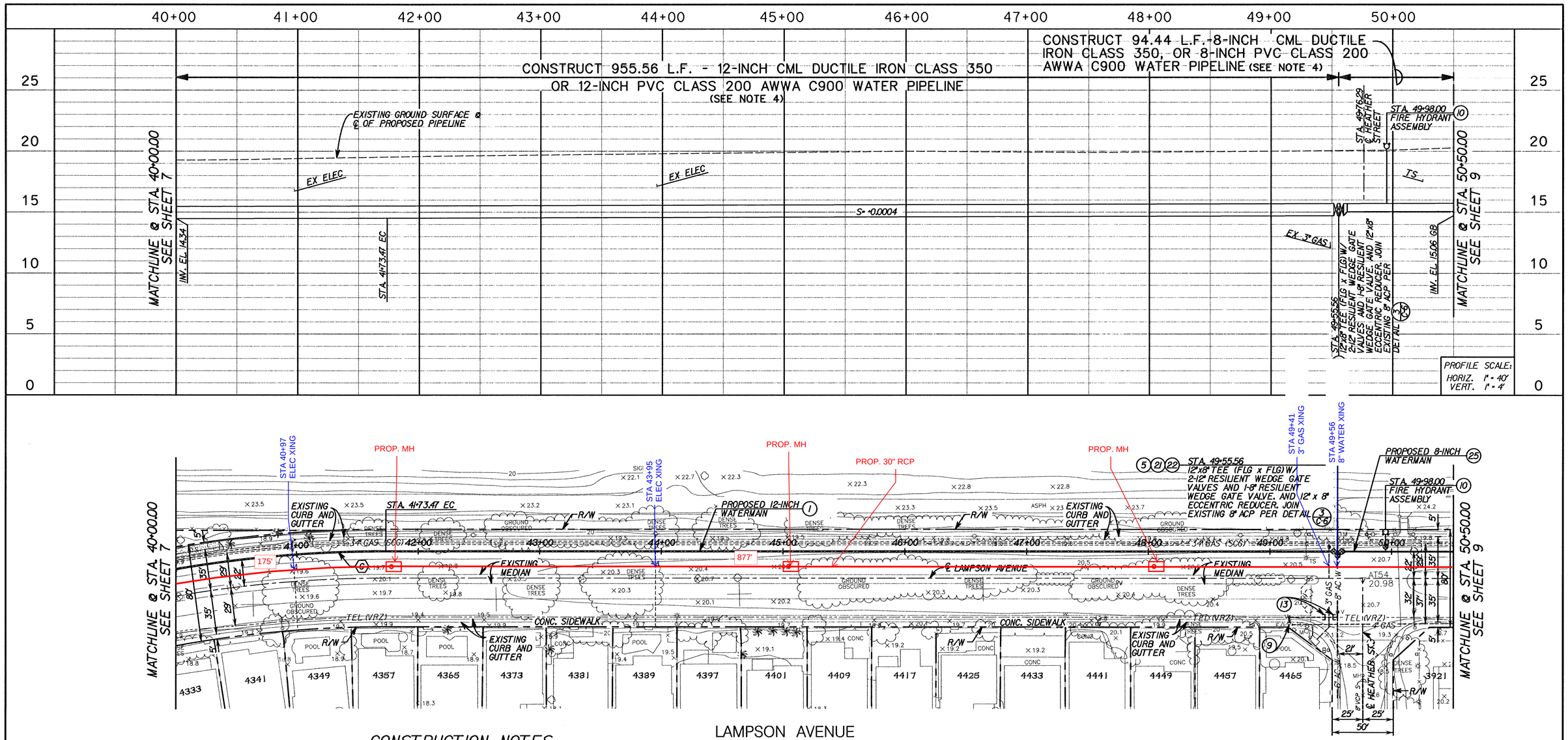
PROJECT NO.

DRAWING NO. **C-3**

Drawn By: _____ Checked By: _____

SHEET 7 OF 15

N:\0800 Seal Beach\700 Lampson Avenue Well_Offsite Package\07_C-3_pnpsht_wtr_03.dgn 8/3/2009



LAMPSON AVENUE

HEATHER STREET

CONSTRUCTION NOTES:

(1) CONSTRUCT 12" CLASS 350 CML DUCTILE IRON OR 12" PVC CLASS 200 AWWA C900 WATERMAIN. TRENCH, BACKFILL AND PAVEMENT PER CITY OF SEAL BEACH STD. PLAN 711 AND 133. RUBBERIZED ASPHALT IS REQUIRED FOR TRENCH REPAIR. (SEE NOTE 4)

(5) CONSTRUCT 12" RESILIENT WEDGE GATE VALVE (FLG x FLG) PER CITY OF SEAL BEACH STD. PLAN 706.

(9) REMOVE AND SALVAGE FIRE HYDRANT. REMOVE HYDRANT BURY, VALVE BOX AND COVER, AND BACKFILL AND REPLACE IN KIND.

(10) CONSTRUCT FIRE HYDRANT ASSEMBLY PER CITY OF SEAL BEACH STD. PLAN 705.

(13) CAP AND SEAL EXISTING WATERLINE. INSTALL THRUST BLOCK PER CITY OF SEAL BEACH STD. PLAN 712.

(21) CONSTRUCT 8" RESILIENT WEDGE GATE VALVE (FLG x FLG) PER CITY OF SEAL BEACH STD. PLAN 706.

(22) CONSTRUCT 12" x 8" DUCTILE IRON TEE (FLG x FLG) WITH THRUST BLOCK PER CITY OF SEAL BEACH STD. PLAN 712.

(25) CONSTRUCT 8" CLASS 350 CML DUCTILE IRON OR 8" PVC CLASS 200 AWWA C900 WATERMAIN. TRENCH, BACKFILL AND PAVEMENT PER CITY OF SEAL BEACH STD. 711 AND 133. RUBBERIZED ASPHALT IS REQUIRED FOR TRENCH REPAIR. (SEE NOTE 4)

SHEET NOTES:

1. CONTRACTOR SHALL POTHOLE TO VERIFY DEPTH, AND LOCATION OF ALL CONNECTION POINTS AND CROSSING UTILITIES PRIOR TO SUBMISSION OF SHOP DRAWINGS.
2. WORK IN LAMPSON AVE. REQUIRES A NO FEE ENCROACHMENT PERMIT FROM THE CITY OF SEAL BEACH. THE CONTRACTOR SHALL BE REQUIRED TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN SIGNED AND SEALED BY A REGISTERED TRAFFIC CONTROL ENGINEER TO THE CITY OF SEAL BEACH FOR REVIEW AND APPROVAL.
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4. CONTRACTOR BASE BID SHALL BE FOR FURNISHING AND INSTALLING DUCTILE IRON PIPE. PVC PIPE SHALL ONLY BE PROPOSED AS A BID ALTERNATIVE AND MAY BE IMPLEMENTED AT THE SOLE DISCRETION OF THE CITY.

CURVE DATA				
	△	R	L	T
(C)	30°30'34"	1022'	544.21'	278.72'

N

20 10 0 20 40

SCALE IN FEET
1 inch = 40ft.

DESIGNED BY: J. T. LEE
DRAWN BY: CADD
CHECKED BY: J. A. LOAGUE
DATE: JULY 2009

REGISTERED PROFESSIONAL ENGINEER — JARED T. LEE — No. C71422 — Exp. 12/31/09 — CIVIL — STATE OF CALIFORNIA

APPROVED BY: JARED T. LEE RCE NO. C71422 8/3/2009 DATE

AKM Consulting Engineers
553 Wald
Irvine, Ca. 92618
(949) 753-7333

PUBLIC WORKS DEPARTMENT

REVISIONS

DATE	BY	
		AS BUILT

FIELD BOOK REF.

PROJECT: CITY OF SEAL BEACH
LAMPSON AVENUE WELL, PHASE II–
WATER TRANSMISSION MAIN
AND GRAVITY SEWER,
PROJECT NO. WT0903

TITLE: 12–INCH AND 8–INCH WATERMAIN
PLAN AND PROFILE
STA. 40+00.00 TO STA. 50+50.00

Approved: SEE COVER SHEET
MICHAEL HO, CITY ENGINEER RCE NO.70299 DATE

Recommended: SEE COVER SHEET
DAVID L. SPITZ, ASSOCIATE ENGINEER RCE NO. 69800 DATE

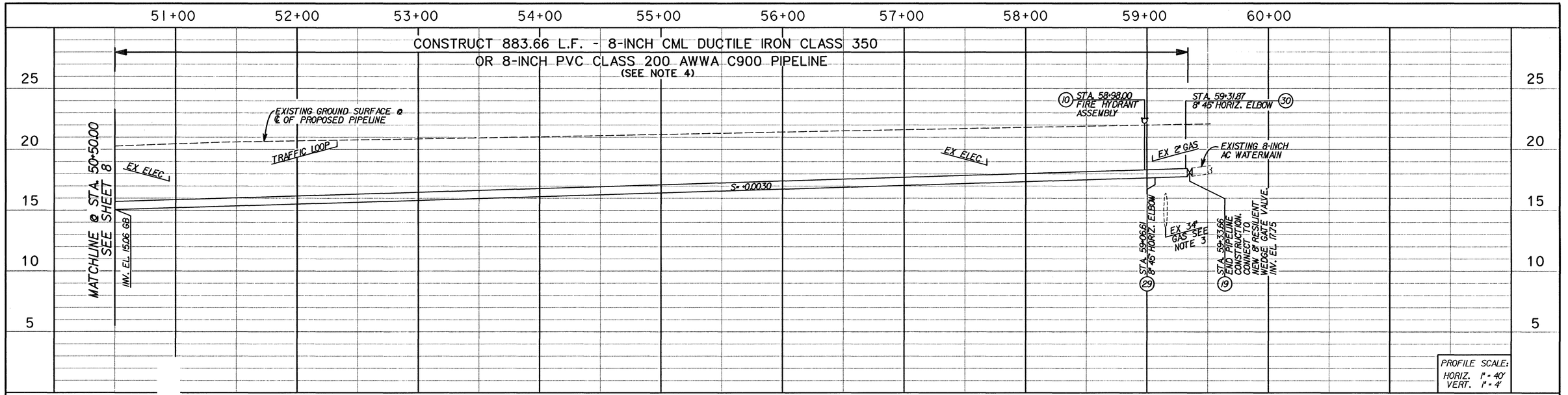
PROJECT NO.

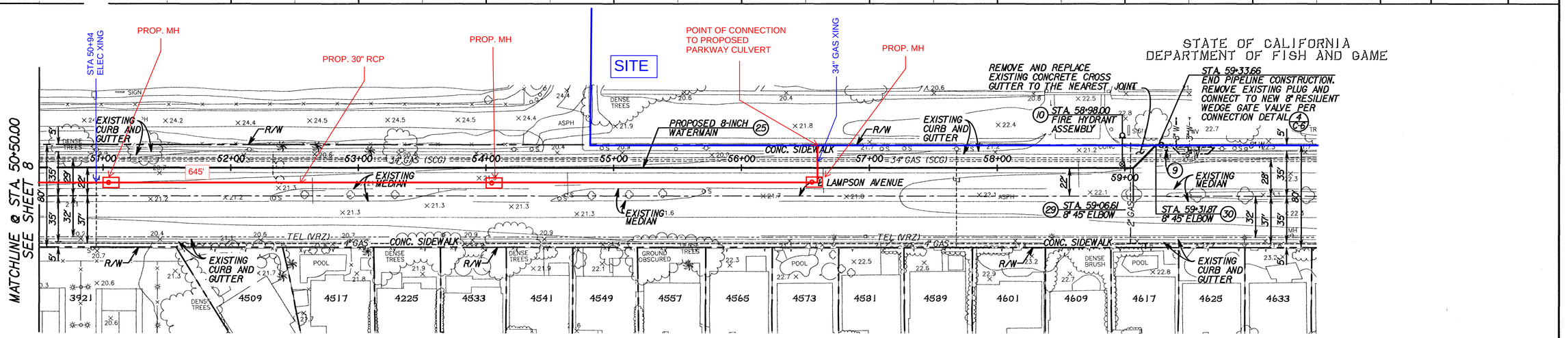
DRAWING NO. C-4

Drawn By: _____ Checked By: _____

SHEET 8 OF 15

N:\0800 Seal Beach\700 Lampson Avenue Well\...\08_C-4_pnpsht_wtr_04.dgn 8/3/2009





LAMPSON AVENUE

SHEET NOTES:

1. CONTRACTOR SHALL POTHOLE TO VERIFY DEPTH, AND LOCATION OF ALL CONNECTION POINTS AND CROSSING UTILITIES PRIOR TO SUBMISSION OF SHOP DRAWINGS.
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(19) CONSTRUCT 8" RESILIENT WEDGE GATE VALVE (FLG x FLG) PER CITY OF SEAL BEACH STD. PLAN 706.

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(29) CONSTRUCT 8" 45° ELBOW (PO x PO) WITH THRUST BLOCK PER CITY OF SEAL BEACH STD. PLAN 712.

(30) CONSTRUCT 8" 45° ELBOW (FLG x PO) WITH THRUST BLOCK PER CITY OF SEAL BEACH STD. PLAN 712.

N

20 10 0 20 40

SCALE IN FEET
1 Inch = 40ft.

DESIGNED BY: J. T. LEE	REGISTERED PROFESSIONAL ENGINEER JARED T. LEE No. C71422 Exp. 12/31/09 CIVIL STATE OF CALIFORNIA	PUBLIC WORKS DEPARTMENT	PROJECT: CITY OF SEAL BEACH LAMPSON AVENUE WELL, PHASE II– WATER TRANSMISSION MAIN AND GRAVITY SEWER, PROJECT NO. WT0903
DRAWN BY: CADD		REVISIONS: DATE / BY	TITLE: 8–INCH WATERMAIN PLAN AND PROFILE STA. 50+50.00 TO STA. 59+33.66
CHECKED BY: J. A. LOAGUE	APPROVED BY: Jared Lee 8/31/2009 JARED T. LEE RCE NO. C71422 DATE	AS BUILT	Approved: SEE COVER SHEET MICHAEL HO, CITY ENGINEER RCE NO.70299 DATE
DATE: JULY 2009		FIELD BOOK REF.	PROJECT NO.
AKM Consulting Engineers 553 Wald Irvine, Ca. 92618 (949) 753-7333			Recommended: SEE COVER SHEET DAVID L. SPITZ, ASSOCIATE ENGINEER RCE NO. 69800 DATE
			DRAWING NO. C-5
			Drawn By: _____ Checked By: _____ SHEET 9 OF 15

N:\0800 Seal Beach\700 Lampson Avenue Well_Offsite Package\09_C-5_prpsht_wtr_05.dgn 8/3/2009

APPENDIX E
SOILS MAP

Soil Map—Orange County and Part of Riverside County, California
(KBHO-007 Soil Map)



Map Scale: 1:2,050 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County and Part of Riverside County, California
Survey Area Data: Version 17, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 14, 2022—Apr 23, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
158	Hueneme fine sandy loam, drained	19.3	100.0%
Totals for Area of Interest		**19.3**	**100.0%**

Orange County and Part of Riverside County, California

158—Hueneme fine sandy loam, drained

Map Unit Setting

National map unit symbol: hcn3
Elevation: 0 to 430 feet
Mean annual precipitation: 15 inches
Mean annual air temperature: 64 degrees F
Frost-free period: 300 to 350 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Hueneme and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hueneme

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Stratified alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 27 inches: fine sandy loam
H2 - 27 to 60 inches: stratified sand to silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: A

Ecological site: R019XG911CA - Loamy Fan
Hydric soil rating: Yes

Minor Components

San emigdio, fine sandy loam
Percent of map unit: 5 percent
Hydric soil rating: No

Hueneme, fine sandy loam
Percent of map unit: 5 percent
Hydric soil rating: No

Bolsa, silt loam, drained
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Orange County and Part of Riverside County, California
Survey Area Data: Version 17, Aug 30, 2023

Preliminary Water Quality Management Plan (WQMP)

Project Name:

4665 Lampson Avenue

Los Alamitos, California 90720

APN: 130-012-35

PM2022-133, Parcel 1 & 2

(TTM 19263, Lot 1)

Prepared for:

MJW Investments, LLC

27702 Crown Valley Parkway

Suite D-4-197

Ladera Ranch, Ca 92694

Prepared by:

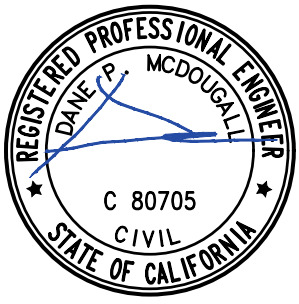
C&V Consulting, Inc.

Engineer Dane McDougall Registration No. 80705

9830 Irvine Center Drive

Irvine, CA 92618

(949) 916-3800



Prepared: October 7, 2022

Revised: August 23, 2024

Project Owner's Certification			
Permit/Application No.	TBD	Grading Permit No.	TBD
Tract/Parcel Map No.	PM2022-133, Parcel 1 & 2 (VTTM 19263, Lot 1)	Building Permit No.	TBD
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract)			APN: 130-012-35

This Preliminary Water Quality Management Plan (WQMP) has been prepared for MJW Investments by C&V Consulting, Inc. The WQMP is intended to comply with the requirements of the local NPDES Stormwater Program requiring the preparation of the plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Owner: Matthew Waken			
Title	Managing Member		
Company	MJW Investments, LLC		
Address	27702 Crown Valley Parkway Suite D-4-197 Ladera Ranch, CA 92694		
Email	matt@mwakenig.com		
Telephone #	(626) 710-6377		
I understand my responsibility to implement the provisions of this Preliminary WQMP including the ongoing operation and maintenance of the best management practices (BMPs) described herein.			
Signature		Date	

Preparer (Engineer): Dane McDougall, PE, PLS			
Title	Principal	PE Registration #	80705
Company	C&V Consulting, Inc.		
Address	9830 Irvine Center Drive, Irvine, CA 92618		
Email	dmcdougall@cvc-inc.net		
Telephone #	(949) 916-3800		
I hereby certify that this Preliminary Water Quality Management Plan is in compliance with, and meets the requirements set forth in, Order No. R8-2009-0030/NPDES No. CAS618030, of the Santa Ana Regional Water Quality Control Board.			
Preparer Signature		Date	8/23/24
Place Stamp Here	REGISTERED PROFESSIONAL ENGINEER DANE P. MCDOUGALL C 80705 CIVIL STATE OF CALIFORNIA		

Contents

Page No.

Section I	**Discretionary Permit(s) and Water Quality Conditions**	**3**
Section II	**Project Description**	**5**
Section III	**Site Description**	**12**
Section IV	**Best Management Practices (BMPs)**	**17**
Section V	**Inspection/Maintenance Responsibility for BMPs**	**35**
Section VI	**BMP Exhibit (Site Plan)**	**40**
Section VII	**Educational Materials**	**41**

Attachments

Attachment A ..... **TGD Worksheets & Figures**
Attachment B ..... **Preliminary WQMP Exhibit**
Attachment C ..... **Site BMPs**
Attachment D ..... **Reference Material**
Attachment E ..... **Operations and Maintenance Plan**
Attachment F ..... **Geotechnical Report**
Attachment G ..... **Notice of Responsibility Transfer Form**

Section I Discretionary Permit(s) and Water Quality Conditions

Project Infomation			
Permit/Application No.	TBD	Tract/Parcel Map No.	PM2022-133, Parcel 1 & 2 (VTTM 19263, Lot 1)
Additional Information/ Comments:	4665 Lampson Avenue Los Alamitos, California 90720 APN: 130-012-35		
Water Quality Conditions			
Water Quality Conditions (list verbatim)	Conditions of Approval are not available at this time. This section will be completed as part of final engineering.		
Watershed-Based Plan Conditions			
Provide applicable conditions from watershed - based plans including WIHMPs and TMDLS.	TMDLs are listed for the water bodies Coyote Creek Channel for Copper, Lead, and Zinc. San Gabriel TMDLs are for Indicator Bacteria. These TMDLs have been adopted for Coyote Creek/ San Gabriel River by the Los Angeles Regional Water Quality Control Board (Region 4); however, it applies to the areas of Orange County that drain to the Coyote Creek and San Gabriel River.		

Section II Project Description

II.1 Project Description

Description of Proposed Project		
Development Category (Verbatim from MWQMP):	Priority Project Category for North Orange County: 8. All significant redevelopment projects, where significant redevelopment is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. If the redevelopment results in the addition or replacement of less than 50 percent of the impervious area on-site and the existing development was not subject to WQMP requirement, the numeric sizing criteria discussed in Section 7.II-2.0 only applies to the addition or replacement area. If the addition or replacement accounts for 50 percent or more of the impervious area, the Project WQMP requirements apply to the entire development.	
Project Area (ft^2): 527,940*	Number of Dwelling Units: 246	SIC Code: n/a
Narrative Project Description:	The proposed project consists of approximately 12.12 acres (527,940tras square feet)* located at 4665 Lampson Avenue in the City of Los Alamitos, California. The site is bounded to the south by Lampson Avenue, to the east by a golf course, to the north by a park, and to the west by the Seal Beach Joint Forces Training base and vacant land. The site is currently occupied by the California Department of Fish and Wildlife with an associated parking lot and open space. The proposed site consists of 2 parcels per PM2022-133; Parcel 1 is being developed as Apartments and Parcel 2 (VTTM 19263, Lot 1) as for sale Townhomes. A combined drainage/ water quality system for both Parcel 1 and 2 has been incorporated into this Preliminary WQMP and support calculations. A drainage agreement between the 2 parcels for maintenance and access will be established as part of final engineering. Per the City of Los Alamitos General Plan dated March 2015, Existing Land Use exhibit the site is located within the General Office designation. According to the city of Los Alamitos Zoning Map the site is located within the C-F Community Facilities designation. There are two (2) existing driveways that provide access to the site from Lampson Avenue. Approximately 1/3 of the site consists of a paved parking lot. Along the	

west and northern property lines there is a drive aisle and head in parking that appears to serve the park to the north. The remainder of the site consists of a large building, associated concrete sidewalks, and a large grassy/ brush filled open space. The site is bounded on the North, West, and East Property lines with a chain link fence.

The existing building coverage is approximately 44,960 square feet, the existing landscaping coverage is approximately 340,276 square feet, and the AC coverage is 153,471 square feet.

There are three (3) driveways proposed to provide access to the development from Lampson Avenue; one (1) for Parcel 1 and two (2) for Parcel 2. The proposed development will consist of 76 buildings consisting of 2- and 3-story detached single family homes, 3 story townhomes, and 3 story apartment buildings for a total of 246 dwelling units.

The Single Family Detached buildings and the townhome buildings will have side-by-side parking and the apartment buildings will have tuck under parking on the first level.

The proposed building coverage is approximately 336,374 square feet, the drive aisle and open parking coverage is approximately 155,691 square feet, and the open space (public and private) lot coverage is approximately 46,641 square feet.

The site proposes 133 open parking spaces (69 for the apartment buildings and 69 for the townhomes and single family homes), 55 driveway parking spaces, and 368 garage parking spaces (30 for the apartment buildings and 338 for the townhomes and single family homes. The open space areas will be maintained by the appointed Homeowners Association (HOA).

The project proposes onsite private drive aisles, parking areas, hardscape and landscaped areas, and is accessed by two entrances along Lampson Avenue. Drive aisles and parking areas will consist of asphalt concrete pavement and sidewalks comprised of Portland concrete cement (PCC). Decorative hardscape is proposed within the walkways, common areas and portions of the drive aisles. Landscaping will be incorporated in open space areas including vegetation and street trees.

*Note that the project area excludes the proposed 10' dedication for the use of parks along the northern property line which consists of approximately 10,761 square feet.

Project Area	Pervious		Impervious	
	Area (acres or sq ft)	Percentage	Area (acres or sq ft)	Percentage
Pre-Project Conditions	7.18 ac	58%	5.19 AC	42%
Post-Project Conditions*	1.21 ac	10%	10.91	90%
Drainage Patterns/Connections	The existing site is generally flat and sheet flows to the south west towards Lampson Avenue. According to existing topography, the site elevations range from approximately 21.5 feet to 26.5 feet. Per the existing topography, the site elevations range from approximately 21 feet to 26 feet. The existing site generally flows in a north to south direction into an existing westerly flowing concrete channel along the site's southerly property line. The westerly flowing channel outlets to an existing 18" diameter corrugated metal pipe (CMP) with headwall that flows under the offsite driveway to Arbor Park and discharges into an offsite earthen channel on the west side of the park driveway. Stormwater runoff flows within this earthen channel converge with runoff flows from portions of Arbor Park and JFTB and are then collected by an existing 24" CMP that flows westerly through the Joint Forces Training Base (JFTB), then discharge into a westerly flowing earthen channel within the JFTB, and then drain to the Old Ranch Country Club to the south. Stormwater runoff is ultimately conveyed downstream into the San Gabriel River. Per C&V Consulting conducted field observations and existing topography, the existing concrete channel along the site's southerly property line currently ponds back to the existing driveway and overflows onto Lampson Avenue near the southwest corner of the site at the lowest elevation. Based on the existing topography of the site, in the event the outlet pipe were to become clogged, the existing overflows from the property would flow onto Lampson Avenue at the low point at the southwest corner of the site. Lampson Avenue street design is a flow-by condition along the project frontage, therefore any ponding or curb topping as discussed with City staff will likely occur downstream and designed sump condition near Old Ranch Country Club. Runoff appears to run along Lampson Avenue until it reaches an existing Orange County Flood Control Facility east of Seal Beach Boulevard. After entering this facility runoff is conveyed downstream into the San Gabriel River and eventually into the Pacific Ocean. The proposed residential development will be divided into seven (7) Drainage Management Areas (DMA) which will be graded to match the existing drainage condition. The storm water runoff will be collected and conveyed by a series of			

area drains and street flow, towards curb inlet bio-filtration vaults. The bio-filtration vaults will be equipped with an internal bypass that will allow runoff to bypass treatment when the treatment capacity is exceeded. Once through the biofiltration vault, runoff will be conveyed into an underground detention system that will detain the runoff. From the detention system, a stormwater sump pump located within the westerly drive aisle will discharge/ overflow to the existing 18" CMP at the southwest corner to the existing JFTB earthen channel. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing flows. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will flow onto Lampson Avenue matching historical overflow drainage patterns.

The downstream junction structure will be equipped with a Connector Pipe Screen (CPS) device for full trash capture of the 1-yr, 1-hr peak flow rate sized for the entire site to ensure trash collection prior to overflow. Refer to Attachment A for calculations and Attachment C for manufacturer's specifications.

<u>Alternative Drainage System Outlets to Lampson Avenue:</u>

There is no current cross lot drainage agreement between the JFTB and the subject property allowing for the proposed development's flows to outlet onto the JFTB. The JFTB controls all improvements on their property. If, for whatever reason, proposed flows from the project are not allowed to outlet to the JFTB, then an alternate design is proposed to outlet surface flows onto Lampson Avenue gutter via a parkway drain.

Due to existing flooding concerns on Lampson Avenue, the onsite detention and pump system will be designed to allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowable Q25 on Lampson. Once the peak storm event flows have subsided and flows are no longer above the allowed Q25, it will resume pumping to Lampson Avenue.

Refer to Attachment B of this report for the Preliminary WQMP Exhibit.

Refer to Attachment D of this report for a copy of the OCFCD Drainage Facilities Maps.

Refer to separately prepared Hydrology Report for additional drainage information.

**Post-Project perviousness was assumed to be 10% to produce a conservative value for preliminary design. During final engineering, actual pervious coverage will be calculated as landscape plans become available. A thorough review will take place in the final design stages once an impervious percentage is determined and the BMP size may be affected due to the change.

II.2 Potential Stormwater Pollutants

Pollutants of Concern			
Pollutant	Circle One: E=Expected to be of concern N=Not Expected to be of concern		Additional Information and Comments
Suspended-Solid/ Sediment	E X	N	Tributary by proposed landscaped areas.
Nutrients	E X	N	Tributary by proposed landscaped areas.
Heavy Metals	E	N X	Per TGD, Table 2.1 this pollutant is not expected for attached residential developments.
Pathogens (Bacteria/Virus)	E X	N	Tributary by proposed residence and pets.
Pesticides	E X	N	Tributary by proposed landscaped areas.
Oil and Grease	E X	N	Tributary by uncovered parking areas.
Toxic Organic Compounds	E	N X	Per TGD, Table 2.1 this pollutant is nto expected for attached residential developments.
Trash and Debris	E X	N	Tributary by proposed residence.

II.3 Hydrologic Conditions of Concern

☒ No – Map shown in Attachment A

☐ Yes – Describe applicable hydrologic conditions of concern below. *Refer to Section 2.2.3 in the TGD.*

Refer to Attachment A of this report for a copy of the Susceptibility Analysis of San Gabriel-Coyote Creek, HCOC Map. The proposed drainage path of travel has been indicated by arrows on the map. Downstream waters are not considered susceptible to hydromodification.

II.4 Post Development Drainage Characteristics

The proposed residential development will be divided into seven (7) Drainage Management Areas (DMA) which will be graded to match the existing drainage condition. The storm water runoff will be collected and conveyed by a series of area drains and street flow, towards curb inlet bio-filtration vaults. These devices will be sized to treat the required stormwater runoff and have been designed conservatively. The bio-filtration chambers will contain an internal bypass to allow the conveyance of larger storm events. Once through the biofiltration vault, runoff will be conveyed into an underground detention system that will detain the runoff. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows into the existing 18" storm drain pipe at the southwest corner of the site to outlet to the JFTB. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing flows. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will flow onto Lampson Avenue matching historical drainage patterns.

Alternative Drainage System Outlets to Lampson Avenue:

There is no current cross lot drainage agreement between the JFTB and the subject property allowing for the proposed development's flows to outlet onto the JFTB. The JFTB controls all improvements on their property. If, for whatever reason, proposed flows from the project are not allowed to outlet to the JFTB, then an alternate design is proposed to outlet surface flows onto Lampson Avenue gutter via a parkway culvert.

Due to existing flooding concerns on Lampson Avenue, the onsite detention and pump system will be designed to allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowable Q25 on Lampson. Once the peak storm event flows have subsided and flows are no longer above the allowed Q25, it will resume pumping to Lampson Avenue.

II.5 Property Ownership/Management

The proposed project will be maintained by an appointed Homeowners Association (HOA) selected by the Developer, MJW Investments, LLC. The HOA will be responsible for maintaining and providing regular inspections on the post-construction BMPs.

MJW Investments, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, Ca 92694

Section III Site Description

III.1 Physical Setting

Planning Area/ Community Name	n/a
Location/Address	4665 Lampson Avenue Los Alamitos, CA 90631
Land Use	Existing Land Use: General Office Proposed Land Use: Residential Multi-Family
Zoning	C-F Community Facilities
Acreage	12.12 ac
Predominant Soil Type	Soil Type A

III.2 Site Characteristics

Precipitation Zone	The site falls under the 0.8" per the TGD, Figure XVI-1, Rainfall Zones Map. Refer to Attachment A of this report for a copy of the map.
Topography	The site is generally flat and sheet flows to the south west towards Lampson Avenue. According to existing topography, the site elevations range from approximately 21.5 feet to 26.5 feet.
Drainage Patterns/Connections	According to existing topography runoff generally surface flows south and west onsite. There is an existing headwall near the eastern most existing driveway. It appears runoff from the adjacent onsite grass area is conveyed towards the headwall that connects to an open drainage channel that slopes to the west along the southern property line. The drainage channel terminates into an existing headwall at the southwest corner of the site. Existing onsite gutters convey runoff into the existing drainage channel. There are two existing trench drains in the two eastern driveways that appear to connect to the existing drainage channel as well. Runoff appears to run along Lampson Avenue until it reaches an existing Orange County Flood Control Facility east of Seal Beach Blvd. After entering this facility runoff is conveyed downstream into the San Gabriel River and eventually into the Pacific Ocean. The proposed drainage design will follow the existing drainage pattern with surface flows to onsite drainage facilities that will ultimately outlet into the existing headwall on the southwest corner of the site.
Soil Type, Geology, and Infiltration Properties	Per the Preliminary Geotechnical Evaluation and Design Recommendations Report prepared by LGC Geotechnical, Inc. Dated December 21, 2021, the site's geotechnical properties are described as the following: "Based on the results of our subsurface investigation, the site is underlain by a thin veneer of topsoil and older artificial fill over young alluvial deposits of Holocene age, per regional geologic mapping (USGS, 2016). The young alluvial sediments encountered during our subsurface exploration generally consist of interbedded layer of gray and brown, silty clay, clay silty sand, and clayey sand. The materials were observed to be very moist to wet with depth, soft to very stiff and medium dense to dense." "In general, our borings indicate the site is underlain by young alluvial fan deposits to the maximum explored depth of approximately 46.5 feet below existing grade. The material consists of clay, clayey sand, silty clay, and silty sand. The material was observed to be very moist to wet with depth and soft to stiff and medium dense to dense." Refer to Attachment F of this report for a copy of the Geotechnical Report.

Hydrogeologic (Groundwater) Conditions

Per the Preliminary Geotechnical Evaluation and Design Recommendations Report prepared by LGC Geotechnical, Inc. Dated December 21, 2021, the site's groundwater conditions are described as the following:

"*Groundwater was encountered in three of our borings (HS-1 through HS-3) at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. The location and approximate depth of groundwater is summarized in Table 1 below.*

Boring Number	Total Drilled Depth of Boring (ft)	Groundwater Depth Below Existing Grade (ft)
HS-1	*21.5*	*13*
HS-2	*46.5*	*11.5*
HS-3	*21.5*	*11*

Seasonal fluctuations of groundwater elevations should be expected over time. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present due to local seepage caused by irrigation and/ or recent precipitation. Local perched groundwater conditions or surface seepage may develop once site development is completed."

Refer to Attachment F of this report for a copy of the Geotechnical Report.

Geotechnical Conditions (relevant to infiltration)

Per the Preliminary Geotechnical Evaluation and Design Recommendations Report prepared by LGC Geotechnical, Inc. Dated December 21, 2021, the site's geotechnical infiltration properties are described as the following:

"Two field percolation tests were performed in locations and depths per the direction of the project civil engineer, the location is depicted on Figure 2 – Boring Location Map. Test well installation consisted of placing a 3-inch diameter perforated PVC pipe in the excavated 8-inch diameter borehole and backfilling the annulus with crushed rock including the placement of approximately 2 inches of crushed rock at the bottom of the borehole. The infiltration test wells were presoaked the day of installation and testing took place within 24 hours of presoaking. During the pre-test, the water level was observed to drop less than 6 inches in 25 minutes for two consecutive readings. Therefore, the test procedure for fine-grained soils or "slow test" was followed. Test well installation and the estimation of infiltration rates were accomplished in general accordance with the guidelines set forth by the County of Orange (2013). In general, three-dimensional flow out of the test well (percolation), as observed in the field, is mathematically reduced to one-dimensional flow out of the bottom of the test well (infiltration). Infiltration tests are performed using relatively clean water, free of particulates, silt, etc. The results of our recent field infiltration testing are presented in Appendix D and summarized below.

TABLE 2
Summary of Field Infiltration Testing

Infiltration Test *Identification*	**Approx. Depth Below Existing Grade (ft)**	**Observed Infiltration Rate* (in./hr.)**
I-1	5	**0.03**
I-2	**5**	**0.04**

*Observed Infiltration Rates Do Not Include Factor of Safety.

The tested infiltration rates provided in this report are considered a general representation of the infiltration rates at the location of the proposed infiltration boring. Please note, the testing of infiltration rates is highly dependent upon the materials encountered at the point of testing (i.e., location and depth of testing). Varying subsurface conditions may exist outside of the test location which could alter the calculated infiltration rate."

"Geotechnical stability and integrity of the project site is reliant upon appropriate handling of surface water. Due to the extremely low measured infiltration rate, low permeability fine-grained soils at depth, shallow groundwater and site liquefaction potential, we strongly recommend against the intentional infiltration of storm water into subsurface soils."

Refer to Attachment F of this report for a copy of the Geotechnical Report.

Per GeoTracker, there are no Leaking Underground Storage Tank (LUST) Cleanup Sites within 1,000 feet of the project site. There is a public water well operated by the City of Seal Beach approximately 1,800 feet west of the site. The well is listed as an active, raw groundwater well operated by the city of Seal Beach. Refer to Attachment F for the GeoTracker printout of the site.

Off-Site Drainage	The site does not experience any off-site run-on
Utility and Infrastructure Information	Utilities are proposed to be underground. No special setbacks are needed or proposed.

III.3 Watershed Description

Receiving Waters	The project site is located within the San Gabriel-Coyote Creek Watershed. The site discharges into the Federal Storm Channel, converges with the San Gabriel River and outlets to the Pacific Ocean.
303(d) Listed Impairments	San Gabriel River Estuary is listed for Copper, Dioxin, Indicator Bacteria, Nickel and Oxygen, Dissolved. San Pedro Bay Near/Off Shore Zones is listed for Chlordane, PCBs, Total DDT, Toxicity.
Applicable TMDLs	TMDLs are listed for the water bodies Coyote Creek Channel for Copper, Lead, and Zinc. San Gabriel TMDLs are for Indicator Bacteria. These TMDLs have been adopted for Coyote Creek/ San Gabriel River by the Los Angeles Regional Water Quality Control Board (Region 4); however, it applies to the areas of Orange County that drain to the Coyote Creek and San Gabriel River.
Pollutants of Concern for the Project	Suspended solid/ sediments, Nutrients, Pathogens (Bacteria/ Virus), Pesticides, Oil & Grease and Trash & Debris
Environmentally Sensitive and Special Biological Significant Areas	n/a

Section IV Best Management Practices (BMPs)

IV. 1 Project Performance Criteria

(NOC Permit Area only) Is there an approved WIHMP or equivalent for the project area that includes more stringent LID feasibility criteria or if there are opportunities identified for implementing LID on regional or sub-regional basis?		YES ☐	NO ☒
If yes, describe WIHMP feasibility criteria or regional/sub-regional LID opportunities.	n/a		

Project Performance Criteria (continued)	
If HCOC exists, list applicable hydromodification control performance criteria (Section 7.II-2.4.2.2 in MWQMP)	Per 7.II-2.4.2.2 of the Model WQMP, HCOC exists for when the post-construction time of concentration and volume of storm water increases beyond 5% of a 2-year storm event thus potentially increasing the downstream erosion and adversely impacts on physical structure, aquatic, and riparian habitat.
List applicable LID performance criteria (Section 7.II-2.4.3 from MWQMP)	Per 7.II-2.4.3 of the Model WQMP, the available LID Treatment BMPs to be utilized in reducing the post-development impacts include infiltration, harvest and use, evapotranspiration, or biotreat/biofilter, the 85^{th} percentile of a 24-hour storm event (Design Capture Volume).
List applicable treatment control BMP performance criteria (Section 7.II-3.2.2 from MWQMP)	Per 7.II-3.2.2 of the Model WQMP, if the LID performance criteria is not feasibly met by retention and/or biotreatment, then sizing of onsite treatment control BMPs are required. Sizing of these treatment control BMPs will include, if applicable any Water Quality credits as calculated per the Technical Guidance Document. The project proposes to satisfy LID performance criteria, therefore treatment control performance criteria is also fully satisfied.
Calculate LID design storm capture volume for Project.	The proposed project residential site will generate a total DCV of 29,213 cf. The DCV for each DMA was calculated as follows: DMA 1: V_{design} = 0.83*0.8*2.160 acres*43,560 (sf/acre)*(1 foot/12 inches) = 5,206 cf DMA 2: V_{design} = 0.83*0.8*2.093 acres*43,560 (sf/acre)*(1 foot/12 inches) = 5,045 cf DMA 3: V_{design} = 0.83*0.8*2.809 acres*43,560 (sf/acre)*(1 foot/12 inches) = 6,771 cf DMA 4: V_{design} = 0.83*0.8*1.806 acres*43,560 (sf/acre)*(1 foot/12 inches) = 4,352 cf DMA 5: V_{design} = 0.83*0.8*0.507 acres*43,560 (sf/acre)*(1 foot/12 inches) = 1,223 cf DMA 6: V_{design} = 0.83*0.8*0.504 acres*43,560 (sf/acre)*(1 foot/12 inches) = 1,214 cf DMA 7: V_{design} = 0.83*0.8*2.241 acres*43,560 (sf/acre)*(1 foot/12 inches) = 5,401 cf

	As flow-based Bio-filtration BMPs are proposed for project site. The design flowrates corresponding to surface flows from streets and drive aisles within each DMA were calculated as follows: DMA 1: Q_{design} = 0.83*0.26 (in/hr)*2.160 acres = 0.466 cfs DMA 2: Q_{design} = 0.83*0.26 (in/hr)*2.093 acres = 0.452 cfs DMA 3: Q_{design} = 0.83*0.26 (in/hr)*2.809 acres = 0.606 cfs DMA 4: Q_{design} = 0.83*0.26 (in/hr)*1.806 acres = 0.390 cfs DMA 5: Q_{design} = 0.83*0.26 (in/hr)*0.507 acres = 0.110 cfs DMA 6: Q_{design} = 0.83*0.26 (in/hr)*0.504 acres = 0.109 cfs DMA 7: Q_{design} = 0.83*0.26 (in/hr)*2.241 acres = 0.484 cfs * Refer to Worksheet B & Din Attachment A of this report.

IV.2. SITE DESIGN AND DRAINAGE PLAN

The site is divided into seven (7) Drainage Management Areas (DMA) as indicated on the Preliminary WQMP Exhibit. Each drainage area will have an area drain system to convey runoff from landscape and roof drainage along with curb inlet Modular Wetlands Systems to intercept surface runoff form surrounding walkways and drive aisles. The area drain system design for the project will be determined during final engineering and will connect directly to the proposed water quality treatment devices.

Stormwater runoff will be collected and conveyed through curb inlet Modular Wetlands Systems for water quality treatment of the Design Capture Volume (DCV). The overall project treatment flow rate for the site is 2.615 cfs, per Worksheet D in Attachment A of this report. Refer to the DMA Table below for area designation.

The Modular Wetland System (MWS) Biofiltration vaults are designed to provide a 3-phase treatment train. Initially, when the stormwater enters the system, a trash rack, filter media and settling chamber will capture large trash/ debris and sediment in the stormwater before entering the planting media. This system is designed to treat stormwater flow horizontally. Before the stormwater enters the planting or "wetland" chamber, the runoff flows through the 2nd phase, a pre-filter cartridge which captures fines TSS, metals, nutrients and bacteria. The pre-filter chamber eliminates additional maintenance of the planting area. The wetland chamber is the 3rd phase of the system which provides final treatment through a combination of physical, chemical and biological processes. Refer to Section IV.3.4 of this report for sizing information of the Biofiltration Vaults.

In the 7 DMAs, street runoff and landscape area runoff will be conveyed into the Modular Wetlands System where it will be treated for Water Quality. In the event that the design capture flowrate is exceeded, runoff will flow through the internal bypass and be conveyed into the underground detention system. The underground detention system meters flows offsite through an existing 18" storm drain pipe.

Treated runoff will discharge to the existing 18" CMP/ JFTB earthen channel matching historic drainage patterns, ultimately converging with the San Gabriel River which eventually outlets into the Pacific Ocean.

Drainage from upstream offsite areas that run onto the site will be collected and conveyed in separate underground storm drain pipes that will direct flows to overflow parkway drains to discharge into the existing 18" CMP. Offsite and onsite runoff flows will not co-mingle prior to onsite treatment runoff.

Drainage Management Areas (DMA) Table:

Refer to the Preliminary WQMP Exhibit within this report for referenced area designations.

Drainage Area No. (DMA)	Area (ac)	DCV (cf)	Design Flow Rate (cfs)	Proposed BMPs
1	2.15978	5,206	0.466	BIO-7 Biofiltration System
2	2.09320	5,045	0.452	BIO-7 Biofiltration System
3	2.80935	6,771	0.606	BIO-7 Biofiltration System
4	1.80556	4,352	0.390	BIO-7 Biofiltration System
5	0.50746	1,223	0.110	BIO-7 Biofiltration System

6	0.50365	1,214	0.109	BIO-7 Biofiltration System
7	2.24081	5,401	0.484	BIO-7 Biofiltration System
∑	12.12	29,213	2.615	

* Refer to Worksheets B and D in Attachment A of this report.

IV.3 LID BMP SELECTION AND PROJECT CONFORMANCE ANALYSIS

IV.3.1 Hydrologic Source Controls

Name	Included?
Localized on-lot infiltration	☐
Impervious area dispersion (e.g. roof top disconnection)	☐
Street trees (canopy interception)	☐
Residential rain barrels (not actively managed)	☐
Green roofs/Brown roofs	☐
Blue roofs	☐
Impervious area reduction (e.g. permeable pavers, site design)	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐

**HSC BMPs are not required since the site is HCOC exempt*

IV.3.2 Infiltration BMPs

Name	Included?
Bioretention without underdrains	☐
Rain gardens	☐
Porous landscaping	☐
Infiltration planters	☐
Retention swales	☐
Infiltration trenches	☐
Infiltration basins	☐
Drywells	☐
Subsurface infiltration galleries	☐
French drains	☐
Permeable asphalt	☐
Permeable concrete	☐
Permeable concrete pavers	☐
Other:	☐
Other:	☐

Per TGD Figure XVI-2A the site falls under Soil Type "A".

Due to the high groundwater levels and very low infiltration rates, infiltration is not feasible for this site.

IV.3.3 Evapotranspiration, Rainwater Harvesting BMPs

Name	Included?
All HSCs; *See Section IV.3.1*	☐
Surface-based infiltration BMPs	☐
Biotreatment BMPs	☒
Above-ground cisterns and basins	☐
Underground detention	☐
Other:	☐
Other:	☐
Other:	☐

The entire DCV is being treated by Biotreatment BMPs. Harvested Water Demand and Feasibility assessment was performed per Worksheet J, which indicated that Evapotranspiration or Rainwater Harvesting BMPs are infeasible.

IV.3.4 Biotreatment BMPs

Name	Included?
Bioretention with underdrains	☐
Stormwater planter boxes with underdrains	☐
Rain gardens with underdrains	☐
Constructed wetlands	☐
Vegetated swales	☐
Vegetated filter strips	☐
Proprietary vegetated biotreatment systems	☒
Wet extended detention basin	☐
Dry extended detention basins	☐
Other:	☐
Other:	☐

Modular Wetland System (MWS) Biofiltration vaults will be utilized to treat runoff prior to discharging offsite. The MWS Biofiltration vaults utilize a 3-phase treatment train by collecting the stormwater runoff in a Pre-Treatment Chamber, Planting or "Wetland" Chamber and Discharge Chamber. Treated runoff outlets to existing Caltrans catch basins.

The MWS Biofiltration vaults were sized separately per DMA using the treatment flow rate method per the Orange County Technical Guidance Document worksheets. Note that the tributary treatment area used for MWS sizing calculations refers to the entire DMA. Landscape areas will have area drains to convey runoff through the MWS systems.

Refer to Worksheet D in Attachment A for calculations.

DMA	Acreage Tributary to Proposed Catch Basins (ac)	Design Flow Rate (cfs)	MWS Model	Treatment Capacity, Q (cfs)
1	2.15978	0.466	MWS-L-8-20-V	0.620
2	2.09320	0.452	MWS-L-8-16-C	0.462
3	2.80935	0.606	MWS-L-8-20-C	0.620
4	1.80556	0.390	MWS-L-8-16-C	0.462
5	0.50746	0.110	MWS-L-4-8-C	0.115
6	0.50365	0.109	MWS-L-4-8-C	0.115

7	2.24081	0.484	MWS-L-8-16-C	0.489
Total	12.12	2.615		2.725

** Project-specific details will be provided during final engineering. Refer to Attachment C for additional manufacturer information.*

Conclusion:

The utilization of a MWS Biofiltration vaults will provide more than the required pre-treatment flow rate for their tributary drainage areas.

	Easting	***Northing***
MWS #1	*6014531.4995'*	*2232655.3917'*
MWS #2	*6014932.0452'*	*2232907.6932'*
MWS #3	*6014965.4528'*	*2232807.1811'*
MWS #4	*6014903.1336'*	*2232808.1092'*
MWS #5	*6014677.7325'*	*2232684.9774'*
MWS #6	*6014814.9612'*	*2232681.4795'*
MWS #7	*6014894.1135'*	*2232648.0694'*

IV.3.5 Hydromodification Control BMPs

Hydromodification Control BMPs	
BMP Name	**BMP Description**
n/a	n/a

IV.3.6 Regional/Sub-Regional LID BMPs

Regional/Sub-Regional LID BMPs
n/a

IV.3.7 Treatment Control BMPs

Treatment Control BMPs	
BMP Name	**BMP Description**
Connector Pipe Screen (CPS) Device	Install CPS device at downstream junction prior to overflow to ensure full trash capture of entire site based on the 1-yr, 1-hr peak flow rate. Refer Attachment A for calculations and Attachment C for manufacturer's specifications.

IV.3.8 Non-structural Source Control BMPs

Non-Structural Source Control BMPs				
Identifier	**Name**	**Check One**		**If not applicable, state brief reason**
		Included	**Not Applicable**	
N1	Education for Property Owners, Tenants and Occupants	☒	☐	
N2	Activity Restrictions	☒	☐	
N3	Common Area Landscape Management	☒	☐	
N4	BMP Maintenance	☒	☐	
N5	Title 22 CCR Compliance (How development will comply)	☒	☐	
N6	Local Industrial Permit Compliance	☐	☒	Proposed residential project.
N7	Spill Contingency Plan	☐	☒	Proposed residential project.
N8	Underground Storage Tank Compliance	☐	☒	No proposed underground storage tanks.
N9	Hazardous Materials Disclosure Compliance	☐	☒	Proposed residential project.
N10	Uniform Fire Code Implementation	☒	☐	
N11	Common Area Litter Control	☒	☐	
N12	Employee Training	☒	☐	
N13	Housekeeping of Loading Docks	☐	☒	Proposed residential project.
N14	Common Area Catch Basin Inspection	☒	☐	
N15	Street Sweeping Private Streets and Parking Lots	☒	☐	
N16	Retail Gasoline Outlets	☐	☒	Proposed residential project.

N1: Education for Property Owners, Tenants & Occupants

Project conditions of approval will require that the Homeowner's Association (HOA) periodically provide environmental awarness education materials, made available bt the municipalities, to all of its members. Among other things, these materials will be descrive the use of chemcials (including household type) that should be limited to the property, with no discharge of wastes via hosing or other direct discharge to gutters, catch basins and storm drains. Educational materials available from the County of Orange can be downloaded here:

http://www.ocwatersheds.com/PublicEd/resources/default.aspx

N2: Activity Restrictions

Conditions, covenants and restrictions (CC&Rs) must be prepared by the developer for the appointed HOA for the purpose of surface water quality protection. The CC&Rs shall incorporate the restrictions based on the Project WQMP.

N3: Common Area Landscape Management

All common landscaping and/ or open space areas shall have on-going landscape maintenance by an appointed professional landscaping maintenance company as selected by the HOA. Maintenance shall incorporate all current County Water Conservation Resolution usage and follow the Management Guidelines for Use of Fertilizers per the DAMP Section 5.5. Refer to Section 5 of this report for additional landscape maintenance requirements.

N4: BMP Maintenance

Refer to Section 5 and Attachment C of this report for additional non-structural BMP maintenance requirements, responsibility and frequency.

N5: Title 22 CCR Compliance

HOA is responsible for compliance with Title 22 of the California Code of Regulations (CCR) and relevant sections of the California Health & Safety Code regarding hazardous waste management is enforced by the County Environmental Heath and behalf of the State. Inforamtion regarding hazardous waste management must be provided to all employees, homeowners, tenants and occupants.

N10: Uniform Fire Code Implementation

HOA is responsible for compliance with Article 80 of the Uniform Fire Code enforced by the local fire protection agency.

N11: Common Area Litter Control

HOA to implement trash management and litter control procedures in the common areas aimed at reducing pollution of drainage water. HOA to contract with landscape maintenance company to provide this service during regularly scheduled maintenance, which will consist of litter patrol,

emptying of trash receptacles in common areas, and noting trash disposals violations by homeowners, tenants or occupants and reporting the violations to the HOA for investigation.

N12: Employee Training

HOA to provide Educational Materials and Property Management manuals to all employees upon initial hiring. Any updated information shall be provided to employees within a timely manner along with information on implementation.

N14: Common Area Catch Basin Inspections

HOA to inspect, clean and repair common area catch basins within the development to verify that the private drainage system is working properly. All trash/ debris and sediment build up is removed and any repairs/ replacements are conducted. Cleaning should take place in late summer/ early fall prior to the start of the raining season. Drainage facilities include catch basins (storm drain inlets), detention basins, retention basins, sediment basins, open drainage channels, area drains, and lift stations. Records shall be kept onsite to document the annual maintenance.

N15: Street Sweeping of Private Streets & Parking Lots

HOA to schedule at a minimum street sweeping of private streets and parking areas prior to the start of the rainy seasons, in late summer or early fall. Additional sweeping may be required to remove landscaping foliage and/ or pollution.

IV.3.9 Structural Source Control BMPs

Structural Source Control BMPs				
Identifier	**Name**	**Check One**		**If not applicable, state brief reason**
		Included	**Not Applicable**	
S1	Provide storm drain system stenciling and signage	☒	☐	
S2	Design and construct outdoor material storage areas to reduce pollution introduction	☐	☒	No proposed outdoor storage areas.
S3	Design and construct trash and waste storage areas to reduce pollution introduction	☒	☐	
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	☒	☐	
S5	Protect slopes and channels and provide energy dissipation	☐	☒	No proposed slopes/channels to be protected.
	Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)	☐	☒	n/a
S6	Dock areas	☐	☒	Proposed residential project.
S7	Maintenance bays	☐	☒	Proposed residential project.
S8	Vehicle wash areas	☐	☒	No proposed vehicle wash areas.
S9	Outdoor processing areas	☐	☒	Proposed residential project.
S10	Equipment wash areas	☐	☒	Proposed residential project.
S11	Fueling areas	☐	☒	Proposed residential project.
S12	Hillside landscaping	☐	☒	Project not located within hillside area.
S13	Wash water control for food preparation areas	☐	☒	Proposed residential project.
S14	Community car wash racks	☐	☒	No proposed community car washing areas.

S1 (SD-13): Provide Storm Drain System Stenciling

Phrase "No Dumping – Drains to Ocean" or equally effective phrase to be stenciled on catch basins to alert the public of the destination of pollutants discharged into storm water. This stenciling will be inspected and re-stenciled on a periodic basis by HOA.

Refer to CASQA BMP Fact Sheet SD-13 for additional information.

S4 (SD-12): Use Efficient Irrigation Systems & Landscape Design

HOA shall implement the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm drain systems. HOA to implement the following methods to reduce excessive irrigation water runoff, where applicable:

- Employ rain shutoff devices to prevent irrigation after precipitation
- Utilizing landscape specific irrigation water requirements
- Utilize flow reducers or shutoff valves triggered by pressure drop to control water loss due to broken sprinkler heads
- Implement landscaping practices per the County Water Conservation Resolution or City agency equivalent
- Group plants or landscaping with similar water consumption in order to promote surface infiltration

Refer to CASQA BMP Fact Sheet SD-12 for additional information.

IV.4 ALTERNATIVE COMPLIANCE PLAN (IF APPLICABLE)

IV.4.1 Water Quality Credits

<table>
<tr><th colspan="5">Description of Proposed Project</th></tr>
<tr><td colspan="5">Project Types that Qualify for Water Quality Credits (Select all that apply):</td></tr>
<tr><td colspan="2">☐Redevelopment projects that reduce the overall impervious footprint of the project site.</td><td colspan="2">☐Brownfield redevelopment, meaning redevelopment, expansion, or reuse of real property which may be complicated by the presence or potential presence of hazardous substances, pollutants or contaminants, and which have the potential to contribute to adverse ground or surface WQ if not redeveloped.</td><td>☐ Higher density development projects which include two distinct categories (credits can only be taken for one category): those with more than seven units per acre of development (lower credit allowance); vertical density developments, for example, those with a Floor to Area Ratio (FAR) of 2 or those having more than 18 units per acre (greater credit allowance).</td></tr>
<tr><td colspan="2">☐ Mixed use development, such as a combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that can demonstrate environmental benefits that would not be realized through single use projects (e.g. reduced vehicle trip traffic with the potential to reduce sources of water or air pollution).</td><td colspan="2">☐ Transit-oriented developments, such as a mixed use residential or commercial area designed to maximize access to public transportation; similar to above criterion, but where the development center is within one half mile of a mass transit center (e.g. bus, rail, light rail, or commuter train station). Such projects would not be able to take credit for both categories, but may have greater credit assigned</td><td>☐ Redevelopment projects in an established historic district, historic preservation area, or similar significant city area including core City Center areas (to be defined through mapping).</td></tr>
<tr><td>☐Developments with dedication of undeveloped portions to parks, preservation areas and other pervious uses.</td><td>☐ Developments in a city center area.</td><td>☐ Developments in historic districts or historic preservation areas.</td><td>☐ Live-work developments, a variety of developments designed to support residential and vocational needs together – similar to criteria to mixed use development; would not be able to take credit for both categories.</td><td>☐In-fill projects, the conversion of empty lots and other underused spaces into more beneficially used spaces, such as residential or commercial areas.</td></tr>
<tr><td>Calculation of Water Quality Credits
(if applicable)</td><td colspan="4">The entire DCV is being treated by LID BMPs. Water quality credits will not be used.</td></tr>
</table>

IV.4.2 Alternative Compliance Plan Information

n/a

Section V Inspection/Maintenance Responsibility for BMPs

Currently the owner of the property is the California Department of Fish and Wildlife. Upon completion of entitlement, during the process of final engineering, ownership will be transferred to MJW Investments, LLC. Ultimately, the property owner will be responsible for establishing a Homeowner's Association (HOA) for long term BMP operation and maintenance. The owner is aware of the maintenance responsibilities of the proposed BMPs. A funding mechanism is in place to establish an HOA to maintain the BMPs at the frequency stated in the WQMP. Contact information will be updated as part of final engineering.

If ownership is transferred at a later date other than who is listed within the Final report, completion of a Notice of Transfer of Responsibility form is required. A blank form is provided in Attachment G of this report.

For preliminary purposes, MJW Investments will be responsible for the BMP maintenance until the project is sold and/ or transferred to a new Owner, HOA.

MJW Investments, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, Ca 92694

The following BMP Inspection/ Maintenance table will be completed as part of the final engineering. This table will include BMP description, responsible party(ies), required inspection/ maintenance routine and frequency.

BMP Inspection/Maintenance			
BMP	**Reponsible Party(s)**	**Inspection/ Maintenance Activities Required**	**Minimum Frequency of Activities**
Education for Property Owners, Tenants, Occupants & Employees	Homeowner's Association (HOA)	HOA to provide education material, a copy of the approved WQMP and Operation & Maintenance Plan (O&M) to new property owners, tenants, occupants & employees.	As needed.
Activity Restrictions	HOA	HOA notified of activities that are prohibited by homeowners.	Restrictions identified in Employee Manual and reviewed yearly by employees.
Common Area Landscape Management	HOA	HOA to hire professional landscape company to conduct maintenance of landscaping to meet current water efficiency and keep plants healthy and bio areas maintained with proper soil amendments.	Regular maintenance once a week and monthly inspection to determine deficiencies
Title 22 CCR Compliance	HOA	HOA to comply with Title 22 of the California Code of Regulations (CCR), relevant California Health & Safety Code and keep informed of the latest	As needed.

		requirements. Information regarding hazardous waste management must be provided to all employees, homeowners, tenants & occupants.	
Uniform Fire Code Implementation	HOA	HOA to comply with fire regulations and keep informed of the latest rules and requirements.	Comply with annual fire inspections and maintain building and access per the latest fire codes.
Common Area Litter Control	HOA	HOA to provide litter removal of site parking lot and landscape areas.	Once per week.
Employee Training	HOA	HOA to provide Educational Materials and Property Management manuals to all employees upon initial hiring. Any updated information shall be provided to employees in a timely manner.	As needed.
Common Area Catch Basin Inspections	HOA	HOA to inspect, clean and repair common area catch basins to verify private drainage system functioning properly.	80% of drainage facilities to be inspected, cleaned and maintained on an annual basis and 100% in a two-year period.

Private Street & Parking Lot Sweeping	HOA	HOA to provide maintenance of Parking Lot.	Regular Parking Lot sweeping once a week.
Storm Drain Stencilling and Signage	HOA	HOA to provide maintenance of storm drain stencilling and signage.	Once every 6 months, inspect for re-stencilling needs. Re-stencil as needed immediately.
Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	HOA	HOA to provide maintenance of landscaping to meet current water efficiency standards and keep plants healthily.	Regular maintenance once a week and monthly inspection to determine deficiencies.
Connector Pipe Screen (CPS) Device (Full Trash Capture)	HOA	HOA inspect, clean, and/ or replace device per manufacturer's speciation's.	Regular maintenance before rainy season (October 1st). Inspect and clean at least twice per year.
Modular Wetlands Biofiltration systems	HOA	HOA to provide maintenance of systems. Remove trash debris and sediment accumulation after storm events. Replace media as required. Repair as needed.	Regular maintenance before rainy season (October 1st). Inspect and clean at least twice per year.

Modular Trough Diversion System	HOA	HOA to inspect system and schedule maintenance when deficiencies are noted. Area near system to be kept free of debris and cleanings shall be scheduled to remove silt from trough as needed	Inspections should occur at least two times per year and one of the inspection must be before the start of the rainy season (October 1st).

Section VI Site Plan and Drainage Plan

VI.1 SITE PLAN AND DRAINAGE PLAN

Include a site plan and drainage plan sheet set containing the following minimum information:

- Project location
- Site boundary
- Land uses and land covers, as applicable
- Suitability/feasibility constraints
- Structural BMP locations
- Drainage delineations and flow information
- Drainage connections
- BMP details

Section VII Educational Materials

Refer to the Orange County Stormwater Program (ocwatersheds.com) for a library of materials available. For the copy submitted to the Permittee, only attach the educational materials specifically applicable to the project. Other materials specific to the project may be included as well and must be attached.

Education Materials			
Residential Material (http://www.ocwatersheds.com)	**Check If Applicable**	**Business Material (http://www.ocwatersheds.com)**	**Check If Applicable**
The Ocean Begins at Your Front Door	☒	Tips for the Automotive Industry	☐
Tips for Car Wash Fund-raisers	☐	Tips for Using Concrete and Mortar	☐
Tips for the Home Mechanic	☒	Tips for the Food Service Industry	☐
Homeowners Guide for Sustainable Water Use	☒	Proper Maintenance Practices for Your Business	☐
Household Tips	☒	**Other Material**	**Check If Attached**
Proper Disposal of Household Hazardous Waste	☒		
Recycle at Your Local Used Oil Collection Center (North County)	☒		☐
Recycle at Your Local Used Oil Collection Center (Central County)	☐		☐
Recycle at Your Local Used Oil Collection Center (South County)	☐		☐
Tips for Maintaining a Septic Tank System	☐		☐
Responsible Pest Control	☒		☐
Sewer Spill	☒		☐
Tips for the Home Improvement Projects	☒		☐
Tips for Horse Care	☐		☐
Tips for Landscaping and Gardening	☒		☐
Tips for Pet Care	☒		☐
Tips for Pool Maintenance	☐		☐
Tips for Residential Pool, Landscape and Hardscape Drains	☒		☐
Tips for Projects Using Paint	☒		☐

Attachment A

Orange County Technical Guidance Document
Worksheets and Figures

Table 2.7: Infiltration BMP Feasibility Worksheet

	Infeasibility Criteria	***Yes***	***No***
1	**Would Infiltration BMPs pose significant risk for groundwater related concerns?** Refer to Appendix VII (Worksheet I) for guidance on groundwater-related infiltration feasibility criteria.	X	
Provide basis: Per the preliminary Geotechnical Evaluation and Design Recommendations Report prepared by LGC Geotechnical, Inc dated December 21, 2021: "Geotechnical stability and integrity of the project site is reliant upon appropriate handling of surface water. Due to the extremely low measured infiltration rate, low permeability fine-grained soils at depth, shallow groundwater and site liquefaction potential, we strongly recommend against the intentional infiltration of storm water into subsurface soils."			
2	Would Infiltration BMPs **pose significant risk of increasing risk of geotechnical hazards that cannot be mitigated to an acceptable level**? (Yes if the answer to any of the following questions is yes, as established by a geotechnical expert): • The BMP can only be located less than 50 feet away from slopes steeper than 15 percent • The BMP can only be located less than eight feet from building foundations or an alternative setback. • A study prepared by a geotechnical professional or an available watershed study substantiates that stormwater infiltration would potentially result in significantly increased risks of geotechnical hazards that cannot be mitigated to an acceptable level.		X
Provide basis:			
3	Would infiltration of the DCV from drainage area **violate downstream water rights**?		X
Provide basis:			

Table 2.7: Infiltration BMP Feasibility Worksheet (continued)

	Partial Infeasibility Criteria	***Yes***	***No***
4	Is proposed infiltration facility **located on HSG D soils** or the site geotechnical investigation identifies presence of soil characteristics which support categorization as D soils?		X
Provide basis:			
5	Is **measured infiltration rate below proposed facility less than 0.3 inches per hour**? This calculation shall be based on the methods described in Appendix VII.	X	
Provide basis:			
6	Would **reduction of over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?**		X
Provide citation to applicable study and summarize findings relative to the amount of infiltration that is permissible:			
7	Would **an increase in infiltration over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?**		X
Provide citation to applicable study and summarize findings relative to the amount of infiltration that is permissible:			

Table 2.7: Infiltration BMP Feasibility Worksheet (continued)

Infiltration Screening Results (check box corresponding to result):		
8	Is there substantial evidence that infiltration from the project would result in a significant increase in I&I to the sanitary sewer that cannot be sufficiently mitigated? (See Appendix XVII) Provide narrative discussion and supporting evidence:	No
9	If any answer from row 1-3 is yes: infiltration of any volume is **not feasible** within the DMA or equivalent. Provide basis:	Yes
10	If any answer from row 4-7 is yes, infiltration is **permissible but is not presumed to be feasible for the entire DCV.** Criteria for designing biotreatment BMPs to achieve the maximum feasible infiltration and ET shall apply. Provide basis:	No
11	If all answers to rows 1 through 11 are no, infiltration of the full DCV is potentially feasible, BMPs must be designed to infiltrate the full DCV to the maximum extent practicable.	Infiltration is Infeasible

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.80	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.80	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.862	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.83	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	6,856	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate			**N/A**	
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (Appendix VII)	$K_{measured}$=	NA	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	NA	
3	Calculate design infiltration rate, $K_{design} = K_{measured} / S_{final}$	K_{design}=	NA	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	NA	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	NA	feet
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	NA	sq-ft

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.8	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.8	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.018	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9	
3	Calculate runoff coefficient, $C= (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate runoff volume, $V_{design}= (C \times d_{remainder} \times A \times 43560 \times (1/12))$	V_{design}=	4,836	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate			**N/A**	
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (Appendix VII)	$K_{measured}$=	NA	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	NA	
3	Calculate design infiltration rate, $K_{design} = K_{measured} / S_{final}$	K_{design}=	NA	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	NA	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	NA	feet
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	NA	sq-ft

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.8	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.8	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.144	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.83	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	5,136	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate			**N/A**	
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (Appendix VII)	$K_{measured}$=	NA	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	NA	
3	Calculate design infiltration rate, $K_{design} = K_{measured} / S_{final}$	K_{design}=	NA	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	NA	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	NA	feet
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	NA	sq-ft

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.8	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.8	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	1.935	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.83	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	4,637	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate			**N/A**	
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (Appendix VII)	$K_{measured}$=	NA	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	NA	
3	Calculate design infiltration rate, $K_{design} = K_{measured} / S_{final}$	K_{design}=	NA	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	NA	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	NA	feet
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	NA	sq-ft

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.8	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.8	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	0.476	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.83	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	1,140	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate			**N/A**	
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (Appendix VII)	$K_{measured}$=	NA	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	NA	
3	Calculate design infiltration rate, $K_{design} = K_{measured} / S_{final}$	K_{design}=	NA	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	NA	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	NA	feet
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	NA	sq-ft

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.8	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.8	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	0.439	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9	
3	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	C=	0.83	
4	Calculate runoff volume, V_{design}= *(C x* $d_{remainder}$ *x A x 43560 x (1/12))*	V_{design}=	1,052	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate			**N/A**	
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (Appendix VII)	$K_{measured}$=	NA	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	NA	
3	Calculate design infiltration rate, $K_{design} = K_{measured} / S_{final}$	K_{design}=	NA	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	NA	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	NA	feet
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	NA	sq-ft

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from Figure III.1, *d* (inches)	d=	0.8	inches
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 – Line 2)	$d_{remainder}$=	0.8	inches
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.246	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9	
3	Calculate runoff coefficient, $C= (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate runoff volume, $V_{design}= (C \times d_{remainder} \times A \times 43560 \times (1/12))$	V_{design}=	5,381	cu-ft
Step 3: Design BMPs to ensure full retention of the DCV				
Step 3a: Determine design infiltration rate			**N/A**	
1	Enter measured infiltration rate, $K_{measured}$ (in/hr) (Appendix VII)	$K_{measured}$=	NA	In/hr
2	Enter combined safety factor from Worksheet H, S_{final} (unitless)	S_{final}=	NA	
3	Calculate design infiltration rate, $K_{design} = K_{measured} / S_{final}$	K_{design}=	NA	In/hr
Step 3b: Determine minimum BMP footprint				
4	Enter drawdown time, *T* (max 48 hours)	T=	NA	Hours
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	D_{max}=	NA	feet
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	A_{min}=	NA	sq-ft

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter the time of concentration, T_c (min) (See Appendix IV.2)	T_c=	5.00	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	0.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
4	Enter capture efficiency corresponding to d_{HSC}, Y_2 (Worksheet A)	Y_2=	0	%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	0	in/hr
6	Determine the design intensity that must be provided by BMP, $I_{design} = I_1 - I_2$	I_{design}=	0.26	in/hr
Step 2: Calculate the design flowrate				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.862	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9 *	
3	Calculate runoff coefficient, $C = (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate design flowrate, $Q_{design} = (C \times i_{design} \times A)$	Q_{design}=	0.614	cfs

Supporting Calculations

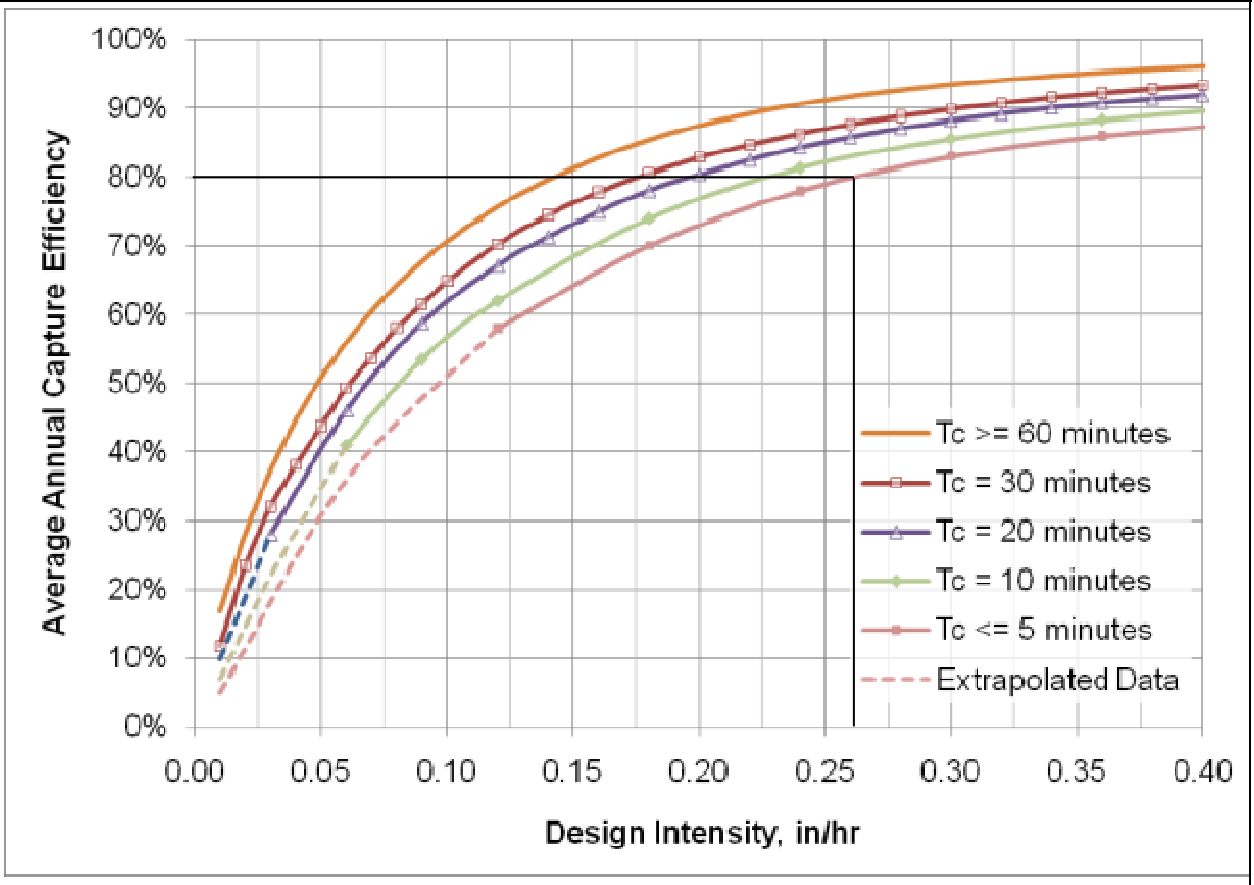
Describe system:
Surface runoff will be conveyed through the private street to proposed curb inlet Biofiltration Vaults for water quality treatment.

*Assumed 90% impervious coverage utilized for preliminary calculations. Actual impervious coverage will be calculated in final engineering.

Provide time of concentration assumptions:
The time of concentration was assumed to be 5 minutes for conservative purposes.

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Graphical Operations



Provide supporting graphical operations. See Example III.7.

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter the time of concentration, T_c (min) (See Appendix IV.2)	T_c=	5.00	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	0.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
4	Enter capture efficiency corresponding to d_{HSC}, Y_2 (Worksheet A)	Y_2=	0	%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	0	in/hr
6	Determine the design intensity that must be provided by BMP, $I_{design}= I_1-I_2$	I_{design}=	0.26	in/hr
Step 2: Calculate the design flowrate				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.018	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9 *	
3	Calculate runoff coefficient, $C= (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate design flowrate, $Q_{design}= (C \times i_{design} \times A)$	Q_{design}=	0.433	cfs

Supporting Calculations

Describe system:
Surface runoff will be conveyed through the private street to proposed curb inlet Biofiltration Vaults for water quality treatment.

*Assumed 90% impervious coverage utilized for preliminary calculations. Actual impervious coverage will be calculated in final engineering.

Provide time of concentration assumptions:
The time of concentration was assumed to be 5 minutes for conservative purposes.

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter the time of concentration, T_c (min) (See Appendix IV.2)	T_c=	5.00	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	0.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
4	Enter capture efficiency corresponding to d_{HSC}, Y_2 (Worksheet A)	Y_2=	0	%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	0	in/hr
6	Determine the design intensity that must be provided by BMP, $I_{design} = I_1 - I_2$	I_{design}=	0.26	in/hr
Step 2: Calculate the design flowrate				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.144	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9 *	
3	Calculate runoff coefficient, $C = (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate design flowrate, $Q_{design} = (C \times i_{design} \times A)$	Q_{design}=	0.460	cfs

Supporting Calculations

Describe system:
Surface runoff will be conveyed through the private street to proposed curb inlet Biofiltration Vaults for water quality treatment.

*Assumed 90% impervious coverage utilized for preliminary calculations. Actual impervious coverage will be calculated in final engineering.

Provide time of concentration assumptions:
The time of concentration was assumed to be 5 minutes for conservative purposes.

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter the time of concentration, T_c (min) (See Appendix IV.2)	T_c=	5.00	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	0.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
4	Enter capture efficiency corresponding to d_{HSC}, Y_2 (Worksheet A)	Y_2=	0	%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	0	in/hr
6	Determine the design intensity that must be provided by BMP, $I_{design}= I_1-I_2$	I_{design}=	0.26	in/hr
Step 2: Calculate the design flowrate				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	1.935	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9 *	
3	Calculate runoff coefficient, $C= (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate design flowrate, $Q_{design}= (C \times i_{design} \times A)$	Q_{design}=	0.415	cfs

Supporting Calculations

Describe system:
Surface runoff will be conveyed through the private street to proposed curb inlet Biofiltration Vaults for water quality treatment.

*Assumed 90% impervious coverage utilized for preliminary calculations. Actual impervious coverage will be calculated in final engineering.

Provide time of concentration assumptions:
The time of concentration was assumed to be 5 minutes for conservative purposes.

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter the time of concentration, T_c (min) (See Appendix IV.2)	T_c=	5.00	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	0.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
4	Enter capture efficiency corresponding to d_{HSC}, Y_2 (Worksheet A)	Y_2=	0	%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	0	in/hr
6	Determine the design intensity that must be provided by BMP, $I_{design} = I_1 - I_2$	I_{design}=	0.26	in/hr
Step 2: Calculate the design flowrate				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	0.476	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9 *	
3	Calculate runoff coefficient, $C = (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate design flowrate, $Q_{design} = (C \times i_{design} \times A)$	Q_{design}=	0.102	cfs

Supporting Calculations

Describe system:
Surface runoff will be conveyed through the private street to proposed curb inlet Biofiltration Vaults for water quality treatment.

*Assumed 90% impervious coverage utilized for preliminary calculations. Actual impervious coverage will be calculated in final engineering.

Provide time of concentration assumptions:
The time of concentration was assumed to be 5 minutes for conservative purposes.

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter the time of concentration, T_c (min) (See Appendix IV.2)	T_c=	5.00	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	0.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
4	Enter capture efficiency corresponding to d_{HSC}, Y_2 (Worksheet A)	Y_2=	0	%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	0	in/hr
6	Determine the design intensity that must be provided by BMP, $I_{design} = I_1 - I_2$	I_{design}=	0.26	in/hr
Step 2: Calculate the design flowrate				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	0.439	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9 *	
3	Calculate runoff coefficient, $C = (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate design flowrate, $Q_{design} = (C \times i_{design} \times A)$	Q_{design}=	0.094	cfs

Supporting Calculations

Describe system:
Surface runoff will be conveyed through the private street to proposed curb inlet Biofiltration Vaults for water quality treatment.

*Assumed 90% impervious coverage utilized for preliminary calculations. Actual impervious coverage will be calculated in final engineering.

Provide time of concentration assumptions:
The time of concentration was assumed to be 5 minutes for conservative purposes.

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter the time of concentration, T_c (min) (See Appendix IV.2)	T_c=	5.00	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	0.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d_{HSC}=	0	inches
4	Enter capture efficiency corresponding to d_{HSC}, Y_2 (Worksheet A)	Y_2=	0	%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	0	in/hr
6	Determine the design intensity that must be provided by BMP, $I_{design}= I_1-I_2$	I_{design}=	0.26	in/hr
Step 2: Calculate the design flowrate				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	2.246	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.9 *	
3	Calculate runoff coefficient, $C= (0.75 \times imp) + 0.15$	C=	0.83	
4	Calculate design flowrate, $Q_{design}= (C \times i_{design} \times A)$	Q_{design}=	0.482	cfs

Supporting Calculations

Describe system:
Surface runoff will be conveyed through the private street to proposed curb inlet Biofiltration Vaults for water quality treatment.

*Assumed 90% impervious coverage utilized for preliminary calculations. Actual impervious coverage will be calculated in final engineering.

Provide time of concentration assumptions:
The time of concentration was assumed to be 5 minutes for conservative purposes.

Worksheet I: Summary of Groundwater-related Feasibility Criteria

1	Is project large or small? (as defined by Table VIII.2) circle one	**Large**		Small
2	What is the tributary area to the BMP?	A	12.12	acres
3	What type of BMP is proposed?	Underground infiltration		
4	What is the infiltrating surface area of the proposed BMP?	A_{BMP}		sq-ft
5	What land use activities are present in the tributary area (list all) Multi-Family Residential			
6	What land use-based risk category is applicable?	L	**M**	H
7	If M or H, what pretreatment and source isolation BMPs have been considered and are proposed (describe all): Proposed MWS System Biofiltration Vaults will provide treatment for the required design flow rate.			
8	What minimum separation to mounded seasonally high groundwater applies to the proposed BMP? See Section VIII.2 (circle one)	**5 ft**		10 ft
9	Provide rationale for selection of applicable minimum separation to seasonally high mounded groundwater: Per the TGD Section VIII.2, the following applies to a subsurface infiltration gallery: "Separation to mounded seasonally high groundwater shall be at least 10 feet for infiltration devices that inject water below the subsurface and surface infiltration BMPs with tributary area and land use activities that are considered to pose a more significant risk to groundwater quality."			
10	What is separation from the infiltrating surface to seasonally high groundwater?	SHGWT	<10	ft
11	What is separation from the infiltrating surface to mounded seasonally high groundwater?	Mounded SHGWT	n/a	ft
12	Describe assumptions and methods used for mounding analysis: Groundwater was encountered at 11-13 feet below existing grade			
13	Is the site within a plume protection boundary (See Figure VIII.2)?	Y	**N**	N/A
14	Is the site within a selenium source area or other natural plume area (See Figure VIII.2)?	Y	**N**	N/A
15	Is the site within 250 feet of a contaminated site?	Y	**N**	N/A

Worksheet I: Summary of Groundwater-related Feasibility Criteria

16	If site-specific study has been prepared, provide citation and briefly summarize relevant findings: n/a	
17	Is the site within 100 feet of a water supply well, spring, septic system?	Y **N** N/A
18	Is infiltration feasible on the site relative to groundwater-related criteria?	Y **N**
Provide rationale for feasibility determination: Per the preliminary Geotechnical Evaluation and Design Recommendations Report prepared by LGC Geotechnical, Inc dated December 21, 2021: "Geotechnical stability and integrity of the project site is reliant upon appropriate handling of surface water. Due to the extremely low measured infiltration rate, low permeability fine-grained soils at depth, shallow groundwater and site liquefaction potential, we strongly recommend against the intentional infiltration of storm water into subsurface soils."		

Note: if a single criterion or group of criteria would render infiltration infeasible, it is not necessary to evaluate every question in this worksheet.

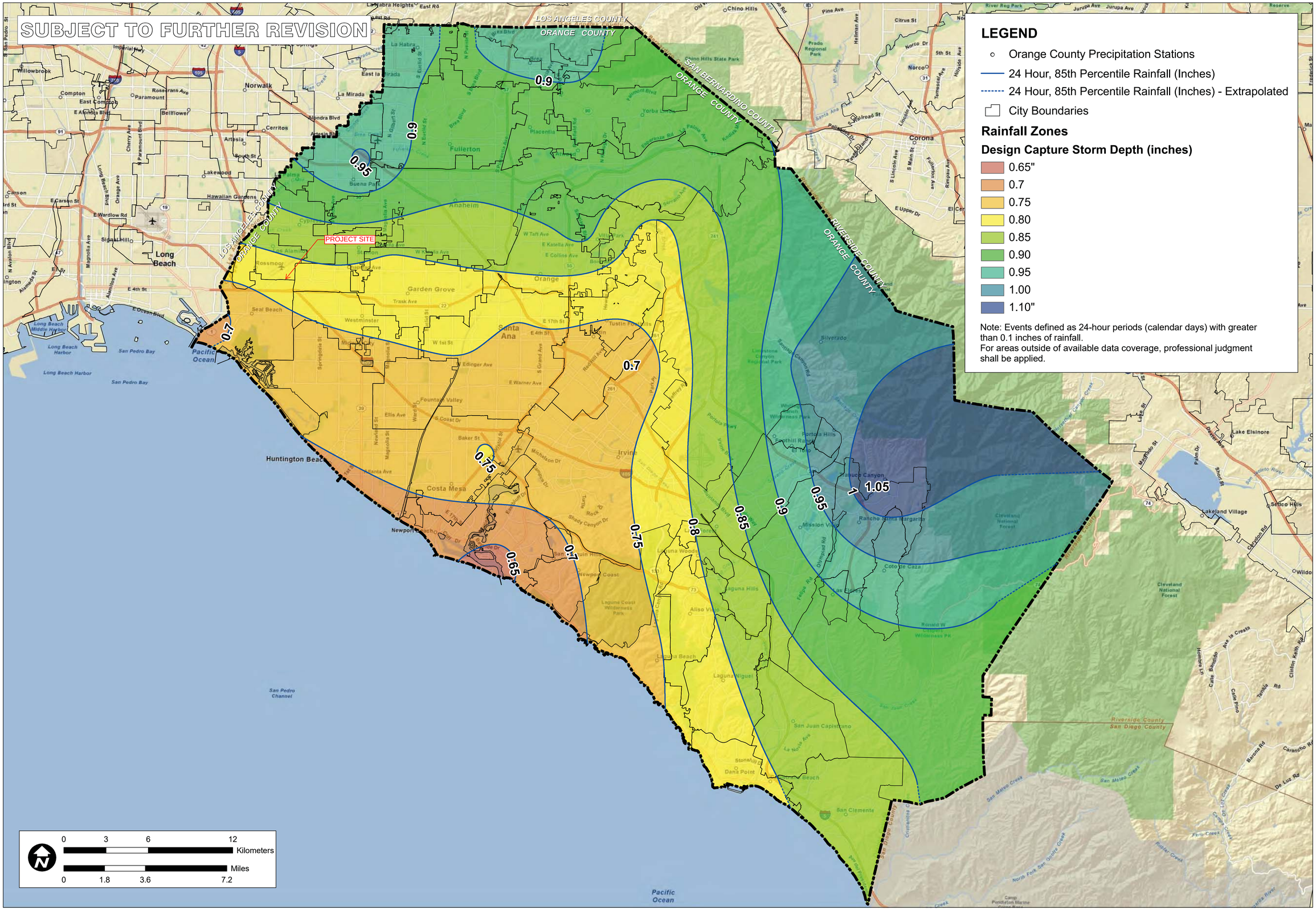
Worksheet J: Summary of Harvested Water Demand and Feasibility **Entire Site**

1	What demands for harvested water exist in the tributary area (check all that apply):			
2	Toilet and urinal flushing		□	
3	Landscape irrigation		✓	
4	Other:_____		□	
5	What is the design capture storm depth? (Figure III.1)	d	0.8	inches
6	What is the project size?	A	12.12	ac
7	What is the acreage of impervious area?	* IA	10.91	ac
	For projects with multiple types of demand (toilet flushing, irrigation demand, and/or other demand)			
8	What is the minimum use required for partial capture? (Table X.6)			gpd
9	What is the project estimated wet season total daily use (Section X.2)?			gpd
10	Is partial capture potentially feasible? (Line 9 > Line 8?)			
	For projects with only toilet flushing demand			
11	What is the minimum TUTIA for partial capture? (Table X.7)			
12	What is the project estimated TUTIA?			
13	Is partial capture potentially feasible? (Line 12 > Line 11?)			
	For projects with only irrigation demand			
14	What is the minimum irrigation area required based on conservation landscape design? (Table X.8) [**10.91x0.9**]	9.82		ac
15	What is the proposed project irrigated area? (multiply conservation landscaping by 1; multiply active turf by 2)	0.9		ac
16	Is partial capture potentially feasible? (Line 15 > Line 14?)	No		

Provide supporting assumptions and citations for controlling demand calculation:
Due to the proposed development type, density and amount of available landscaping, Harvest and Use BMPs for irrigation purposes will not be feasible.

* For preliminary purposes, an assumed 90% impervious coverage based on development type was utilized for these calculations.

SUBJECT TO FURTHER REVISION



LEGEND

- Orange County Precipitation Stations
- 24 Hour, 85th Percentile Rainfall (Inches)
- 24 Hour, 85th Percentile Rainfall (Inches) - Extrapolated
- City Boundaries

Rainfall Zones

Design Capture Storm Depth (inches)

- 0.65"
- 0.7
- 0.75
- 0.80
- 0.85
- 0.90
- 0.95
- 1.00
- 1.10"

Note: Events defined as 24-hour periods (calendar days) with greater than 0.1 inches of rainfall.
For areas outside of available data coverage, professional judgment shall be applied.

0 3 6 12 Kilometers
0 1.8 3.6 7.2 Miles

TITLE: RAINFALL ZONES

JOB: ORANGE COUNTY TECHNICAL GUIDANCE DOCUMENT — ORANGE CO. CA

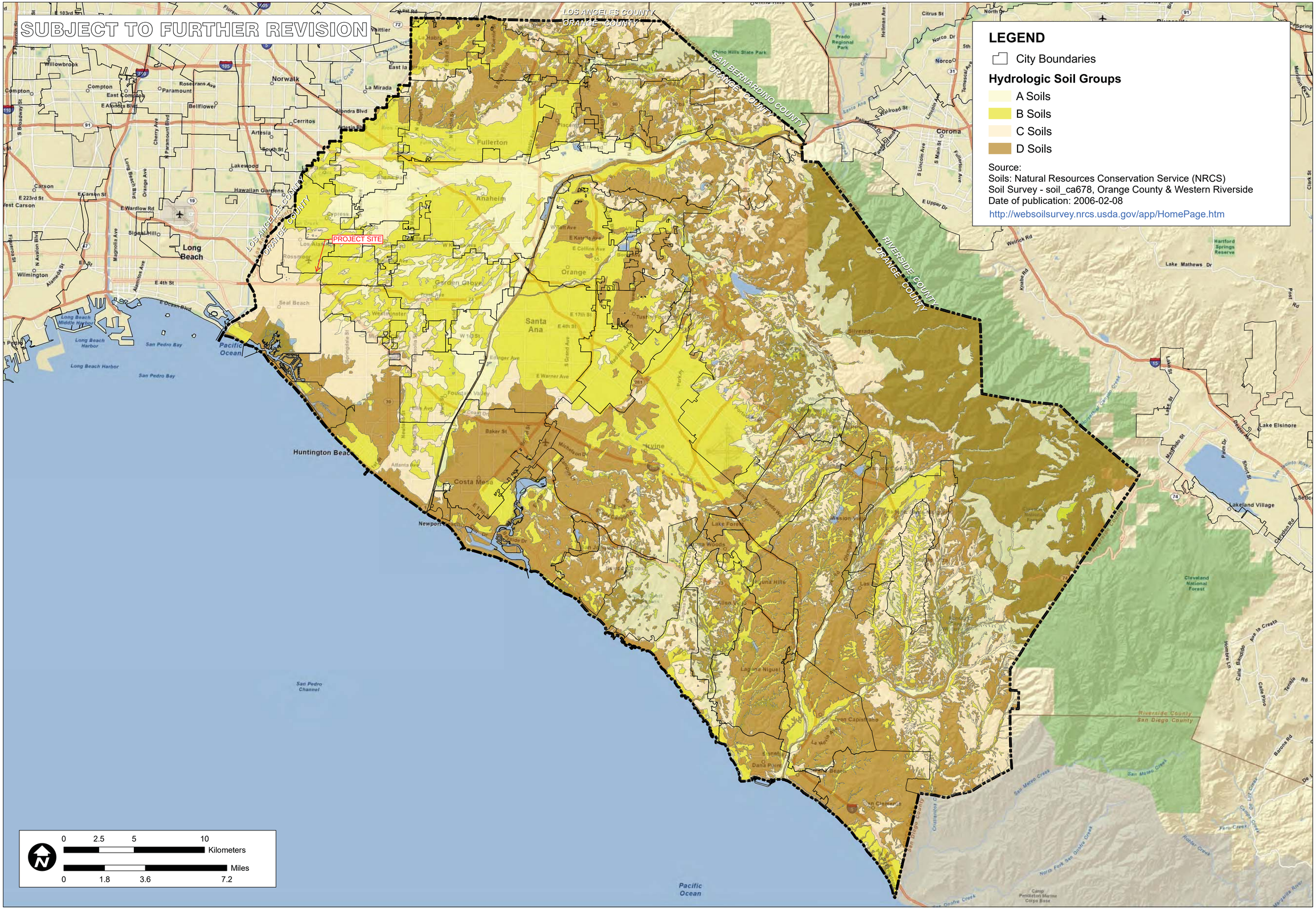
SCALE	1" = 1.8 miles
DESIGNED	TH
DRAWING	TH
CHECKED	BMP
DATE	04/22/10
JOB NO.	9526-E

PACE Advanced Water Engineering

FIGURE XVI-1

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SUBJECT TO FURTHER REVISION



LEGEND

- City Boundaries

Hydrologic Soil Groups

- A Soils
- B Soils
- C Soils
- D Soils

Source:
Soils: Natural Resources Conservation Service (NRCS)
Soil Survey - soil_ca678, Orange County & Western Riverside
Date of publication: 2006-02-08
http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

0 2.5 5 10 Kilometers

0 1.8 3.6 7.2 Miles

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TITLE
NRCS HYDROLOGIC SOILS GROUPS

JOB
ORANGE COUNTY INFILTRATION STUDY
ORANGE CO. CA

SCALE	1" = 1.8 miles
DESIGNED	TH
DRAWING	TH
CHECKED	BMP
DATE	02/09/11
JOB NO.	9526-E

PACE
Advanced Water Engineering

FIGURE
XVI-2a

SUBJECT TO FURTHER REVISION

LEGEND

- Depth To First Groundwater Contours
- City Boundaries
- OCWD Groundwater Basin Protection Boundary

Note: Data are not available for South Orange County at this time.

Source:
Sprotte, Fuller and Greenwood, 1980.
California Division of Mines and Geology;
California Geological Survey

LOS ANGELES COUNTY
ORANGE COUNTY

SAN BERNARDINO COUNTY
ORANGE COUNTY

RIVERSIDE COUNTY
ORANGE COUNTY

PROJECT SITE

0 2 4 8 Kilometers
0 1.25 2.5 5 Miles

TITLE
NORTH ORANGE COUNTY
MAPPED DEPTH TO FIRST
GROUNDWATER

JOB
ORANGE COUNTY
INFILTRATION STUDY
ORANGE CO. CA

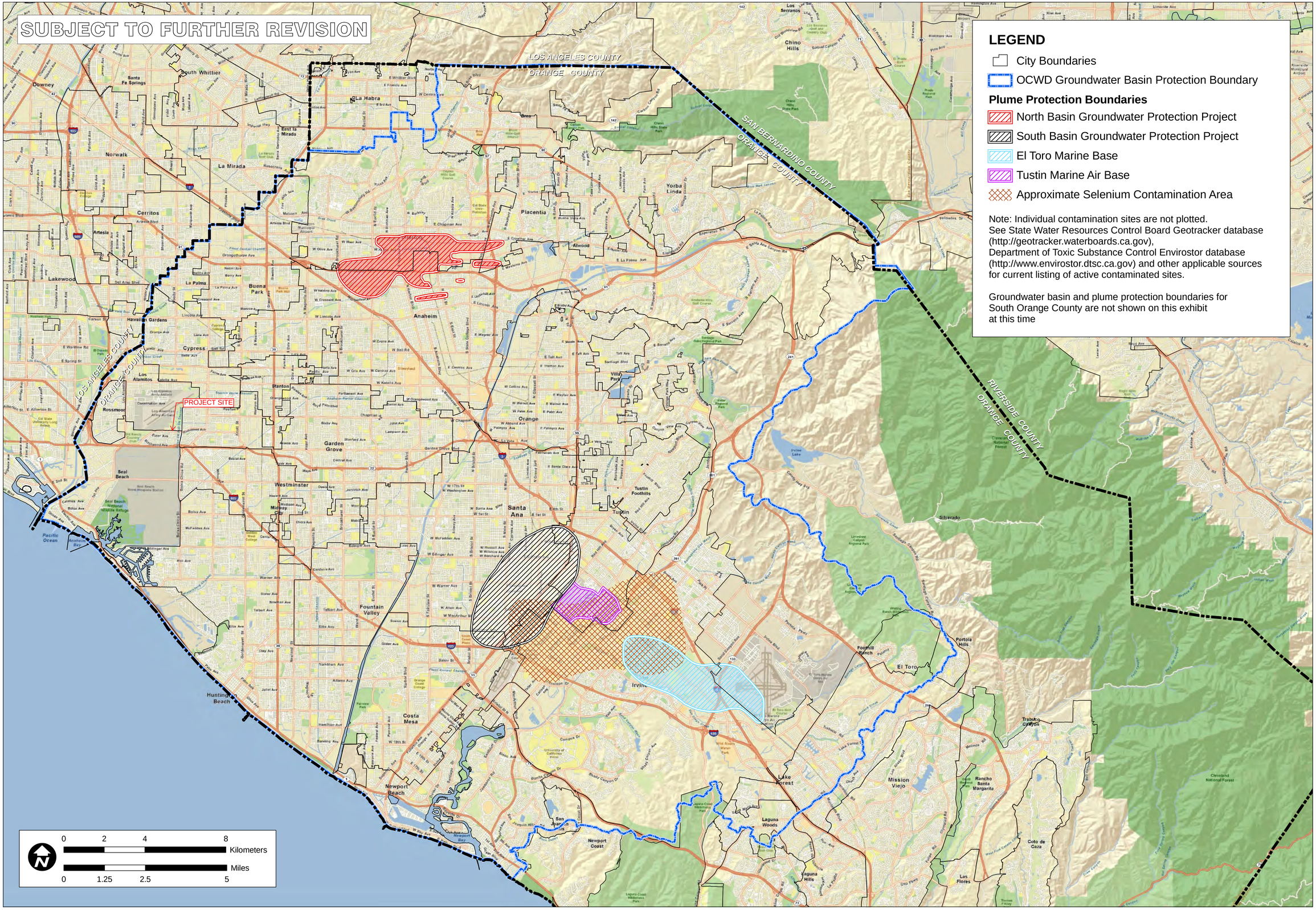
SCALE	1" = 1.25 miles
DESIGNED	TH
DRAWING	TH
CHECKED	BMP
DATE	02/09/11
JOB NO.	9526-E

PACE
Advanced Water Engineering

FIGURE
XVI-2d

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SUBJECT TO FURTHER REVISION



LEGEND

- City Boundaries
- OCWD Groundwater Basin Protection Boundary

Plume Protection Boundaries

- North Basin Groundwater Protection Project
- South Basin Groundwater Protection Project
- El Toro Marine Base
- Tustin Marine Air Base
- Approximate Selenium Contamination Area

Note: Individual contamination sites are not plotted.
See State Water Resources Control Board Geotracker database (http://geotracker.waterboards.ca.gov), Department of Toxic Substance Control Envirostor database (http://www.envirostor.dtsc.ca.gov) and other applicable sources for current listing of active contaminated sites.

Groundwater basin and plume protection boundaries for South Orange County are not shown on this exhibit at this time

TITLE
NORTH ORANGE COUNTY GROUNDWATER PROTECTION AREAS

ORANGE COUNTY INFILTRATION STUDY

JOB
ORANGE CO.

SCALE	1" = 1.25 miles
DESIGNED	TH
DRAWING	TH
CHECKED	BMP
DATE	04/22/10
JOB NO.	9526-E

CA

PACE
Advanced Water Engineering

FIGURE
XVI-2f

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Susceptibility

Potential Areas of Erosion, Habitat, & Physical Structure Susceptibility

Channel Type

- Earth (Unstable)
- Earth (Stabilized)
- Stabilized

Tidel Influence

- <= Mean High Water Line (4.28')

Water Body

- Basin
- Lake
- Reservoir

Other Lands

- Airport/Military

Los Angeles County

Santa River Watershed

Anaheim Bay-Huntington Harbor Watershed

Newport Bay-Newport Coastal Streams Watershed

Humble Reservoir

Orange County

Valencia Reservoir

Fullerton Reservoir

Loftus Diversion Channel Desilting Basin

Brea Creek Reservoir

Fullerton Reservoir

Fullerton Reservoir

Hillcrest Park Reservoir

Fullerton Airport

Miller Retarding Basin

La Jolla Recharge Basin

Placentia Retarding Basin

Kraemer Basin

Raymond Retarding Basin

Gilbert Retarding Basin

Crescent Retarding Basin

Cypress Retarding Basin

Channel in Retarding Basin

Rossmoor Retarding Basin

Los Alamitos Naval Air Station

Project Site

Los Alamitos Retarding Basin

Seal Beach Naval Weapons Station

0 8,000 16,000 Feet

TITLE: SUSCEPTIBILITY ANALYIS SAN GABRIEL-COYOTE CREEK

JOB: ORANGE COUNTY WATERSHED MASTER PLANNING ORANGE CO. CA

SCALE	DESIGNED	DRAWING	CHECKED	DATE	JOB NO.
1" = 8000'	TH	TH	BMP	04/30/10	9526-E

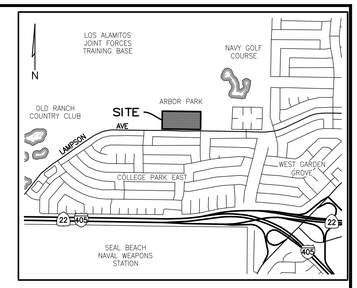
PACE Advanced Water Engineering

1

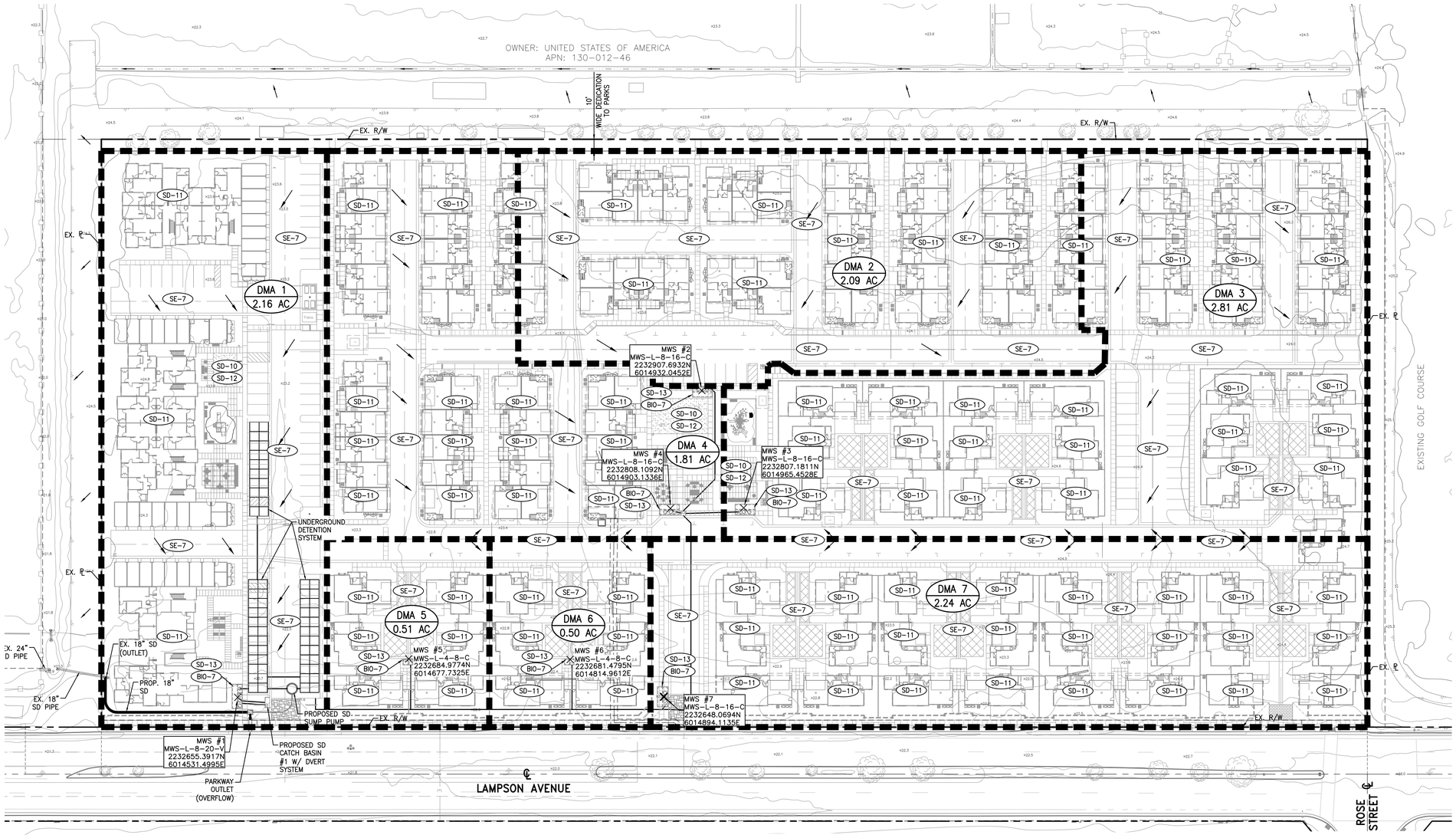
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Attachment B
Preliminary WQMP Exhibit

WQMP EXHIBIT
TENTATIVE TRACT MAP NO. 19263
4665 LAMPSON AVENUE
CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA



VICINITY MAP
NTS



LEGEND

- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING RIGHT-OF-WAY/ BOUNDARY
- PROPOSED RIGHT-OF-WAY/ BOUNDARY
- LOT LINE
- LOT LINE
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

BEST MANGEMENT PRACTICES (BMPS)

SD-10	SITE DESIGN & LANDSCAPE PLANNING
SD-11	ROOF RUNOFF CONTROLS
SD-12	EFFICIENT IRRIGATION (SITEWIDE)
SD-13	STORM DRAIN SIGNAGE
SE-7	STREET SWEEPING & VACUUMING
BIO-7	PROPRIETARY BIOTREATMENT – MODULAR WETLANDS SYSTEM (MWS) BIOFILTRATION VAULT



STENCILING EXAMPLE
N.T.S.

DMA SUMMARY

DMA	AREA (SF)	AREA (AC)	PERVIOUS AREA (SF)	PERVIOUSNESS	IMPERVIOUS AREA (SF)	IMPERVIOUSNESS	DESIGN CAPTURE VOLUME (CF)	DESIGN TREATMENT FLOW RATE (CFS)	MWS MODEL	MWS TREATMENT CAPACITY (CFS)
1	94,080.01	2.16	9409.00	10%	84672.00	90%	5206	0.47	MWS-L-8-20-V	0.62 (HIGH CAPACITY MODEL)
2	91,179.82	2.09	9117.98	10%	82061.84	90%	5045	.452	MWS-L-8-16-C	0.462
3	122,375.36	2.81	12237.54	10%	110137.82	90%	6771	.606	MWS-L-8-20-C	0.62 (HIGH CAPACITY MODEL)
4	78,650.15	1.81	7865.01	10%	70785.13	90%	4352	.390	MWS-L-8-16-C	0.462
5	22,104.95	.51	2210.49	10%	19894.45	90%	1223	.110	MWS-L-4-8-C	0.115
6	21,939.20	.50	2193.92	10%	19745.28	90%	1214	.109	MWS-L-4-8-C	0.115
7	97,609.65	2.24	9760.96	10%	87848.68	90%	5401	.484	MWS-L-8-16-C	0.489 (HIGH CAPCAITY MODEL)

1" = 40'
0 20 40 80

REVISIONS

NUMBER	DATE	INITIALS	DESCRIPTION	APPROVED	INSTALLED

PLANS PREPARED BY:
C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
6630 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3600
INFO@CVC-INC.NET
WWW.CVC-INC.NET

VESTING TENTATIVE TRACT MAP NO. 19263
PRELIMINARY WQMP EXHIBIT
4665 LAMPSON AVENUE

PUBLIC WORKS AGENCY
CITY OF LOS ALAMITOS

SHEET WQMP

Attachment C
Site BMPs

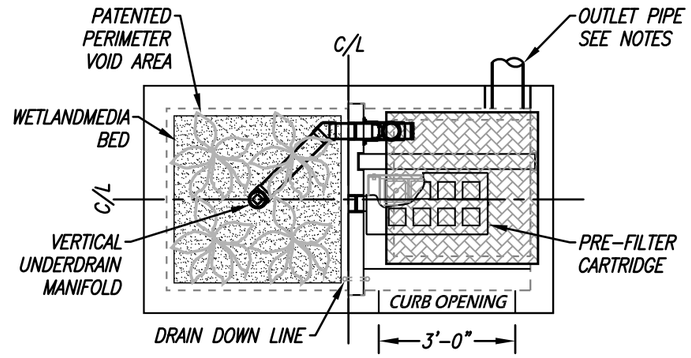
SITE SPECIFIC DATA			
PROJECT NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PARKWAY	OPEN PLANTER	PARKWAY
FRAME & COVER	36" x 36"	N/A	N/A
WETLANDMEDIA VOLUME (CY)			2.37
WETLANDMEDIA DELIVERY METHOD			TBD
ORIFICE SIZE (DIA. INCHES)			ø1.22"
MAXIMUM PICK WEIGHT (LBS)			16500
NOTES:			

INSTALLATION NOTES

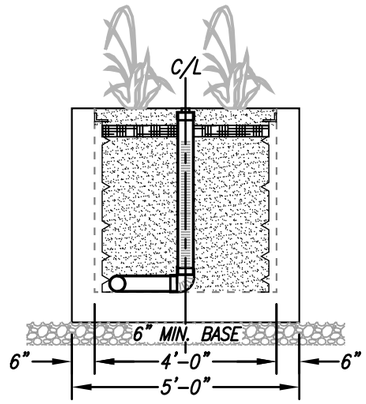
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5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. DRIP OR SPRAY IRRIGATION REQUIRED ON ALL UNITS WITH VEGETATION.

GENERAL NOTES

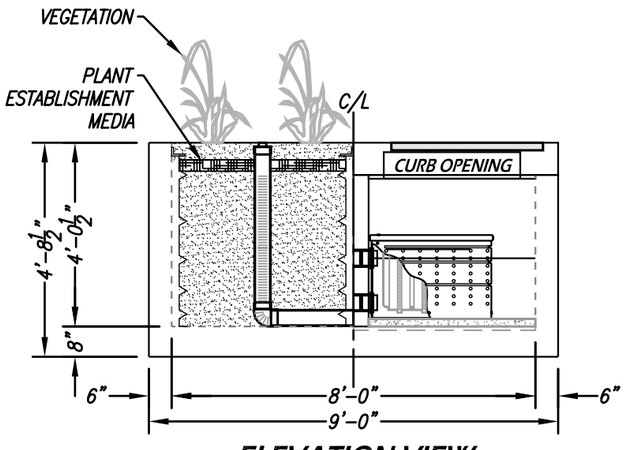
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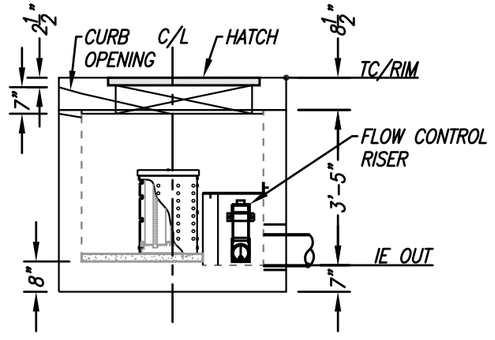
PLAN VIEW



LEFT END VIEW
BIOFILTRATION



ELEVATION VIEW



RIGHT END VIEW
PRETREATMENT/DISCHARGE

TREATMENT FLOW (CFS)	0.115
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	TBD
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

THE PRODUCT DESCRIBED MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS: 7,425,262; 7,470,362; 7,674,378; 8,303,816; RELATED FOREIGN PATENTS OR OTHER PATENTS PENDING

PROPRIETARY AND CONFIDENTIAL:

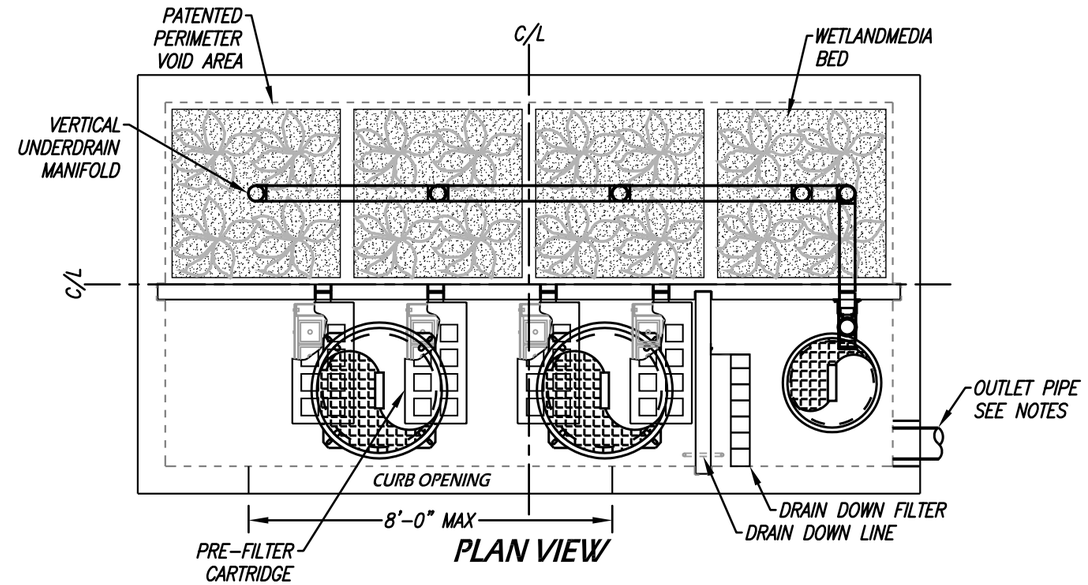
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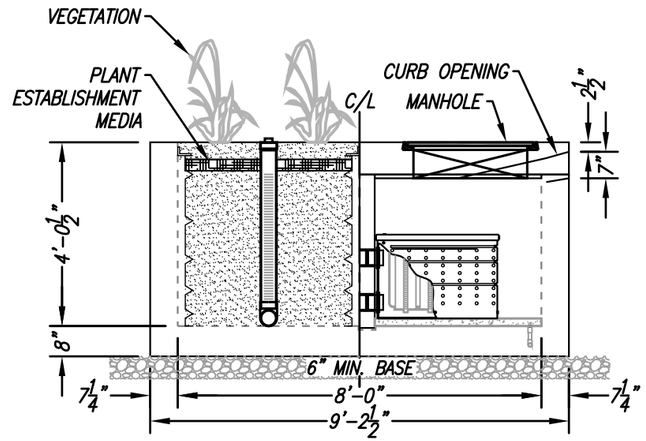
MWS-L-4-8-C
STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

5/1/15/JOHN

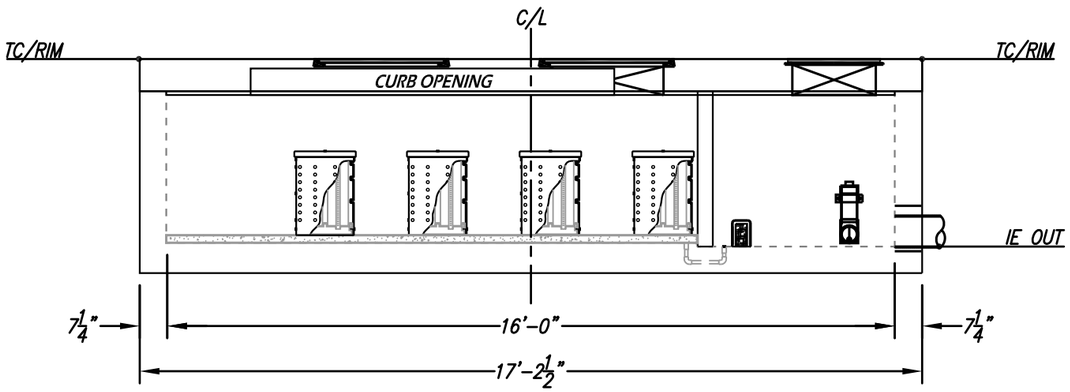
SITE SPECIFIC DATA			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PARKWAY	OPEN PLANTER	PARKWAY
FRAME & COVER	ø30"	N/A	ø24"
WETLANDMEDIA VOLUME (CY)			9.50
WETLANDMEDIA DELIVERY METHOD			TBD
ORIFICE SIZE (DIA. INCHES)			ø3.07"
MAXIMUM PICK WEIGHT (LBS)			TBD
NOTES:			



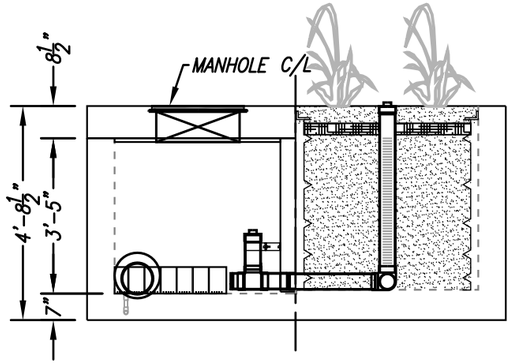
PLAN VIEW



LEFT END VIEW
BIOFILTRATION/PRETREATMENT



ELEVATION VIEW



RIGHT END VIEW
DISCHARGE/BIOFILTRATION

INSTALLATION NOTES

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TREATMENT FLOW (CFS)	0.462
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	TBD
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

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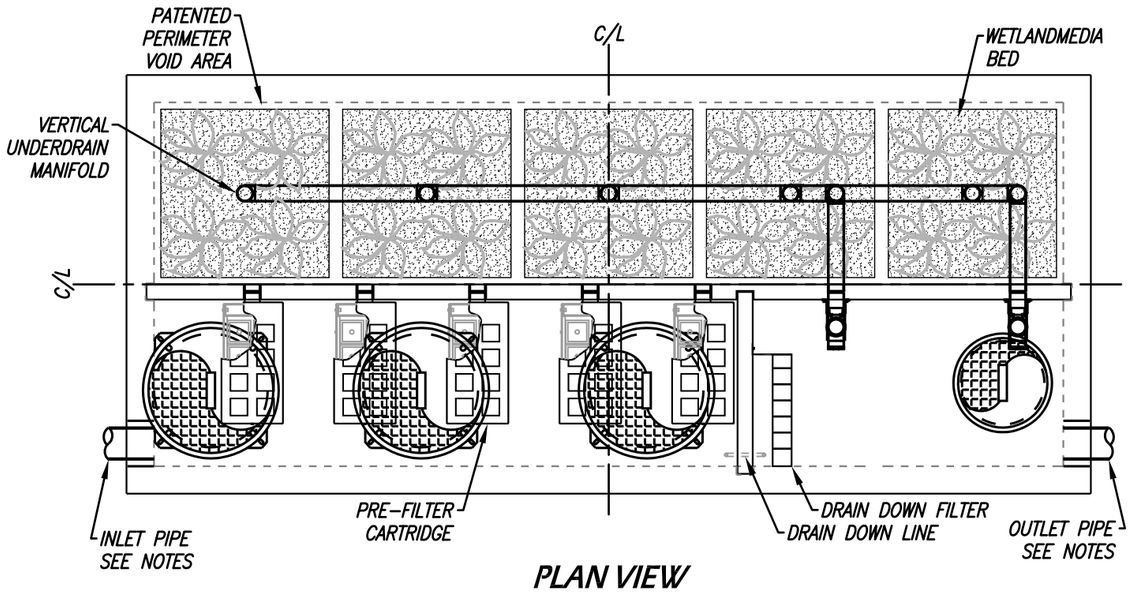
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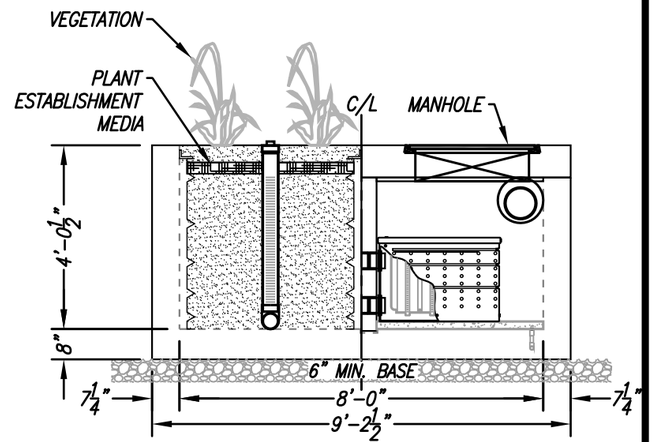
MWS-L-8-16-C
STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

3/11/15 JOHN

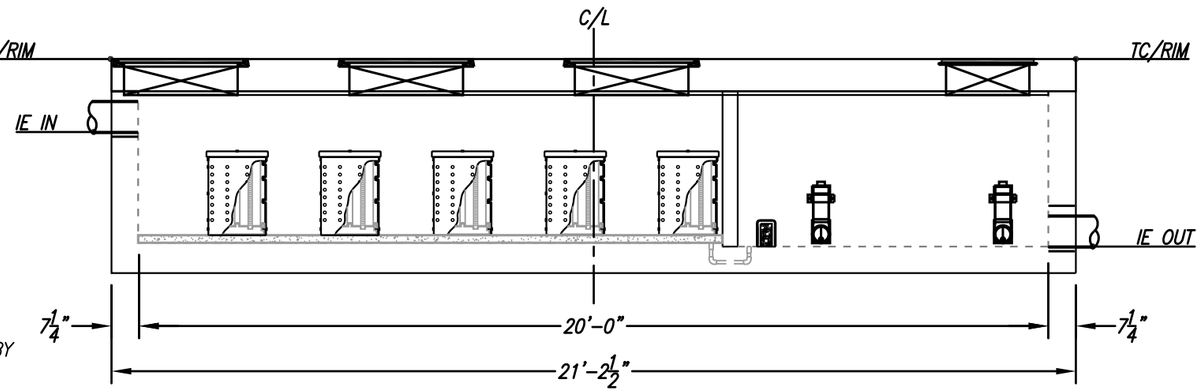
SITE SPECIFIC DATA			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PARKWAY	OPEN PLANTER	PARKWAY
FRAME & COVER	ø30"	N/A	ø24"
WETLANDMEDIA VOLUME (CY)			11.85
WETLANDMEDIA DELIVERY METHOD			TBD
ORIFICE SIZE (DIA. INCHES)			ø2.43"
MAXIMUM PICK WEIGHT (LBS)			TBD
NOTES:			



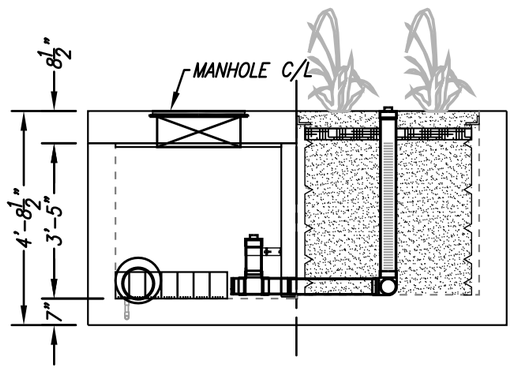
PLAN VIEW



LEFT END VIEW
BIOFILTRATION/PRETREATMENT



ELEVATION VIEW



RIGHT END VIEW
DISCHARGE/BIOFILTRATION

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TREATMENT FLOW (CFS)	0.577
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	TBD
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

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MWS-L-8-20-V
STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

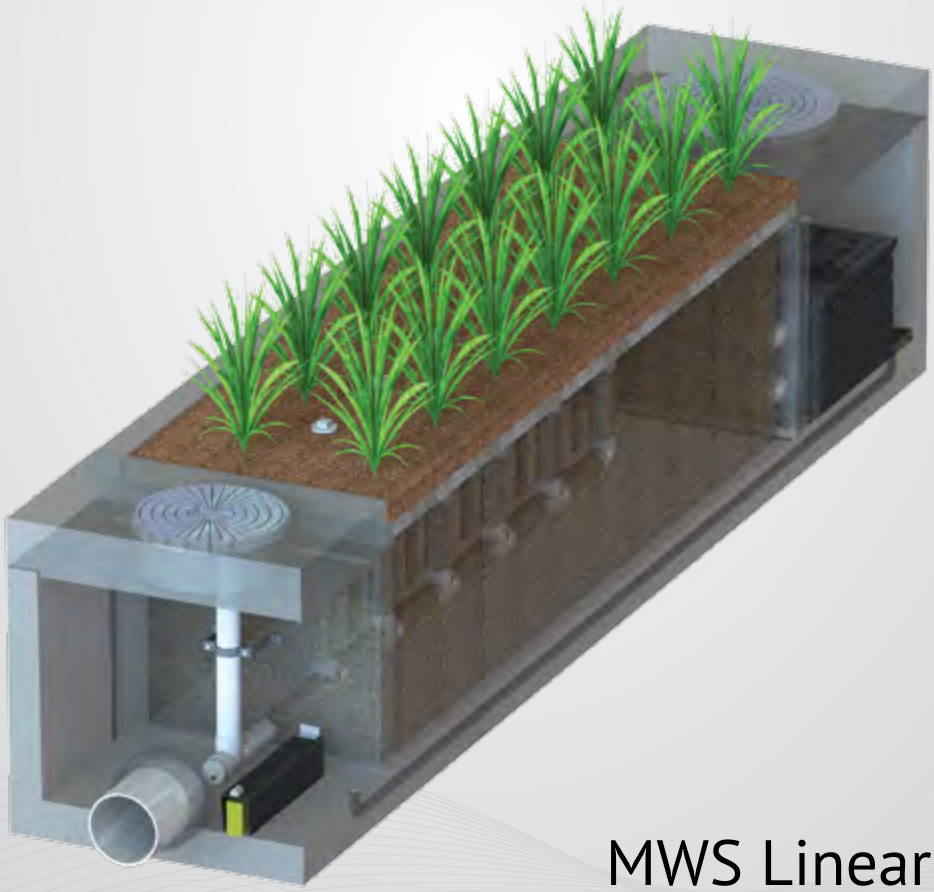
6/2/15/JOHN

MWS Linear 2.0 HGL Sizing Calculations

MWS MODEL SIZE	WETLAND PERMITER LENGTH	LOADING RATE GPM/SF	HGL HEIGHT																												
			SHALLOW MODELS																			STANDARD HEIGHT MODEL	HIGH CAPACITY MODELS									
			1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.65	3.70	3.75	3.80	3.85	3.90	3.95
MWS-L-4-4	6.70	1.0	0.022	0.023	0.025	0.026	0.028	0.029	0.031	0.032	0.034	0.035	0.037	0.038	0.040	0.042	0.043	0.045	0.046	0.048	0.049	0.051	**0.052**	0.054	0.055	0.056	0.057	0.058	0.058	0.059	0.060	0.061
~~**MWS-L-4-6**~~	~~10.00~~	~~1.0~~	~~0.032~~	~~0.035~~	~~0.037~~	~~0.039~~	~~0.042~~	~~0.044~~	~~0.046~~	~~0.048~~	~~0.051~~	~~0.053~~	~~0.055~~	~~0.058~~	~~0.060~~	~~0.062~~	~~0.065~~	~~0.067~~	~~0.069~~	~~0.072~~	~~0.074~~	~~0.076~~	**0.078**	~~0.081~~	~~0.083~~	~~0.084~~	~~0.085~~	~~0.087~~	~~0.088~~	~~0.089~~	~~0.090~~	~~0.091~~
MWS-L-4-6	9.30	1.0	0.030	0.032	0.034	0.036	0.038	0.041	0.043	0.045	0.047	0.049	0.051	0.053	0.055	0.058	0.060	0.062	0.064	0.066	0.068	0.070	**0.073**	0.075	0.077	0.078	0.079	0.080	0.081	0.082	0.083	0.084
MWS-L-4-8	14.80	1.0	0.048	0.051	0.054	0.058	0.061	0.065	0.068	0.071	0.075	0.078	0.082	0.085	0.088	0.092	0.095	0.099	0.102	0.105	0.109	0.112	**0.115**	0.119	0.122	0.124	0.126	0.127	0.129	0.131	0.132	0.134
MWS-L-4-13	18.40	1.0	0.059	0.063	0.068	0.072	0.076	0.080	0.084	0.089	0.093	0.097	0.101	0.106	0.110	0.114	0.118	0.122	0.127	0.131	0.135	0.139	**0.144**	0.148	0.152	0.154	0.156	0.158	0.160	0.163	0.165	0.167
MWS-L-4-15	22.40	1.0	0.072	0.077	0.082	0.087	0.093	0.098	0.103	0.108	0.113	0.118	0.123	0.129	0.134	0.139	0.144	0.149	0.154	0.159	0.165	0.170	**0.175**	0.180	0.185	0.188	0.190	0.193	0.195	0.198	0.200	0.203
MWS-L-4-17	26.40	1.0	0.085	0.091	0.097	0.103	0.109	0.115	0.121	0.127	0.133	0.139	0.145	0.151	0.158	0.164	0.170	0.176	0.182	0.188	0.194	0.200	**0.206**	0.212	0.218	0.221	0.224	0.227	0.230	0.233	0.236	0.239
MWS-L-4-19	30.40	1.0	0.098	0.105	0.112	0.119	0.126	0.133	0.140	0.147	0.153	0.160	0.167	0.174	0.181	0.188	0.195	0.202	0.209	0.216	0.223	0.230	**0.237**	0.244	0.251	0.255	0.258	0.262	0.265	0.269	0.272	0.276
MWS-L-4-21	34.40	1.0	0.111	0.118	0.126	0.134	0.142	0.150	0.158	0.166	0.174	0.182	0.189	0.197	0.205	0.213	0.221	0.229	0.237	0.245	0.253	0.261	**0.268**	0.276	0.284	0.288	0.292	0.296	0.300	0.304	0.308	0.312
MWS-L-6-8	18.80	1.0	0.060	0.065	0.069	0.073	0.078	0.082	0.086	0.091	0.095	0.099	0.104	0.108	0.112	0.116	0.121	0.125	0.129	0.134	0.138	0.142	**0.147**	0.151	0.155	0.157	0.160	0.162	0.164	0.166	0.168	0.170
MWS-L-8-8	29.60	1.0	0.095	0.102	0.109	0.115	0.122	0.129	0.136	0.143	0.149	0.156	0.163	0.170	0.177	0.183	0.190	0.197	0.204	0.211	0.217	0.224	**0.231**	0.238	0.245	0.248	0.251	0.255	0.258	0.262	0.265	0.268
MWS-L-8-12	44.40	1.0	0.143	0.153	0.163	0.173	0.183	0.194	0.204	0.214	0.224	0.234	0.245	0.255	0.265	0.275	0.285	0.296	0.306	0.316	0.326	0.336	**0.346**	0.357	0.367	0.372	0.377	0.382	0.387	0.392	0.397	0.402
MWS-L-8-16	59.20	1.0	0.190	0.204	0.217	0.231	0.245	0.258	0.272	0.285	0.299	0.312	0.326	0.340	0.353	0.367	0.380	0.394	0.408	0.421	0.435	0.448	**0.462**	0.476	0.489	0.496	0.503	0.509	0.516	0.523	0.530	0.537
MWS-L-8-20	74.00	1.0	0.238	0.255	0.272	0.289	0.306	0.323	0.340	0.357	0.374	0.391	0.408	0.425	0.442	0.459	0.476	0.493	0.509	0.526	0.543	0.560	**0.577**	0.594	0.611	0.620	0.628	0.637	0.645	0.654	0.662	0.671
MWS-L-10-20 or MWS-L-8-24	88.80	1.0	0.285	0.306	0.326	0.346	0.367	0.387	0.408	0.428	0.448	0.469	0.489	0.509	0.530	0.550	0.571	0.591	0.611	0.632	0.652	0.673	**0.693**	0.713	0.734	0.744	0.754	0.764	0.774	0.785	0.795	0.805
4'x'4 media cage	14.80	1.0	0.048	0.051	0.054	0.058	0.061	0.065	0.068	0.071	0.075	0.078	0.082	0.085	0.088	0.092	0.095	0.099	0.102	0.105	0.109	0.112	**0.115**	0.119	0.122	0.124						

MODULAR WETLANDS™

*Advanced **Stormwater** Biofiltration*



MWS Linear



Contents

1 Introduction

2 Applications

3 Configurations

4 Advantages

5 Operation

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The Urban Impact

For hundreds of years natural wetlands surrounding our shores have played an integral role as nature's stormwater treatment system. But as our cities grow and develop, these natural wetlands have perished under countless roads, rooftops, and parking lots.



Plant A Wetland

Without natural wetlands our cities are deprived of water purification, flood control, and land stability. Modular Wetlands and the MWS Linear re-establish nature's presence and rejuvenate water ways in urban areas.





MWS Linear

The Modular Wetland System Linear represents a pioneering breakthrough in stormwater technology as the only biofiltration system to utilize patented horizontal flow, allowing for a smaller footprint and higher treatment capacity. While most biofilters use little or no pre-treatment, the MWS Linear incorporates an advanced pre-treatment chamber that includes separation and pre-filter cartridges. In this chamber sediment and hydrocarbons are removed from runoff before it enters the biofiltration chamber, in turn reducing maintenance costs and improving performance.

Applications

The MWS Linear has been successfully used on numerous new construction and retrofit projects. The system's superior versatility makes it beneficial for a wide range of stormwater and waste water applications - treating rooftops, streetscapes, parking lots, and industrial sites.



Industrial

Many states enforce strict regulations for discharges from industrial sites. The MWS Linear has helped various sites meet difficult EPA mandated effluent limits for dissolved metals and other pollutants.



Residential

Low to high density developments can benefit from the versatile design of the MWS Linear. The system can be used in both decentralized LID design and cost-effective end-of-the-line configurations.



Streets

Street applications can be challenging due to limited space. The MWS Linear is very adaptable, and offers the smallest footprint to work around the constraints of existing utilities on retrofit projects.



Parking Lots

Parking lots are designed to maximize space and the MWS Linear's 4 ft. standard planter width allows for easy integration into parking lot islands and other landscape medians.



Commercial

Compared to bioretention systems, the MWS Linear can treat far more area in less space - meeting treatment and volume control requirements.



Mixed Use

The MWS Linear can be installed as a raised planter to treat runoff from rooftops or patios, making it perfect for sustainable "live-work" spaces.

More applications are available on our website: www.ModularWetlands.com/Applications

- Agriculture
- Reuse
- Low Impact Development
- Waste Water





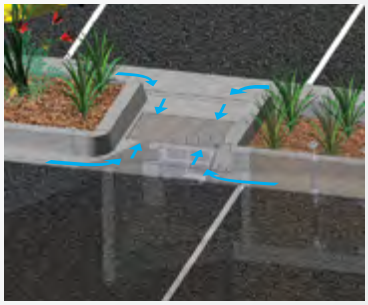
Configurations

The MWS Linear is the preferred biofiltration system of Civil Engineers across the country due to its versatile design. This highly versatile system has available "pipe-in" options on most models, along with built-in curb or grated inlets for simple integration into your stormdrain design.



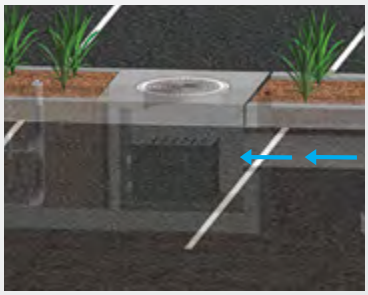
Curb Type

The *Curb Type* configuration accepts sheet flow through a curb opening and is commonly used along road ways and parking lots. It can be used in sump or flow by conditions. Length of curb opening varies based on model and size.



Grate Type

The *Grate Type* configuration offers the same features and benefits as the *Curb Type* but with a grated/drop inlet above the systems pre-treatment chamber. It has the added benefit of allowing for pedestrian access over the inlet. ADA compliant grates are available to assure easy and safe access. The *Grate Type* can also be used in scenarios where runoff needs to be intercepted on both sides of landscape islands.



Vault Type

The system's patented horizontal flow biofilter is able to accept inflow pipes directly into the pre-treatment chamber, meaning the MWS Linear can be used in end-of-the-line installations. This greatly improves feasibility over typical decentralized designs that are required with other biofiltration/bioretention systems. Another benefit of the "pipe in" design is the ability to install the system downstream of underground detention systems to meet water quality volume requirements.



Downspout Type

The *Downspout Type* is a variation of the *Vault Type* and is designed to accept a vertical downspout pipe from roof top and podium areas. Some models have the option of utilizing an internal bypass, simplifying the overall design. The system can be installed as a raised planter and the exterior can be stuccoed or covered with other finishes to match the look of adjacent buildings.

Advantages & Operation

The MWS Linear is the most efficient and versatile biofiltration system on the market, and the only system with horizontal flow which improves performance, reduces footprint, and minimizes maintenance. Figure-1 and Figure-2 illustrate the invaluable benefits of horizontal flow and the multiple treatment stages.

Featured Advantages

- Horizontal Flow Biofiltration
- Greater Filter Surface Area
- Pre-Treatment Chamber
- Patented Perimeter Void Area
- Flow Control
- No Depressed Planter Area

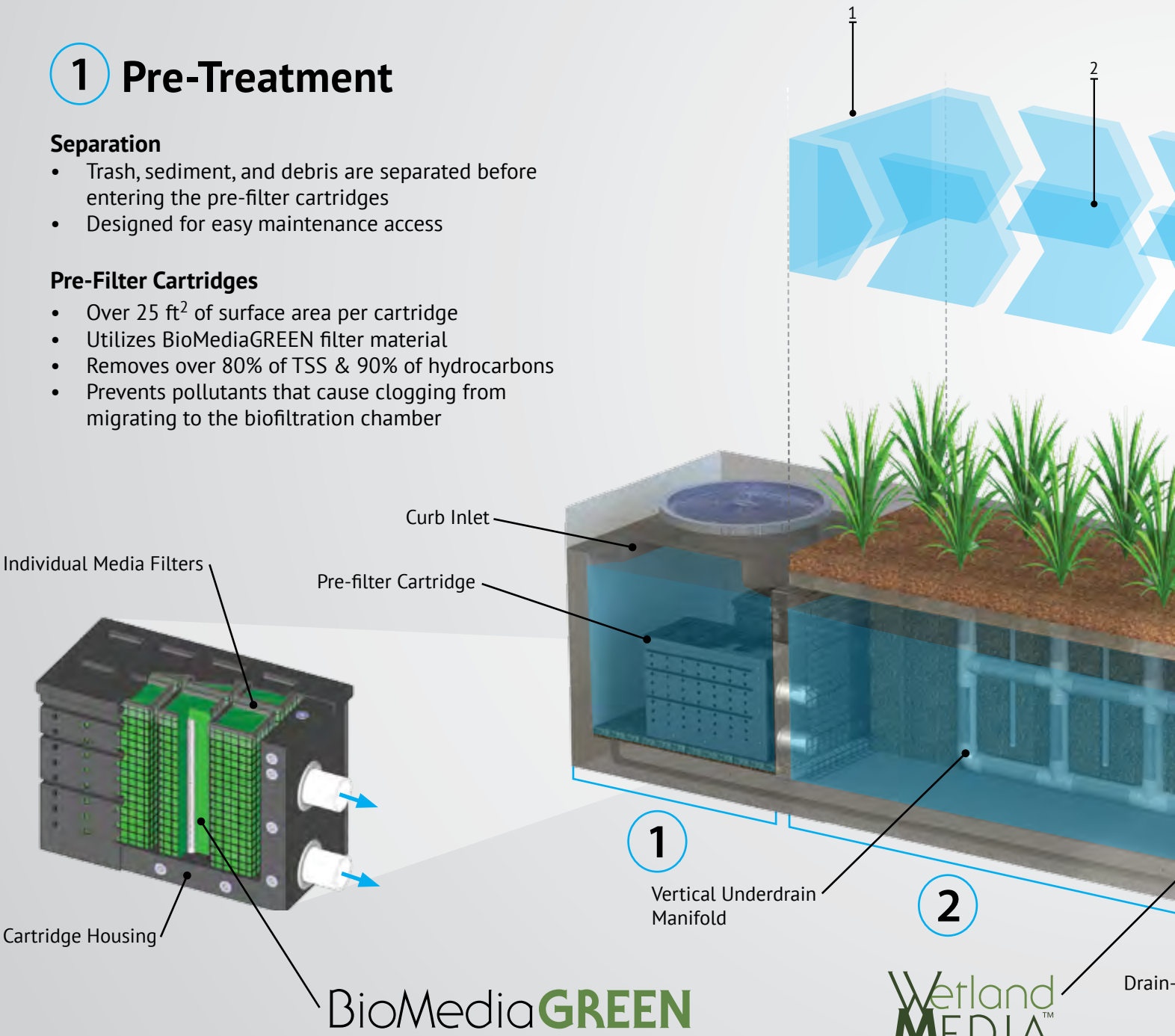
1 Pre-Treatment

Separation

- Trash, sediment, and debris are separated before entering the pre-filter cartridges
- Designed for easy maintenance access

Pre-Filter Cartridges

- Over 25 ft^2 of surface area per cartridge
- Utilizes BioMediaGREEN filter material
- Removes over 80% of TSS & 90% of hydrocarbons
- Prevents pollutants that cause clogging from migrating to the biofiltration chamber



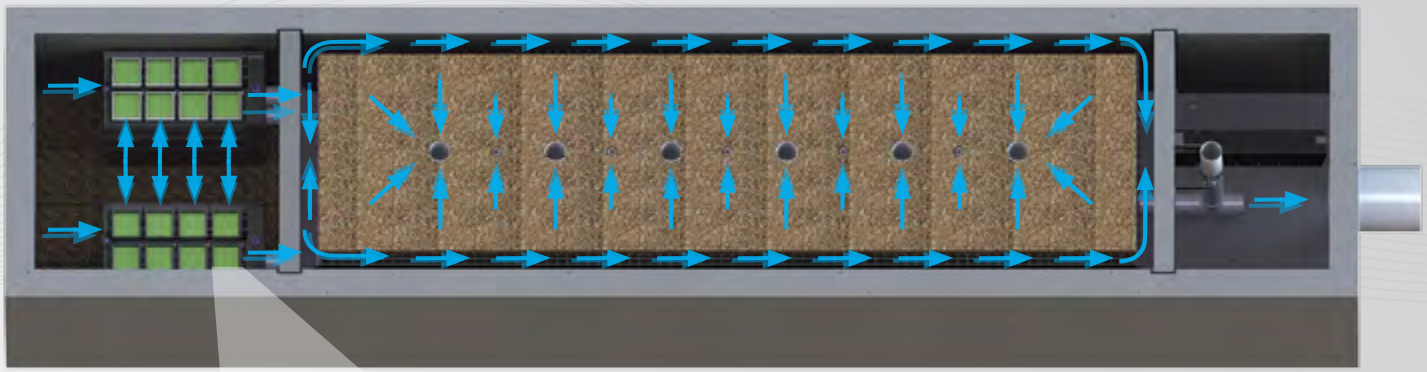


Fig. 2 - Top View

2x to 3x More Surface Area Than Traditional Downward Flow Bioretention Systems.



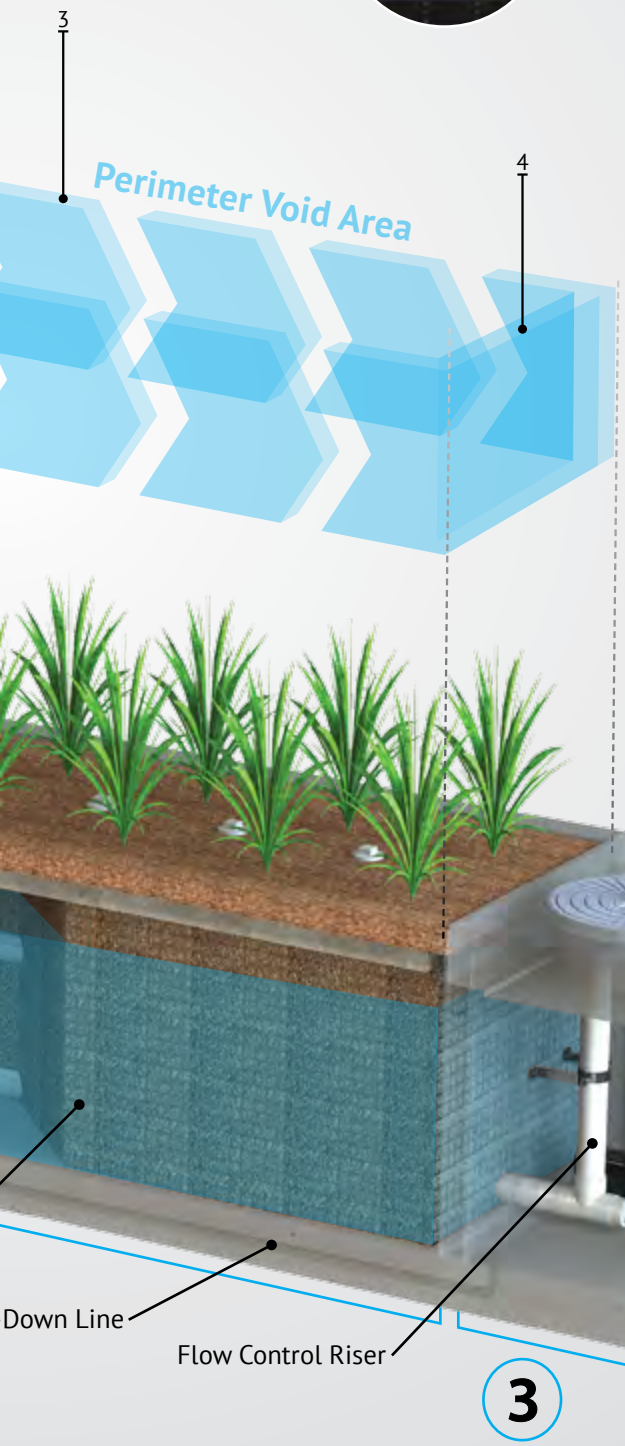


Fig. 1

2 Biofiltration

Horizontal Flow

- Less clogging than downward flow biofilters
- Water flow is subsurface
- Improves biological filtration

Patented Perimeter Void Area

- Vertically extends void area between the walls and the WetlandMEDIA on all four sides.
- Maximizes surface area of the media for higher treatment capacity

WetlandMEDIA

- Contains no organics and removes phosphorus
- Greater surface area and 48% void space
- Maximum evapotranspiration
- High ion exchange capacity and light weight

3 Discharge

Flow Control

- Orifice plate controls flow of water through WetlandMEDIA to a level lower than the media's capacity.
- Extends the life of the media and improves performance

Drain-Down Filter

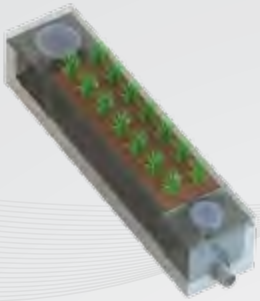
- The Drain-Down is an optional feature that completely drains the pre-treatment chamber
- Water that drains from the pre-treatment chamber between storm events will be treated

Orientations



Side-By-Side

The *Side-By-Side* orientation places the pre-treatment and discharge chamber adjacent to one another with the biofiltration chamber running parallel on either side. This minimizes the system length, providing a highly compact footprint. It has been proven useful in situations such as streets with directly adjacent sidewalks, as half of the system can be placed under that sidewalk. This orientation also offers internal bypass options as discussed below.



End-To-End

The *End-To-End* orientation places the pre-treatment and discharge chambers on opposite ends of the biofiltration chamber therefore minimizing the width of the system to 5 ft (outside dimension). This orientation is perfect for linear projects and street retrofits where existing utilities and sidewalks limit the amount of space available for installation. One limitation of this orientation is bypass must be external.

Bypass

Internal Bypass Weir (Side-by-Side Only)

The *Side-By-Side* orientation places the pre-treatment and discharge chambers adjacent to one another allowing for integration of internal bypass. The wall between these chambers can act as a bypass weir when flows exceed the system's treatment capacity, thus allowing bypass from the pre-treatment chamber directly to the discharge chamber.

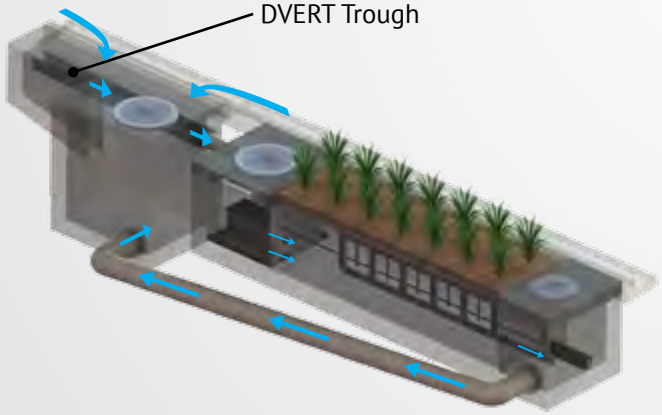
External Diversion Weir Structure

This traditional offline diversion method can be used with the MWS Linear in scenarios where runoff is being piped to the system. These simple and effective structures are generally configured with two outflow pipes. The first is a smaller pipe on the upstream side of the diversion weir - to divert low flows over to the MWS Linear for treatment. The second is the main pipe that receives water once the system has exceeded treatment capacity and water flows over the weir.

Flow By Design

This method is one in which the system is placed just upstream of a standard curb or grate inlet to intercept the first flush. Higher flows simply pass by the MWS Linear and into the standard inlet downstream.

DVERT Low Flow Diversion



This simple yet innovative diversion trough can be installed in existing or new curb and grate inlets to divert the first flush to the MWS Linear via pipe. It works similar to a rain gutter and is installed just below the opening into the inlet. It captures the low flows and channels them over to a connecting pipe exiting out the wall of the inlet and leading to the MWS Linear. The DVERT is perfect for retrofit and green street applications that allows the MWS Linear to be installed anywhere space is available.





Performance

The MWS Linear continues to outperform other treatment methods with superior pollutant removal for TSS, heavy metals, nutrients, hydrocarbons and bacteria. Since 2007 the MWS Linear has been field tested on numerous sites across the country. With it's advanced pre-treatment chamber and innovative horizontal flow biofilter, the system is able to effectively remove pollutants through a combination of physical, chemical, and biological filtration processes. With the same biological processes found in natural wetlands, the MWS Linear harnesses natures ability to process, transform, and remove even the most harmful pollutants.

Approvals

The MWS Linear has successfully met years of challenging technical reviews and testing from some of the most prestigious and demanding agencies in the nation, and perhaps the world.



Washington State DOE Approved

The MWS Linear is approved for General Use Level Designation (GULD) for Basic, Enhanced, and Phosphorus treatment at 1 gpm/ft^2 loading rate. The highest performing BMP on the market for all main pollutant categories.

TSS	Total Phosphorus	Ortho Phosphorus	Nitrogen	Dissolved Zinc	Dissolved Copper	Total Zinc	Total Copper	Motor Oil
85%	64%	67%	45%	66%	38%	69%	50%	95%



DEQ Assignment

The Virginia Department of Environmental Quality assigned the MWS Linear, the highest phosphorus removal rating for manufactured treatment devices to meet the new Virginia Stormwater Management Program (VSMP) Technical Criteria.



MASTEP Evaluation

The University of Massachusetts at Amherst – Water Resources Research Center, issued a technical evaluation report noting removal rates up to 84% TSS, 70% Total Phosphorus, 68.5% Total Zinc, and more.



Rhode Island DEM Approved

Approved as an authorized BMP and noted to achieve the following minimum removal efficiencies: 85% TSS, 60% Pathogens, 30% Total Phosphorus for discharges to freshwater systems, and 30% Total Nitrogen for discharges to saltwater or tidal systems.

Flow Based Sizing

The MWS Linear can be used in stand alone applications to meet treatment flow requirements. Since the MWS Linear is the only biofiltration system that can accept inflow pipes several feet below the surface it can be used not only in decentralized design applications but also as a large central end-of-the-line application for maximum feasibility.

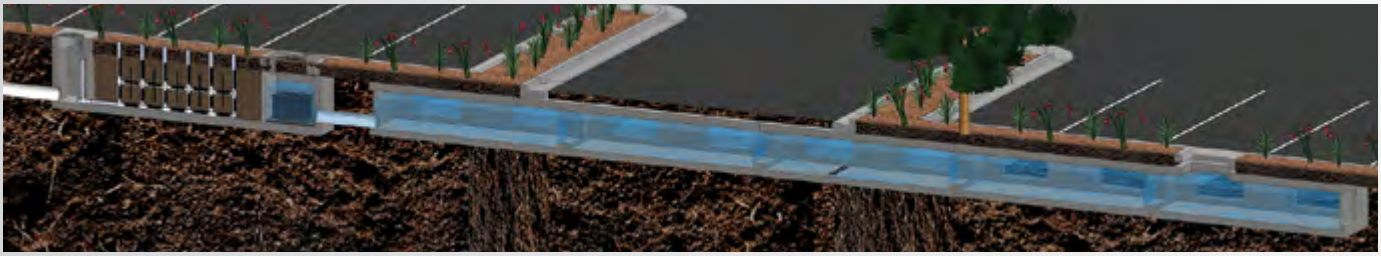


Treatment Flow Sizing Table

Model #	Dimensions	WetlandMedia Surface Area	Treatment Flow Rate (cfs)
MWS-L-4-4	4' x 4'	23 ft^2	0.052
MWS-L-4-6	4' x 6'	32 ft^2	0.073
MWS-L-4-8	4' x 8'	50 ft^2	0.115
MWS-L-4-13	4' x 13'	63 ft^2	0.144
MWS-L-4-15	4' x 15'	76 ft^2	0.175
MWS-L-4-17	4' x 17'	90 ft^2	0.206
MWS-L-4-19	4' x 19'	103 ft^2	0.237
MWS-L-4-21	4' x 21'	117 ft^2	0.268
MWS-L-8-8	8' x 8'	100 ft^2	0.230
MWS-L-8-12	8' x 12'	151 ft^2	0.346
MWS-L-8-16	8' x 16'	201 ft^2	0.462

Volume Based Sizing

Many states require treatment of a water quality volume and do not offer the option of flow based design. The MWS Linear and its unique horizontal flow makes it the only biofilter that can be used in volume based design installed downstream of ponds, detention basins, and underground storage systems.



Treatment Volume Sizing Table

Model #	Treatment Capacity (cu. ft.) @ 24-Hour Drain Down	Treatment Capacity (cu. ft.) @ 48-Hour Drain Down
MWS-L-4-4	1140	2280
MWS-L-4-6	1600	3200
MWS-L-4-8	2518	5036
MWS-L-4-13	3131	6261
MWS-L-4-15	3811	7623
MWS-L-4-17	4492	8984
MWS-L-4-19	5172	10345
MWS-L-4-21	5853	11706
MWS-L-8-8	5036	10072
MWS-L-8-12	7554	15109
MWS-L-8-16	10073	20145

Installation

The MWS Linear is simple, easy to install, and has a space efficient design that offers lower excavation and installation costs compared to traditional tree-box type systems. The structure of the system resembles pre-cast catch basin or utility vaults and is installed in a similar fashion.

The system is delivered fully assembled for quick installation. Generally, the structure can be unloaded and set in place in 15 minutes. Our experienced team of field technicians are available to supervise installations and provide technical support.



Maintenance

Reduce your maintenance costs, man hours, and materials with the MWS Linear. Unlike other biofiltration systems that provide no pre-treatment, the MWS Linear is a self-contained treatment train which incorporates simple and effective pre-treatment.

Maintenance requirements for the biofilter itself are almost completely eliminated, as the pre-treatment chamber removes and isolates trash, sediments, and hydrocarbons. What's left is the simple maintenance of an easily accessible pre-treatment chamber that can be cleaned by hand or with a standard vac truck. Only periodic replacement of low-cost media in the pre-filter cartridges is required for long term operation and there is absolutely no need to replace expensive biofiltration media.



Plant Selection

Abundant plants, trees, and grasses bring value and an aesthetic benefit to any urban setting, but those in the MWS Linear do even more - they increase pollutant removal. What's not seen, but very important, is that below grade the stormwater runoff/flow is being subjected to nature's secret weapon: a dynamic physical, chemical, and biological process working to break down and remove non-point source pollutants. The flow rate is controlled in the MWS Linear, giving the plants more "contact time" so that pollutants are more successfully decomposed, volatilized and incorporated into the biomass of The MWS Linear's micro/macro flora and fauna.

A wide range of plants are suitable for use in the MWS Linear, but selections vary by location and climate. View suitable plants by selecting the list relative to your project location's hardy zone.

Please visit www.ModularWetlands.com/Plants for more information and various plant lists.



SPECIFICATIONS

MWS – Linear

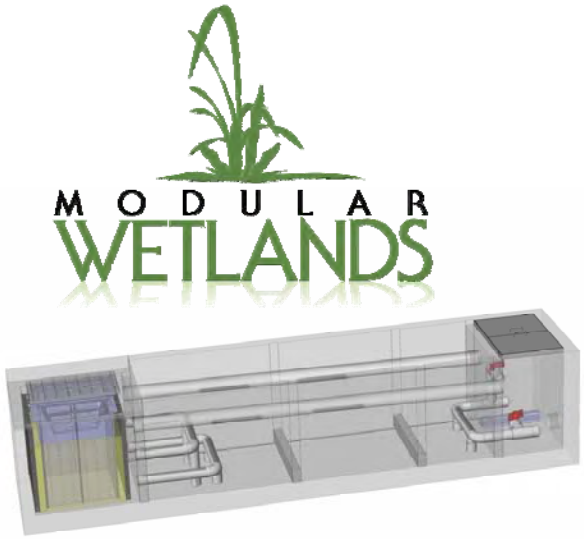
Hybrid Stormwater Filtration System

Modular Wetland Systems, Inc.
P.O. Box 869
Oceanside, CA 92049

www.modularwetlands.com
P 760-433-7640
F 760-433-3179

MWS – Linear

Hybrid Stormwater Filtration System



Save valuable space with small footprint for urban sites.

Improve BMP aesthetics with attractive native and tropical landscape plants.

Reduce lifetime costs with safer and less expensive maintenance

"The MWS – Linear hybrid stormwater treatment system is described as a self contained treatment train. This system utilizes an innovative combination of l treatment processes. Stormwater runoff flows into the system via pipe or curb/grate type catch basin opening. Polluted runoff first encounters a screening device to remove larger pollutants and then enters a hydrodynamic separation chamber which settles out the sediments and larger suspended solids. Next the runoff is treated by a revolutionary filter media, BioMediaGREEN that removes fines and associated pollutants, including bacteria. From there runoff enters of bioretention filter in the form of a subsurface flow vegetated gravel wetland. Within the wetland physical, chemical, and biological mechanisms remove the remaining particulate and dissolved pollutants. The purified runoff leaves the system via the discharge chamber. In the discharge chamber the rate of discharge is controlled by valves set to a desired rate".

Tested Pollutant Removal Efficiencies:

TSS Removal	Dissolved Lead Removal	Dissolved Copper Removal	TPH	E. coli Removal	Turbidity Removal
98%	81%	92%	99%	60.2%	92%

"Nature and Harmony Working Together in Perfect Harmony"

SPECIFICATIONS – MWS- LINEAR

Track Record: The MWS- Linear Hybrid Stormwater Treatment System is manufactured by a company whom is regularly engaged in the engineering design and production of treatment systems for stormwater.

Coverage: The MWS- Linear is designed to treat the water quality volume or water quality flow. For flow based design, high flow bypass is internal, for volume based design, high flow bypass is external and prior to pre-detention system. For offline volume based designs the MWS - Linear has the ability to treat the entire water quality volume when used with pre-storage and properly sized.

Non-Corrosive Materials: The MWS – Linear is designed with non-corrosive materials. All internal piping is SD35 PVC. Catch basin filter components, including mounting hardware, fasteners, support brackets, filtration material, and support frame are constructed of non-corrosive materials (316 stainless steel, and UV protected/marine grade fiberglass). Fasteners are stainless steel. Primary filter mesh is 316 stainless steel welded screens. Filtration basket screens for coarse, medium and fine filtration is ¾" x 1 ¾"expanded, 10 x 10 mesh, and 35 x 35 mesh, respectively. No polypropylene, monofilament netting or fabrics shall be used in this system. Media Protective Panels are constructed of UV protected/marine grade fiberglass. Mounts are constructed of stainless steel. BioMediaGREEN is an inert rock substrate and is non-corrosive. Perimeter filter structure is constructed of lightweight injection molded plastic. Mounting brackets are constructed of SD40 PVC and are mounted with 3/8" diameter stainless steel redheads. Drain down filter cover is constructed of UV protected/marine grade fiberglass and stainless steel hinge and mount.

Weight: Each complete unit weighs approximately 29,000 to 40,000 pounds and requires a boom crane to install. Details of this are provided in the installation section of the MWS-Linear Design Kit.

Transportation: The Modular Wetland System – Linear is designed to be transported on a standard flat bed truck. The unit easily fits on a flat bed truck without the need of special permitting.

Alternative Technology Configurations: The Modular Wetland System – Linear is modular is design. Each module will be up to 22 feet long and 5 feet wide. The system can be made in lengths varying from 13 to 100s of feet long. For lengths longer than 22 feet the system will shipped in modules and assembled on site. The Modular Wetland System – Linear has many alternative configurations. This allows the system to be adapted to many site conditions. Runoff can enter the system through a pipe, and/or a built in curb or grate type opening.

Energy Requirements: The Modular Wetland System – Linear is completely passive and requires no external energy sources.

Buoyancy Issues: Buoyancy is only a an issue when ground water levels rise above the bottom of the Modular Wetland System – Linear's concrete structure. With 8.5 cubic yards of wetland media there is no concern of floatation. As a precaution a footing can also be built into the systems concrete structure.

Durability: The structure of the box will be precast concrete. The concrete will be 28 day compressive strength fc = 5,000 psi. Steel reinforcing will be ASTM A – C857. Structure will support an H20 loading as indicted by AASHTO. The joint between the concrete sections will ship lap and joint sealed with ram-nek. Filter (excluding oil absorbent media) and support structures are of proven durability. The filter and mounting structures are of sufficient strength to support water, sediment, and debris loads when the filter is full, with no slippage, breaking, or tearing. All filters are warranted for a minimum of five (5) years.

Oil Absorbent Media: The MWS – Linear utilizes both physical and biological mechanisms to capture and filter oil and grease. A skimmer and boom system will be positioned on the internal perimeter of the catch basin insert. The primary filtration media, BioMediaGreen, utilized in the perimeter and drain down filters, has excellent hydrocarbon removal abilities. Within the wetland filter biological processes capture and

break down oil and grease. Much of the breakdown and transformation of oil and grease is performed by natural occurring bacteria.

Overflow Protection: The grate and curb type MWS – Linear are designed with an internal bypass consisting of two SD PVC pipes which direct high flows around the perimeter and wetland filter, directly into the discharge chamber. For the volume based vault type configuration, bypass should be located prior to the pre-detention system. For peak flows that exceed internal bypass capacity, external bypass is use.

Filter Bypass: Runoff will bypass filtration (BioMediaGREEN and wetland filter) components of the MWS - Linear. The system will still provide screening and settling during higher flow rates for internally bypassed flows. External bypass will bypass of treatment processes.

Pollutant Removal Efficiency: The MWS - Linear is capable of removing over 90% of the net annual total suspended solids (TSS) load based on a 20-micron particle size. Annual TSS removal efficiency models are based on documented removal efficiency performance from full-scale laboratory tests on BioMediaGreen and quarter-scale laboratory tests on the MWS – Linear flow based system.

POLLUTANT	REMOVAL EFFICIENCY
Trash & Litter	99%
TPH (mg/L)	99%
TSS (mg/L)	98%
E. Coli (MPN/100ml)	60%
Turbidity (NTU)	92%
Dissolved Metals (mg/L)	76%

Sil-Co-Sil 106. Mean particle diameter = 19 microns

Non-Scouring: During heavy storm events the runoff bypasses perimeter and wetland filter components. The system will not re-suspend solids at design flows.

Uniqueness: The Modular Wetland System – Linear is a complete self contained treatment train that incorporates capture, screening, sedimentation, filtration, bioretention, high flow bypass, and flow control into a single modular structure. This system provides four stages of treatment making it the only 4 stage treatment train stormwater filtration system, therefore making it unique to the industry. Other systems do not incorporate all the necessary attributes to make it a complete stormwater management device as with the Modular Wetland System – Linear. Therefore, no equal exists for this system.

Pretreatment & Preconditioning: Since the Modular Wetland System – Linear is a complete capture and treatment train stormwater management system no external pretreatment of preconditioning is necessary.

SPECIFICATIONS – BioMediaGREEN

BioMediaGREEN is a proprietary engineered filter media. Made of a unique combination of the inert naturally occurring material this product is non-combustible and do not pose a fire hazard, stable and non-reactive, and is also biodegradable. It is stable with no known adverse environmental effects.

This product has been tested in long-term carcinogenicity studies [inhalation and intraperitoneal injection (i.p.)] with no significant increase in lung tumors or abdominal tumors. Short-term biopersistent (inhalation and intra-tracheal injection) studies have shown that the products disappear very rapidly from the lung.

In October 2001, IARC classified this product as Group 3, "not classifiable as to its carcinogenicity to humans". The 2001 decision was based on the latest epidemiological studies and animal inhalation studies that show no relation between inhalation exposure and the development of tumors.

The product can typically be disposed of in an ordinary landfill (local regulations may apply). If you are unsure of the regulations, contact your local Public Health Department or the local office of the Environmental Protection Agency (EPA).

Coverage: When properly installed BioMediaGREEN Filter Blocks provide sufficient contact time, at rated flows, of passing contaminate water. The BioMediaGREEN material will capture and retain most pollutants that pass through it. The BioMediaGREEN material is made of a proprietary blend of inert substances. The BioMediaGREEN Filter Blocks can be used in different treatment devices, including but not limited to flume filters, trench drain filters, downspout filters, catch basin inserts, water polishing units, and hydrodynamic separators.

Non-Corrosive Materials: The BioMediaGreen material is made of non-corrosive materials.

Durability: The BioMediaGREEN material has been chosen for its proven durability, with an expected life of 2 plus years. The BioMediaGREEN material is of sufficient strength to support water, sediment, and debris loads when the media is at maximum flow; with no slippage, breaking, or tearing. The BioMediaGREEN material has been tested through rigorous flow and loading conditions.

Oil Absorbent Media: The BioMediaGREEN material has been proven to capture and retain hydrocarbons.

Pollutant Removal Efficiency: The BioMediaGREEN Filter Blocks are designed to capture high levels of Hydrocarbons including but not limited to oils & grease, gasoline, diesel, and PAHs. BioMediaGREEN Filter Blocks have the physical ability to block and filter trash and litter, grass and foliage, sediments, TSS, particulate and dissolved metals, nutrients, and bacteria.

BioMediaGREEN technology is based on a proprietary blend of synthetic inert natural substances aimed at removal of various stormwater pollutants. BioMediaGREEN was created to have a very porous structure capable of selectively removing pollutants while

allowing high flow through rates for water. As pollutants are captured by its structure, BioMediaGREEN captures most pollutants and maintains porosity and filtering capabilities.

Field and laboratory tests have confirmed the BioMediaGREEN capability to capture large percentage of TSS, hydrocarbons, nutrients, and heavy metals. Microbial reduction efficiency will vary depending on colony size, flow rates and site specific conditions.

POLLUTANT	REMOVAL EFFICIENCY
Oil & Grease (mg/L)	90%
TPH (mg/L)	99%
TSS (mg/L)	85%
Turbidity (NTU)	99%
Total Phosphorus (mg/L)	69.6%
Dissolved Metals (mg/L)	75.6%

Sil-Co-Sil 106. Mean particle diameter = 19 microns

Replacement: Removal and replacement of the blocks is simple. Remove blocks from filtration system. Replace with new block of equal size.

Site Design & Landscape Planning SD-10



Design Objectives

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- ☑ Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Each project site possesses unique topographic, hydrologic, and vegetative features, some of which are more suitable for development than others. Integrating and incorporating appropriate landscape planning methodologies into the project design is the most effective action that can be done to minimize surface and groundwater contamination from stormwater.

Approach

Landscape planning should couple consideration of land suitability for urban uses with consideration of community goals and projected growth. Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

Design Considerations

Design requirements for site design and landscapes planning should conform to applicable standards and specifications of agencies with jurisdiction and be consistent with applicable General Plan and Local Area Plan policies.

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Designing New Installations

Begin the development of a plan for the landscape unit with attention to the following general principles:

- Formulate the plan on the basis of clearly articulated community goals. Carefully identify conflicts and choices between retaining and protecting desired resources and community growth.
- Map and assess land suitability for urban uses. Include the following landscape features in the assessment: wooded land, open unwooded land, steep slopes, erosion-prone soils, foundation suitability, soil suitability for waste disposal, aquifers, aquifer recharge areas, wetlands, floodplains, surface waters, agricultural lands, and various categories of urban land use. When appropriate, the assessment can highlight outstanding local or regional resources that the community determines should be protected (e.g., a scenic area, recreational area, threatened species habitat, farmland, fish run). Mapping and assessment should recognize not only these resources but also additional areas needed for their sustenance.

Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Conserve Natural Areas during Landscape Planning

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- Cluster development on least-sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
- Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
- Promote natural vegetation by using parking lot islands and other landscaped areas.
- Preserve riparian areas and wetlands.

Maximize Natural Water Storage and Infiltration Opportunities Within the Landscape Unit

- Promote the conservation of forest cover. Building on land that is already deforested affects basin hydrology to a lesser extent than converting forested land. Loss of forest cover reduces interception storage, detention in the organic forest floor layer, and water losses by evapotranspiration, resulting in large peak runoff increases and either their negative effects or the expense of countering them with structural solutions.
- Maintain natural storage reservoirs and drainage corridors, including depressions, areas of permeable soils, swales, and intermittent streams. Develop and implement policies and

regulations to discourage the clearing, filling, and channelization of these features. Utilize them in drainage networks in preference to pipes, culverts, and engineered ditches.

- Evaluating infiltration opportunities by referring to the stormwater management manual for the jurisdiction and pay particular attention to the selection criteria for avoiding groundwater contamination, poor soils, and hydrogeological conditions that cause these facilities to fail. If necessary, locate developments with large amounts of impervious surfaces or a potential to produce relatively contaminated runoff away from groundwater recharge areas.

Protection of Slopes and Channels during Landscape Design

- Convey runoff safely from the tops of slopes.
- Avoid disturbing steep or unstable slopes.
- Avoid disturbing natural channels.
- Stabilize disturbed slopes as quickly as possible.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize temporary and permanent channel crossings as quickly as possible, and ensure that increases in run-off velocity and frequency caused by the project do not erode the channel.
- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Line on-site conveyance channels where appropriate, to reduce erosion caused by increased flow velocity due to increases in tributary impervious area. The first choice for linings should be grass or some other vegetative surface, since these materials not only reduce runoff velocities, but also provide water quality benefits from filtration and infiltration. If velocities in the channel are high enough to erode grass or other vegetative linings, riprap, concrete, soil cement, or geo-grid stabilization are other alternatives.
- Consider other design principles that are comparable and equally effective.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Redevelopment may present significant opportunity to add features which had not previously been implemented. Examples include incorporation of depressions, areas of permeable soils, and swales in newly redeveloped areas. While some site constraints may exist due to the status of already existing infrastructure, opportunities should not be missed to maximize infiltration, slow runoff, reduce impervious areas, disconnect directly connected impervious areas.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Stormwater Management Manual for Western Washington, Washington State Department of Ecology, August 2001.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Roof Runoff Controls SD-11



Rain Garden

Design Objectives

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- ☑ Contain Pollutants
- Collect and Convey

Description

Various roof runoff controls are available to address stormwater that drains off rooftops. The objective is to reduce the total volume and rate of runoff from individual lots, and retain the pollutants on site that may be picked up from roofing materials and atmospheric deposition. Roof runoff controls consist of directing the roof runoff away from paved areas and mitigating flow to the storm drain system through one of several general approaches: cisterns or rain barrels; dry wells or infiltration trenches; pop-up emitters, and foundation planting. The first three approaches require the roof runoff to be contained in a gutter and downspout system. Foundation planting provides a vegetated strip under the drip line of the roof.

Approach

Design of individual lots for single-family homes as well as lots for higher density residential and commercial structures should consider site design provisions for containing and infiltrating roof runoff or directing roof runoff to vegetative swales or buffer areas. Retained water can be reused for watering gardens, lawns, and trees. Benefits to the environment include reduced demand for potable water used for irrigation, improved stormwater quality, increased groundwater recharge, decreased runoff volume and peak flows, and decreased flooding potential.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

Design Considerations

Designing New Installations

Cisterns or Rain Barrels

One method of addressing roof runoff is to direct roof downspouts to cisterns or rain barrels. A cistern is an above ground storage vessel with either a manually operated valve or a permanently open outlet. Roof runoff is temporarily stored and then released for irrigation or infiltration between storms. The number of rain

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barrels needed is a function of the rooftop area. Some low impact developers recommend that every house have at least 2 rain barrels, with a minimum storage capacity of 1000 liters. Roof barrels serve several purposes including mitigating the first flush from the roof which has a high volume, amount of contaminants, and thermal load. Several types of rain barrels are commercially available. Consideration must be given to selecting rain barrels that are vector proof and childproof. In addition, some barrels are designed with a bypass valve that filters out grit and other contaminants and routes overflow to a soak-away pit or rain garden.

If the cistern has an operable valve, the valve can be closed to store stormwater for irrigation or infiltration between storms. This system requires continual monitoring by the resident or grounds crews, but provides greater flexibility in water storage and metering. If a cistern is provided with an operable valve and water is stored inside for long periods, the cistern must be covered to prevent mosquitoes from breeding.

A cistern system with a permanently open outlet can also provide for metering stormwater runoff. If the cistern outlet is significantly smaller than the size of the downspout inlet (say ¼ to ½ inch diameter), runoff will build up inside the cistern during storms, and will empty out slowly after peak intensities subside. This is a feasible way to mitigate the peak flow increases caused by rooftop impervious land coverage, especially for the frequent, small storms.

Dry wells and Infiltration Trenches

Roof downspouts can be directed to dry wells or infiltration trenches. A dry well is constructed by excavating a hole in the ground and filling it with an open graded aggregate, and allowing the water to fill the dry well and infiltrate after the storm event. An underground connection from the downspout conveys water into the dry well, allowing it to be stored in the voids. To minimize sedimentation from lateral soil movement, the sides and top of the stone storage matrix can be wrapped in a permeable filter fabric, though the bottom may remain open. A perforated observation pipe can be inserted vertically into the dry well to allow for inspection and maintenance.

In practice, dry wells receiving runoff from single roof downspouts have been successful over long periods because they contain very little sediment. They must be sized according to the amount of rooftop runoff received, but are typically 4 to 5 feet square, and 2 to 3 feet deep, with a minimum of 1-foot soil cover over the top (maximum depth of 10 feet).

To protect the foundation, dry wells must be set away from the building at least 10 feet. They must be installed in solids that accommodate infiltration. In poorly drained soils, dry wells have very limited feasibility.

Infiltration trenches function in a similar manner and would be particularly effective for larger roof areas. An infiltration trench is a long, narrow, rock-filled trench with no outlet that receives stormwater runoff. These are described under Treatment Controls.

Pop-up Drainage Emitter

Roof downspouts can be directed to an underground pipe that daylights some distance from the building foundation, releasing the roof runoff through a pop-up emitter. Similar to a pop-up irrigation head, the emitter only opens when there is flow from the roof. The emitter remains flush to the ground during dry periods, for ease of lawn or landscape maintenance.

Foundation Planting

Landscape planting can be provided around the base to allow increased opportunities for stormwater infiltration and protect the soil from erosion caused by concentrated sheet flow coming off the roof. Foundation plantings can reduce the physical impact of water on the soil and provide a subsurface matrix of roots that encourage infiltration. These plantings must be sturdy enough to tolerate the heavy runoff sheet flows, and periodic soil saturation.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Supplemental Information

Examples

- City of Ottawa's Water Links Surface –Water Quality Protection Program
- City of Toronto Downspout Disconnection Program
- City of Boston, MA, Rain Barrel Demonstration Program

Other Resources

Hager, Marty Catherine, Stormwater, "Low-Impact Development", January/February 2003. www.stormh2o.com

Low Impact Urban Design Tools, Low Impact Development Design Center, Beltsville, MD. www.lid-stormwater.net

Start at the Source, Bay Area Stormwater Management Agencies Association, 1999 Edition

Efficient Irrigation SD-12



Design Objectives

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Irrigation water provided to landscaped areas may result in excess irrigation water being conveyed into stormwater drainage systems.

Approach

Project plan designs for development and redevelopment should include application methods of irrigation water that minimize runoff of excess irrigation water into the stormwater conveyance system.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Designing New Installations

The following methods to reduce excessive irrigation runoff should be considered, and incorporated and implemented where determined applicable and feasible by the Permittee:

- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.

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- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water drainage system.
- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider design features such as:
  - Using mulches (such as wood chips or bar) in planter areas without ground cover to minimize sediment in runoff
  - Installing appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant materials where possible and/or as recommended by the landscape architect
  - Leaving a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible
  - Choosing plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth
- Employ other comparable, equally effective methods to reduce irrigation water runoff.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Storm Drain Signage SD-13



Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- ☑ Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Waste materials dumped into storm drain inlets can have severe impacts on receiving and ground waters. Posting notices regarding discharge prohibitions at storm drain inlets can prevent waste dumping. Storm drain signs and stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets.

Approach

The stencil or affixed sign contains a brief statement that prohibits dumping of improper materials into the urban runoff conveyance system. Storm drain messages have become a popular method of alerting the public about the effects of and the prohibitions against waste disposal.

Suitable Applications

Stencils and signs alert the public to the destination of pollutants discharged to the storm drain. Signs are appropriate in residential, commercial, and industrial areas, as well as any other area where contributions or dumping to storm drains is likely.

Design Considerations

Storm drain message markers or placards are recommended at all storm drain inlets within the boundary of a development project. The marker should be placed in clear sight facing toward anyone approaching the inlet from either side. All storm drain inlet locations should be identified on the development site map.

Designing New Installations

The following methods should be considered for inclusion in the project design and show on project plans:

- Provide stenciling or labeling of all storm drain inlets and catch basins, constructed or modified, within the project area with prohibitive language. Examples include "NO DUMPING

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– DRAINS TO OCEAN" and/or other graphical icons to discourage illegal dumping.

- Post signs with prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

Note - Some local agencies have approved specific signage and/or storm drain message placards for use. Consult local agency stormwater staff to determine specific requirements for placard types and methods of application.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. If the project meets the definition of "redevelopment", then the requirements stated under " designing new installations" above should be included in all project design plans.

Additional Information

Maintenance Considerations

- Legibility of markers and signs should be maintained. If required by the agency with jurisdiction over the project, the owner/operator or homeowner's association should enter into a maintenance agreement with the agency or record a deed restriction upon the property title to maintain the legibility of placards or signs.

Placement

- Signage on top of curbs tends to weather and fade.
- Signage on face of curbs tends to be worn by contact with vehicle tires and sweeper brooms.

Supplemental Information

Examples

- Most MS4 programs have storm drain signage programs. Some MS4 programs will provide stencils, or arrange for volunteers to stencil storm drains as part of their outreach program.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Street Sweeping and Vacuuming SE-7



Objectives

EC	Erosion Control	
SE	Sediment Control	☒
TR	Tracking Control	☑
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	☑
Metals	
Bacteria	
Oil and Grease	☑
Organics	

Potential Alternatives

None

Description and Purpose

Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.

Suitable Applications

Sweeping and vacuuming are suitable anywhere sediment is tracked from the project site onto public or private paved streets and roads, typically at points of egress. Sweeping and vacuuming are also applicable during preparation of paved surfaces for final paving.

Limitations

Sweeping and vacuuming may not be effective when sediment is wet or when tracked soil is caked (caked soil may need to be scraped loose).

Implementation

- Controlling the number of points where vehicles can leave the site will allow sweeping and vacuuming efforts to be focused, and perhaps save money.
- Inspect potential sediment tracking locations daily.
- Visible sediment tracking should be swept or vacuumed on a daily basis.

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- Do not use kick brooms or sweeper attachments. These tend to spread the dirt rather than remove it.
- If not mixed with debris or trash, consider incorporating the removed sediment back into the project

Costs

Rental rates for self-propelled sweepers vary depending on hopper size and duration of rental. Expect rental rates from $58/hour (3 yd^3 hopper) to $88/hour (9 yd^3 hopper), plus operator costs. Hourly production rates vary with the amount of area to be swept and amount of sediment. Match the hopper size to the area and expect sediment load to minimize time spent dumping.

Inspection and Maintenance

- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
- When actively in use, points of ingress and egress must be inspected daily.
- When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. More frequent removal, even continuous removal, may be required in some jurisdictions.
- Be careful not to sweep up any unknown substance or any object that may be potentially hazardous.
- Adjust brooms frequently; maximize efficiency of sweeping operations.
- After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Labor Surcharge and Equipment Rental Rates, State of California Department of Transportation (Caltrans), April 1, 2002 – March 31, 2003.

BIO-7: Proprietary Biotreatment

Proprietary biotreatment devices are devices that are manufactured to mimic natural systems such as bioretention areas by incorporating plants, soil, and microbes engineered to provide treatment at higher flow rates or volumes and with smaller footprints than their natural counterparts. Incoming flows are typically filtered through a planting media (mulch, compost, soil, plants, microbes, etc.) and either infiltrated or collected by an underdrain and delivered to the storm water conveyance system. Tree box filters are an increasingly common type of proprietary biotreatment device that are installed at curb level and filled with a bioretention type soil. For low to moderate flows they operate similarly to bioretention systems and are bypassed during high flows. Tree box filters are highly adaptable solutions that can be used in all types of development and in all types of soils but are especially applicable to dense urban parking lots, street, and roadways.

Also known as:

- *Catch basin planter box*
- *Bioretention vault*
- *Tree box filter*



Proprietary biotreatment
Source: http://www.americastusa.com /index.php/filterra/

Feasibility Screening Considerations

- Proprietary biotreatment devices that are unlined may cause incidental infiltration. Therefore, an evaluation of site conditions should be conducted to evaluate whether the BMP should include an impermeable liner to avoid infiltration into the subsurface.

Opportunity Criteria

- Drainage areas of 0.25 to 1.0 acres.
- Land use may include commercial, residential, mixed use, institutional, and subdivisions. Proprietary biotreatment facilities may also be applied in parking lot islands, traffic circles, road shoulders, and road medians.
- Must not adversely affect the level of flood protection provided by the drainage system.

OC-Specific Design Criteria and Considerations

☐ Frequent maintenance and the use of screens and grates to keep trash out may decrease the likelihood of clogging and prevent obstruction and bypass of incoming flows.

☐ Consult proprietors for specific criteria concerning the design and performance.

☐ Proprietary biotreatment may include specific media to address pollutants of concern. However, for proprietary device to be considered a biotreatment device the media must be capable of supporting rigorous growth of vegetation.

☐ Proprietary systems must be acceptable to the reviewing agency. Reviewing agencies shall have the discretion to request performance information. Reviewing agencies shall have the discretion to deny the use of a proprietary BMP on the grounds of performance, maintenance considerations, or other relevant factors.

☐ In right of way areas, plant selection should not impair traffic lines of site. Local jurisdictions may also limit plant selection in keeping with landscaping themes.

Computing Sizing Criteria for Proprietary Biotreatment Device

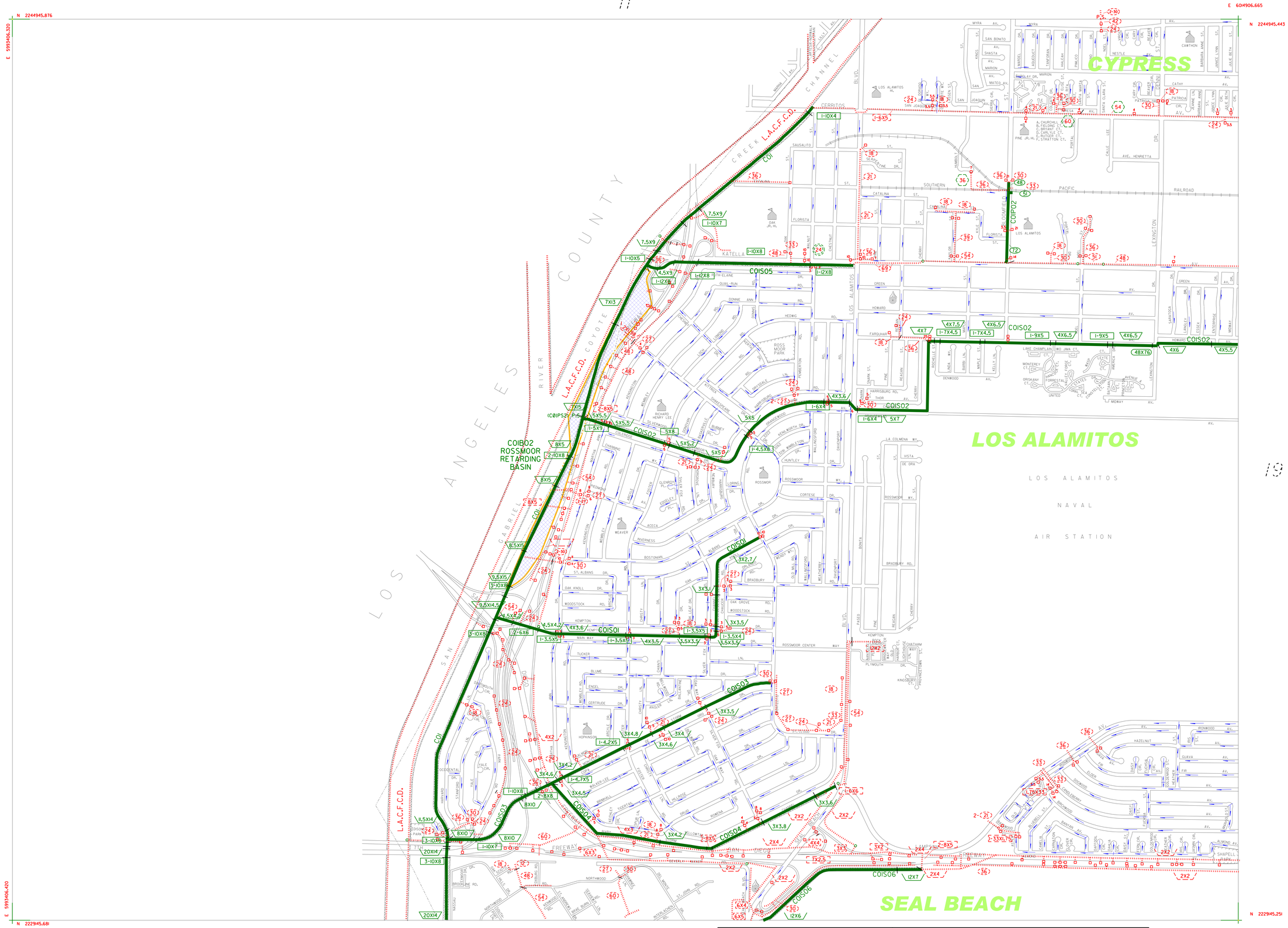
- Proprietary biotreatment devices can be volume based or flow-based BMPs.
- Volume-based proprietary devices should be sized using the Simple Design Capture Volume Sizing Method described in **Appendix III.3.1** or the Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs described in **Appendix III.3.2**.
- The required design flowrate for flow-based proprietary devices should be computed using the Capture Efficiency Method for Flow-based BMPs described in **Appendix III.3.3)**.

In South Orange County, the provided ponding plus pore volume must be checked to demonstrate that it is greater than 0.75 of the remaining DCV that this BMP is designed to address. Many propretary biotreatment BMPs will not be able to meet the definition of "biofiltration" that applies in South Orange County. See Section III.7 and Worksheet SOC-1.

Additional References for Design Guidance

- Los Angeles Unified School District (LAUSD) Stormwater Technical Manual, Chapter 4: **http://www.laschools.org/employee/design/fs-studies-and-reports/download/white_paper_report_material/Storm_Water_Technical_Manual_2009-opt-red.pdf?version_id=76975850**
- Los Angeles County Stormwater BMP Design and Maintenance Manual, Chapter 9: **http://dpw.lacounty.gov/DES/design_manuals/StormwaterBMPDesignandMaintenance.pdf**
- Santa Barbara BMP Guidance Manual, Chapter 6: **http://www.santabarbaraca.gov/NR/rdonlyres/91D1FA75-C185-491E-A882-49EE17789DF8/0/Manual_071008_Final.pdf**

Attachment D
Reference Materials



NOTICE

The drainage information has been prepared for information purposes only. The location, ownership, facility information and limits have been determined from available information provided by public agencies, but may not be exact, accurate, or up-to-date. The user of this information is responsible for verifying exact location, ownership, accuracy, and the regional versus local character of drainage facilities.

Additional information may be obtained from public plans and recorded deeds. Facility designations included with this information are for convenience only and are not controlling or intended to imply ownership by the County or the Orange County Flood Control District (OCFCD). The information is being provided as a courtesy and neither the County of Orange nor OCFCD assume any liabilities for inaccuracy of the information.

To notify OC Public Works Flood Control Section of additions or corrections, please contact Sal Gutierrez at (714) 834-5396 or by email at sal.gutierrez@ocpw.ocgov.com

ORANGE COUNTY FLOOD CONTROL DISTRICT

BASE MAP OF DRAINAGE FACILITIES IN ORANGE COUNTY

REVISION	DATE	SHEET NO.	DWG. NO.
S. GUTIERREZ	JUN 9, 2008	18	MAPS-113-3

Channel Drainage Area Boundary
Major Sub-Area Drainage Boundary
Minor Sub-Area Drainage Boundary
Existing O.C.F.C.D. Facility
Existing Local Facility
Existing Retarding Basin or Reservoir
Natural Watercourse
City Limits
G G Greenbelt
P.S. P.S. Pump Station
Catch Basin (length in feet)
Drop Inlet or Other Entry
OCFCD Basins or Reservoirs

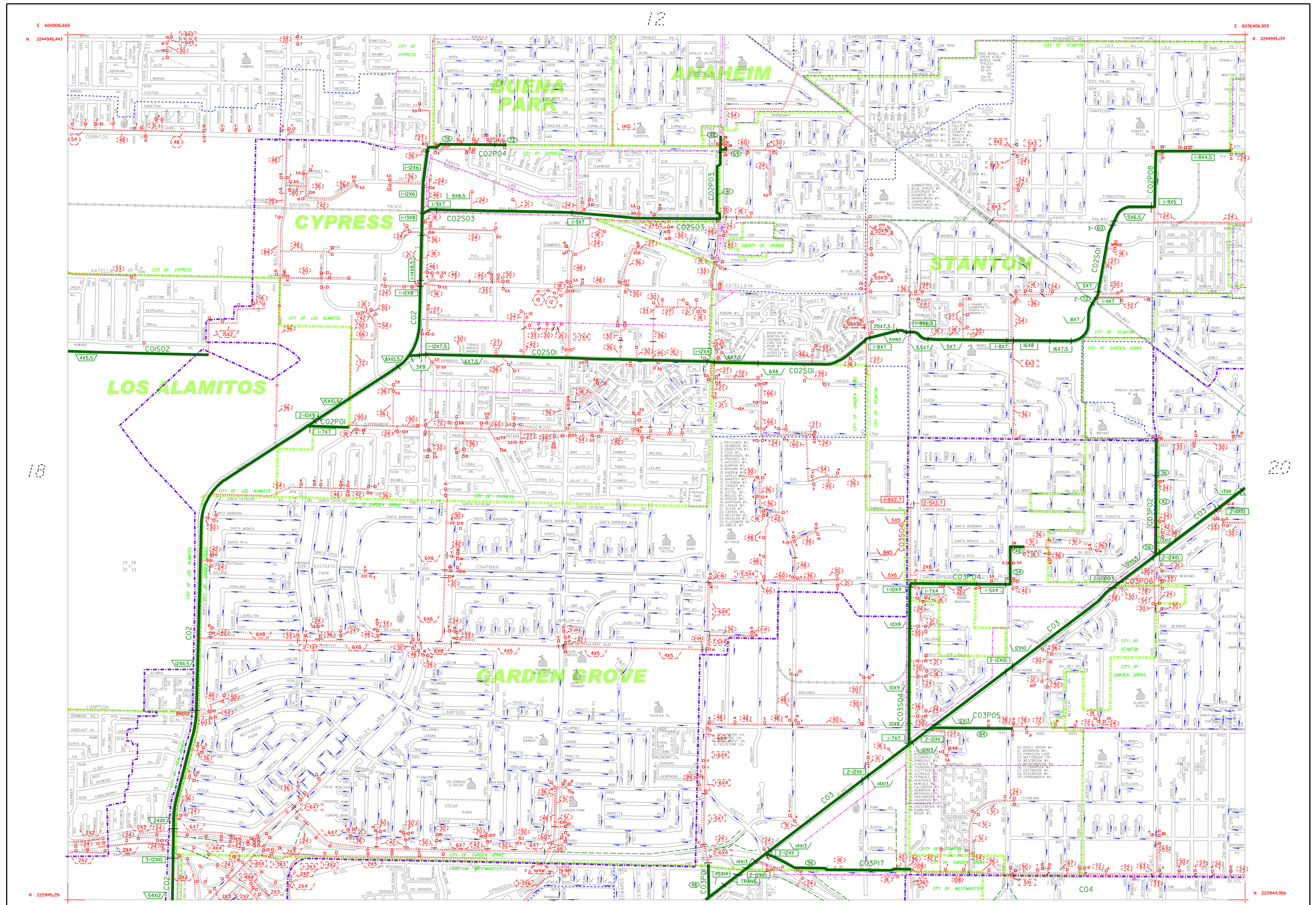
Ownership (If other than City or County): Private = P State = S Federal = F

EXISTING FACILITIES

O.C.F.C.D.	LOCAL	
		Earth Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Rectangular Channel (base width by height in feet)
		Reinforced Concrete Box (RCB) (number of barrels-span by height in feet)
		Reinforced Concrete Pipe (RCP) (diameter in inches)
		Metal Sheet Channel (MSC) (Base width by pile height in feet/Sheet pile total length)
		Corrugated Metal Pipe (CMP) (diameter in inches)
		Concrete Pipe (diameter in inches)
		Concrete Oval Pipe (width by height in inches)
		Steel Pipe (diameter in inches)
		Reinforced Concrete Arch (base span by height in inches)
		Corrugated Metal Arch (base span by height in inches)

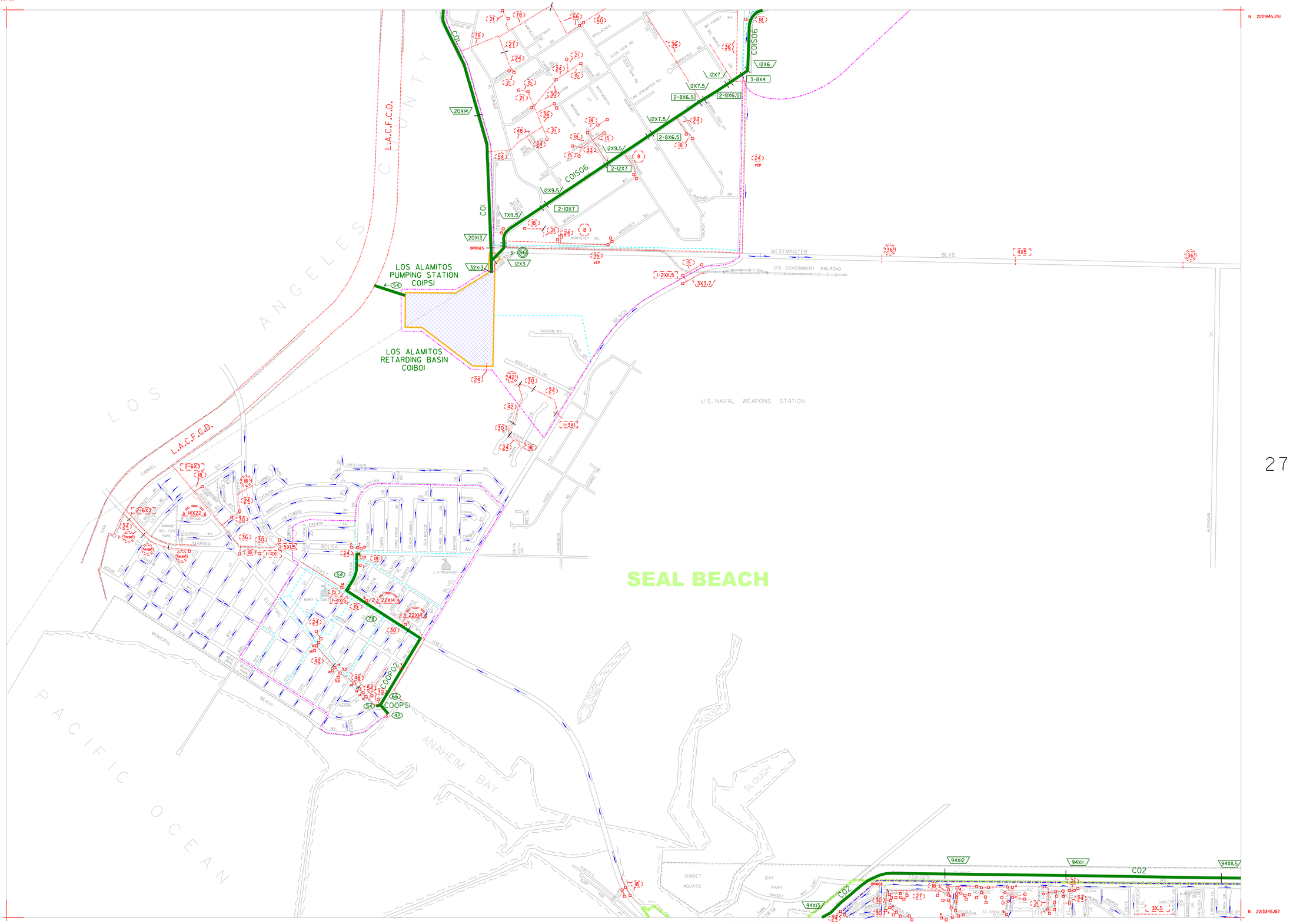
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CITY OF CYPRESS
BUENA PARK
ANAHEIM
CYPRESS
STANTON
LOS ALAMITOS
GARDEN GROVE
CITY OF LOS ALAMITOS
CITY OF GARDEN GROVE
CITY OF STANTON
CITY OF GARDEN GROVE
COUNTY OF ORANGE
C02P04
C02P03
C02P08
C02S03
C02S01
C02P01
C02S02
C02
C03
C03P02
C03P04
C03P06
C03S04
C03P05
C03P07
C03P01
C04
N 2229145.251
E 6014906.805
N 2229144.956
E 6036407.116
27
NOTICE
The drainage information has been prepared for information purposes only. The location, ownership, facility information and limits have been determined from available information provided by public agencies, but may not be exact, accurate, or up-to-date. The user of this information is responsible for verifying exact location, ownership, accuracy, and the regional versus local character of drainage facilities.
Additional information may be obtained from public plans and recorded deeds. Facility designations included with this information are for convenience only and are not controlling or intended to imply ownership by the County or the Orange County Flood Control District (OCFCD). The information is being provided as a courtesy and neither the County of Orange nor OCFCD assume any liabilities for inaccuracy of the information.
To notify OC Public Works Flood Control Section of additions or corrections, please contact Sal Gutierrez at (714) 647-3992 or by email at sal.gutierrez@ocpw.ocgov.com
N
0 200 400 600 800
FEET
ORANGE COUNTY FLOOD CONTROL DISTRICT
BASE MAP
OF DRAINAGE FACILITIES
IN ORANGE COUNTY
REVISION
S. GUTIERREZ
DATE
JAN 23,2012
SHEET NO.
19
DWG. NO.
MAPS-113-3
Channel Drainage Area Boundary
Major Sub-Area Drainage Boundary
Minor Sub-Area Drainage Boundary
Existing O.C.F.C.D. Facility
Existing Local Facility
Existing Retarding Basin or Reservoir
Natural Watercourse
City Limits
Greenbelt
Pump Station
Catch Basin (length in feet)
Drop Inlet or Other Entry
OCFCD Basins or Reservoirs
Ownership (If other than City or County): Private = P State = S Federal = F
EXISTING FACILITIES
O.C.F.C.D.
LOCAL
Earth Trapezoidal Channel (base width by height in feet)
Reinforced Concrete Trapezoidal Channel (base width by height in feet)
Reinforced Concrete Rectangular Channel (base width by height in feet)
Reinforced Concrete Box (RCB) (number of barrels-span by height in feet)
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Concrete Pipe (diameter in inches)
Concrete Oval Pipe (width by height in inches)
Steel Pipe (diameter in inches)
Reinforced Concrete Arch (base span by height in inches)
Corrugated Metal Arch (base span by height in inches)

E 5993406.420
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N 2229145.251



N

0 200 400 600 800
FEET

NOTICE

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To notify the Resources & Development Management Department (RDMD) of additions or corrections, please contact Sal Gutierrez at (714) 834-5396 or by email at sal.gutierrez@rdmd.ocgov.com

35

ORANGE COUNTY FLOOD CONTROL DISTRICT

BASE MAP
OF DRAINAGE FACILITIES
IN ORANGE COUNTY

REVISION	DATE	SHEET NO.	DWG. NO.
S. GUTIERREZ	MAR. 7, 2007	26	MAPS-113-3

- Channel Drainage Area Boundary
- Major Sub-Area Drainage Boundary
- Minor Sub-Area Drainage Boundary
- Existing O.C.F.C.D. Facility
- Existing Local Facility
- Existing Retarding Basin or Reservoir
- Natural Watercourse
- City Limits
- G Greenbelt
- P.S. Pump Station
- Catch Basin (length in feet)
- Drop Inlet or Other Entry
- OCFCD Basins or Reservoirs

Ownership (If other than City or County): Private = P State = S Federal = F

EXISTING FACILITIES

O.C.F.C.D.	LOCAL	
		Earth Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Trapezoidal Channel (base width by height in feet)
		Reinforced Concrete Rectangular Channel (base width by height in feet)
		Reinforced Concrete Box (RCB) (number of barrels-span by height in feet)
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		Concrete Oval Pipe (width by height in inches)
		Steel Pipe (diameter in inches)
		Reinforced Concrete Arch (base span by height in inches)
		Corrugated Metal Arch (base span by height in inches)

Attachment E

Operations and Maintenance Plan

(to be completed during final engineering)

Bio Clean

A Forterra Company

Bio Clean ARS

A Stormwater Trash Capture Solution

OPERATION & MAINTENANCE MANUAL

5796 Armada Drive Suite 250 | Carlsbad, CA 92008 | 855.566.3938

stormwater@forterrabp.com | biocleanenvironmental.com

MAINTENANCE

The Bio Clean ARS requires minimal preventative maintenance. Regular street sweeping will prevent debris from building up in front of the unit thereby obstructing storm water from entering the catch basin curb opening. The Bio Clean ARS is specially designed with flow control blades that will open during larger rain events to prevent flooding regardless of trash build up in front of the unit.

Pressure-washing the unit may be necessary if street sweeping is unavailable.



Yearly Maintenance Schedule:

Inspections consist of visually inspecting the unit from street level and performing an opening-closing function check.

Visual Inspection:

1. Built-up debris and foreign object debris can hinder the unit's operation. Remove any visible debris that may be on, in front of, and nearby the unit.

2. Look for any visible signs of vandalism or damage that may compromise the unit's ability to properly function. Attempted vandalism and slight damage should be inspected closely to ensure no future damage may result.

Opening-Closing Function Check:

1. Manually push on the blades at the bottom from the front of the catch basin. Perform this at the center and at each end of the device Please ensure all appropriate traffic control has been set up and all appropriate safety procedures are followed based on local and state regulations, if required.

2. Observe if the tension is appropriate on the blades and that the return to the close position. Note if any or all of the blades to not return to the close position.

3. Observe if the blades which are interconnecting work together. The blade being pushed on should open the most and the adjacent blades should open slight less in an outward pattern as shown below. Please note if any blades are moving or not moving outside of this pattern.



5. Check to see if the tensioner and cable/spring is properly connected behind each blade. Note any issues related to the cable/spring not being connected.

Blades Maintenance/Adjustment/Replacement:

1. Verify which Blade is damaged and plan which faceplate is easiest and most efficient to remove.
2. Remove Faceplate from brackets and remove tension spring from back of unit.
3. Slide each blade off until damaged blade has been reached. Replace damaged blade or blades.
4. Feed tensioner spring through all the back clips and attach faceplate to top bar.
5. Secure tensioner spring on back of unit and secure faceplate to mounted bracket

LA-ARS Locking Screen: Torsion Spring and Adjustment Knob System Maintenance

1. Verify unit does not have damage blades and working properly
2. Check the status of the locking system making sure the system can tighten by first releasing the unit by pressing on the releases on each side of the unit. If unit releases, proceed to next step
3. Check the status of the tension knob by clicking it tighter to make sure the unit tightens with each click of the tightening knob. If unit tightens, maintenance is complete.
4. If unit does not tighten or release, remove faceplates from bracket and remove torsion spring system. Both Torsion Spring and Adjustment knob units will need to be replaced.
5. Screw new torsion spring and adjustment knob system into place and place metal wire into plastic holding system on back of each blade.
6. Test unit by tightening and releasing the locking system. If unit is working properly, reinstall unit.

Replacement Schedule:

All components on the on the Bio Clean ARS are made from 304 or 316 stainless steel parts with the exception of the flow control blades which are made of structural polymer. Replacement of individual blades is quick and easy. If during maintenance inspection it is observed the unit is damaged or vandalized to the point at which the opening-closing function is not operating correctly, the unit should be repaired. Bio Clean Environmental should be notified if a replacement parts or repair work is needed.

For Maintenance Services
Please Contact Us At:
760-433-7640
stormwater@forterrabpm.com

CONTECH®
ENGINEERED SOLUTIONS

Modular Wetlands® Linear
Operation & Maintenance Manual



MODULAR WETLANDS®

MODULAR WETLANDS® LINEAR
OPERATION & MAINTENANCE MANUAL

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Maintenance Summary 8

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- Prefilter Cartridge 10
- Biofiltration Chamber 11
- Discharge Chamber 12

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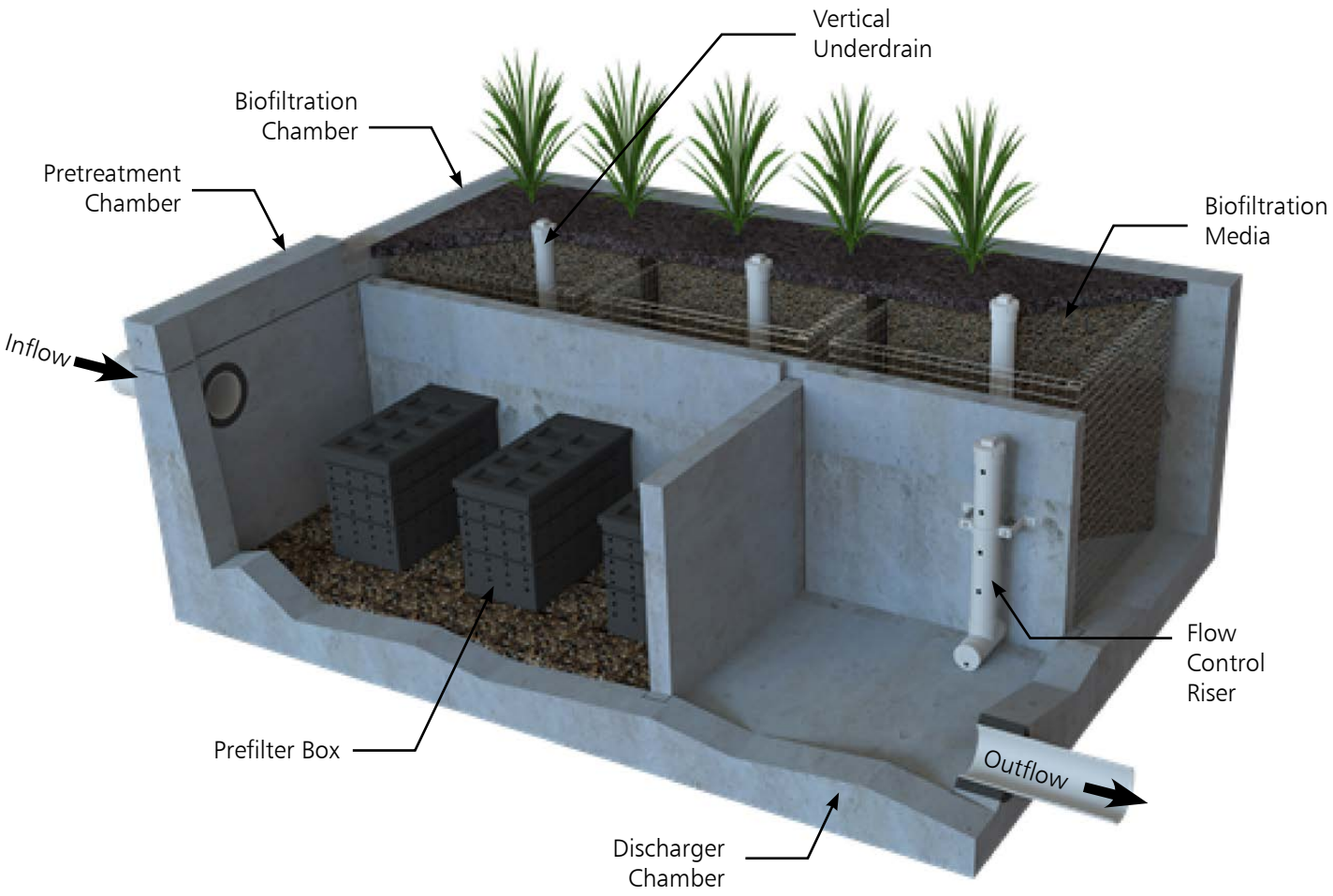
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OVERVIEW

The Modular Wetlands® Linear Biofilter is designed to remove high levels of trash, debris, sediments, nutrients, metals, and hydrocarbons. Its simple design allows for quick and easy installation. The system is housed in a standard precast structure and can be installed at various depths to meet site-specific conditions.

INTRODUCTION

This is the Modular Wetlands Linear Biofilter operation and maintenance manual. Before starting, read the instructions and equipment lists closely. It is important to follow all necessary safety procedures associated with state and local regulations. Some steps required confined space entry. Please contact Contech for more information on pre-authorized third party contractors who can provide installation services in your area. For a list of service providers in your area please visit: www.conteches.com/maintenance.



INSTRUCTIONS

INSPECTION SUMMARY

Stormwater regulations require BMPs be inspected and maintained to ensure they are operating as designed to allow for effective pollutant removal and provide protection to receiving water bodies. It is recommended that inspections be performed multiple times during the first year to assess the site specific loading conditions. The first year of inspections can be used to set inspection and maintenance intervals for subsequent years to ensure appropriate maintenance is provided.

- Inspect pre-treatment, biofiltration, and discharge chambers an average of once every six to twelve months. Varies based on site specific and local conditions.
- Average inspection time is approximately 15 minutes. Always ensure appropriate safety protocol and procedures are followed.

The following is a list of equipment required to allow for simple and effective inspection of the Modular Wetlands Linear:

- Modular Wetlands Linear Inspection Form
- Flashlight
- Manhole hook or appropriate tools to remove access hatches and covers
- Appropriate traffic control signage and procedures
- Measuring pole and/or tape measure
- Protective clothing and eye protection
- 7/16" open or closed ended wrench
- Large permanent black marker (initial inspections only - first year)

Note: entering a confined space requires appropriate safety and certification. It is generally not required for routine inspections of the system

INSPECTION AND MAINTENANCE NOTES

1. Following maintenance and/or inspection, it is recommended that the maintenance operator prepare a maintenance/inspection record. The record should include any maintenance activities performed, amount and description of debris collected, and condition of the system and its various filter mechanisms.
2. The owner should keep maintenance/inspection record(s) for a minimum of five years from the date of maintenance. These records should be made available to the governing municipality for inspection upon request at any time.
3. Transport all debris, trash, organics, and sediments to approved facility for disposal in accordance with local and state requirements.
4. Entry into chambers may require confined space training based on state and local regulations.
5. No fertilizer shall be used in the biofiltration chamber.
6. Irrigation should be provided as recommended by manufacturer and/or landscape architect. Amount of irrigation required is dependent on plant species. Some plants may not require irrigation after initial establishment.

INSPECTION PROCESS

1. Prepare the inspection form by writing in the necessary information including project name, location, date & time, unit number and other information (see inspection form).
2. Observe the inside of the system through the access covers. If minimal light is available and vision into the unit is impaired, utilize a flashlight to see inside the system and all of its chambers.
3. Look for any out of the ordinary obstructions in the inflow pipe, pre-treatment chamber, biofiltration chamber, discharge chamber or outflow pipe. Write down any observations on the inspection form.
4. Through observation and/or digital photographs, estimate the amount of trash, debris accumulated in the pre-treatment chamber. Utilizing a tape measure or measuring stick, estimate the amount of sediment in this chamber. Record this depth on the inspection form.
5. Through visual observation, inspect the condition of the pre-filter cartridges. Look for excessive build-up of sediment on the cartridges, any build-up on the tops of the cartridges, or clogging of the holes. Record this information on the inspection form. The prefilter cartridges can be further inspected by removing the cartridge tops and assessing the color of the BioMediaGREEN filter cubes (requires entry into pre-treatment chamber - see notes previous notes regarding confined space entry). Record the color of the material. New material is a light green color. As the media becomes clogged, it will turn darker in color, eventually becoming dark brown or black. The closer to black the media is the higher percentage that the media is exhausted and is in need of replacement.

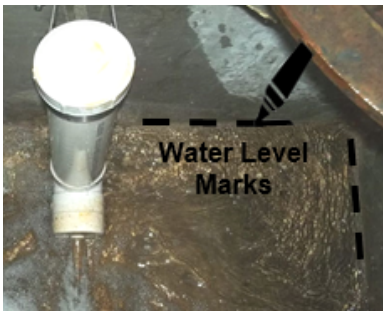


6. The biofiltration chamber is generally maintenance-free due to the system's advanced pre-treatment chamber. For units which have open planters with vegetation, it is recommended that the vegetation be inspected. Look for any plants that are dead or showing signs of disease or other negative stressors. Record the general health of the plants on the inspection form and indicate through visual observation or digital photographs if trimming of the vegetation is required.
7. The discharge chamber houses the orifice control structure, drain down filter (only in California - older models), and is connected to the outflow pipe. It is important to check to ensure the orifice is in proper operating conditions and free of any obstructions. It is also important to assess the condition of the drain down filter media which utilizes a block form of the BioMediaGREEN. Assess in the same manner as the cubes in the pre-filter cartridge as mentioned above. Generally, the discharge chamber will be clean and free of debris. Inspect the water marks on the side walls. If possible, inspect the discharge chamber during a rain event to assess the amount of flow leaving the system while it is at 100% capacity (pre-treatment chamber water level at peak HGL - top of bypass weir). The water level of the flowing water should be compared to the watermark level on the side walls, which is an indicator of the highest discharge rate the system achieved when initially installed. Record on the form if there is any difference in level from the watermark in inches.

NOTE: During the first few storms, the water level in the outflow chamber should be observed and a 6" long horizontal watermark line drawn (using a large permanent marker) at the water level in the discharge chamber while the system is operating at 100% capacity. The diagram below illustrates where the line should be drawn. This line is a reference point for future inspections of the system.

Water level in the discharge chamber is a function of flow rate and pipe size. Observation of the water level during the first few months of operation can be used as a benchmark level for future inspections. The initial mark and all future observations shall be made when the system is at 100% capacity (water level at maximum level in the pre-treatment chamber). If future water levels are below this mark when the system is at 100% capacity, this is an indicator that maintenance to the pre-filter cartridges may be needed.

8. Finalize the inspection report for analysis by the maintenance manager to determine if maintenance is required.





MAINTENANCE INDICATORS

Based upon the observations made during inspection, maintenance of the system may be required based on the following indicators:

- Missing or damaged internal components or cartridges
- Obstructions in the system or its inlet and/or outlet pipes
- Excessive accumulation of floatables in the pretreatment chamber in which the length and width of the chamber is fully impacted more than 18". See photo below.
- Excessive accumulation of sediment in the pretreatment chamber of more than 6" in depth.
- Excessive accumulation of sediment on the BioMediaGREEN media housed within the pretreatment cartridges. The following chart shows photos of the condition of the BioMediaGREEN contained within the pre-filter cartridges. When media is more than 85% clogged, replacement is required.
- Excessive accumulation of sediment on the BioMediaGREEN media housed within the pretreatment cartridges. When media is more than 85% clogged, replacement is required. The darker the BioMediaGREEN, the more clogged it is and in need of replacement.





INSPECTION PROCESS

- Excessive accumulation of sediment on the BioMediaGREEN media housed within the drain down filter (California only - older models). The following photos show the condition of the BioMediaGREEN contained within the drain down filter. When media is more than 85% clogged, replacement is required.





- Overgrown vegetation.



- Water level in the discharge chamber during 100% operating capacity (pretreatment chamber water level at max height) is lower than the water mark by 20%.

MAINTENANCE SUMMARY

The time has come to maintain your Modular Wetlands® Linear. All necessary pre-maintenance steps must be carried out before maintenance occurs. Once traffic control has been set up per local and state regulations and access covers have been safely opened, the maintenance process can begin. It should be noted that some maintenance activities require confined space entry. All confined space requirements must be strictly followed before entry into the system. In addition, the following is recommended:

- Prepare the maintenance form by writing in the necessary information including project name, location, date & time, unit number and other info (see maintenance form).
- Set up all appropriate safety and cleaning equipment.
- Ensure traffic control is set up and properly positioned.
- Prepared pre-checks (OSHA, safety, confined space entry) are performed.

The following is a list of equipment to required for maintenance of the Modular Wetlands® Linear:

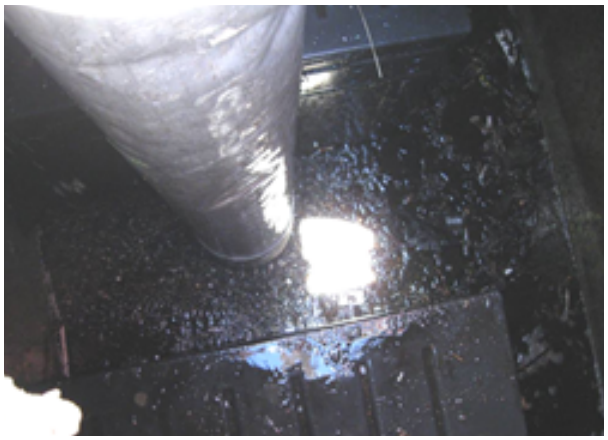
- Modular Wetlands Linear Maintenance Form
- Manhole hook or appropriate tools to access hatches and covers
- Protective clothing, flashlight, and eye protection
- 7/16" open or closed ended wrench
- Vacuum assisted truck with pressure washer
- Replacement BioMediaGREEN for pre-filter cartridges if required (order from one of Contech's Maintenance Team members at https://www.conteches.com/maintenance).

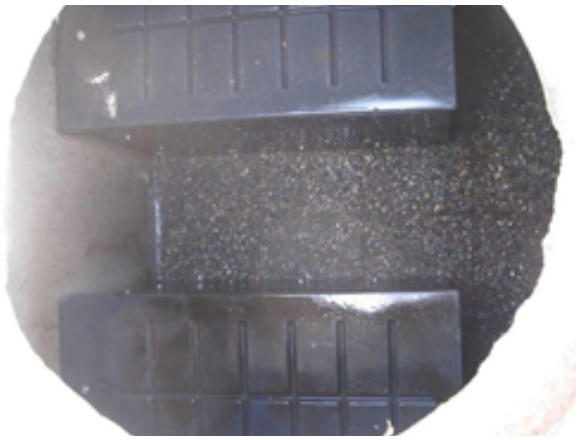
MAINTENANCE | PRETREATMENT CHAMBER

1. Remove access cover over pre-treatment chamber and position vacuum truck accordingly.
2. With a pressure washer, spray down pollutants accumulated on walls and pre-filter cartridges.
3. Vacuum out pre-treatment chamber and remove all accumulated pollutants including trash, debris, and sediments. Be sure to vacuum the floor until the pervious pavers are visible and clean.
4. If pre-filter cartridges require media replacement, continue to step 5. If not, replace access cover and move to step 11.





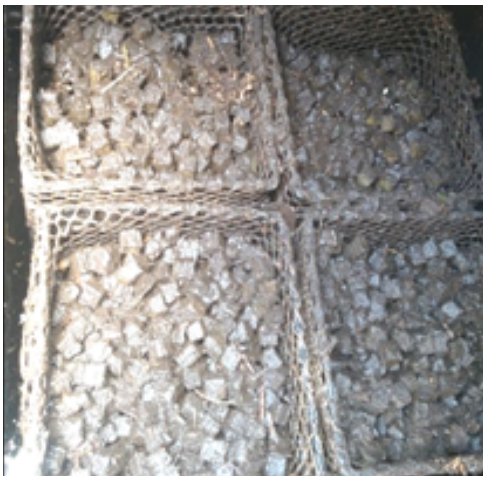




MAINTENANCE | PREFILTER CARTRIDGES

5. After successfully cleaning out the pre-treatment chamber (previous page) enter the pre-treatment chamber.
6. Unscrew the two bolts (circles shown below) holding the lid on each cartridge filter and remove lid.

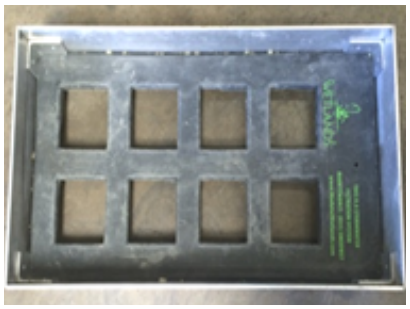


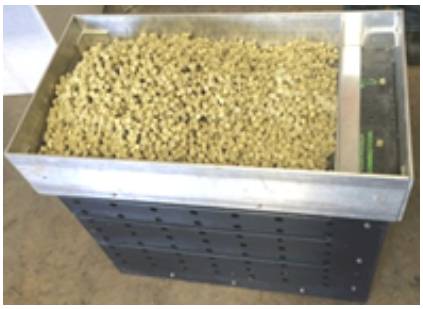


7. Place the vacuum hose over each individual media filter to suck out filter media.



8. Once filter media has been sucked out, use a pressure washer to spray down the inside of the cartridge and it's media cages. Remove cleaned media cages and place to the side. Once removed, the vacuum hose can be inserted into the cartridge to vacuum out any remaining material near the bottom of the cartridge.
9. Reinstall media cages and fill with new media from the manufacturer or outside supplier. Manufacturer will provide specification of media and sources to purchase. Utilize the manufacture-provided refilling tray and place on top of the cartridge. Fill the tray with new bulk media and shake down into place. Using your hands, lightly compact the media into each filter cage. Once the cages are full, remove the refilling tray and replace the cartridge top, ensuring bolts are properly tightened.







10. Exit the pre-treatment chamber. Replace access hatch or manhole cover.

MAINTENANCE | BIOFILTRATION CHAMBER

11. In general, the biofiltration chamber is maintenance-free with the exception of maintaining the vegetation. The Modular Wetlands Linear utilizes vegetation similar to surrounding landscape areas, therefore trim vegetation to match surrounding vegetation. If any plants have died, replace them with new ones.



12. Each vertical under drain on the biofiltration chamber has a removable (threaded cap) that can be taken off to check any blockages or root growth. Once removed, a jetting attachment can be used to clean out the under drain and orifice riser.
13. As with all biofilter systems, at some point the biofiltration media (WetlandMedia) will need to be replaced. Either because of physical clogging of sorptive exhaustion of the media ion exchange capacity (to remove dissolved metals and phosphorous). The general life of this media is 10 to 20 years based on site specific conditions and pollutant loading. Utilize the vacuum truck to vacuum out the media by placing the hose into the chamber. Once all the media is removed use the power washer to spray down all the netting on the outer metal cage. Inspect the netting for any damage or holes. If the netting is damaged it can be repaired or replaced with guidance by the manufacturer.
14. Contact one of Contech's Maintenance Team members at https://www.conteches.com/maintenance to order new WetlandMedia. The quantity of media needed can be determined by providing the model number and unit depth. Media will be provided in super sacks for easy installation. Each sack will weigh between 1000 and 2000 lbs. A lifting apparatus (backhoe, boom truck, or other) is recommended to position the super sack over the biofiltration chamber. Fill the media cages up to the same level as the old media. Replant with vegetation.





MAINTENANCE | DISCHARGE CHAMBER

15. Remove access hatch or manhole cover over discharge chamber.
16. Enter chamber to gain access to the drain down filter. Unlock the locking mechanism and lift up drain down filter housing to remove used BioMediaGREEN filter block as shown below. *NOTE: Drain down filter is only found on units installed in California prior to 2023. If no drain down filter is present, skip steps 16 and 17.*





17. Insert a new BioMediaGREEN filter block and lock drain down filter housing back in place.
18. Replace access hatch or manhole cover over discharge chamber.

NOTES

CONTECH® ENGINEERED SOLUTIONS

Inspection Report
Modular Wetlands Linear

Project Name _____

Project Address _____
(city) (Zip Code)

Owner / Management Company _____

Contact _____ Phone ( ) –

For Office Use Only
(Reviewed By)
(Date)
Office personnel to complete section to the left.

Inspector Name _____ Date ____/____/____ Time _____ AM / PM

Type of Inspection ☐ Routine ☐ Follow Up ☐ Complaint ☐ Storm Storm Event in Last 72-hours? ☐ No ☐ Yes

Weather Condition _____ Additional Notes _____

Inspection Checklist

Modular Wetland System Type (Curb, Grate or UG Vault): _____ Size (22', 14' or etc.): _____

Structural Integrity:	**Yes**	**No**	**Comments**
Damage to pre-treatment access cover (manhole cover/grate) or cannot be opened using normal lifting pressure?			
Damage to discharge chamber access cover (manhole cover/grate) or cannot be opened using normal lifting pressure?			
Does the MWS unit show signs of structural deterioration (cracks in the wall, damage to frame)?			
Is the inlet/outlet pipe or drain down pipe damaged or otherwise not functioning properly?			
Working Condition:			
Is there evidence of illicit discharge or excessive oil, grease, or other automobile fluids entering and clogging the unit?			
Is there standing water in inappropriate areas after a dry period?			
Is the filter insert (if applicable) at capacity and/or is there an accumulation of debris/trash on the shelf system?			
Does the depth of sediment/trash/debris suggest a blockage of the inflow pipe, bypass or cartridge filter? If yes, specify which one in the comments section. Note depth of accumulation in in pre-treatment chamber.			Depth:
Does the cartridge filter media need replacement in pre-treatment chamber and/or discharge chamber?			Chamber:
Any signs of improper functioning in the discharge chamber? Note issues in comments section.			
Other Inspection Items:			
Is there an accumulation of sediment/trash/debris in the wetland media (if applicable)?			
Is it evident that the plants are alive and healthy (if applicable)? Please note Plant Information below.			
Is there a septic or foul odor coming from inside the system?			

Waste:	**Yes**	**No**
Sediment / Silt / Clay		
Trash / Bags / Bottles		
Green Waste / Leaves / Foliage		

Recommended Maintenance	
No Cleaning Needed	
Schedule Maintenance as Planned	
Needs Immediate Maintenance	

Plant Information	
Damage to Plants	
Plant Replacement	
Plant Trimming	

Additional Notes: _____

CONTECH®
ENGINEERED SOLUTIONS

Cleaning and Maintenance Report
Modular Wetlands Linear

Project Name _____

Project Address _____
(city) (Zip Code)

Owner / Management Company _____

Contact _____ Phone ( ) –

For Office Use Only
(Reviewed By)
(Date)
Office personnel to complete section to the left.

Inspector Name _____ Date ____/____/_____ Time _____AM / PM

Type of Inspection ☐ Routine ☐ Follow Up ☐ Complaint ☐ Storm Storm Event in Last 72-hours? ☐ No ☐ Yes

Weather Condition _____ Additional Notes _____

Site Map #	GPS Coordinates of Insert	Manufacturer / Description / Sizing	Trash Accumulation	Foliage Accumulation	Sediment Accumulation	Total Debris Accumulation	Condition of Media 25/50/75/100 (will be changed @ 75%)	Operational Per Manufactures' Specifications (If not, why?)
	Lat: Long:	MWS Catch Basins						
		MWS Sedimentation Basin						
		Media Filter Condition						
		Plant Condition						
		Drain Down Media Condition						
		Discharge Chamber Condition						
		Drain Down Pipe Condition						
		Inlet and Outlet Pipe Condition						

Comments:



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Modular Wetland System (MWS) – LINEAR

Maintenance Cost (per acre)

MWS - LINEAR	Cleaning Required	Yearly Maintenance Cost
Year 1	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 2	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 3	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 4	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 5	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 6	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 7	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 8	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 9	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media	$80 / each (x2) $350 / year $500 / year
Year 10	1) Clean Inlet Filter (6 Month Intervals) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media 4) Remove & Replace Wetland Plants & Media	$80 / each (x2) $350/ year $500 / year $2,500
Total 1 - 10	**Total Maintenance Cost Over 10 Years**	**$11,800**
Average Yearly Cost	**Assumes 10 Year Replacement of Wetland Media.**	**$1,180 / Year**

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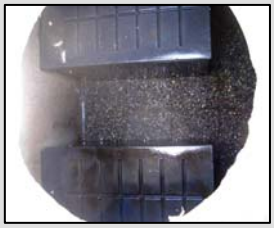
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Modular Wetland System - Linear (MWS-Linear)

Maintenance Schedule



MWS - LINEAR	Cleaning Required	Est. Cleaning Time
Year 1	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 2	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 3	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 4	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 5	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 6	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 7	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 8	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 9…	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals)	10 Minutes 25 Minutes 45 Minutes
Year 15	1) Clean Inlet Filter (6 Month Intervals) (does not apply to vault type) 2) Vacuum Catch Basin (12 Month Intervals) 3) Replace BioMedia Green Filter Media (12 month Intervals) 4) Remove & Replace Wetland Plants & Media (every 10-20 years)	10 Minutes 25 Minutes 45 Minutes 6 to 8 Hours
Procedure 1 **Clean Inlet Filter** (does not apply to vault type) 	Modular Wetland Systems, Inc. recommends the catch basin filter be inspected and cleaned a minimum of once every six months and replacement of hydrocarbon booms once a year. The procedure is easily done with the use of any standard vacuum truck. Before doing maintenance please use proper safety and traffic control. 1) Remove grate or manhole, remove the deflector shield (grate type only). Note: entry into an underground stormwater vault such as an inlet vault requires certification in confined space training. 2) Remove all trash, debris, organics, and sediments collected by the inlet filter insert either manually or with the use of a vactor truck. 3) Evaluate hydrocarbon boom. If the boom is filled with hydrocarbons and oils it should be replaced. Attach new boom to basket with plastic ties through pre-drilled holes in basket. Place the deflector shield (grate type only) back into the filter. Hydrocarbon boom should be replaced annually. (The hydrocarbon boom may be classified as hazardous material and will have to be picked up and disposed of as hazardous waste).	**10 Minutes**

Procedure 2 **Vacuum Catch Basin** 	Modular Wetland Systems, Inc. recommends the separation chamber be inspected and cleaned a minimum of once a year. The procedure is easily done with the use of any standard vacuum truck. Before doing maintenance please use proper safety and traffic control. 1) Remove grate or manhole. 2) Remove catch basin filter. 3) Spray down pollutants accumulated on cartridge filters and catch basin walls. 4) Vacuum out sediments and debris accumulated on catch basin floor. 5) Replace catch basin filter, and replace grate or manhole cover.	**25 Minutes**
Procedure 3 **Replace BioMedia Green Media Filter**   	Modular Wetland Systems, Inc. recommends the BioMediaGREEN Cartridge Filters be inspected and cleaned a minimum of once a year. The procedure will require prior maintenance of catch basin. Before doing maintenance please use proper safety and traffic control. 1) Remove grate, remove catch basin filter. 2) Perform maintenance activities on catch basin. 3) Enter separation chamber, unscrew the two bolts holding the lid on the cartridge filter. This will expose the 14 pieces of BioMediaGREEN in each cartridge. 4) Evaluate media condition, replace if necessary. If the spaces between the media are filled with sediment and the surface of the media is dark brown or black the media should be replaced. The old media can be removed by hand by pulling the media pieces up out of the cartridge and taking them out of the catch basin. 5) Once all old media is removed, spray down the interior of the cartridge and vacuum out accumulated debris. 6) Use new pieces of BioMediaGREEN and slide down over the perforated PVC risers. The media will only go in one way for easy installation. Replace media over all risers. 5) Replace cartridge filter lid, replace catch basin filter, and replace grate or manhole cover. Modular Wetland Systems, Inc. recommends the drain down filter be inspected and maintained a minimum of once a year. 1) Open hatch of discharge chamber, enter chamber. 2) Unlatch fiberglass cover, remove media block, replace with new block, replace and latch cover. 3) Exit chamber, close and lock down the hatch. BioMediaGREEN	**45 Minutes**
Procedure 4 **Replace Wetland Media** 	Modular Wetland Systems, Inc. recommends the wetland media be evaluated every 3 to 5 years to test flow rate. The media life is approximately 15 to 20 years. The wetland media is an expanded shale that can be ordered from the manufacturer or independent supplier. If the flow through the wetland filter is decreasing the internal inflow and outflow pipes leading to and from the wetland chamber can be jetted. If the flow through the wetland is still minimal then the media may need to be replaced. To replace the media the following steps are required. Before doing maintenance please use proper safety and traffic control. 1) Remove plants and dispose. Have new plants standing ready to plant. 2) Use a larger vacuum truck to remove the media from the wetland chamber. 3) Spray down the chamber walls and remove all sediment and water. 4) Replace with new wetland media and plant plants.	**6 to 8 Hours**

Attachment F
Geotechnical Report

December 21, 2021 Project No. 21198-01

Mr. Matthew J. Waken
MW Investment Group, LLC
27702 Crown Valley Parkway, Suite D-4-197
Ladera Ranch, CA 92694

Subject: ***Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California***

In accordance with your request and authorization, LGC Geotechnical, Inc. has performed a preliminary geotechnical evaluation for the proposed single-family and multi-family residential development located at 4665 Lampson Avenue in the City of Los Alamitos, California. The purpose of our study was to evaluate the existing onsite geotechnical conditions and to provide preliminary geotechnical recommendations relative to the proposed residential development.

Should you have any questions regarding this report, please do not hesitate to contact our office. We appreciate this opportunity to be of service.

Respectfully Submitted,

LGC Geotechnical, Inc.



Ryan Douglas, PE, GE 3147
Project Engineer

RLD/BPP/amm

Distribution: (1) Addressee (electronic copy)

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Appendix B – Boring and CPT Logs
Appendix C – Laboratory Test Results
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Appendix E – General Earthwork and Grading Specifications

1.0 INTRODUCTION

1.1 Purpose and Scope of Services

This report presents the results of our preliminary geotechnical evaluation for the proposed single-family and multi-family residential development located at 4665 Lampson Avenue in the City of Los Alamitos, California. Refer to the Site Location Map (Figure 1).

The purpose of our study was to provide a preliminary geotechnical evaluation relative to the proposed residential development. As part of our scope of work, we have: 1) reviewed available geotechnical background information including in-house regional geologic maps and published geotechnical literature pertinent to the site (Appendix A); 2) performed a limited subsurface geotechnical evaluation of the site consisting of the excavation of seven small-diameter borings ranging in depth from approximately 5 to 46.5 feet below existing ground surface; 3) performed two field infiltration tests; 4) performed laboratory testing of select soil samples obtained during our subsurface evaluation; and 5) prepared this preliminary geotechnical summary report presenting our findings, preliminary conclusions and recommendations for the development of the proposed residential project.

It should be noted that our evaluation and this report only address geotechnical issues associated with the site and do not address any environmental issues.

1.2 Project Description

Based on the preliminary site plan (KTGY, 2021), the proposed development includes the construction of 102 single-family residential lots and 90 affordable multi-family units. Proposed site improvements include a park and a series of internal streets. Design cuts and fills (not including required remedial grading) are anticipated to be on the order of 1 to 3 feet. The proposed building structures are anticipated to be relatively light-weight at-grade structures with maximum column and wall loads of approximately 30 kips and 2 kips per linear foot, respectively. Please note no grading plans or structural loads were provided to us at the time of this report.

The recommendations given in this report are based upon the estimated structural loading, grading and layout information above. We understand that the project plans are currently being developed at this time; LGC Geotechnical should be provided with updated project plans and any changes to structural loads when they become available, in order to either confirm or modify the recommendations provided herein. Additional field work and/or laboratory testing may be necessary.

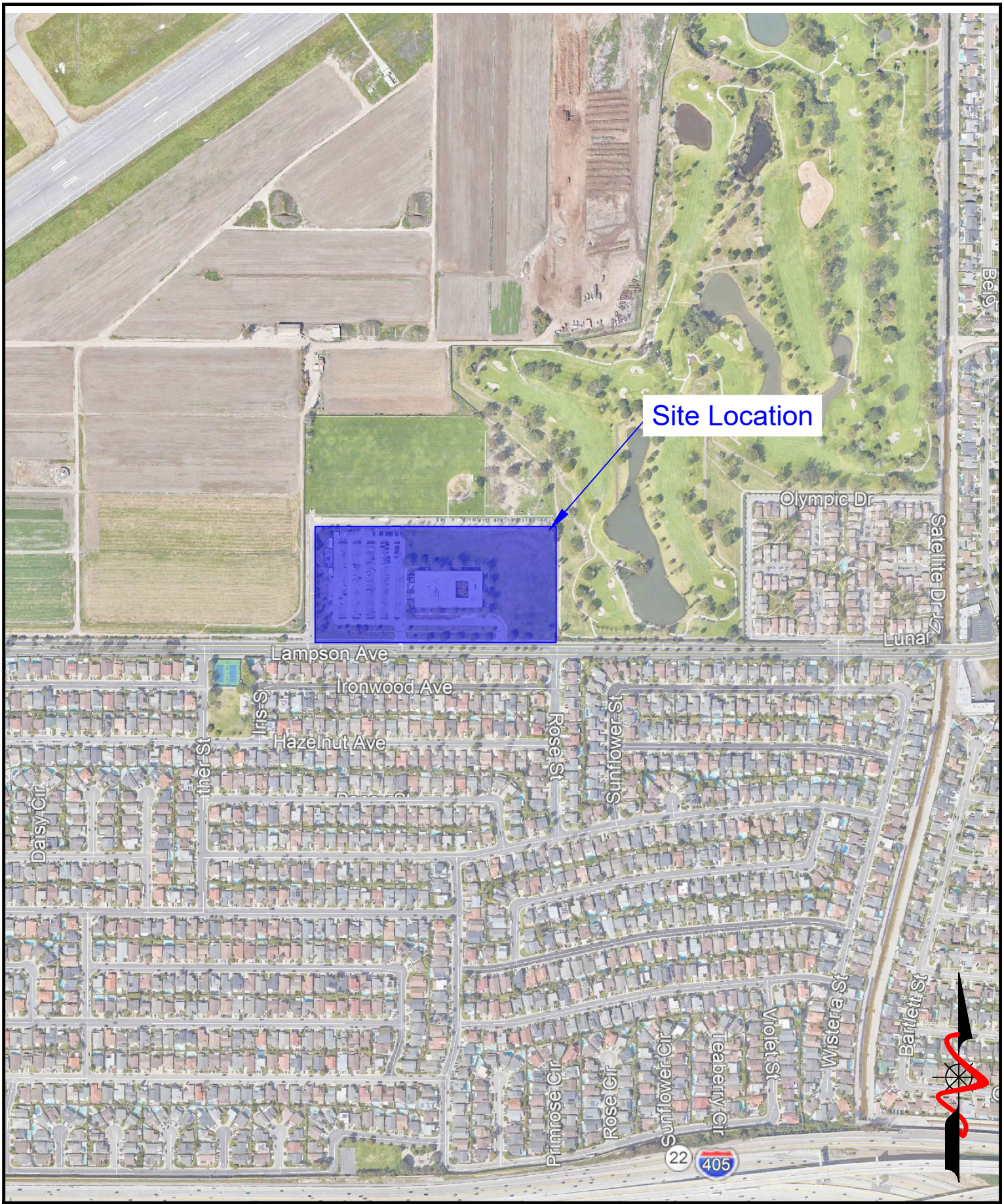
1.3 Existing Conditions

The site is approximately 12 acres and is bound to the south by Lampson Avenue, to the east by a golf course, to the north by a park and to the west by vacant land. The site is currently occupied by the California Department of Fish and Wildlife with an associated parking lot and open space.

The site has minor relief, with the highest being the northern side of the site and gently slopes gently from north to south.

1.4 Background

Review of historical aerials indicates that the building and associated improvements were constructed after 1963, but prior to 1972 and remained relatively unchanged since (Historic Aerials, 2021). Aerial photos from 1952 and 1963 indicate the site was previously raw land.



LGC Geotechnical, Inc.

FIGURE 1
Site Location Map

PROJECT NAME	MWIG - Los Alamitos
PROJECT NO.	21198-01
ENG. / GEOL.	RLD
SCALE	Not to Scale
DATE	December 2021

1.5 Subsurface Geotechnical Evaluation

LGC Geotechnical performed a subsurface geotechnical evaluation of the site consisting of the excavation of five hollow-stem auger borings and two hand-auger borings to evaluate onsite geotechnical conditions.

Five hollow-stem borings (HS-1 through HS-3, I-1, and I-2) were drilled to depths ranging from approximately 5 to 46.5 feet below existing grade. An LGC Geotechnical staff engineer observed the drilling operations, logged the borings, and collected soil samples for laboratory testing. The borings were excavated by Cal Pac Drilling, Inc. under subcontract to LGC Geotechnical using a truck-mounted drill rig equipped with 6 and 8-inch-diameter hollow-stem augers. Driven soil samples were collected by means of the Standard Penetration Test (SPT) and Modified California Drive (MCD) sampler generally obtained at 2.5 to 5-foot vertical increments. The MCD is a split-barrel sampler with a tapered cutting tip and lined with a series of 1-inch-tall brass rings. The SPT sampler (1.4-inch ID) and MCD sampler (2.4-inch ID, 3.0-inch OD) were driven using a 140-pound automatic hammer falling 30 inches to advance the sampler a total depth of 18 inches. The raw blow counts for each 6-inch increment of penetration were recorded on the boring logs. Bulk samples of the near-surface soils were also collected and logged at select borings for laboratory testing. At the completion of drilling, the borings were backfilled with the native soil cuttings and tamped. Some settlement of the backfill soils may occur over time.

Two hand auger borings (HA-1 and HA-2) were excavated to approximately 5 feet below the existing surface, sampled, logged, and backfilled. The approximate locations of our hand auger borings are presented on our Boring Location Map (Figure 2). The boring logs are presented in Appendix B.

Infiltration testing was performed within two of the borings (I-1 and I-2) to depths of approximately 5 feet below existing grade. An LGC Geotechnical geologist installed standpipes, backfilled the borings with crushed rock and pre-soaked the infiltration holes prior to testing. Infiltration testing was performed per the County of Orange testing guidelines. Standpipes were removed and the locations were subsequently backfilled with native soils at the completion of testing. Some settlement of the backfill soils may occur over time.

The approximate locations of our subsurface explorations are provided on the Boring Location Map (Figure 2). The boring logs are provided in Appendix B.

1.6 Laboratory Testing

Representative bulk and driven (relatively undisturbed) samples were obtained for laboratory testing during our field evaluation. Laboratory testing included in-situ moisture content and in-situ dry density, fines content, Atterberg Limits, expansion index, consolidation, direct shear, laboratory compaction and corrosion (sulfate, chloride, pH and minimum resistivity).

The following is a summary of the laboratory test results:

- Dry density of the samples collected ranged from approximately 87 pounds per cubic foot (pcf) to 111 pcf, with an average of 99 pcf. Field moisture contents ranged from approximately 9 to 35 percent, with an average of 25 percent.

- Two fines content tests were performed and indicated a fines content (passing No. 200 sieve) of approximately 15 and 16.5 percent. Based on the Unified Soils Classification System (USCS), the tested samples would be classified as "coarse-grained."
- Four Atterberg Limit (liquid limit and plastic limit) tests were performed. Results indicated a Plasticity Index (PI) value ranging from 12 to 24.
- Two consolidation tests were performed. The load versus deformation plots are provided in Appendix C.
- One remolded direct shear test was performed. The plot is provided in Appendix C.
- One laboratory compaction test of a near surface sample indicated a maximum dry density of 116.0 pcf with an optimum moisture content of 13.0 percent.
- Two Expansion potential tests were performed and indicated an expansion index value of 30 and 32, corresponding to "Low" expansion potential.
- Corrosion testing indicated soluble sulfate contents ranging from approximately 0.032 to 0.254 percent, a chloride content ranging from 140 to 600 parts per million (ppm), pH of 8.92, and a minimum resistivity of 210 ohm-centimeters.

A summary of the laboratory test results is presented in Appendix C. The moisture and dry density results are presented on the boring logs in Appendix B.

2.0 GEOTECHNICAL CONDITIONS

2.1 Geologic Conditions

The subject site is located within the Orange County coastal plain, more generally located on the broad southern margin of the Los Angeles Basin. The site is located more specifically within the Santa Ana River drainage basin, and it is underlain at depth by poorly consolidated alluvial sediments mapped as Quaternary Young Alluvial Fan deposits "Unit 2" (Qya_2) (USGS, 2016).

2.2 Site-Specific Geology

Based on the results of our subsurface investigation, the site is underlain by a thin veneer of topsoil and older artificial fill over young alluvial deposits of Holocene age, per regional geologic mapping (USGS, 2016). The materials are described on the boring logs presented in Appendix B.

The young alluvial sediments encountered during our subsurface exploration generally consist of interbedded layers of gray and brown, silty clay, clay, silty sand, and clayey sand. The materials were observed to be very moist to wet with depth, soft to very stiff and medium dense to dense.

2.3 Groundwater

Groundwater was encountered in three of our borings (HS-1 through HS-3) at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade (CDMG, 1998). The location and approximate depth of groundwater is summarized in Table 1 below.

TABLE 1

Groundwater Summary

Boring Number	Total Drilled Depth of Boring (ft)	Groundwater Depth Below Existing Grade (ft)
HS-1	21.5	13
HS-2	46.5	11.5
HS-3	21.5	11

Seasonal fluctuations of groundwater elevations should be expected over time. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present due to local seepage caused by irrigation and/or recent precipitation. Local perched groundwater conditions or surface seepage may develop once site development is completed.

2.4 Field Infiltration Testing

Two field percolation tests were performed in locations and depths per the direction of the project civil engineer, the location is depicted on Figure 2 – Boring Location Map. Test well installation consisted of placing a 3-inch diameter perforated PVC pipe in the excavated 8-inch diameter borehole and backfilling the annulus with crushed rock including the placement of approximately 2 inches of crushed rock at the bottom of the borehole. The infiltration test wells were presoaked the day of installation and testing took place within 24 hours of presoaking. During the pre-test, the water level was observed to drop less than 6 inches in 25 minutes for two consecutive readings. Therefore, the test procedure for fine-grained soils or "slow test" was followed. Test well installation and the estimation of infiltration rates were accomplished in general accordance with the guidelines set forth by the County of Orange (2013). In general, three-dimensional flow out of the test well (*percolation*), as observed in the field, is mathematically reduced to one-dimensional flow out of the bottom of the test well (*infiltration*). Infiltration tests are performed using relatively clean water, free of particulates, silt, etc. The results of our recent field infiltration testing are presented in Appendix D and summarized below.

TABLE 2

Summary of Field Infiltration Testing

Infiltration Test Identification	Approx. Depth Below Existing Grade (ft)	Observed Infiltration Rate* (in./hr.)
I-1	5	0.03
I-2	5	0.04

*Observed Infiltration Rates Do Not Include Factor of Safety.

The tested infiltration rates provided in this report are considered a general representation of the infiltration rates at the location of the proposed infiltration boring. Please note, the testing of infiltration rates is highly dependent upon the materials encountered at the point of testing (i.e., location and depth of testing). Varying subsurface conditions may exist outside of the test location which could alter the calculated infiltration rate. Please refer to Section 4.7 for subsurface water infiltration recommendations.

2.5 Seismic Design Criteria

The site seismic characteristics were evaluated per the guidelines set forth in Chapter 16, Section 1613 of the 2019 California Building Code (CBC). Since the site contains soils that are susceptible to liquefaction (refer to below Section "Liquefaction and Dynamic Settlement"), ASCE 7-16 which has been adopted by the CBC requires that site soils be assigned Site Class "F" and a site-specific response spectrum be performed. However, in accordance with Section 20.3.1 of ASCE 7-16, if the fundamental periods of vibration of the planned structure are equal to or less than 0.5 second, a site-specific response spectrum is not required and ASCE 7-16/2019 CBC site class and seismic parameters may be used in lieu of a site-specific response

spectrum. It should be noted that the seismic parameters provided herein are not applicable for any structure having a fundamental period of vibration greater than 0.5 second. **Please note that the following seismic parameters are only applicable for code-based acceleration response spectra and are not applicable for where site-specific ground motion procedures are required by ASCE 7-16.** Representative site coordinates of latitude 33.7815 degrees north and longitude -118.0510 degrees west were utilized in our analyses. The maximum considered earthquake (MCE) spectral response accelerations (S_{MS} and S_{M1}) and adjusted design spectral response acceleration parameters (S_{DS} and S_{D1}) for Site Class D are provided in Table 3 below. The structural designer should contact the geotechnical consultant if structural conditions (e.g., number of stories, seismically isolated structures, etc.) require site-specific ground motions.

TABLE 3

Seismic Design Parameters

Selected Parameters from 2019 CBC, Section 1613 - Earthquake Loads	**Seismic Design Values**	**Notes/Exceptions**
Distance to applicable faults classifies the site as a "Near-Fault" site.		Section 11.4.1 of ASCE 7
Site Class	D*	Chapter 20 of ASCE 7
Ss (Risk-Targeted Spectral Acceleration for Short Periods)	1.467g	From SEAOC, 2021
S_1 (Risk-Targeted Spectral Accelerations for 1-Second Periods)	0.524g	From SEAOC, 2021
F_a (per Table 1613.2.3(1))	1.000	For Simplified Design Procedure of Section 12.14 of ASCE 7, F_a shall be taken as 1.4 (Section 12.14.8.1)
F_v (per Table 1613.2.3(2))	1.776	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{MS} for Site Class D [Note: $S_{MS} = F_aS_S$]	1.467g	-
S_{M1} for Site Class D [Note: $S_{M1} = F_vS_1$]	0.931g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{DS} for Site Class D [Note: $S_{DS} = (^2/_3)S_{MS}$]	0.978g	-
S_{D1} for Site Class D [Note: $S_{D1} = (^2/_3)S_{M1}$]	0.620g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
C_{RS} (Mapped Risk Coefficient at 0.2 sec)	0.908	ASCE 7 Chapter 22
C_{R1} (Mapped Risk Coefficient at 1 sec)	0.913	ASCE 7 Chapter 22
*Since site soils are Site Class D and S_1 is greater than or equal to 0.2, the seismic response coefficient Cs is determined by Eq. 12.8-2 for values of $T \leq 1.5T_s$ and taken equal to 1.5 times the value calculated in accordance with either Eq. 12.8-3 for $T_L \geq T > T_s$, or Eq. 12.8-4 for $T > T_L$. Refer to ASCE 7-16.		

Section 1803.5.12 of the 2019 CBC (per Section 11.8.3 of ASCE 7) states that the maximum considered earthquake geometric mean (MCE_G) Peak Ground Acceleration (PGA) should be used for liquefaction potential. The PGA_M for the site is equal to 0.696g (SEAOC, 2021).

A deaggregation of the PGA based on a 2,475-year average return period indicates that an earthquake magnitude of 6.8 at a distance of approximately 10.6 km from the site would contribute the most to this ground motion (USGS, 2014).

2.6 Faulting

Prompted by damaging earthquakes in Northern and Southern California, State legislation and policies concerning the classification and land-use criteria associated with faults have been developed. Their purpose was to prevent the construction of urban developments across the trace of active faults, resulting in the Alquist-Priolo Earthquake Fault Zoning Act. Earthquake Fault Zones have been delineated along the traces of active faults within California. Where developments for human occupation are proposed within these zones, the state requires detailed fault evaluations be performed so that engineering geologists can mitigate the hazards associated with active faulting by identifying the location of active faults and allowing for a setback from the zone of previous ground rupture.

The subject site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo) and no faults were identified on the site during our site evaluation (CGS, 2018). The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. The closest known active faults to the subject site are the Newport-Inglewood, Puente Hills, Palos Verdes and Elsinore Fault Zones (USGS 2016).

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the site, include ground lurching and shallow ground rupture, soil liquefaction, and dynamic settlement. These secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault and the onsite geology. A discussion of these secondary effects is provided in the following sections.

2.6.1 Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that saturated, loose near-surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction, depending on their plasticity and moisture content (Bray & Sancio, 2006). Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry loose sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

Based on our review of the State of California Seismic Hazard Zone for liquefaction potential (CDMG, 1999), the site is located within a liquefaction hazard zone. Subsurface field data indicates that the site contains isolated sandy layers susceptible to liquefaction interfingered with fine-grained non-liquefiable soils and dense sands. The recent explored groundwater elevation of 11 feet below existing grade and historic high groundwater elevation of 10 feet below existing grade were both used in the liquefaction analysis. Liquefaction potential was evaluated using the procedures outlined by Special Publication 117A (SCEC, 1999 & CGS, 2008) and the applicable seismic criteria (e.g., 2019 CBC). Liquefaction induced settlement was estimated using the PGA_M per the 2019 CBC and a moment magnitude of 6.80 (USGS, 2014).

Results indicate total seismic settlement on the order of 2 inches. Differential seismic settlement can be estimated as half of the total estimated seismic settlement over a horizontal span of about 40 feet. This can be mitigated using a post-tensioned slab and interconnecting isolated pad footings with grade beams.

2.6.2 Liquefaction Surface Effects

Liquefaction induced surface effects, such as sand boils, can occur when shallow liquefiable soil layers trigger during a seismic event and are not contained deep enough below a non-liquefiable cap (i.e., non-liquefiable soils such as artificial fill or fine-grained soil). Based on analysis of the subsurface data, surface effects due to liquefaction are not anticipated to significantly affect the proposed surface improvements.

2.6.3 Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to the lack of a nearby "free face" condition and non-continuous nature of the subsurface layers, the potential for lateral spreading is considered very low.

2.7 Static Settlement

Although no grading plans were available during the preparation of this report, the subject site is sensitive to static settlement and grade changes. Static settlement would be induced by raising the planned grades and subjecting the new grades to building loads. Moderate increases in grades up to approximately 2 to 3 feet are estimated at this time.

The underlying soils were found to be generally stiff to very stiff silts and clays. Based on laboratory test data consisting of in-situ moisture content, consolidation tests, and blow counts,

fine-grained soils are considered generally normally consolidated. Based upon in-situ testing, visual examination, lab data, geotechnical evaluation and the proposed corrective grading and fill placement recommendations, static settlement induced by raising grades 1 to 3 feet is estimated to be on the order of 1-inch. LGC Geotechnical should be provided with the grading plans to for review to confirm or modify the recommendations for static settlement.

2.8 Expansion Potential

Based on the results of our laboratory testing, site soils are anticipated to have a "Low" expansion potential. Final expansion potential of site soils should be determined at the completion of grading. Results of expansion testing at finish grades will be utilized to confirm final foundation design.

3.0 CONCLUSIONS

Based on the results of our geotechnical evaluation, it is our opinion that the proposed development is feasible from a geotechnical standpoint, provided the following conclusions and recommendations are implemented.

The following is a summary of the primary geotechnical factors that may affect future development of the site:

- In general, our borings indicate the site is underlain by young alluvial fan deposits to the maximum explored depth of approximately 46.5 feet below existing grade. The material consists of clay, clayey sand, silty clay, and silty sand. The material was observed to be very moist to wet with depth and soft to stiff and medium dense to dense.
- Groundwater was encountered during our subsurface evaluation at depths of approximately 11 to 13 feet below existing grade. Historic high groundwater is estimated to be about 10 feet below existing grade (CDMG, 1998).
- The subject site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo). The main seismic hazard that may affect the site is ground shaking from one of the active regional faults. The subject site will likely experience strong seismic ground shaking during its design life.
- Site soils are considered susceptible to liquefaction. The site is located in a State of California Seismic Hazard Zone for liquefaction (CDMG, 1999). Total seismic settlement is estimated to be on the order of 2.0 inches. Differential seismic settlement can be estimated at half of the total seismic settlement over a horizontal span of 40 feet for design of foundations.
- Based on the results of preliminary laboratory testing, site soils are anticipated to have "Low" expansion potential. Mitigation measures are required for foundations and site improvements like concrete flatwork to minimize the impacts of expansive site soils. Final design expansion potential must be determined at the completion of grading.
- Pre-soaking of the subgrade for building slabs will be required due to site expansive soils. The duration of this process varies greatly based on the chosen method and is also dependent on factors such as soil type and weather conditions. Time duration for presoaking from completion of rough grading to trenching of foundations should be accounted for in the construction schedule (typically 1 to 2 weeks).
- From a geotechnical perspective, the existing onsite soils are suitable material for use as general fill (not retaining wall backfill), provided that they are relatively free from rocks (larger than 8 inches in maximum dimension), construction debris, and significant organic material.
- The site contains soils that are not suitable for retaining wall backfill due to their fines content and expansion potential, therefore import of sandy soils will be required by the contractor for obtaining suitable backfill soil for planned site retaining walls.
- Excavations into the existing site soils should be feasible with heavy construction equipment in good working order.
- Due to the relatively shallow site groundwater (about 11 feet below existing ground surface) and soils above the groundwater table with high moisture contents, dewatering or stabilization of subgrade for removal bottoms or deep utility trenches may be locally required, prior to subsequent fill placement.

4.0 PRELIMINARY RECOMMENDATIONS

The following recommendations are to be considered preliminary and should be confirmed upon completion of grading and earthwork operations. In addition, they should be considered minimal from a geotechnical viewpoint, as there may be more restrictive requirements from the architect, structural engineer, building codes, governing agencies, or the owner.

It should be noted that the following geotechnical recommendations are intended to provide sufficient information to develop the site in general accordance with the 2019 CBC requirements. With regard to the potential occurrence of potentially catastrophic geotechnical hazards such as fault rupture, earthquake-induced landslides, liquefaction, etc. the following geotechnical recommendations should provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level." The "acceptable level" of risk is defined by the California Code of Regulations as "that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project" [Section 3721(a)]. Therefore, repair and remedial work of the proposed improvements may be required after a significant seismic event. With regards to the potential for less significant geologic hazards to the proposed development, the recommendations contained herein are intended as a reasonable protection against the potential damaging effects of geotechnical phenomena such as expansive soils, fill settlement, groundwater seepage, etc. It should be understood, however, that although our recommendations are intended to maintain the structural integrity of the proposed development and structures given the site geotechnical conditions, they cannot preclude the potential for some cosmetic distress or nuisance issues to develop as a result of the site geotechnical conditions.

The geotechnical recommendations contained herein must be confirmed to be suitable or modified based on the actual as-graded conditions.

4.1 Site Earthwork

We anticipate that earthwork at the site will consist of demolition of the existing site improvements, required earthwork removals, subgrade preparation, precise grading and construction of the proposed new improvements, including the residential structures, neighborhood amenities, subsurface utilities, interior streets, etc.

We recommend that earthwork onsite be performed in accordance with the following recommendations, future grading plan review report(s), the 2019 CBC/City of Los Alamitos grading requirements, and the General Earthwork and Grading Specifications included in Appendix E. In case of conflict, the following recommendations shall supersede those included in Appendix E. The following recommendations should be considered preliminary and may be revised based upon future evaluation and review of the project plans and/or based on the actual conditions encountered during site grading/construction.

4.1.1 Site Preparation

Prior to grading of areas to receive structural fill or engineered improvements, the areas should be cleared of existing building structures, asphalt, surface obstructions, and

demolition debris. Vegetation and debris should be removed and properly disposed of off-site. Holes resulting from the removal of buried obstructions, which extend below proposed finish grades, should be replaced with suitable compacted fill material. Any abandoned sewer or storm drain lines should be completely removed and replaced with properly placed compacted fill. Deeper demolition may be required in order to remove existing foundations. We recommend the trenches associated with demolition which extend below the remedial grading depth of 5 feet be backfilled and properly compacted prior to the demolition contractor leaving the site.

If cesspools or septic systems are encountered, they should be removed in their entirety. The resulting excavation should be backfilled with properly compacted fill soils. As an alternative, cesspools can be backfilled with lean sand-cement slurry. Any encountered wells should be properly abandoned in accordance with regulatory requirements. At the conclusion of the clearing operations, a representative of LGC Geotechnical should observe and accept the site prior to further grading.

4.1.2 Removal and Recompaction Depths and Limits

In order to provide a relatively uniform bearing condition for the planned residential building pads and improvements, we recommend the site soils be removed and recompacted according to the criteria outlined below.

Building Pads: We recommend that soils within building pads be removed and recompacted to a minimum depth of 5 feet below existing grade or 3 feet below the base of the foundations, whichever is deeper. Where space is available, the envelope for removal and recompaction should extend laterally a minimum distance equal to the depth of removal and recompaction below finish grade or 5 feet beyond the edges of the proposed building improvements, whichever is larger.

Minor Site Structures: For minor site structures such as free-standing walls, retaining walls, etc., removal and recompaction should extend at least 3 feet below existing grade or 2 feet below the base of foundations, whichever is deeper. Where space is available, the envelope for removal and recompaction should extend laterally a minimum distance of 3 feet beyond the edges of the proposed minor site structure improvements.

Pavement and Hardscape: Within pavement and hardscape areas, removal and recompaction should extend to a depth of at least 2 feet below the existing grade or 1-foot below finished subgrade (i.e., below planned aggregate base/asphalt concrete), whichever is deeper. In general, the envelope for removal and recompaction should extend laterally a minimum distance of 2 feet beyond the edges of the proposed pavement and hardscape improvements.

Based on our findings, the recommended removal and recompaction depths may extend to a depth in the proximity of the anticipated groundwater table and through clayey soils with high moisture contents. Care should be taken in order to avoid creating an unstable removal bottom during grading. Recommendations for subgrade stabilization are included in Section 4.1.4.

Local conditions may be encountered during excavation that could require additional over-excavation beyond the above noted minimum in order to obtain an acceptable subgrade. The actual depths and lateral extents of grading will be determined by the geotechnical consultant, based on subsurface conditions encountered during grading. Removal areas and areas to be over-excavated should be accurately staked in the field by the Project Surveyor.

4.1.3 Temporary Excavations

Temporary excavations should be performed in accordance with project plans, specifications, and all Occupational Safety and Health Administration (OSHA) requirements. Excavations should be laid back or shored in accordance with OSHA requirements before personnel or equipment are allowed to enter. Based on our field investigation, the majority of site soils are anticipated to be OSHA Type "B" soils (refer to the attached boring logs). Minor amounts of sandy soils are present and should be considered susceptible to caving. Soil conditions should be regularly evaluated during construction to verify conditions are as anticipated. The contractor shall be responsible for providing the "competent person" required by OSHA standards to evaluate soil conditions. Close coordination with the geotechnical consultant should be maintained to facilitate construction while providing safe excavations. Excavation safety is the sole responsibility of the contractor.

Vehicular traffic, stockpiles, and equipment storage should be set back from the perimeter of excavations a minimum distance equivalent to a 1:1 projection from the bottom of the excavation or 5 feet, whichever is greater, unless the cut is shored and designed for applicable surcharge load. Once an excavation has been initiated, it should be backfilled as soon as practical. Prolonged exposure of temporary excavations may result in some localized instability. Excavations should be planned so that they are not initiated without sufficient time to shore/fill them prior to weekends, holidays, or forecasted rain.

It should be noted that any excavation that extends below a 1:1 (horizontal to vertical) projection of an existing foundation will remove existing support of the structure foundation. If requested, temporary shoring parameters will be provided.

4.1.4 Removal Bottoms and Subgrade Preparation

In general, removal bottoms, over-excavation bottoms and areas to receive compacted fill should be scarified to a minimum depth of 6 inches, brought to a near-optimum moisture condition (generally within optimum and 2 percent above optimum moisture content), and re-compacted per project recommendations.

Based on the presence of shallow groundwater, shallow soils with very high moisture contents, and the potential to encounter very moist/wet alluvial materials near/at the estimated removal bottoms and deep utility trenches, some of the removal bottoms are anticipated to be wet and unstable. Pumping subgrade is possible. We recommend all wet/unstable removal bottoms and pumping subgrade be stabilized by the placement

and "working in" of 1 to 3-inch nominal diameter crushed aggregate or an approved alternate stabilization method. Based on our experience with similar projects, we anticipate the thickness of crushed rock (stabilization aggregate) needed to stabilize the removal bottoms will be on the order to 6 to 18 inches thick. The actual thickness of aggregate required to stabilize the excavation bottom shall be determined in the field based on the actual conditions and equipment used. It should be anticipated that the first lift of crushed aggregate will be worked into the pumping subgrade. Subsequent lifts should be properly compacted and will help bridge the pumping conditions. Thickness of required aggregate stabilization may be reduced by placing a layer of biaxial geogrid reinforcement (e.g., Tensar TX140 or acceptable equivalent) directly on the subgrade prior to aggregate base placement. The contractor may have to minimize construction traffic on the removal bottom to reduce disturbance. Soft and yielding subgrade should be evaluated on a case-by-case basis during earthwork operations.

Removal bottoms, over-excavation bottoms and areas to receive fill should be observed and accepted by the geotechnical consultant prior to subsequent fill placement. Soil subgrade for planned footings and improvements (e.g., slabs, etc.) should be firm and competent.

4.1.5 Material for Fill

From a geotechnical perspective, the onsite soils are generally considered suitable for use as general compacted fill, provided they are screened of organic materials, construction debris and oversized material (8 inches in greatest dimension).

From a geotechnical viewpoint, any required import soils for general fill (i.e., non-retaining wall backfill) should consist of soils of "Very Low" to "Low" expansion potential (expansion index 50 or less based on American Society for Testing and Materials [ASTM] D 4829), and free of organic materials, construction debris and any material greater than 3 inches in maximum dimension. Import for any required retaining wall backfill should meet the criteria outlined in the following paragraph. Source samples should be provided to the geotechnical consultant for laboratory testing a minimum of four working days prior to any planned importation.

The onsite soils are not suitable for retaining wall backfill due to their fines content and expansion index; therefore, import of soils will be required by the contractor for obtaining suitable retaining wall backfill soil. These preliminary findings will be confirmed during grading. Retaining wall backfill should consist of imported sandy soils with a maximum of 35 percent fines (passing the No. 200 sieve) per ASTM Test Method D1140 (or ASTM D6913/D422) and a "Very Low" expansion potential (EI of 20 or less per ASTM D4829). Soils should also be screened of organic materials, construction debris, and any material greater than 3 inches in maximum dimension.

Aggregate base (crushed aggregate base or crushed miscellaneous base) should conform to the requirements of Section 200-2 of the most recent version of the Standard Specifications for Public Works Construction ("Greenbook") for untreated base materials (except processed miscellaneous base) and/or City of Los Alamitos requirements.

The placement of demolition materials in compacted fill is acceptable from a geotechnical viewpoint provided the demolition material is broken up into pieces not larger than typically used for aggregate base (approximately 1-inch in maximum dimension) and well blended into fill soils with essentially no resulting voids. Demolition material placed in fills must be free of construction debris (wood, organics, etc.) and reinforcing steel. If asphalt concrete fragments will be incorporated into the demolition materials, approval from an environmental viewpoint may be required and is not the purview of the geotechnical consultant. From our previous experience, we recommend that asphalt concrete fragments be limited to fill areas within planned street areas (i.e., not within building pad areas).

4.1.6 Placement and Compaction of Fills

Material to be placed as fill should be brought to near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content) and recompacted to at least 90 percent relative compaction (per ASTM D1557). Moisture conditioning of site soils will be required in order to achieve adequate compaction. Significant drying and or mixing of very moist soils will be required prior to reusing the materials in compacted fills.

The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches in compacted thickness. Each lift should be thoroughly compacted and accepted prior to subsequent lifts. Generally, placement and compaction of fill should be performed in accordance with local grading ordinances and with observation and testing performed by the geotechnical consultant. Oversized material as previously defined should be removed from site fills.

During backfill of excavations, the fill should be properly benched into firm and competent soils of temporary backcut slopes as it is placed in lifts.

Aggregate base material should be compacted to at least 95 percent relative compaction at or slightly above optimum moisture content per ASTM D1557. Subgrade below aggregate base should be compacted to at least 90 percent relative compaction per ASTM D1557 at near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content).
If gap-graded ¾-inch rock is used for backfill (around storm drain storage chambers, retaining wall backfill, etc.) it will require compaction. Rock shall be placed in thin lifts (typically not exceeding 6 inches) and mechanically compacted with observation by geotechnical consultant. Backfill rock shall meet the requirements of ASTM D2321. Gap-graded rock is required to be wrapped in filter fabric (Mirafi 140N or approved alternative) to prevent the migration of fines into the rock backfill.

4.1.7 Trench and Retaining Wall Backfill and Compaction

The onsite soils may generally be suitable as trench backfill, provided the soils are screened of rocks and other material greater than 6 inches in diameter and organic

matter. If trenches are shallow or the use of conventional equipment may result in damage to the utilities, sand having a sand equivalent (SE) of 30 or greater (per California Test Method [CTM] 217) may be used to bed and shade the pipes. Based on our field evaluation, onsite soils will not meet this sand equivalent requirement. Sand backfill within the pipe bedding zone may be densified by jetting or flooding and then tamping to ensure adequate compaction. Subsequent trench backfill should be compacted in uniform thin lifts by mechanical means to at least the recommended minimum relative compaction (per ASTM D1557).

Retaining wall backfill should consist of sandy soils as outlined in preceding Section 4.1.5. The limits of select sandy backfill should extend at minimum ½ the height of the retaining wall or the width of the heel (if applicable), whichever is greater (Figure 3). Retaining wall backfill soils should be compacted in relatively uniform thin lifts to at least 90 percent relative compaction (per ASTM D1557). Jetting or flooding of retaining wall backfill materials should not be permitted.

In backfill areas where mechanical compaction of soil backfill is impractical due to space constraints, typically sand-cement slurry may be substituted for compacted backfill. The slurry should contain about one sack of cement per cubic yard. When set, such a mix typically has the consistency of compacted soil. Sand cement slurry placed near the surface within landscape areas should be evaluated for potential impacts on planned improvements.

A representative from LGC Geotechnical should observe, probe, and test the backfill to verify compliance with the project recommendations.

4.1.8 Shrinkage and Subsidence

Allowance in the earthwork volumes budget should be made for an estimated 5 to 15 percent reduction in volume of near-surface (upper approximate 5 feet) soils. It should be stressed that these values are only estimates and that an actual shrinkage factor would be extremely difficult to predetermine. Subsidence, due to earthwork operations, is expected to be on the order of 0.1 feet. These values are estimates only and exclude losses due to removal of any vegetation or debris. The effective shrinkage of onsite soils will depend primarily on the type of compaction equipment and method of compaction used onsite by the contractor and accuracy of the topographic survey.

4.2 Preliminary Foundation Recommendations

Provided that the remedial grading recommendations provided herein are implemented, the site may be considered suitable for the support of the residential structures using a post-tensioned foundation system designed to resist the impacts of expansive soils and liquefaction induced differential settlement. Due to seismic settlement potential, we recommend isolated pad footings be interconnected with grade beams. The foundations designer should verify the foundation can accommodate the estimated settlement and differential settlement.

Site soils are anticipated to be "Low" expansion potential (EI of 50 or less per ASTM D4829) and special design considerations from a geotechnical perspective are required. Please note that the following foundation recommendations are preliminary and must be confirmed by LGC Geotechnical at the completion of grading. Recommended soil bearing and estimated settlement due to structural loads are provided in Section 4.3.

4.2.1 Provisional Post-Tensioned Foundation Design Parameters

The geotechnical parameters provided herein may be used for post-tensioned slab foundations. These parameters have been determined in general accordance with the Post-Tensioning Institute (PTI, 2012) Standard Requirements (PTI DC 10.5), referenced in Chapter 18 of the 2019 CBC. In utilizing these parameters, the foundation engineer should design the foundation system in accordance with the allowable deflection criteria of applicable codes and the requirements of the structural designer/architect. Other types of stiff slabs may be used in place of the CBC post-tensioned slab design provided that, in the opinion of the foundation structural designer, the alternative type of slab is at least as stiff and strong as that designed by the CBC/PTI method to resist expansive soils.

Our design parameters are based on our experience with similar residential projects and the anticipated nature of the soil (with respect to expansion potential). Please note that implementation of our recommendations will not eliminate foundation movement (and related distress) should the moisture content of the subgrade soils fluctuate. It is the intent of these recommendations to help maintain the integrity of the proposed structures and reduce (not eliminate) movement, based upon the anticipated site soil conditions. Should future owners not properly maintain the areas surrounding the foundation, for example by overwatering, then we anticipate for highly expansive soils the maximum differential movement of the perimeter of the foundation to the center of the foundation to be on the order of a couple of inches. Soils of lower expansion potential are anticipated to show less movement.

TABLE 4

Provisional Geotechnical Parameters for Post-Tensioned Foundation Slab Design

Parameter	PT Slab with Perimeter Footing	PT Mat with Thickened Edge
Expansion Index	Low[1]	Low[1]
Thornthwaite Moisture Index	-20	-20
Constant Soil Suction	PF 3.9	PF 3.9
Center Lift Edge moisture variation distance, e_m Center lift, y_m	 9.0 feet 0.35 inch	 9.0 feet 0.45 inch
Edge Lift Edge moisture variation distance, e_m Edge lift, y_m	 5.0 feet 0.75 inch	 5.0 feet 0.85 inch
Modulus of Subgrade Reaction, k (assuming presoaking as indicated below)	200 pci	200 pci
Minimum perimeter footing/thickened edge embedment below finish grade	12 inches	6 inches
Perimeter foundation reinforcement	N/A[2]	N/A[2]
Presoak (moisture conditioning)	100% optimum to depth of 12 inches	100% optimum to depth of 12 inches

1. Assumed for preliminary design purposes. Further evaluation is needed at the completion of grading. PT slab parameters are based on expansive soil conditions as well as seismic settlement findings.
2. Recommendations for foundation reinforcement and slab thickness are ultimately the purview of the foundation engineer/structural engineer based upon geotechnical criteria and structural engineering considerations.
3. Recommendations for sand below slabs have traditionally been included with geotechnical foundation recommendations, although they are not the purview of the geotechnical consultant. The sand layer requirements are the purview of the foundation engineer/structural engineer and should be provided in accordance with ACI Publication 302 "Guide for Concrete Floor and Slab Construction".
4. Recommendations for vapor retarders below slabs are also the purview of the foundation engineer/structural engineer and should be provided in accordance with applicable code requirements.

4.2.2 Post-Tensioned Foundation Subgrade Preparation and Maintenance

Moisture conditioning (presoaking) of the subgrade soils is recommended prior to trenching the foundation. The duration of this process varies greatly based on the chosen method and is also dependent on factors such as soil type and weather conditions. Time duration for presoaking from completion of rough grading to trenching of foundations should be accounted for in the construction schedule (typically 1 to 2 weeks). The recommendations specific to the anticipated site soil conditions, including recommended presoak, are presented in Table 4. The subgrade moisture

condition of the building pad soils should be maintained at near-optimum moisture content up to the time of concrete placement. This moisture content should be maintained around the immediate perimeter of the slab during construction and up to occupancy of the homes.

The geotechnical parameters provided herein assume that if the areas adjacent to the foundation are planted and irrigated, these areas will be designed with proper drainage and adequately maintained so that ponding, which causes significant moisture changes below the foundation, does not occur. Our recommendations do not account for excessive irrigation and/or incorrect landscape design. Plants should only be provided with sufficient irrigation for life and not overwatered to saturate subgrade soils. Sunken planters placed adjacent to the foundation, should either be designed with an efficient drainage system or liners to prevent moisture infiltration below the foundation. Some lifting of the perimeter foundation beam should be expected even with properly constructed planters.

In addition to the factors mentioned above, future homeowners should be made aware of the potential negative influences of trees and/or other large vegetation. Roots that extend near the vicinity of foundations can cause distress to foundations. Future homeowners (and the owner's landscape architect) should not plant trees/large shrubs closer to the foundations than a distance equal to half the mature height of the tree or 20 feet, whichever is more conservative unless specifically provided with root barriers to prevent root growth below the house foundation.

It is the homeowner's responsibility to perform periodic maintenance during hot and dry periods to ensure that adequate watering has been provided to keep soils from separating or pulling back from the foundation. Future homeowners should be informed and educated regarding the importance of maintaining a constant level of soil-moisture. The homeowners should be made aware of the potential negative consequences of both excessive watering, as well as allowing potentially expansive soils to become too dry. Expansive soils can undergo shrinkage during drying and swelling during the rainy winter season or when irrigation is resumed. This can result in distress to building structures and hardscape improvements. The builder should provide these recommendations to future homeowners.

4.2.3 Slab Underlayment Guidelines

The following is for informational purposes only since slab underlayment (e.g., moisture retarder, sand or gravel layers for concrete curing and/or capillary break) is unrelated to the geotechnical performance of the foundation and thereby not the purview of the geotechnical consultant. Post-construction moisture migration should be expected below the foundation. The foundation engineer/architect should determine whether the use of a capillary break (sand or gravel layer), in conjunction with the vapor retarder, is necessary or required by code. Sand layer thickness and location (above and/or below vapor retarder) should also be determined by the foundation engineer/architect.

4.3 Soil Bearing and Lateral Resistance

Provided our earthwork recommendations are implemented, an allowable soil bearing pressure of 1,500 pounds per square foot (psf) may be used for the design of footings having a minimum width of 12 inches and minimum embedment of 12 inches below lowest adjacent ground surface. This value may be increased by 300 psf for each additional foot of embedment and 150 psf for each additional foot of foundation width to a maximum value of 2,500 psf. A post-tensioned mat foundation a minimum of 6 inches below lowest adjacent grade may be designed for an allowable soil bearing pressure of 1,200 psf. These allowable bearing pressures are applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Bearing values indicated are for total dead loads and frequently applied live loads and may be increased by ⅓ for short duration loading (i.e., wind or seismic loads).

In utilizing the above-mentioned allowable bearing capacity and provided our earthwork recommendations are implemented, foundation settlement due to consolidation and structural loads is anticipated to be less than 2 inches. Differential static settlement may be taken as half of the total settlement (i.e., 1-inch over a horizontal span of 40 feet due to structural loads). Seismically induced settlement is discussed in Section 2.6.1.

Resistance to lateral loads can be provided by friction acting at the base of foundations and by passive earth pressure. For concrete/soil frictional resistance, an allowable coefficient of friction of 0.25 may be assumed with dead-load forces. For slabs constructed over a moisture retarder, the allowable friction coefficient should be provided by the manufacturer. An allowable passive lateral earth pressure of 200 psf per foot of depth (or pcf) to a maximum of 2,000 psf may be used for the sides of footings poured against properly compacted fill. Allowable passive pressure may be increased to 270 pcf (maximum of 2,700 psf) for short duration seismic loading. This passive pressure is applicable for level (ground slope equal to or flatter than 5H:1V) conditions. Frictional resistance and passive pressure may be used in combination without reduction. We recommend that the upper foot of passive resistance be neglected if finished grade will not be covered with concrete or asphalt. The provided allowable passive pressures are based on a factor of safety of 1.5 and 1.1 for static and seismic loading conditions, respectively.

4.4 Lateral Earth Pressures for Retaining Walls

The following may be used for design of site retaining walls. Lateral earth pressures are provided as equivalent fluid unit weights, in psf per foot of depth (or pcf). These values do not contain an appreciable factor of safety, so the retaining wall designer should apply the applicable factors of safety and/or load factors during design. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of soil over the wall footing.

The following lateral earth pressures are presented in Table 5 for approved imported granular soils with a maximum of 35 percent fines (passing the No. 200 sieve per ASTM D-421/422) and a "Very Low" expansion potential (EI of 20 or less per ASTM D4829). The onsite soils are not suitable for retaining wall backfill due to their fines content and expansion potential. Therefore, import of sandy soils meeting the criteria outlined above will be required by the contractor for obtaining suitable retaining wall backfill soil.

The wall designer should clearly indicate on the retaining wall plans the required select sandy soil backfill criteria. These preliminary findings should be confirmed during grading.

TABLE 5

Lateral Earth Pressures – Imported Sandy Soils

Conditions	Equivalent Fluid Unit Weight (pcf)	Equivalent Fluid Unit Weight (pcf)
	Level Backfill	2:1 Sloped Backfill
	Approved Sandy Soils (Import)	Approved Sandy Soils (Import)
Active	35	55
At-Rest	55	70

If the wall can yield enough to mobilize the full shear strength of the soil, it can be designed for "active" pressure. If the wall cannot yield under the applied load, the earth pressure will be higher. This would include 90-degree corners of retaining walls. Such walls should be designed for "at-rest." The equivalent fluid pressure values assume free-draining conditions. If conditions other than those assumed above are anticipated, the equivalent fluid pressure values should be provided on an individual-case basis by the geotechnical engineer.

Retaining wall structures should be provided with appropriate drainage and appropriately waterproofed. To reduce, but not eliminate, saturation of near-surface (upper approximate 1-foot) soils in front of the retaining walls, the perforated subdrain pipe should be located as low as possible behind the retaining wall. The outlet pipe should be sloped to drain to a suitable outlet. In general, we do not recommend retaining wall outlet pipes be connected to area drains. If subdrains are connected to area drains, special care and information should be provided to homeowners to maintain these drains. Typical retaining wall drainage is illustrated in Figure 3. It should be noted that the recommended subdrain does not provide protection against seepage through the face of the wall and/or efflorescence. Efflorescence is generally a white crystalline powder (discoloration) that results when water containing soluble salts migrates over a period of time through the face of a retaining wall and evaporates. If such seepage or efflorescence is undesirable, retaining walls should be waterproofed to reduce this potential. Waterproofing and outlet systems are not the purview of the geotechnical consultant.

Surcharge loading effects from any adjacent structures should be evaluated by the retaining wall designer. In general, structural loads within a 1:1 (horizontal: vertical) upward projection from the bottom of the proposed retaining wall footing will surcharge the proposed retaining wall. In addition to the recommended earth pressure, retaining walls adjacent to streets should be designed to resist a uniform lateral pressure of 85 pounds per square foot (psf) due to normal street vehicle traffic, if applicable. Uniform lateral surcharges may be estimated using the applicable coefficient of lateral earth pressure using a rectangular distribution. A factor of 0.45 and 0.3 may be used for at-rest and active conditions, respectively. The retaining wall designer should contact the geotechnical consultant for any required geotechnical input in

estimating surcharge loads.

If a retaining wall greater than 6 feet in height is proposed, the retaining wall designer should contact the geotechnical engineer for specific seismic lateral earth pressure increments based on the configuration of the planned retaining wall structures.

Soil bearing and lateral resistance (friction coefficient and passive resistance) are provided in Section 4.3. Earthwork considerations (temporary backcuts, backfill, compaction, etc.) for retaining walls are provided in Section 4.1 (Site Earthwork) and the subsequent earthwork related sub-sections.

4.5 Soil Corrosivity

Although not corrosion engineers (LGC Geotechnical is not a corrosion consultant), several governing agencies in Southern California require the geotechnical consultant to determine the corrosion potential of soils to buried concrete and metal facilities. We therefore present the results of our testing with regard to corrosion for the use of the client and other consultants, as they determine necessary.

Corrosion testing of a near-surface bulk sample indicated a soluble sulfate content ranging from approximately 0.032 to 0.254 percent, a chloride content ranging from 140 to 600 parts per million (ppm), pH of 8.92, and a minimum resistivity of 210 ohm-centimeters. Based on Caltrans Corrosion Guidelines (Caltrans, 2021), soils are considered corrosive to structural elements if the pH is 5.5 or less, or the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater. Based on the preliminary test results, soils are considered corrosive using Caltrans criteria.

Based on preliminary laboratory sulfate test results, the near surface soils are designated to a class "S2" per ACI 318, Table 19.3.1.1 with respect to sulfates. Concrete in direct contact with the onsite soils can be designed according to ACI 318, Table 19.3.2.1 using the "S2" sulfate classification.

Laboratory testing may need to be performed at the completion of grading by the project corrosion engineer to further evaluate the as-graded soil corrosivity characteristics. Accordingly, revision of the corrosion potential may be needed, should future test results differ substantially from the conditions reported herein. The client and/or other members of the development team should consider this during the design and planning phase of the project and formulate an appropriate course of action.

4.6 Control of Surface Water and Drainage Control

From a geotechnical perspective, we recommend that compacted finished grade soils adjacent to proposed residences be sloped away from the proposed residence and towards an approved drainage device or unobstructed swale. Drainage swales, wherever feasible, should not be constructed within 5 feet of buildings. Where lot and building geometry necessitates that the side yard drainage swales be routed closer than 5 feet to structural foundations, we recommend the use of area drains together with drainage swales. Drainage swales used in

conjunction with area drains should be designed by the project civil engineer so that a properly constructed and maintained system will prevent ponding within 5 feet of the foundation. Code compliance of grades is not the purview of the geotechnical consultant.

Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided.

4.7 Subsurface Water Infiltration

Recent regulatory changes in some jurisdictions have recommended that low flow runoff be infiltrated rather than discharged via conventional storm drainage systems. Typically, a combination of methods is implemented to reduce surface water runoff and increase infiltration including; permeable pavements/pavers for roadways and walkways and directing surface water runoff to grass-lined swales, retention areas, and/or drywells. It should be noted that intentionally infiltrating storm water conflicts with the geotechnical engineering objective of directing surface water away from structures and improvements. The geotechnical stability and integrity of the project site is reliant upon appropriately handling all surface water. In general, the vast majority of geotechnical distress issues are directly related to improper drainage. In general, distress in the form of movement of improvements could occur as a result of soil saturation and loss of soil support, expansion, internal soil erosion, collapse and/or settlement. Infiltrated water may enter underground utility pipe zones and migrate along the pipe backfill, potentially impacting other improvements located far away from the point of infiltration.

Geotechnical stability and integrity of the project site is reliant upon appropriate handling of surface water. Due to the extremely low measured infiltration rate, low permeability fine-grained soils at depth, shallow groundwater and site liquefaction potential, we strongly recommend against the intentional infiltration of storm water into subsurface soils.

4.8 Preliminary Asphalt Concrete Pavement Sections

The following provisional minimum asphalt concrete (AC) street sections are provided in Table 6 for Traffic Indices (TI) of 5.0, 5.5 and 6.0. These sections are based on an assumed R-value of 10. These recommendations must be confirmed with R-value testing of representative near-surface soils at the completion of grading and after underground utilities have been installed and backfilled. Final pavement sections should be confirmed by the project civil engineer based upon the final design Traffic Index. If requested, LGC Geotechnical will provide sections for alternate TI values. Should the City of Los Alamitos have more stringent requirements, updated pavement recommendation can be provided.

TABLE 6

Preliminary Pavement Section Options

Assumed Traffic Index	5.0	5.5	6.0
R -Value Subgrade	10	10	10
AC Thickness	4.0 inches	4.0 inches	5.0 inches
Aggregate Base Thickness	7.0 inches	9.0 inches	9.0 inches

The pavement section thicknesses provided above are considered minimum thicknesses. Increasing the thickness of any or all of the above layers will reduce the likelihood of the pavement experiencing distress during its service life. The above recommendations are based on the assumption that proper maintenance and irrigation of the areas adjacent to the roadway will occur throughout the design life of the pavement. Failure to maintain a proper maintenance and/or irrigation program may jeopardize the integrity of the pavement.

Earthwork recommendations regarding aggregate base and subgrade are provided in the previous Section 4.1 (Site Earthwork) and the related sub-sections of this report.

4.9 Nonstructural Concrete Flatwork

Nonstructural concrete flatwork (such as walkways, private drives, patio slabs, etc.) has a potential for cracking due to changes in soil volume related to soil-moisture fluctuations. To reduce the potential for excessive cracking and lifting, concrete may be designed in accordance with the minimum guidelines outlined in Table 7 on the following page. These guidelines will reduce the potential for irregular cracking and promote cracking along construction joints but will not eliminate all cracking or lifting. Thickening the concrete and/or adding additional reinforcement will further reduce cosmetic distress.

TABLE 7

Nonstructural Concrete Flatwork for Low Expansion Potential

	Homeowner Sidewalks	Private Drives	Patios/ Entryways	City Sidewalk Curb and Gutters
Minimum Thickness (in.)	4 (nominal)	4 (full)	4 (full)	City/Agency Standard
Presoaking	Wet down prior to placing	Wet down prior to placing	Wet down prior to placing	City/Agency Standard
Reinforcement	—	No. 3 at 24 inches on centers	No. 3 at 24 inches on centers	City/Agency Standard
Thickened Edge (in.)	—	8 x 8	—	City/Agency Standard
Crack Control Joints	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	City/Agency Standard
Maximum Joint Spacing	5 feet	10 feet or quarter cut whichever is closer	6 feet	City/Agency Standard
Aggregate Base Thickness (in.)	—	—	—	City/Agency Standard

To reduce the potential for driveways to separate from the garage slab, the builder may elect to install dowels to tie these two elements together. Similarly, future homeowners should consider the use of dowels to connect flatwork to the foundation.

4.10 Geotechnical Plan Review

When available, grading, retaining wall and foundation plans should be reviewed by LGC Geotechnical in order to verify our geotechnical recommendations are implemented. Updated recommendations and/or additional field work may be necessary.

4.11 Geotechnical Observation and Testing During Construction

The recommendations provided in this report are based on limited subsurface observations and geotechnical analysis. The interpolated subsurface conditions should be checked in the field during construction by a representative of LGC Geotechnical. Geotechnical observation and testing is required per Section 1705 of the 2019 California Building Code (CBC).

Geotechnical observation and/or testing should be performed by LGC Geotechnical at the following stages:

- During grading (removal bottoms, fill placement, etc);
- During retaining wall backfill and compaction;
- During utility trench backfill and compaction;
- After presoaking building pads and other concrete-flatwork subgrades, and prior to placement of aggregate base or concrete;
- Preparation of pavement subgrade and placement of aggregate base;
- After building and wall footing excavation and prior to placing steel reinforcement and/or concrete; and
- When any unusual soil conditions are encountered during any construction operation subsequent to issuance of this report.

5.0 LIMITATIONS

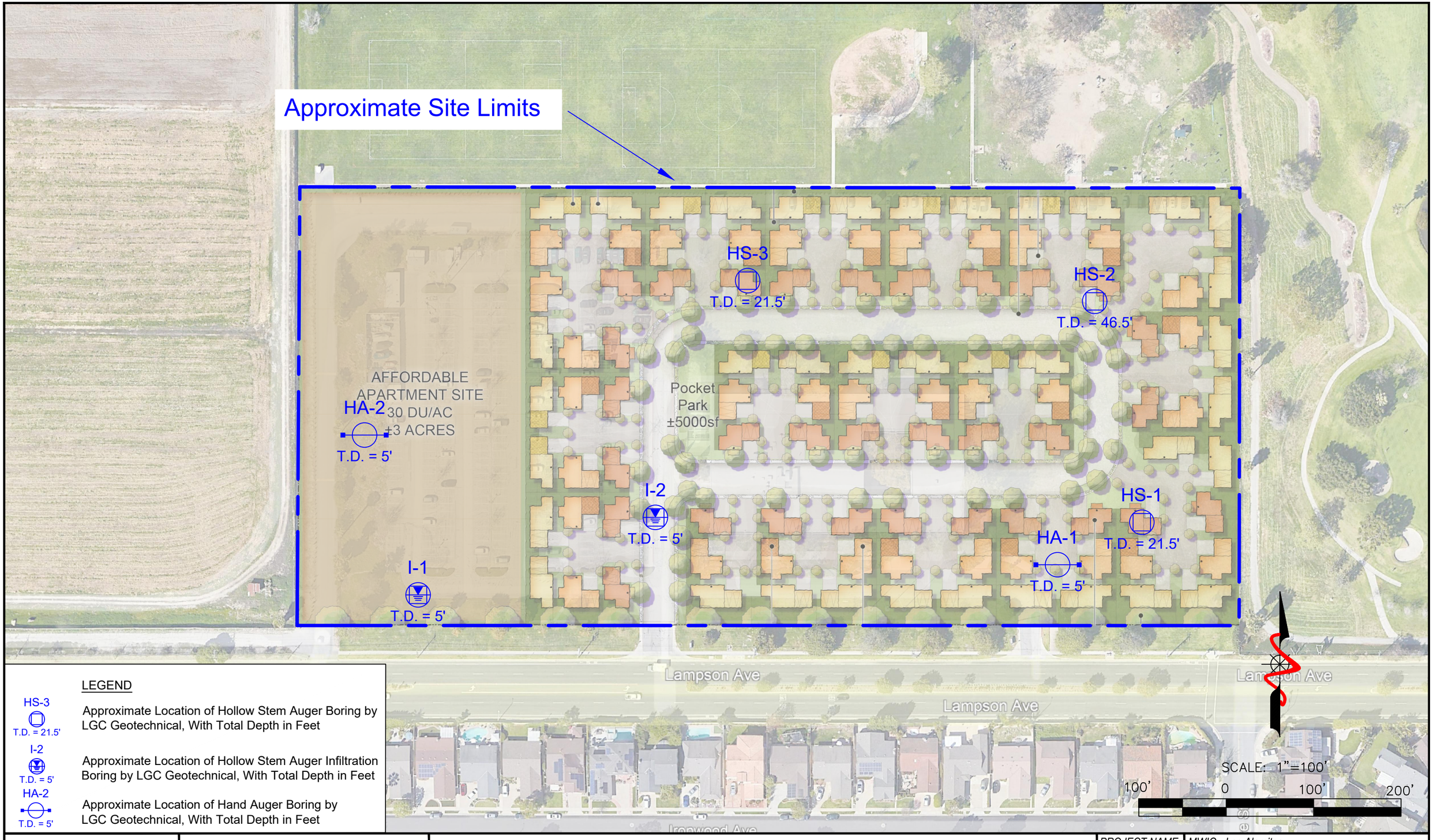
Our services were performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable soils engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

This report is based on data obtained from limited observations of the site, which have been extrapolated to characterize the site. While the scope of services performed is considered suitable to adequately characterize the site geotechnical conditions relative to the proposed development, no practical evaluation can completely eliminate uncertainty regarding the anticipated geotechnical conditions in connection with a subject site. Variations may exist and conditions not observed or described in this report may be encountered during grading and construction.

This report is issued with the understanding that it is the responsibility of the owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of the other consultants (at a minimum the civil engineer, structural engineer, landscape architect) and incorporated into their plans. The contractor should properly implement the recommendations during construction and notify the owner if they consider any of the recommendations presented herein to be unsafe, or unsuitable.

The findings of this report are valid as of the present date. However, changes in the conditions of a site can and do occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. The findings, conclusions, and recommendations presented in this report can be relied upon only if LGC Geotechnical has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site. This report is intended exclusively for use by the client, any use of or reliance on this report by a third party shall be at such party's sole risk.

In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and modification.



LEGEND

HS-3 / T.D. = 21.5' — Approximate Location of Hollow Stem Auger Boring by LGC Geotechnical, With Total Depth in Feet

I-2 / T.D. = 5' — Approximate Location of Hollow Stem Auger Infiltration Boring by LGC Geotechnical, With Total Depth in Feet

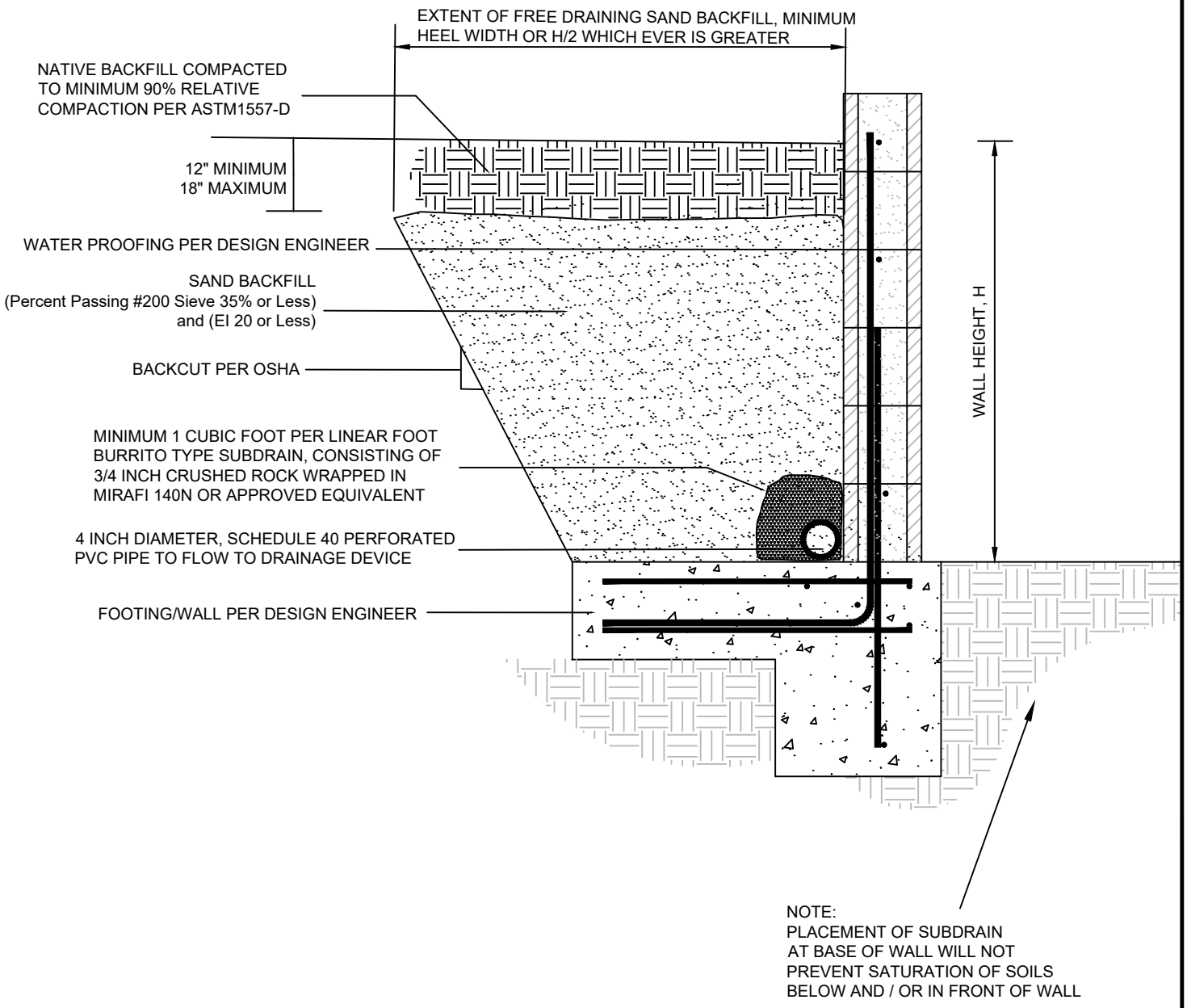
HA-2 / T.D. = 5' — Approximate Location of Hand Auger Boring by LGC Geotechnical, With Total Depth in Feet

LGC Geotechnical, Inc.

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FIGURE 2
Boring Location Map

PROJECT NAME	*MWIG - Los Alamitos*
PROJECT NO.	*21198-01*
ENG. / GEOL.	*RLD*
SCALE	*1" = 100'*
DATE	*December 2021*



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FIGURE 3
Retaining Wall Backfill Detail

PROJECT NAME	MWIG - Los Alamitos
PROJECT NO.	21198-01
ENG. / GEOL.	RLD
SCALE	Not to Scale
DATE	December 2021

Appendix A
References

APPENDIX A

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Appendix B
Boring Logs

Geotechnical Boring Log Borehole HS-1

Date: 11/11/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Los Alamitos | **Type of Rig:** Track Mounted

Project Number: 21198-01 | **Drop:** 30" | **Hole Diameter:** 6"

Elevation of Top of Hole: ~24' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By BPP
Sampled By BPP
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0	B-1						**@0' to T.D. - <u>Quaternary Young Alluvium (Qya):</u>**	
								@0'- 1' of Topsoil; Sandy SILT: brown/gray, slightly moist	
20			R-1	10 7 9	92.9	8.6	CL-ML	@2.5'- Silty CLAY with Sand: grayish brown, slightly moist, stiff	
	5		R-2	4 6 8	94.5	24.6		@5'- Silty CLAY: olive brown, very moist, stiff	
			R-3	3 3 4	94.0	27.9	SM/CL	@7.5'- Top: Silty SAND: brown, wet, loose; Bottom: CLAY: brown, wet, medium stiff	
15	10		R-4	3 4 5	99.0	26.3	CL-ML	@10'- Silty CLAY: olive brown, wet, medium stiff	
10		▽							
	15		SPT-1	2 3 4		27.8		@15'- Silty CLAY: olive brown, wet, stiff	
5									
	20		R-5	7 9 12	106.1	20.9	SM	@20'- Silty SAND: grayish brown, wet, medium dense	
0								Total Depth = 21.5' Groundwater Encountered at Approximately 13' Backfilled with Cuttings on 11/11/2021	
	25								
-5									
	30								

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THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 12/16/2021

Geotechnical Boring Log Borehole HS-2

Date: 11/11/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Los Alamitos | **Type of Rig:** Track Mounted

Project Number: 21198-01 | **Drop:** 30" | **Hole Diameter:** 6"

Elevation of Top of Hole: ~25' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By BPP
Sampled By BPP
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							**@0 to T.D. - Quaternary Young Alluvium (Qya):** @0'- 1' of Topsoil; Sandy SILT: gray/brown, slightly moist	
			R-1	13 7 11	94.9	25.1	CL-ML	@2.5'- Silty CLAY: olive brown, wet, stiff	
20	5		R-2	3 6 9	96.3	28.1		@5'- Silty CLAY: olive brown, wet, stiff	
			R-3	5 5 4	89.3	33.2	CL	@7.5'- CLAY: olive brown, wet, medium stiff	AL CN
15	10	▽	R-4	2 3 4	97.8	27.8		@10'- CLAY: brown, wet, medium stiff	
10	15		R-5	5 5 8	101.2	26.2		@15'- CLAY: brown, wet, stiff	AL
5	20		SPT-1	4 6 8		22.9	ML	@20'- Sandy SILT: grayish brown, wet, medium dense	
0	25		R-6	6 6 5	99.1	30.4	CL	@25'- CLAY: dark gray, wet, stiff	
	30								

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CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 12/16/2021

Geotechnical Boring Log Borehole HS-2

Date: 11/11/2021	**Drilling Company:** Cal Pac Drilling
Project Name: MWIG - Los Alamitos	**Type of Rig:** Track Mounted
Project Number: 21198-01	**Drop:** 30" **Hole Diameter:** 6"
Elevation of Top of Hole: ~25' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 2 of 2

Logged By BPP
Sampled By BPP
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	30		SPT-2	3 5 7		32.3	CL	@30'- CLAY: olive gray, wet, very stiff	AL
-5	35		R-7	6 21 33	110.9	17.4	SM	@35'- Silty SAND: gray, wet, dense	
-10	40		SPT-3	5 7 15		28.1		@40'- Silty SAND: dark gray, wet, medium dense	-#200
-15	45		R-8	7 9 11	99.2	26.6		@45'- Silty SAND: dark gray, wet, medium dense	-#200
-20	50							Total Depth = 46.5' Groundwater Encountered at Approximately 11.5' Backfilled with Cuttings on 11/11/2021	
-25	55								
	60								

LGC Geotechnical, Inc.

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EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Geotechnical Boring Log Borehole HS-3

Date: 11/11/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Los Alamitos | **Type of Rig:** Track Mounted

Project Number: 21198-01 | **Drop:** 30" | **Hole Diameter:** 6"

Elevation of Top of Hole: ~24' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By BPP
Sampled By BPP
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0	B-1						**@0' to T.D. - <u>Quaternary Young Alluvium (Qya):</u>**	MD
								@0'- Topsoil; Sandy SILT: brown/gray, slightly moist	DS
20			R-1	5 7 14	110.5	15.2	CL-ML	@2.5'- Silty CLAY: olive brown, moist, very stiff	EI CR
	5		R-2	7 8 13	101.6	22.0	CL	@5'- CLAY: olive brown, very moist, very stiff	
15			R-3	5 2 3	87.4	35.4		@7.5'- CLAY: olive brown, wet, soft	AL CN
	10	▽	R-4	1 3 4	98.7	26.9		@10'- CLAY: olive brown, wet, medium stiff	
10									
	15		SPT-1	2 3 3		24.7		@15'- CLAY: olive brown, wet, medium stiff	
5									
	20		R-5	3 5 6	107.9	20.7		@20'- CLAY: olive brown, wet, stiff	
0								Total Depth = 21.5' Groundwater Encountered at Approximately 11' Backfilled with Cuttings on 11/11/2021	
	25								
-5									
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

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AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 12/16/2021

Geotechnical Boring Log Borehole I-1

Date: 11/11/2021	**Drilling Company:** Cal Pac Drilling
Project Name: MWIG - Los Alamitos	**Type of Rig:** Track Mounted
Project Number: 21198-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~23' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	Logged By BPP Sampled By BPP Checked By RLD DESCRIPTION	Type of Test
20	0	B-1				22.0	SC	**@0' to 2.5' - Older Artificial Fill (afo):** @0'- 3" of Asphalt over 5" of Base @1'- Clayey SAND: gray/brown, very moist **@2.5' to T.D. - Quaternary Young Alluvium (Qya):** @2.5'- Clayey SAND: gray/brown, very moist	
15	5							Total Depth = 5' Groundwater Not Encountered 3" Perforated Pipe With Filter Sock Installed, Surrounded by Gravel, and Presoaked on 11/11/2021 Pipe Removed and Boring Backfilled With Cuttings on 11/12/2021	
10	10								
5	15								
0	20								
-5	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 12/16/2021

Geotechnical Boring Log Borehole I-2

Date: 11/11/2021	**Drilling Company:** Cal Pac Drilling
Project Name: MWIG - Los Alamitos	**Type of Rig:** Track Mounted
Project Number: 21198-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~23' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	Logged By BPP Sampled By BPP Checked By RLD DESCRIPTION	Type of Test
20	0	B-1				16.9	SM	**@0' to 2.5'- <u>Older Artificial Fill (afo):</u>** @0'- 3" of Asphalt over 5" of Base @1'- Silty SAND: dark gray, very moist **@2.5' to T.D. - <u>Quaternary Young Alluvium (Qya):</u>** @2.5'- Silty SAND: dark gray, very moist	
15	5							Total Depth = 5' Groundwater Not Encountered 3" Perforated Pipe With Filter Sock Installed, Surrounded by Gravel, and Presoaked on 7/23/2021 Pipe Removed and Boring Backfilled With Cuttings on 11/12/2021	
10	10								
5	15								
0	20								
-5	25								
	30								

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 12/16/2021

Geotechnical Boring Log Borehole HA-1

Date: 11/11/2021	**Drilling Company:** Cal Pac Drilling
Project Name: MWIG - Los Alamitos	**Type of Rig:** Track Mounted
Project Number: 21198-01	**Drop:** 30" **Hole Diameter:** 3"
Elevation of Top of Hole: ~24' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By BPP
Sampled By BPP
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
20	0	B-1				12.8	ML	**@0' to T.D. - <u>Quaternary Young Alluvium (Qya):</u>** @0'- 1' of Topsoil @1'- Sandy SILT: brown, slightly moist	
						12.8	CL	@3'- Silty CLAY: brown, moist	
15	5							Total Depth = 5' Groundwater Not Encountered Backfilled with Cuttings on 11/11/2021	
10	10								
5	15								
0	20								
-5	25								
	30								

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 12/16/2021

Geotechnical Boring Log Borehole HA-2

Date: 11/12/2021 | **Drilling Company:** Cal Pac Drilling

Project Name: MWIG - Los Alamitos | **Type of Rig:** Track Mounted

Project Number: 21198-01 | **Drop:** 30" | **Hole Diameter:** 3"

Elevation of Top of Hole: ~24' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map |

Logged By BPP
Sampled By BPP
Checked By RLD

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
20	0	B-1					SM SC	**@0' to 2.5'- Undocumented Artificial Fill (afu):** @0'- Silty SAND: grayish brown, dry **@2.5' to T.D. - Quaternary Young Alluvium (Qya):** @2.5'- Clayey SAND: grayish brown, very moist	EI CR
15	5							Total Depth = 5' Groundwater Not Encountered Backfilled with Cuttings on 11/12/2021	
10	10								
5	15								
0	20								
-5	25								
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 12/16/2021

Appendix C
Laboratory Test Results

APPENDIX C

Laboratory Testing Procedures and Test Results

The laboratory testing program was formulated towards providing data relating to the relevant engineering properties of the soils with respect to residential construction. Samples considered representative of site conditions were tested in general accordance with American Society for Testing and Materials (ASTM) procedure and/or California Test Methods (CTM), where applicable. The following summary is a brief outline of the test type and a table summarizing the test results.

Moisture and Density Determination Tests: Moisture content (ASTM D2216) and dry density determinations (ASTM D2937) were performed on relatively undisturbed samples obtained from the test borings and/or trenches. The results of these tests are presented in the boring logs. Where applicable, only moisture content was determined from undisturbed or disturbed samples.

Expansion Index: The expansion potential of selected samples was evaluated by the Expansion Index Test, Standard ASTM D4829. Specimens are molded under a given compactive energy to approximately the optimum moisture content and approximately 50 percent saturation or approximately 90 percent relative compaction. The prepared 1-inch-thick by 4-inch-diameter specimens are loaded to an equivalent 144 psf surcharge and are inundated with tap water until volumetric equilibrium is reached. The results of these tests are presented in the table below.

Sample Location	Expansion Index	Expansion Potential*
HS-3 @ 1-5 feet	32	Low
HA-2 @ 1-5 feet	30	Low

* ASTM D4829

Grain Size Distibution/Fines Content: Representative samples were dried, weighed and soaked in water until individual soil particles were separated (per ASTM D421) and then washed on a No. 200 sieve (ASTM D1140). Where applicable, the portion retained on the No. 200 sieve and dried and then sieved on a U.S. Standard brass sieve set in accordance with ASTM D6913 (sieve).

Sample Location	Description	% Passing # 200 Sieve
HS-2 @ 40 feet	Silty Sand	16.5
HS-2 @ 45 feet	Silty Sand	15

Laboratory Testing Procedures and Test Results

Atterberg Limits: The liquid and plastic limits ("Atterberg Limits") were determined per ASTM D4318 for engineering classification of fine-grained material and presented in the table below. The USCS soil classification indicated in the table below is based on the portion of sample passing the No. 40 sieve and may not necessarily be representative of the entire sample. The plot is provided in this Appendix.

Sample Location	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	USCS Soil Classification
HS-2 @ 7.5 feet	31	19	12	CL
HS-2 @ 15 feet	34	17	17	CL
HS-2 @ 30 feet	35	16	19	CL
HS-3 @ 7.5 feet	48	24	24	CL

Consolidation: Two consolidation tests were performed per ASTM D2435. A sample (2.4 inches in diameter and 1 inch in height) was placed in a consolidometer and increasing loads were applied. The sample was allowed to consolidate under "double drainage" and total deformation for each loading step was recorded. The percent consolidation for each load step was recorded as the ratio of the amount of vertical compression to the original sample height. The consolidation pressure curve is provided in this Appendix.

Direct Shear: One direct shear test was performed on remolded samples, which was soaked for a minimum of 24 hours prior to testing. The samples were tested under various normal loads using a motor-driven, strain-controlled, direct-shear testing apparatus (ASTM D3080). The plot is provided in this Appendix.

Maximum Density Tests: The maximum dry density and optimum moisture content of typical materials were determined in accordance with ASTM D1557. The results of these tests are presented in the table below:

Sample Location	Sample Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
HS-3 @ 1-5 feet	Dark Olive Brown Clayey Sand	116.0	13.0

Laboratory Testing Procedures and Test Results

Chloride Content: Chloride content was tested in accordance with Caltrans Test Method (CTM) 422. The results are presented below.

Sample Location	Chloride Content, ppm
HS-3 @ 1-5 feet	600
HA-2 @ 1-5 feet	140

Soluble Sulfates: The soluble sulfate contents of selected samples were determined by standard geochemical methods (CTM 417). The soluble sulfate content is used to determine the appropriate cement type and maximum water-cement ratios. The test results are presented in the table below.

Sample Location	Sulfate Content (ppm)	Sulfate Exposure Class *
HS-3 @ 1-5 feet	2535	S2
HA-2 @ 1-5 feet	317	S0

*Based on ACI 318R-14, Table 19.3.1.1

Minimum Resistivity and pH Tests: Minimum resistivity and pH tests were performed in general accordance with CTM 643 and standard geochemical methods. The results are presented in the table below.

Sample Location	pH	Minimum Resistivity (ohms-cm)
HS-3 @ 1-5 feet	8.92	210

ATTERBERG LIMITS

ASTM D 4318

Project Name:	Los Alamitos	Tested By:	S. Felter	Date:	12/03/21
Project No. :	21198-01	Input By:	J. Ward	Date:	12/14/21
Boring No.:	HS-2	Checked By:	J. Ward		
Sample No.:	R-3	Depth (ft.)	7.5		
Soil Identification:	Light olive brown lean clay (CL)				

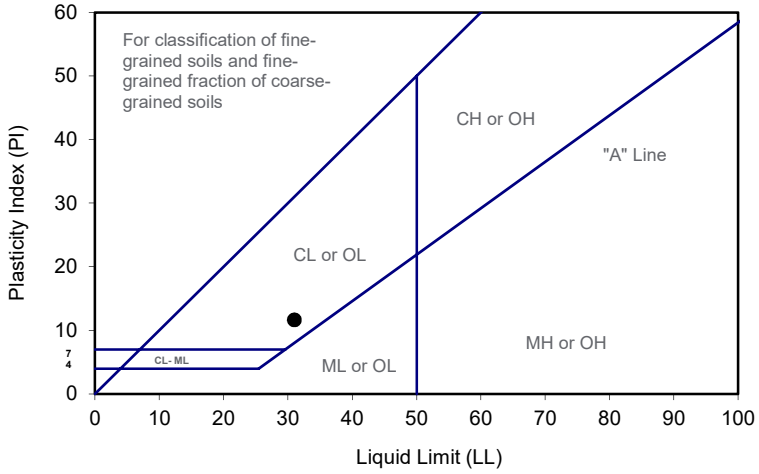
TEST	PLASTIC LIMIT		LIQUID LIMIT			
NO.	1	2	1	2	3	4
Number of Blows [N]			34	27	17	
Wet Wt. of Soil + Cont. (g)	10.70	10.61	21.36	20.43	20.11	
Dry Wt. of Soil + Cont. (g)	9.13	9.08	16.65	15.91	15.53	
Wt. of Container (g)	1.08	1.12	1.11	1.06	1.04	
Moisture Content (%) [Wn]	19.50	19.22	30.31	30.44	31.61	

Liquid Limit	**31**
Plastic Limit	**19**
Plasticity Index	**12**
Classification	**CL**

PI at "A" - Line = 0.73(LL-20) 8.03

One - Point Liquid Limit Calculation

$LL = Wn(N/25)^{0.121}$



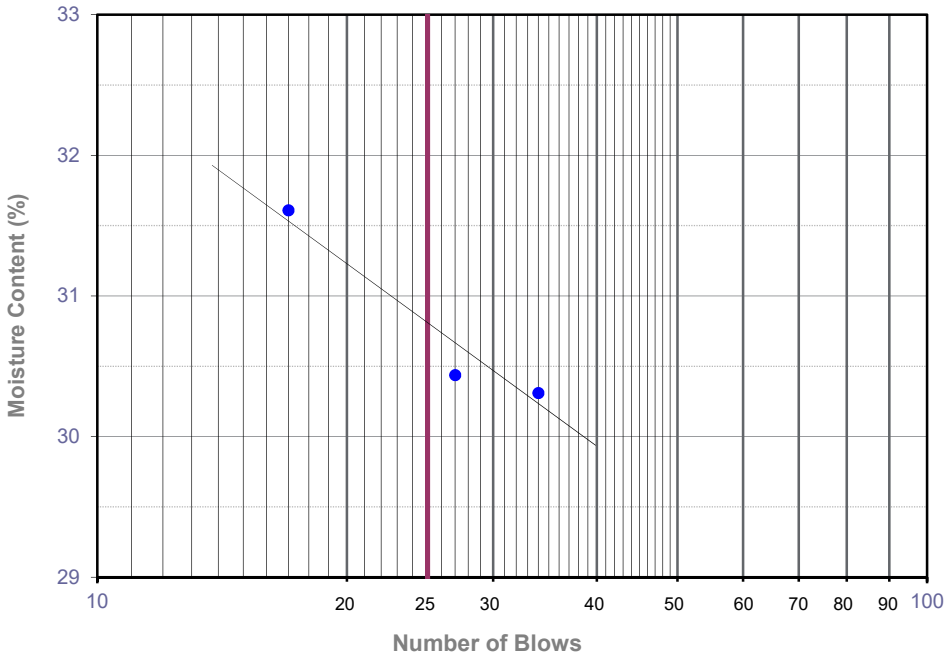
PROCEDURES USED

[ ] Wet Preparation
Multipoint - Wet

[X] Dry Preparation
Multipoint - Dry

[X] Procedure A
Multipoint Test

[ ] Procedure B
One-point Test



ATTERBERG LIMITS

ASTM D 4318

Project Name:	Los Alamitos	Tested By:	S. Felter	Date:	12/03/21
Project No. :	21198-01	Input By:	J. Ward	Date:	12/14/21
Boring No.:	HS-2	Checked By:	J. Ward		
Sample No.:	R-5	Depth (ft.)	15.0		
Soil Identification:	Brown lean clay (CL)				

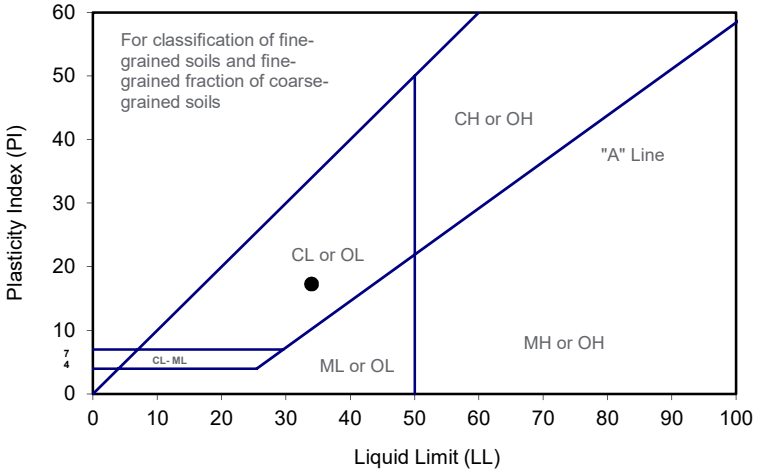
TEST	PLASTIC LIMIT		LIQUID LIMIT			
NO.	1	2	1	2	3	4
Number of Blows [N]			34	25	15	
Wet Wt. of Soil + Cont. (g)	10.21	10.20	20.36	20.23	21.00	
Dry Wt. of Soil + Cont. (g)	8.90	8.89	15.65	15.33	15.77	
Wt. of Container (g)	1.08	1.06	1.10	1.09	1.12	
Moisture Content (%) [Wn]	16.75	16.73	32.37	34.41	35.70	

Liquid Limit	**34**
Plastic Limit	**17**
Plasticity Index	**17**
Classification	**CL**

PI at "A" - Line = 0.73(LL-20) 10.22

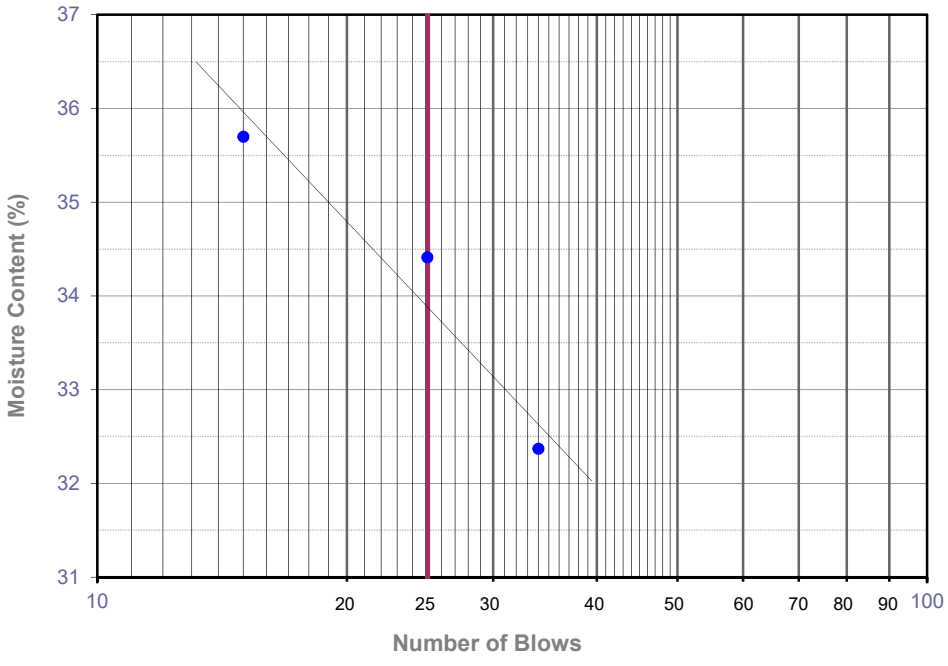
One - Point Liquid Limit Calculation

$LL = Wn(N/25)^{0.121}$



PROCEDURES USED

- [ ] Wet Preparation
  Multipoint - Wet
- [X] Dry Preparation
  Multipoint - Dry
- [X] Procedure A
  Multipoint Test
- [ ] Procedure B
  One-point Test



ATTERBERG LIMITS

ASTM D 4318

Project Name:	Los Alamitos	Tested By:	S. Felter	Date:	12/03/21
Project No. :	21198-01	Input By:	J. Ward	Date:	12/14/21
Boring No.:	HS-2	Checked By:	J. Ward		
Sample No.:	SPT-2	Depth (ft.)	30.0		
Soil Identification:	Olive gray lean clay (CL)				

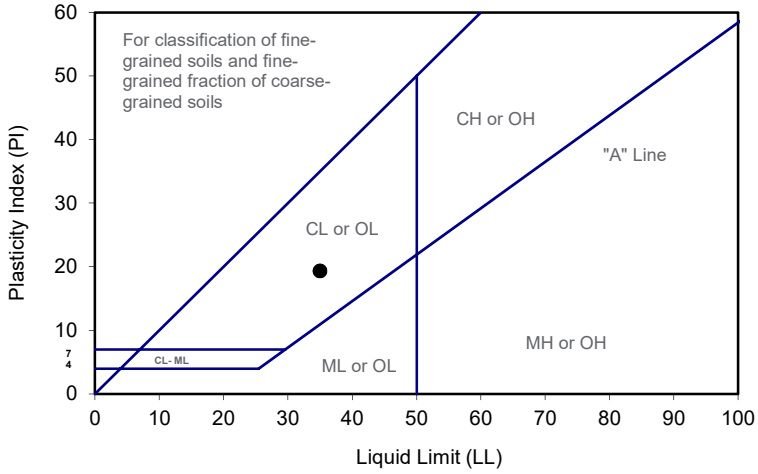
TEST	PLASTIC LIMIT		LIQUID LIMIT			
NO.	1	2	1	2	3	4
Number of Blows [N]			35	25	18	
Wet Wt. of Soil + Cont. (g)	10.49	10.83	20.53	20.10	21.13	
Dry Wt. of Soil + Cont. (g)	9.24	9.48	15.72	15.13	15.74	
Wt. of Container (g)	1.08	1.06	1.12	1.07	1.08	
Moisture Content (%) [Wn]	15.32	16.03	32.95	35.35	36.77	

Liquid Limit	**35**
Plastic Limit	**16**
Plasticity Index	**19**
Classification	**CL**

PI at "A" - Line = 0.73(LL-20) 10.95

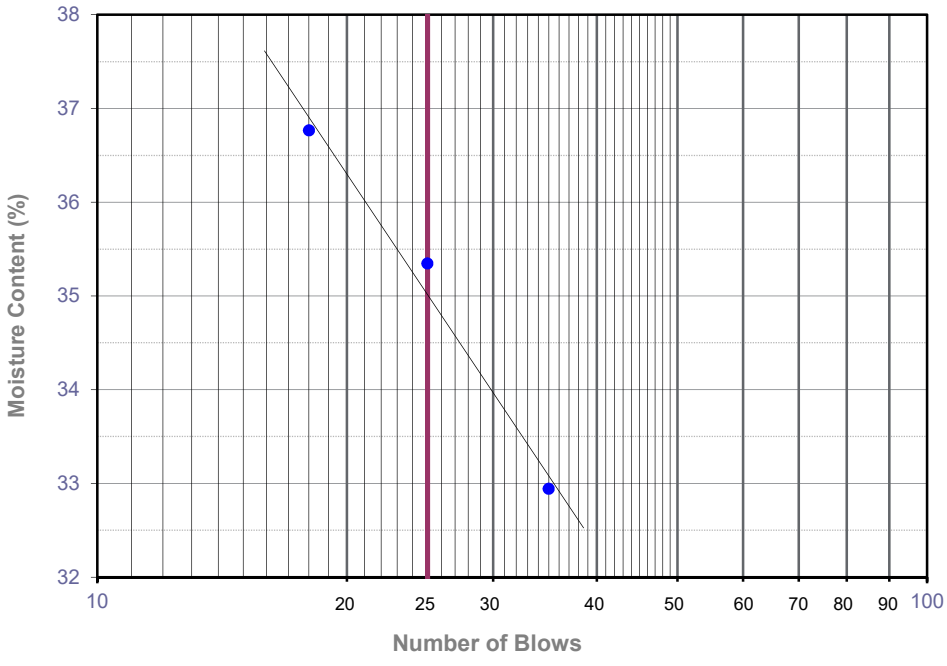
One - Point Liquid Limit Calculation

$LL = Wn(N/25)^{0.121}$



PROCEDURES USED

- [ ] Wet Preparation
  Multipoint - Wet
- [X] Dry Preparation
  Multipoint - Dry
- [X] Procedure A
  Multipoint Test
- [ ] Procedure B
  One-point Test



ATTERBERG LIMITS

ASTM D 4318

Project Name:	Los Alamitos	Tested By:	S. Felter	Date:	12/03/21
Project No. :	21198-01	Input By:	J. Ward	Date:	12/14/21
Boring No.:	HS-3	Checked By:	J. Ward		
Sample No.:	R-3	Depth (ft.)	7.5		
Soil Identification:	Olive brown lean clay (CL)				

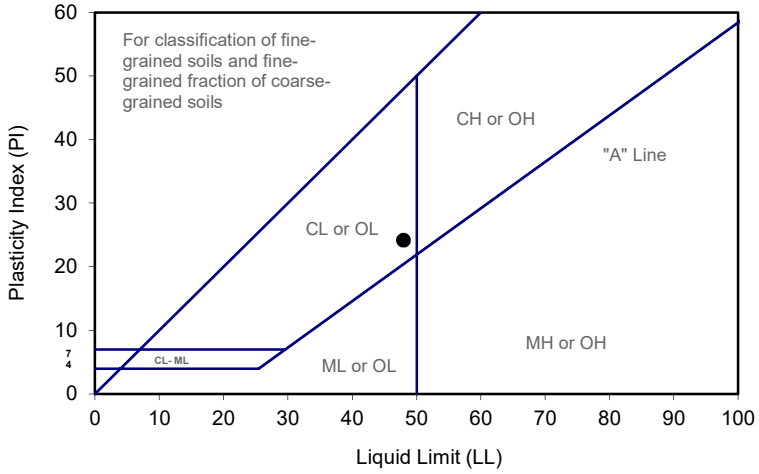
TEST	PLASTIC LIMIT		LIQUID LIMIT			
NO.	1	2	1	2	3	4
Number of Blows [N]			34	28	21	
Wet Wt. of Soil + Cont. (g)	10.09	10.02	20.94	20.13	20.15	
Dry Wt. of Soil + Cont. (g)	8.36	8.30	14.72	14.05	13.85	
Wt. of Container (g)	1.04	1.14	1.05	1.03	1.01	
Moisture Content (%) [Wn]	23.63	24.02	45.50	46.70	49.07	

Liquid Limit	**48**
Plastic Limit	**24**
Plasticity Index	**24**
Classification	**CL**

PI at "A" - Line = 0.73(LL-20) 20.44

One - Point Liquid Limit Calculation

$LL = Wn(N/25)^{0.121}$



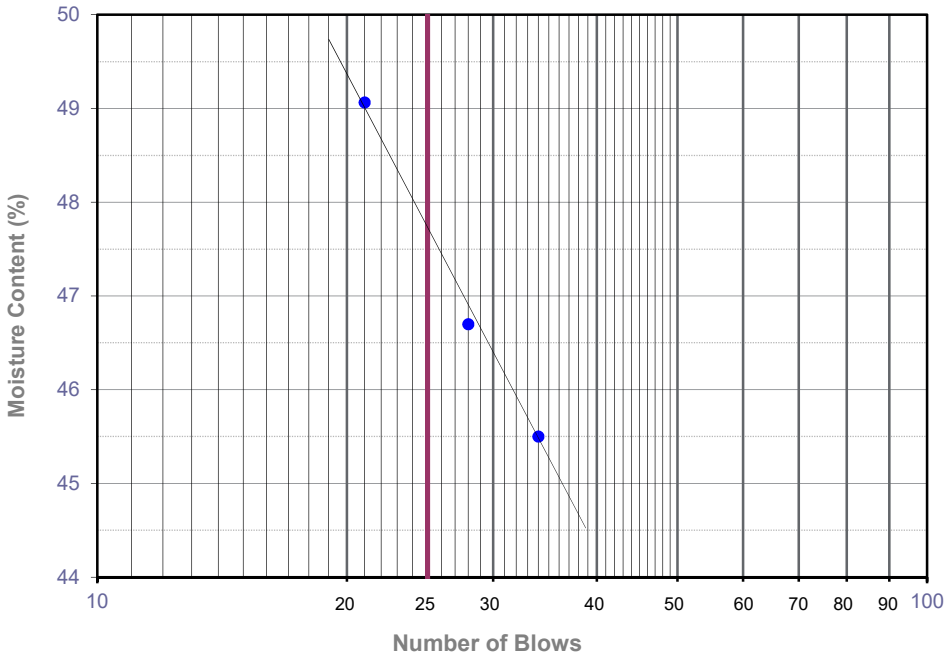
PROCEDURES USED

[ ] Wet Preparation
Multipoint - Wet

[X] Dry Preparation
Multipoint - Dry

[X] Procedure A
Multipoint Test

[ ] Procedure B
One-point Test



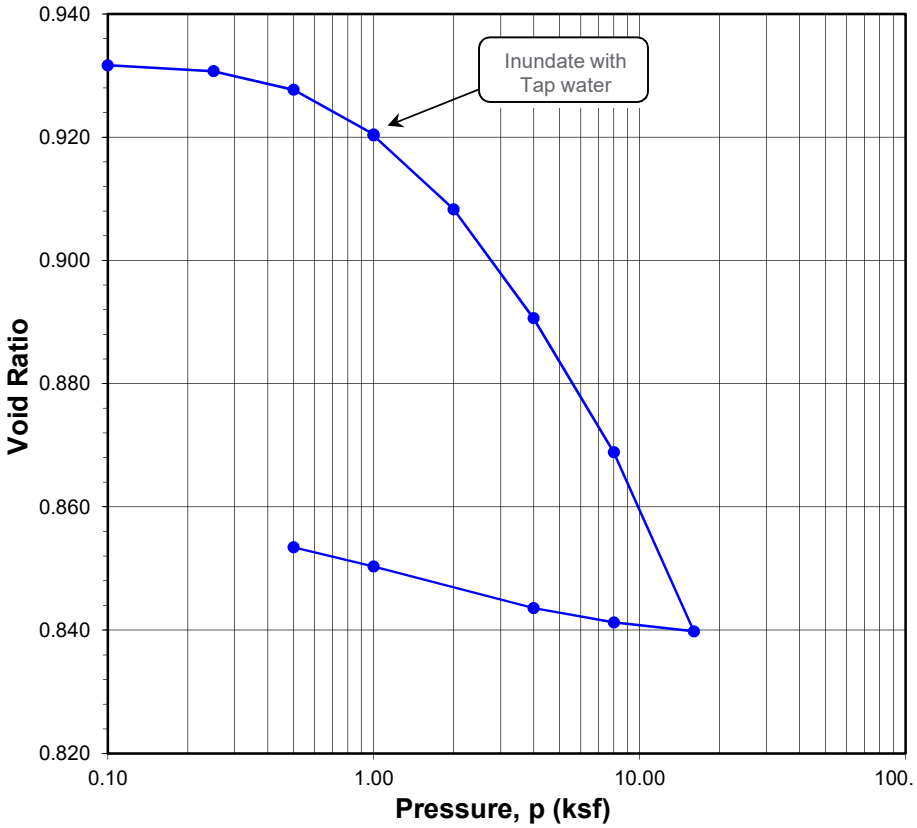
ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS

ASTM D 2435

Project Name: Los Alamitos
Project No.: 21198-01
Boring No.: HS-2
Sample No.: R-3
Soil Identification: Light olive brown lean clay (CL)

Tested By: G. Bathala Date: 11/30/21
Checked By: J. Ward Date: 12/16/21
Depth (ft.): 7.5
Sample Type: Ring

Sample Diameter (in.)	2.415
Sample Thickness (in.)	1.000
Wt. of Sample + Ring (g)	191.82
Weight of Ring (g)	45.88
Height after consol. (in.)	0.9595
Before Test	
Wt.Wet Sample+Cont. (g)	270.84
Wt.of Dry Sample+Cont. (g)	216.12
Weight of Container (g)	51.16
Initial Moisture Content (%)	33.2
Initial Dry Density (pcf)	91.1
Initial Saturation (%)	100
Initial Vertical Reading (in.)	0.3176
After Test	
Wt.of Wet Sample+Cont. (g)	246.12
Wt. of Dry Sample+Cont. (g)	216.12
Weight of Container (g)	59.16
Final Moisture Content (%)	27.01
Final Dry Density (pcf)	96.3
Final Saturation (%)	92
Final Vertical Reading (in.)	0.2743
Specific Gravity (assumed)	2.82
Water Density (pcf)	62.43

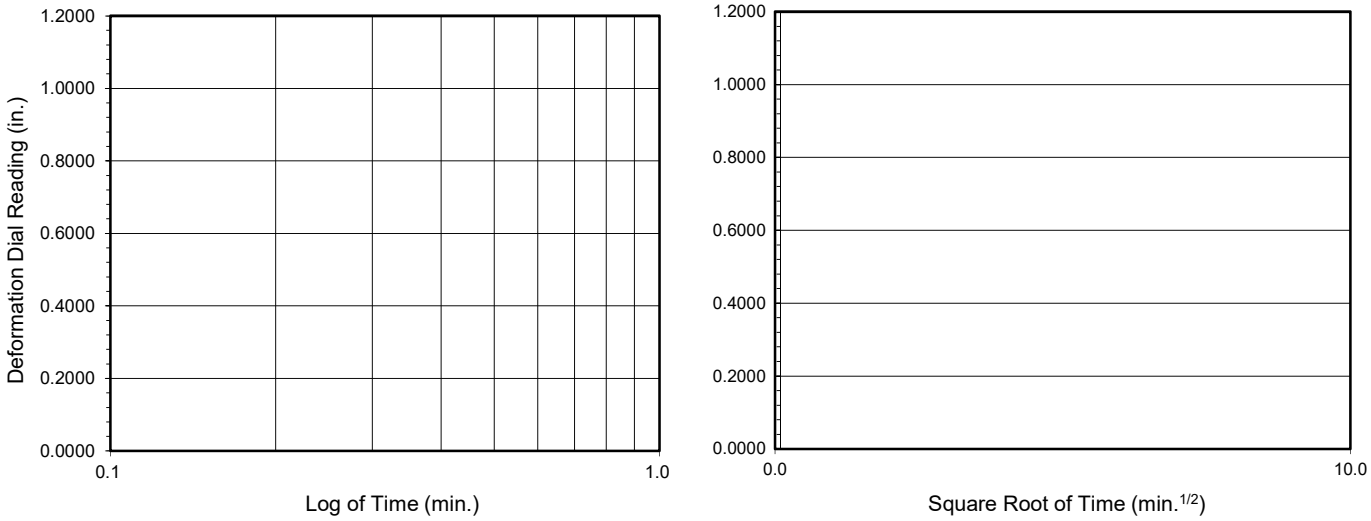


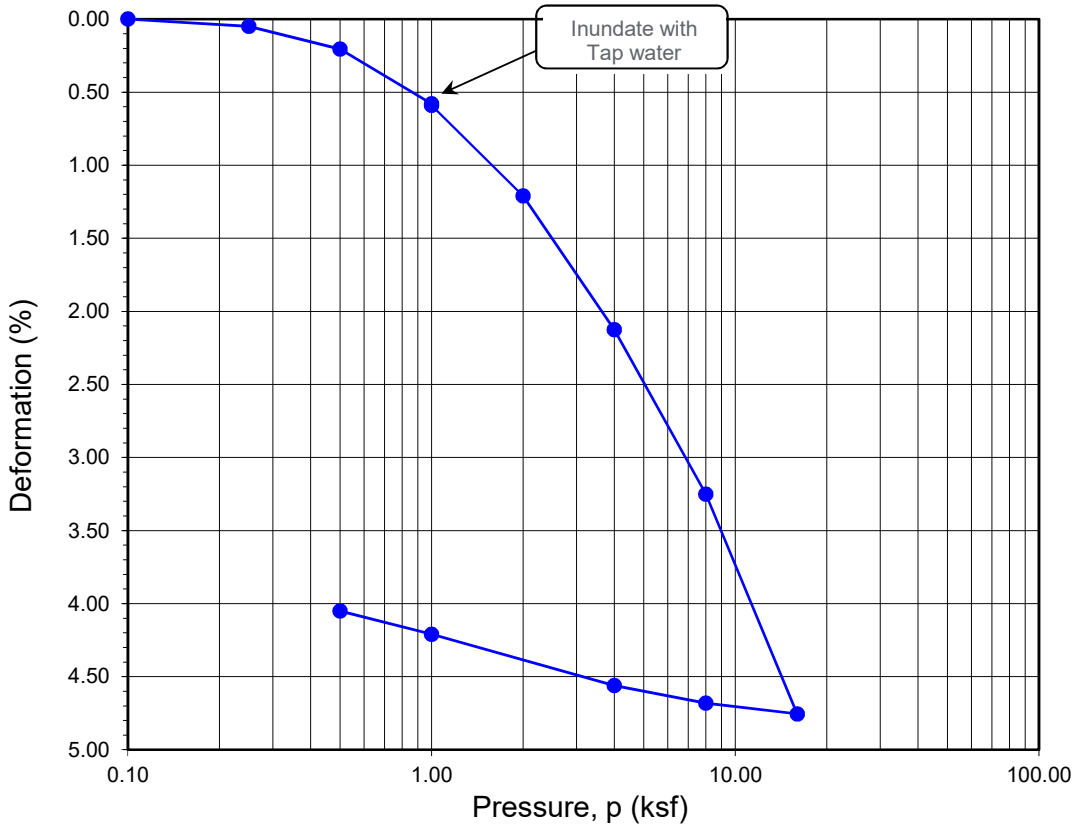
Pressure (p) (ksf)	Final Reading (in.)	Apparent Thickness (in.)	Load Compliance (%)	Deformation % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.10	0.3176	1.0000	0.00	0.00	0.932	0.00
0.25	0.3166	0.9990	0.05	0.10	0.931	0.05
0.50	0.3146	0.9970	0.10	0.31	0.928	0.21
1.00	0.3100	0.9924	0.18	0.76	0.920	0.58
1.00	0.3099	0.9923	0.18	0.77	0.920	0.59
2.00	0.3028	0.9852	0.27	1.48	0.908	1.21
4.00	0.2924	0.9748	0.40	2.53	0.891	2.13
8.00	0.2795	0.9619	0.56	3.81	0.869	3.25
16.00	0.2624	0.9448	0.77	5.53	0.840	4.76
8.00	0.2643	0.9467	0.65	5.33	0.841	4.68
4.00	0.2666	0.9490	0.54	5.10	0.844	4.56
1.00	0.2719	0.9543	0.36	4.57	0.850	4.21
0.50	0.2743	0.9567	0.28	4.33	0.853	4.05

Time Readings

Date	Time	Elapsed Time (min)	Square Root of Time	Dial Rdgs. (in.)

Time Readings





Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
HS-2	**R-3**	**7.5**	**33.2**	**27.0**	**91.1**	**96.3**	**0.932**	**0.853**	**100**	**92**

Soil Identification: Light olive brown lean clay (CL)

ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS
ASTM D 2435

Project No.: 21198-01

Los Alamitos

12-21

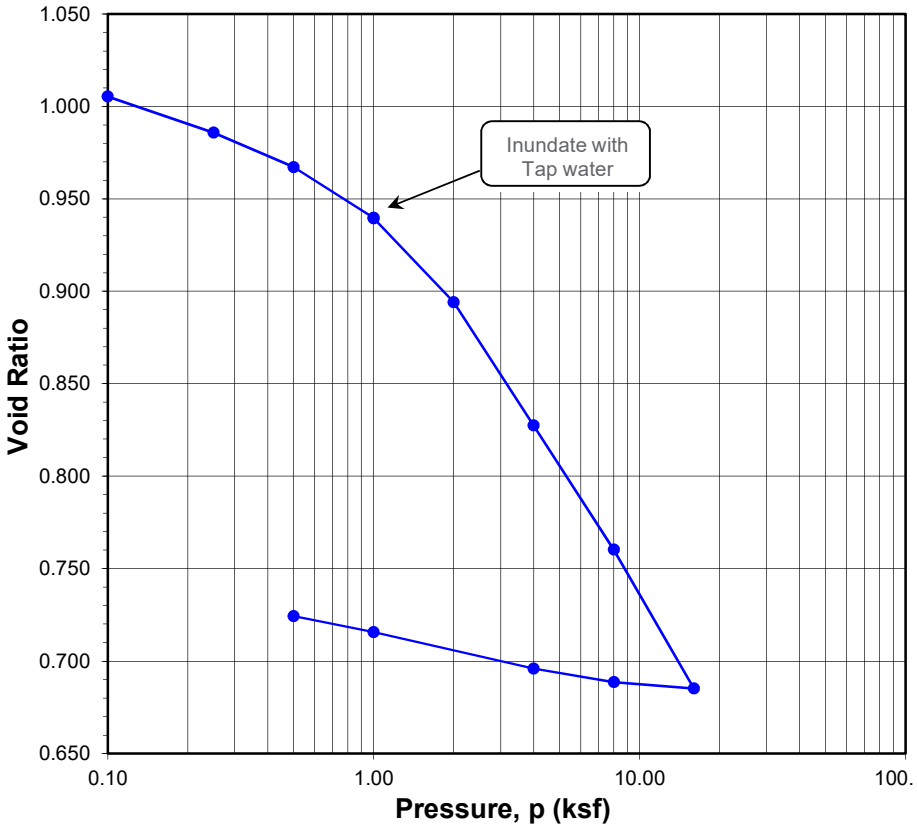
ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS

ASTM D 2435

Project Name: Los Alamitos
Project No.: 21198-01
Boring No.: HS-3
Sample No.: R-3
Soil Identification: Olive brown lean clay (CL)

Tested By: G. Bathala Date: 11/30/21
Checked By: J. Ward Date: 12/16/21
Depth (ft.): 7.5
Sample Type: Ring

Sample Diameter (in.)	2.415
Sample Thickness (in.)	1.000
Wt. of Sample + Ring (g)	190.90
Weight of Ring (g)	45.41
Height after consol. (in.)	0.8542
Before Test	
Wt.Wet Sample+Cont. (g)	264.56
Wt.of Dry Sample+Cont. (g)	210.43
Weight of Container (g)	57.44
Initial Moisture Content (%)	35.4
Initial Dry Density (pcf)	89.4
Initial Saturation (%)	100
Initial Vertical Reading (in.)	0.3339
After Test	
Wt.of Wet Sample+Cont. (g)	234.04
Wt. of Dry Sample+Cont. (g)	209.24
Weight of Container (g)	53.68
Final Moisture Content (%)	22.51
Final Dry Density (pcf)	107.2
Final Saturation (%)	95
Final Vertical Reading (in.)	0.1866
Specific Gravity (assumed)	2.89
Water Density (pcf)	62.43

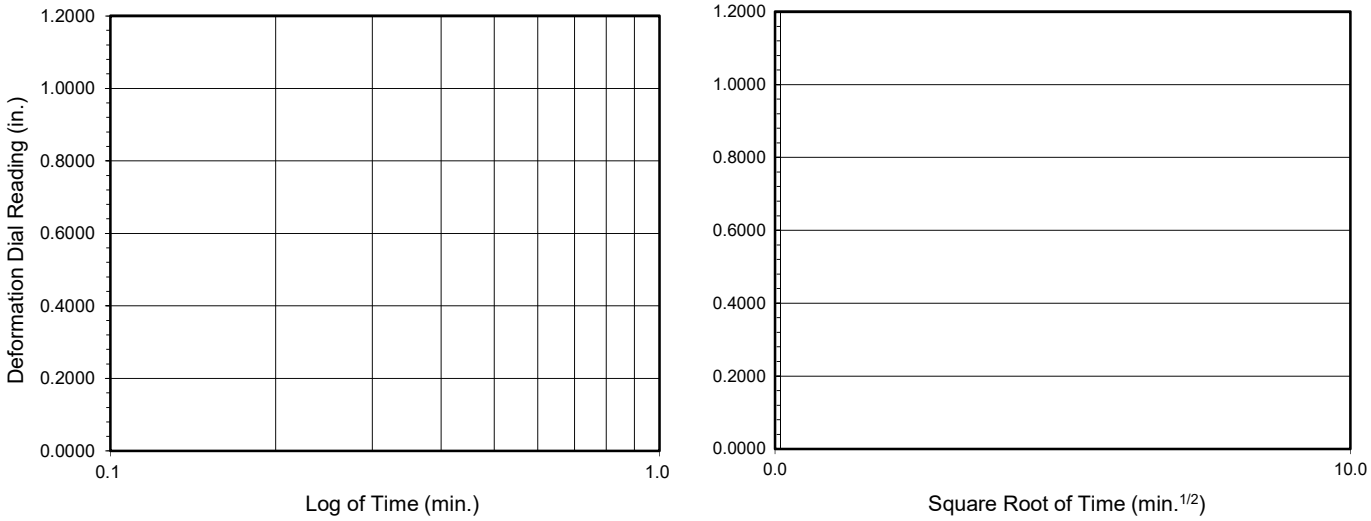


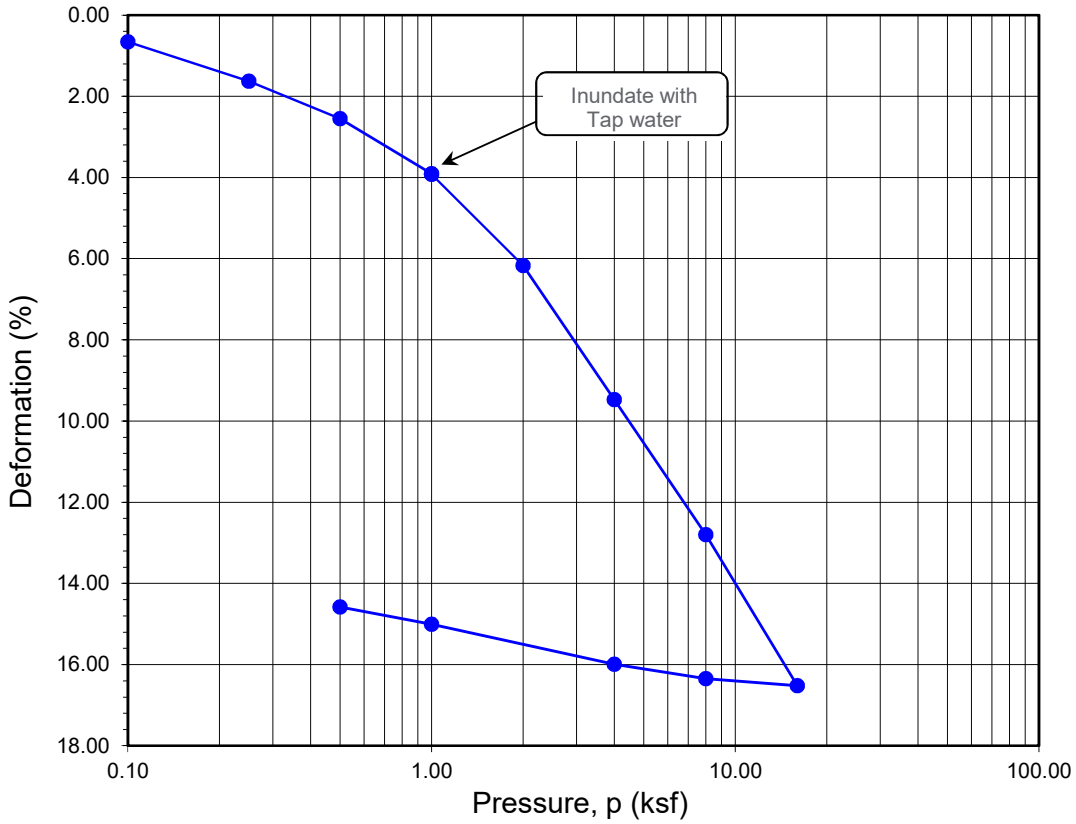
Pressure (p) (ksf)	Final Reading (in.)	Apparent Thickness (in.)	Load Compliance (%)	Deformation % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.10	0.3273	0.9934	0.00	0.66	1.005	0.66
0.25	0.3174	0.9835	0.02	1.65	0.986	1.63
0.50	0.3080	0.9741	0.04	2.59	0.967	2.55
1.00	0.2941	0.9602	0.07	3.98	0.940	3.91
1.00	0.2940	0.9601	0.07	3.99	0.939	3.92
2.00	0.2711	0.9372	0.11	6.28	0.894	6.17
4.00	0.2374	0.9035	0.18	9.65	0.827	9.47
8.00	0.2031	0.8692	0.28	13.08	0.760	12.80
16.00	0.1646	0.8307	0.41	16.93	0.685	16.52
8.00	0.1668	0.8329	0.36	16.71	0.689	16.35
4.00	0.1710	0.8371	0.30	16.29	0.696	15.99
1.00	0.1819	0.8480	0.19	15.20	0.716	15.01
0.50	0.1866	0.8527	0.15	14.73	0.724	14.58

Time Readings

Date	Time	Elapsed Time (min)	Square Root of Time	Dial Rdgs. (in.)

Time Readings





Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
HS-3	**R-3**	**7.5**	**35.4**	**22.5**	**89.4**	**107.2**	**1.019**	**0.724**	**100**	**95**

Soil Identification: Olive brown lean clay (CL)

ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS
ASTM D 2435

Project No.: 21198-01

Los Alamitos

12-21

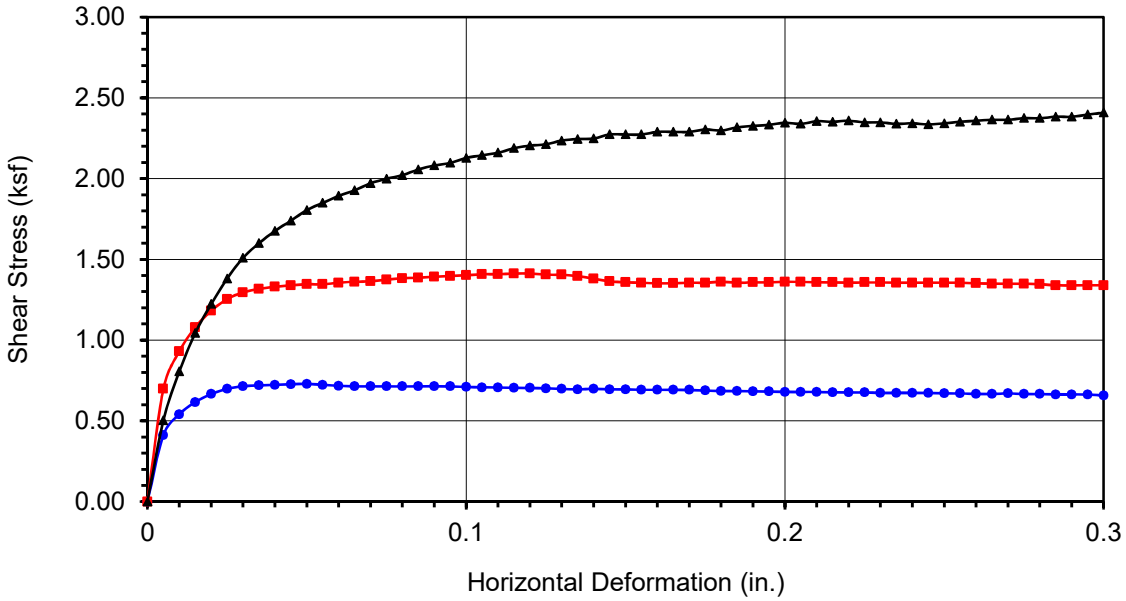
DIRECT SHEAR TEST

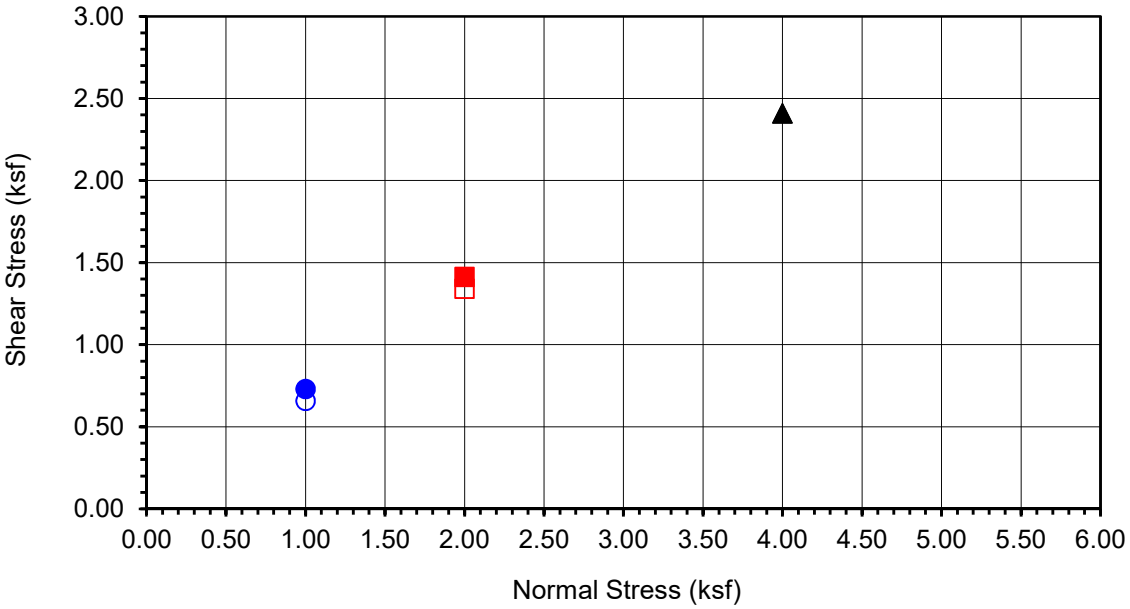
Consolidated Drained - ASTM D 3080

Project Name:	Los Alamitos	Tested By:	G. Bathala	Date:	12/07/21
Project No.:	21198-01	Checked By:	J. Ward	Date:	12/14/21
Boring No.:	HS-3	Sample Type:	Ring		
Sample No.:	B-1	Depth (ft.):	1-5		

Soil Identification: Dark olive brown clayey sand (SC)

Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	187.01	186.85	187.84
Weight of Ring(gm):	45.35	44.87	45.57
Before Shearing			
Weight of Wet Sample+Cont.(gm):	163.89	163.89	163.89
Weight of Dry Sample+Cont.(gm):	151.63	151.63	151.63
Weight of Container(gm):	57.48	57.48	57.48
Vertical Rdg.(in): Initial	0.2546	0.2461	0.0000
Vertical Rdg.(in): Final	0.2615	0.2585	-0.0239
After Shearing			
Weight of Wet Sample+Cont.(gm):	213.85	185.81	215.32
Weight of Dry Sample+Cont.(gm):	188.00	160.70	191.32
Weight of Container(gm):	64.02	36.53	68.15
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43





Boring No.	**HS-3**
Sample No.	**B-1**
Depth (ft)	**1-5**
Sample Type:	
Ring	
Soil Identification:	
Dark olive brown clayey sand (SC)	

Normal Stress (kip/ft²)	1.000	2.000	4.000
Peak Shear Stress (kip/ft²)	● 0.729	■ 1.412	▲ 2.408
Shear Stress @ End of Test (ksf)	○ 0.657	□ 1.339	△ 2.408
Deformation Rate (in./min.)	0.0017	0.0017	0.0017
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	13.02	13.02	13.02
Dry Density (pcf)	104.2	104.5	104.7
Saturation (%)	57.0	57.3	57.6
Soil Height Before Shearing (in.)	0.9931	0.9876	0.9761
Final Moisture Content (%)	20.9	20.2	19.5

DIRECT SHEAR TEST RESULTS

Consolidated Drained - ASTM D 3080

Project No.: 21198-01

Los Alamitos

12-21

Appendix D
Infiltration Test Data

Infiltration Test Data Sheet

LGC Geotechnical, Inc

131 Calle Iglesia Suite 200, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: MWIG - Los Alamitos
Project Number: 21198-01
Date: 11/12/2021
Boring Number: I-1

Test hole dimensions (if circular)	
Boring Depth (feet)*:	5
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

*Pre-Test (Sandy Soil Criteria)**

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Greater Than or Equal to 0.5 feet (yes/no)
1	8:47	9:12	25.0	2.52	2.54	0.02	No
2	9:12	9:37	25.0	2.54	2.56	0.02	No

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight, and then obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25 inches

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Calculated Infiltration Rate(in/hr)
1	9:37	10:07	30.0	2.56	2.57	0.01	0.02
2	10:07	10:37	30.0	2.57	2.58	0.01	0.02
3	10:37	11:07	30.0	2.58	2.59	0.01	0.02
4	11:07	11:37	30.0	2.59	2.60	0.01	0.02
5	11:37	12:07	30.0	2.60	2.61	0.01	0.02
6	12:07	12:37	30.0	2.61	2.62	0.01	0.02
7	12:37	13:07	30.0	2.62	2.63	0.01	0.02
8	13:07	13:37	30.0	2.63	2.64	0.01	0.02
9	13:37	14:07	30.0	2.64	2.66	0.02	0.03
10	14:07	14:37	30.0	2.66	2.67	0.01	0.02
11	14:37	15:07	30.0	2.67	2.68	0.01	0.02
12	15:07	15:37	30.0	2.68	2.70	0.02	0.03
						Calculated Infiltration Rate (No factors of safety)	**0.03**
						Factor of Safety	
						Calculated Infiltration Rate (With Factor of Safety)	

Sketch:

Notes:

Based on Guidelines from: Orange County 12/20/2013
Spreadsheet Revised on: 10/26/2016

Infiltration Test Data Sheet

LGC Geotechnical, Inc
131 Calle Iglesia Suite 200, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: MWIG - Los Alamitos
Project Number: 21198-01
Date: 11/12/2021
Boring Number: I-2

Test hole dimensions (if circular)	
Boring Depth (feet)*:	5
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

*Pre-Test (Sandy Soil Criteria)**

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Greater Than or Equal to 0.5 feet (yes/no)
1	8:54	9:19	25.0	2.72	2.74	0.02	No
2	9:19	9:44	25.0	2.74	2.75	0.01	No

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight, and then obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25 inches

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Calculated Infiltration Rate(in/hr)
1	9:44	10:14	30.0	2.75	2.76	0.01	0.02
2	10:14	10:44	30.0	2.76	2.77	0.01	0.02
3	10:44	11:14	30.0	2.77	2.78	0.01	0.02
4	11:14	11:44	30.0	2.78	2.80	0.02	0.03
5	11:44	12:14	30.0	2.80	2.81	0.01	0.02
6	12:14	12:44	30.0	2.81	2.82	0.01	0.02
7	12:44	13:14	30.0	2.82	2.83	0.01	0.02
8	13:14	13:44	30.0	2.83	2.85	0.02	0.03
9	13:44	14:14	30.0	2.85	2.87	0.02	0.03
10	14:14	14:44	30.0	2.87	2.88	0.01	0.02
11	14:44	15:14	30.0	2.88	2.89	0.01	0.02
12	15:14	15:44	30.0	2.89	2.91	0.02	0.04
						Calculated Infiltration Rate (No factors of safety)	**0.04**
						Factor of Safety	
						Calculated Infiltration Rate (With Factor of Safety)	

Sketch:

Notes:

Based on Guidelines from: Orange County 12/20/2013
Spreadsheet Revised on: 10/26/2016

Appendix E
General Earthwork and Grading Specifications for Rough Grading

General Earthwork and Grading Specifications for Rough Grading

1.0 General

1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ a qualified Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to confirm that the attained level of compaction is being accomplished as specified. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the project plans and specifications. The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of “equipment” of work and the estimated quantities of daily earthwork

contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the
Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate personnel will be available for observation and testing. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified. It is the contractor's sole responsibility to provide proper fill compaction.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed. The contractor is responsible for all hazardous waste relating to his work. The Geotechnical Consultant does not have expertise in this area. If hazardous waste is a concern, then the Client should acquire the services of a qualified environmental assessor.

2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be over-excavated as specified in the following section. Scarification shall continue until soils are broken down and free of oversize material and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Over-excavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of the geotechnical consultant. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.5 Compaction Testing

Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than
5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 The Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over

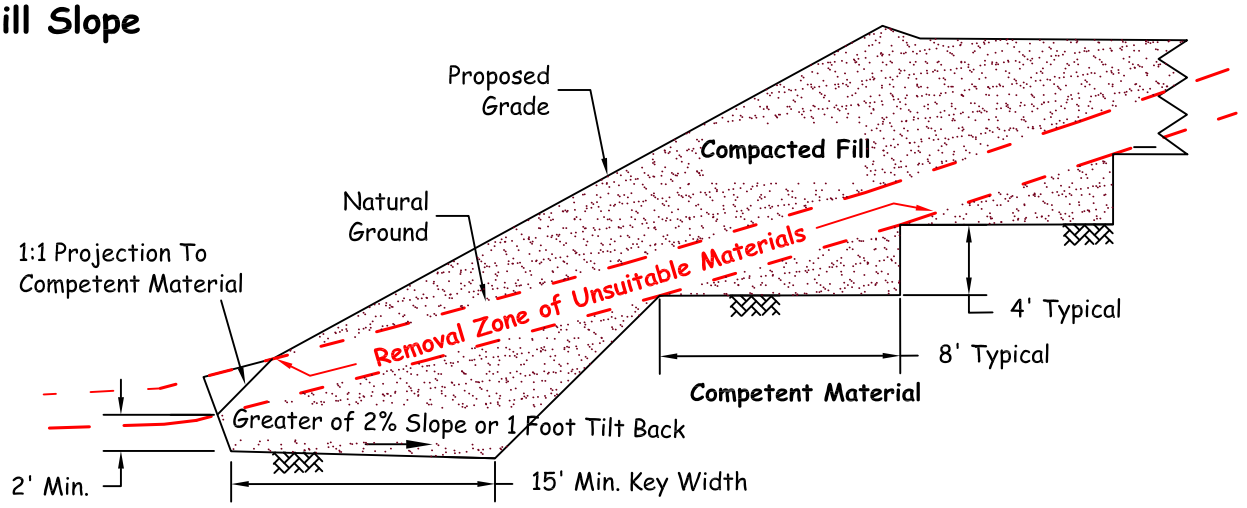
the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

7.3 The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

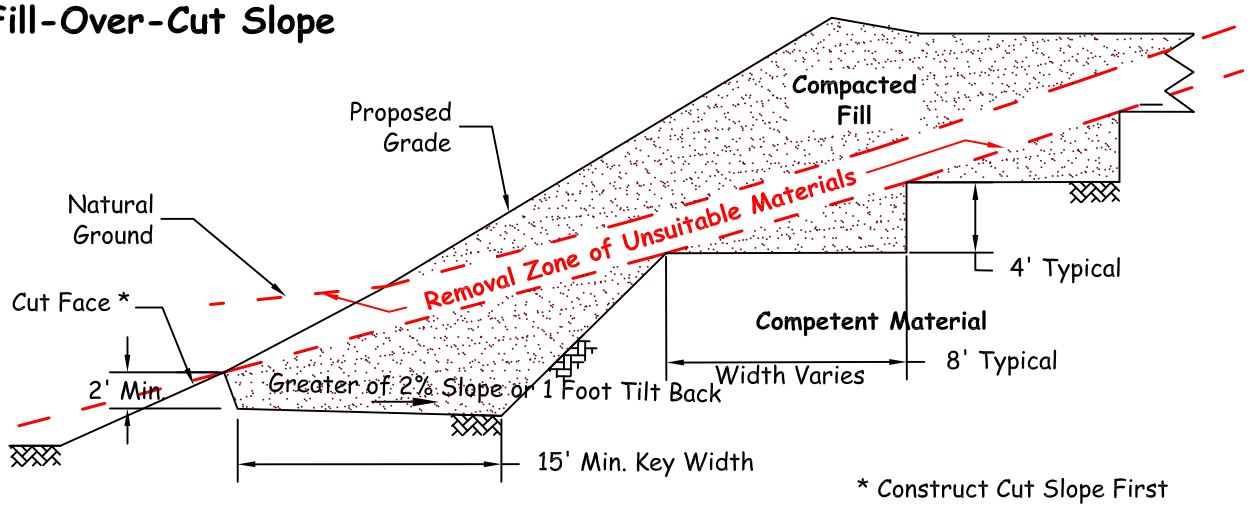
7.4 The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

Fill Slope

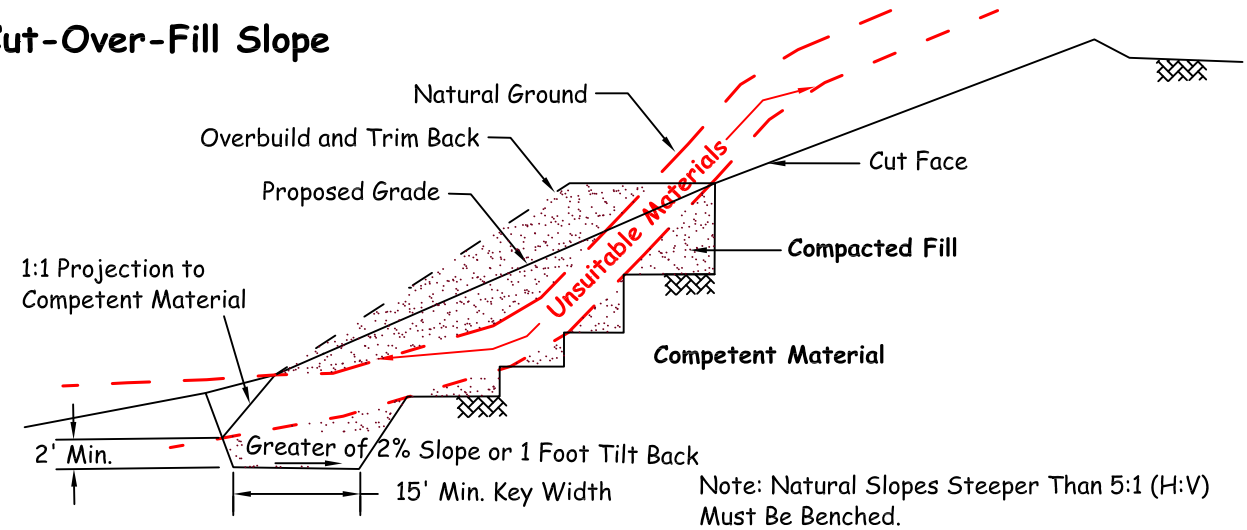


Fill-Over-Cut Slope



* Construct Cut Slope First

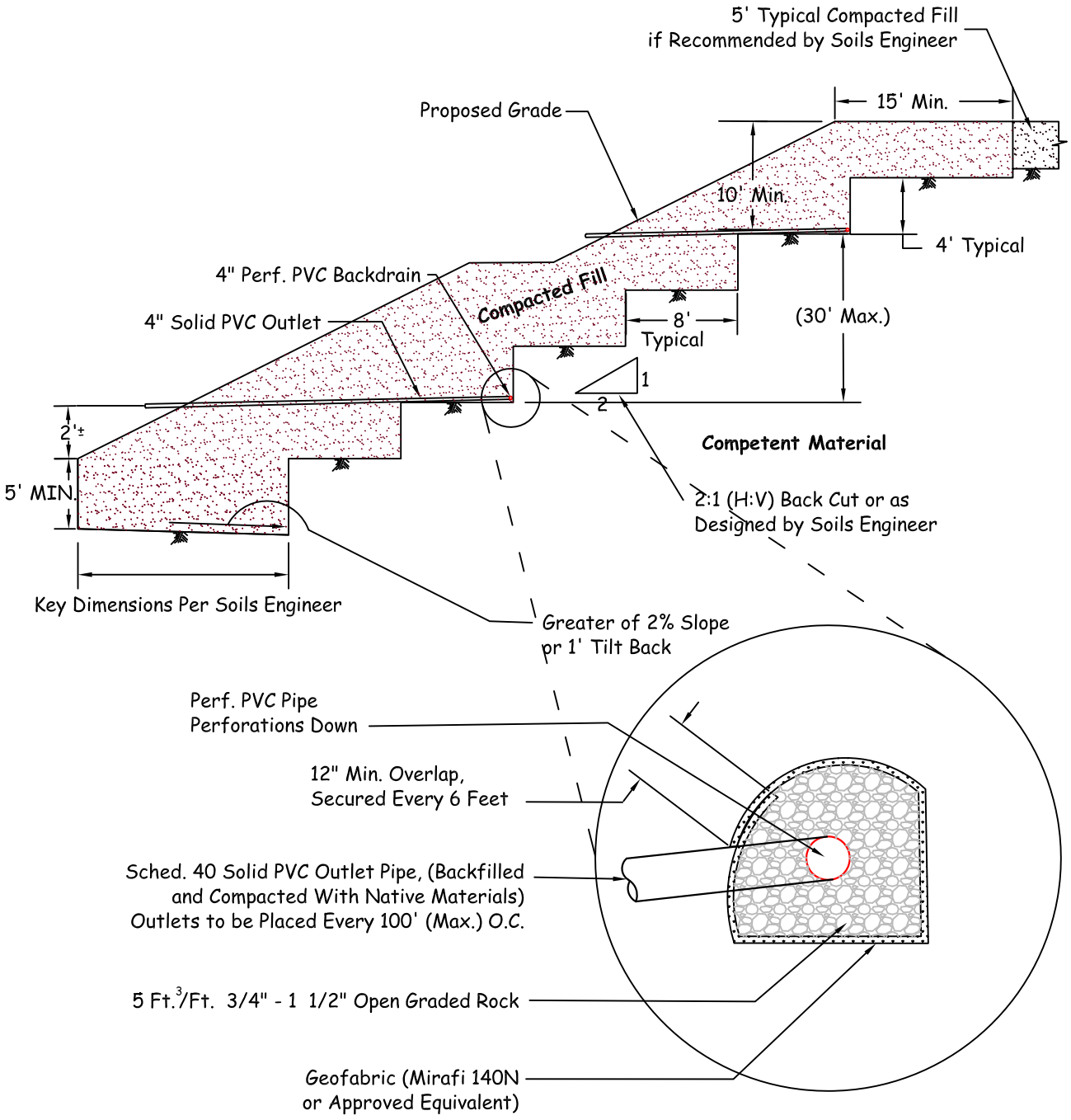
Cut-Over-Fill Slope



Note: Natural Slopes Steeper Than 5:1 (H:V) Must Be Benched.

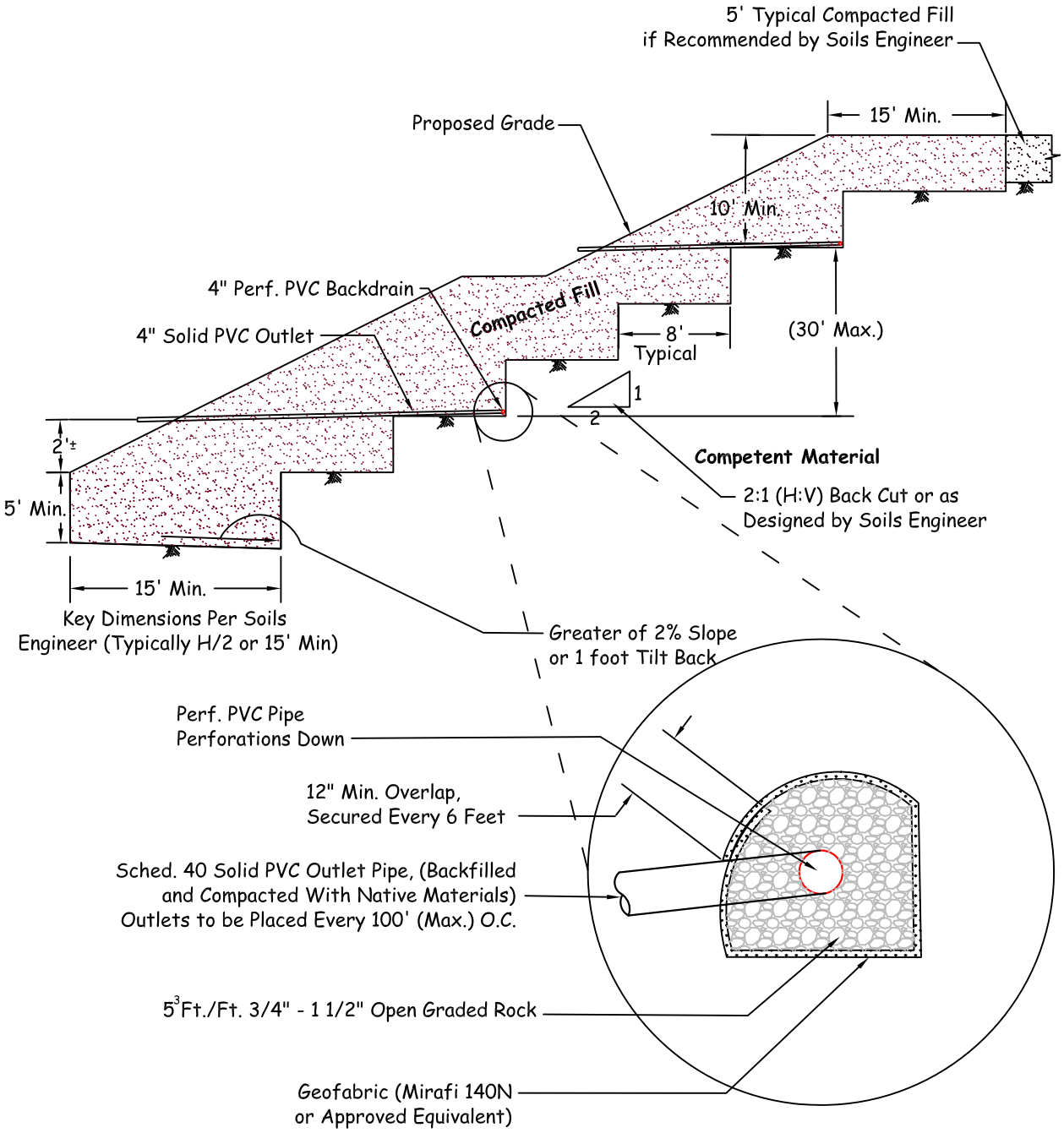
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KEYING AND BENCHING



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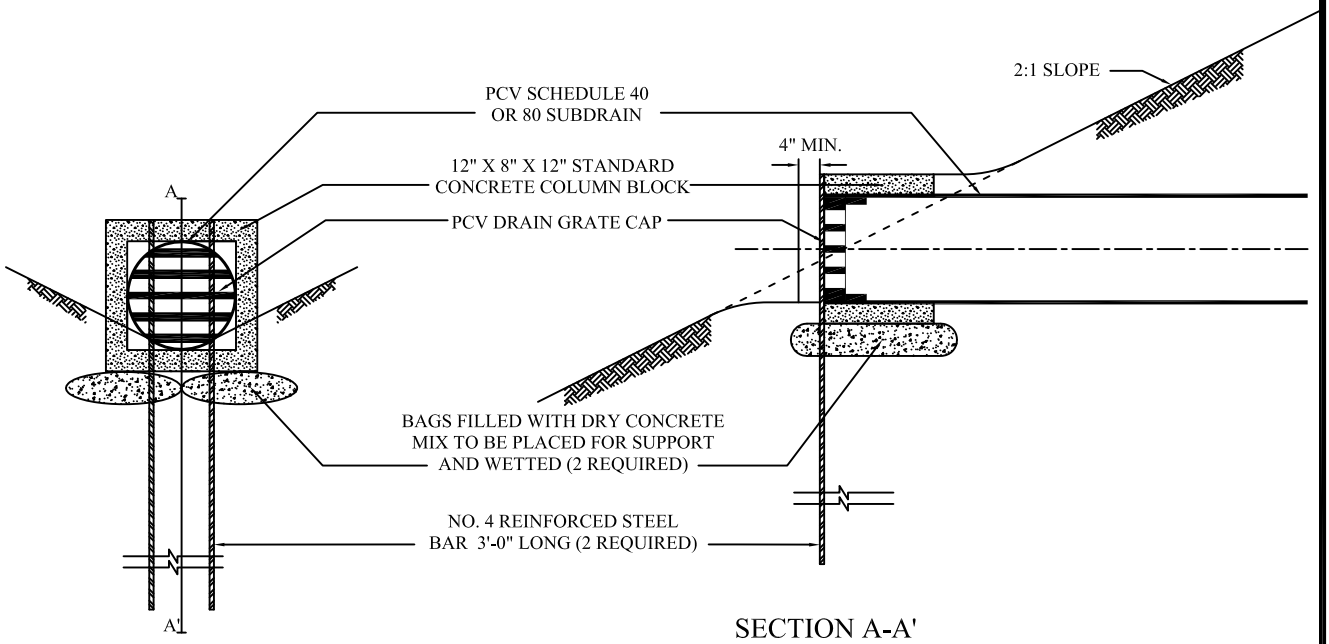
TYPICAL BUTTRESS DETAIL



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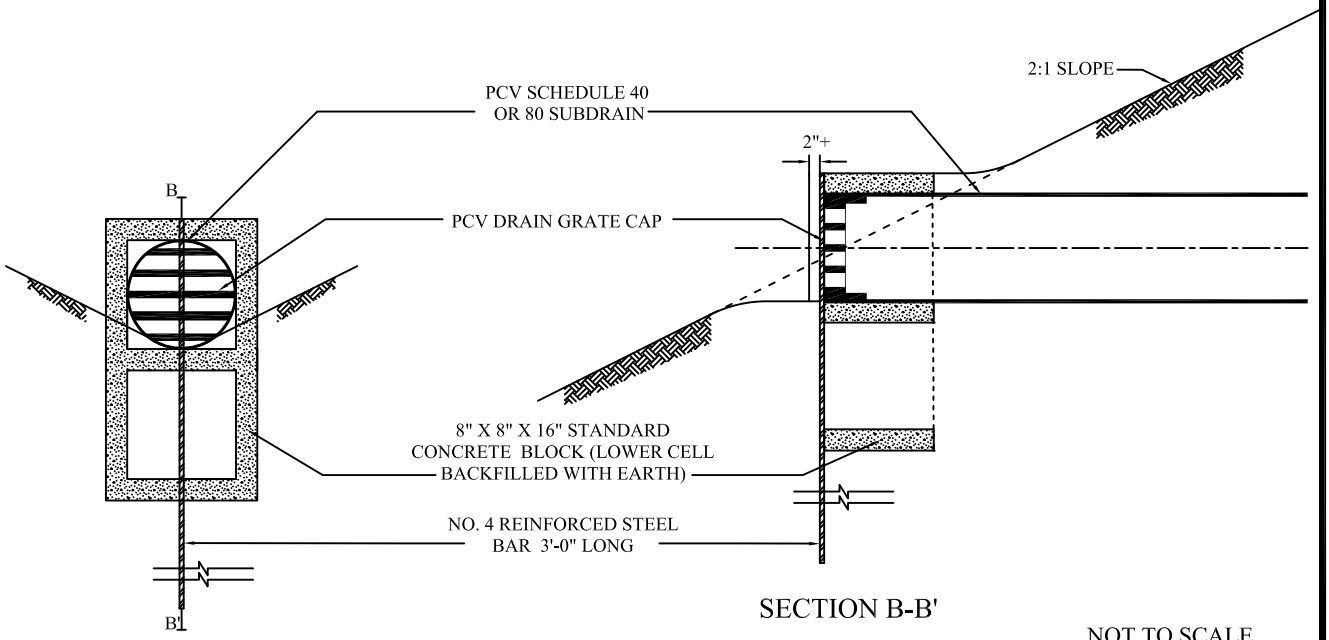
TYPICAL STABILIZATION FILL DETAIL

SUBDRAIN OUTLET MARKER -6" & 8" PIPE



SECTION A-A'

SUBDRAIN OUTLET MARKER -4" PIPE



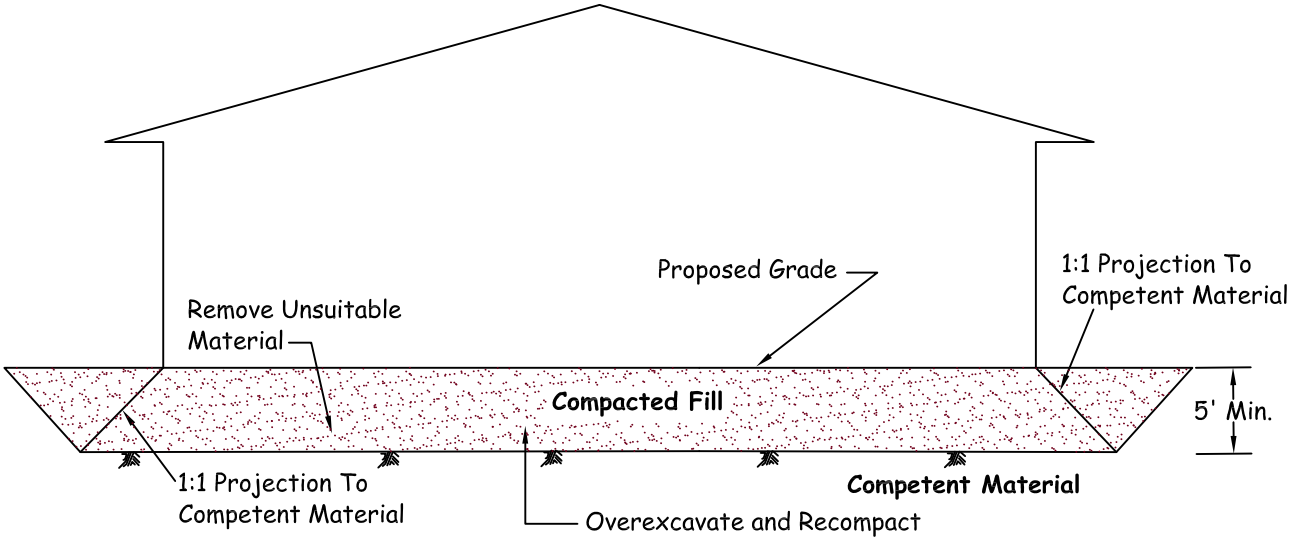
SECTION B-B'

NOT TO SCALE

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SUBDRAIN OUTLET MARKER DETAIL

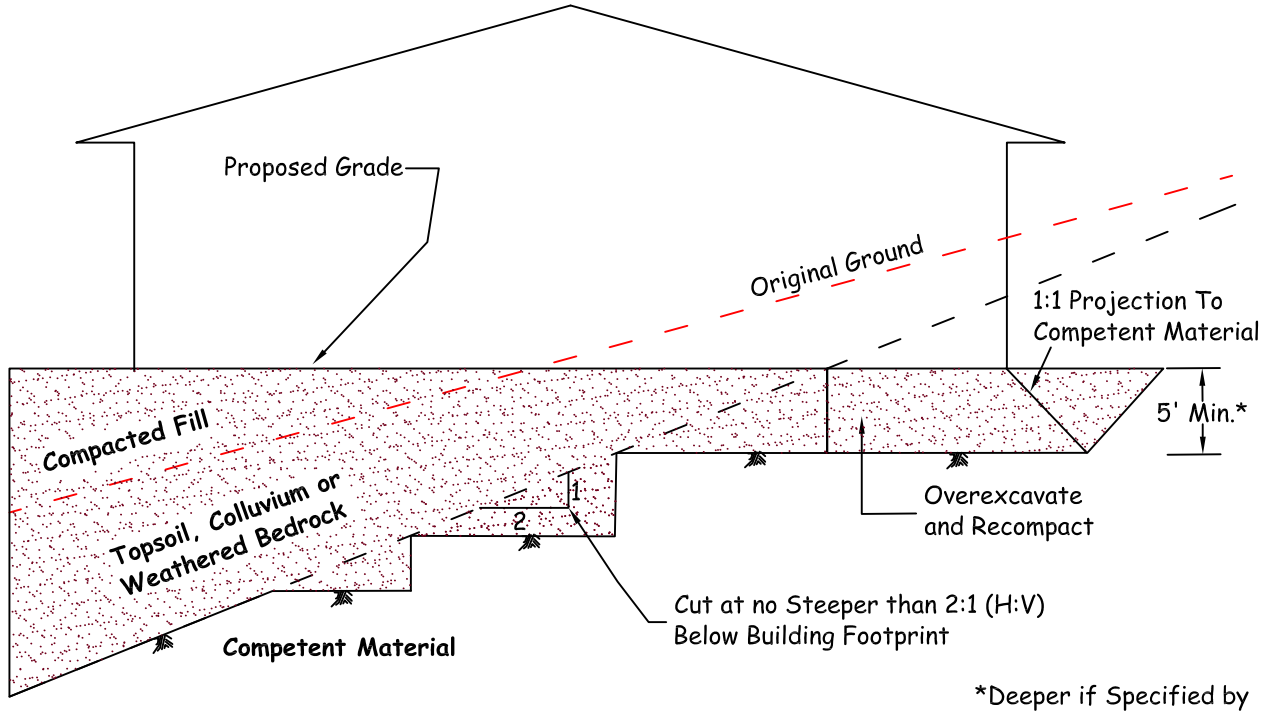
Cut Lot
(Exposing Unsuitable Soils at Design Grade)



Note 1: Removal Bottom Should be Graded With Minimum 2% Fall Towards Street or Other Suitable Area (as Determined by Soils Engineer) to Avoid Ponding Below Building

Note 2: Where Design Cut Lots are Excavated Entirely Into Competent Material, Overexcavation May Still be Required for Hard-Rock Conditions or for Materials With Variable Expansion Characteristics.

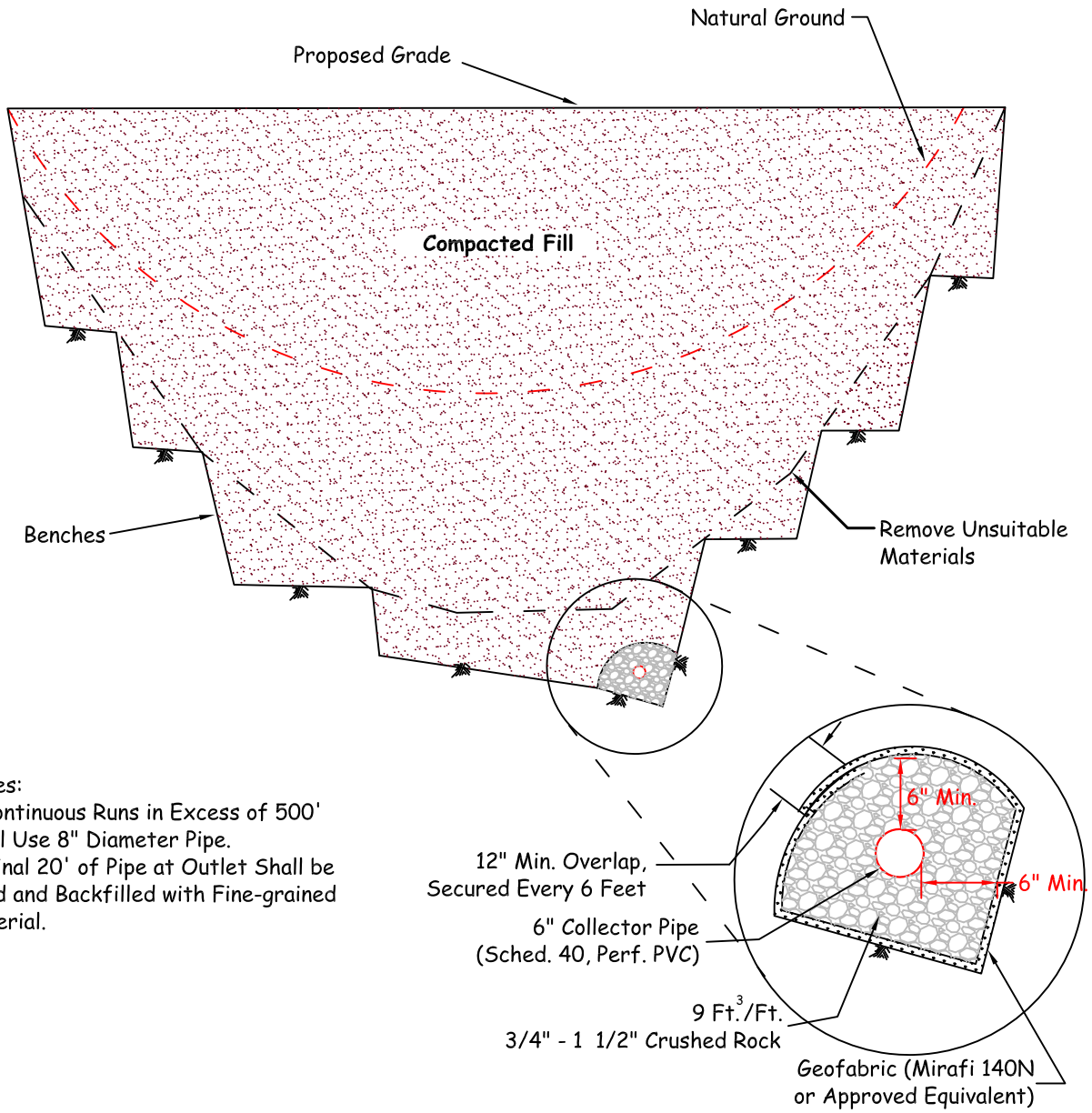
Cut/Fill Transition Lot



*Deeper if Specified by Soils Engineer

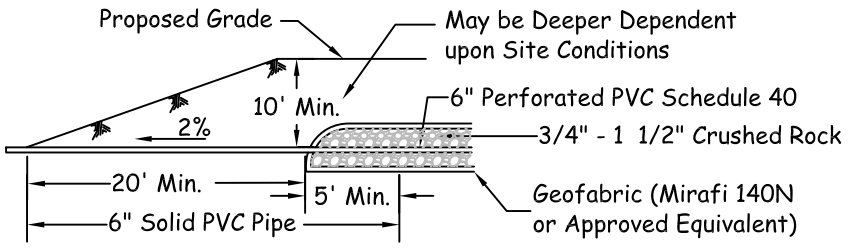
LGC Geotechnical, Inc.

CUT AND TRANSITION LOT OVEREXCAVATION DETAIL



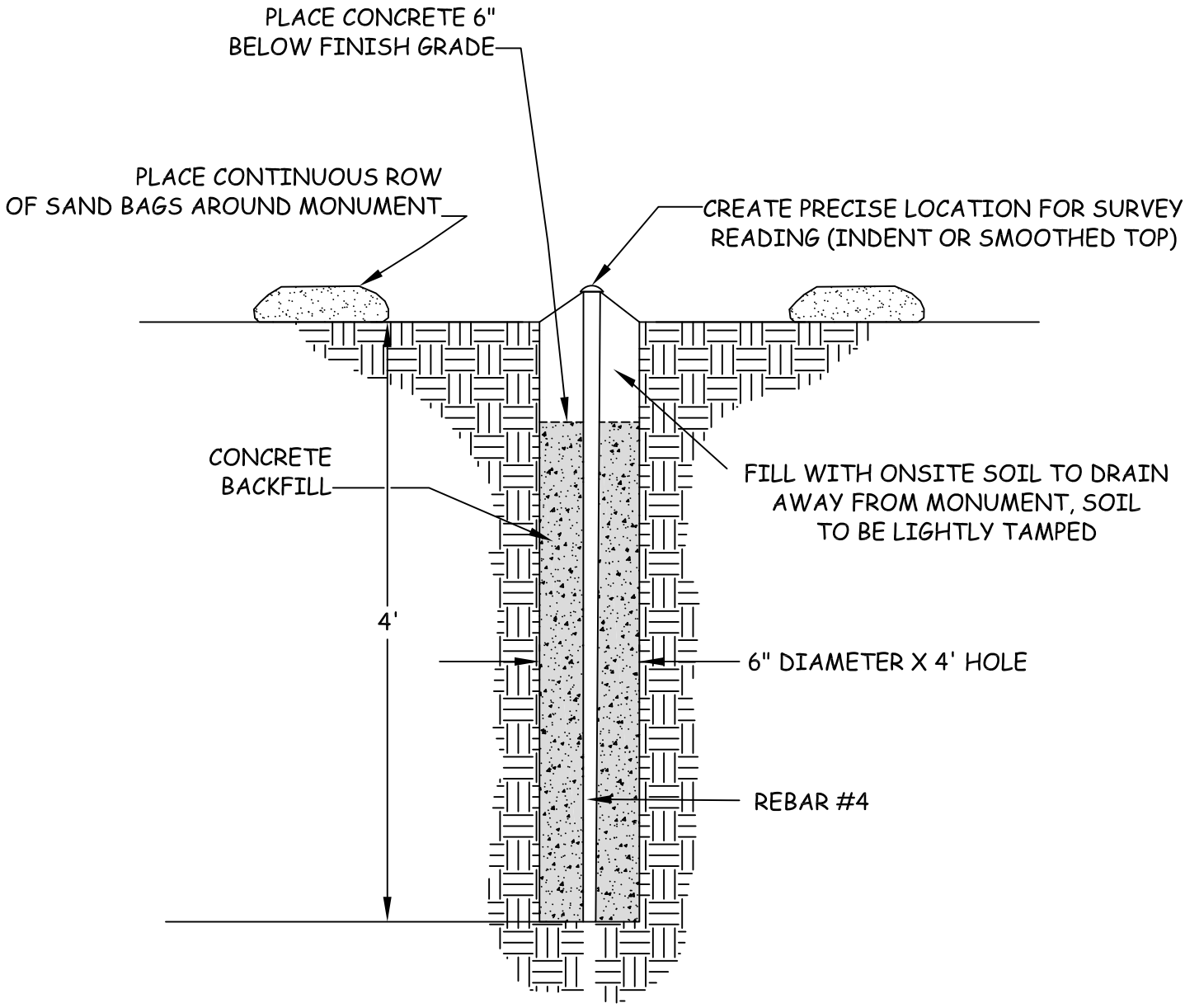
Notes:
1) Continuous Runs in Excess of 500' Shall Use 8" Diameter Pipe.
2) Final 20' of Pipe at Outlet Shall be Solid and Backfilled with Fine-grained Material.

Proposed Outlet Detail



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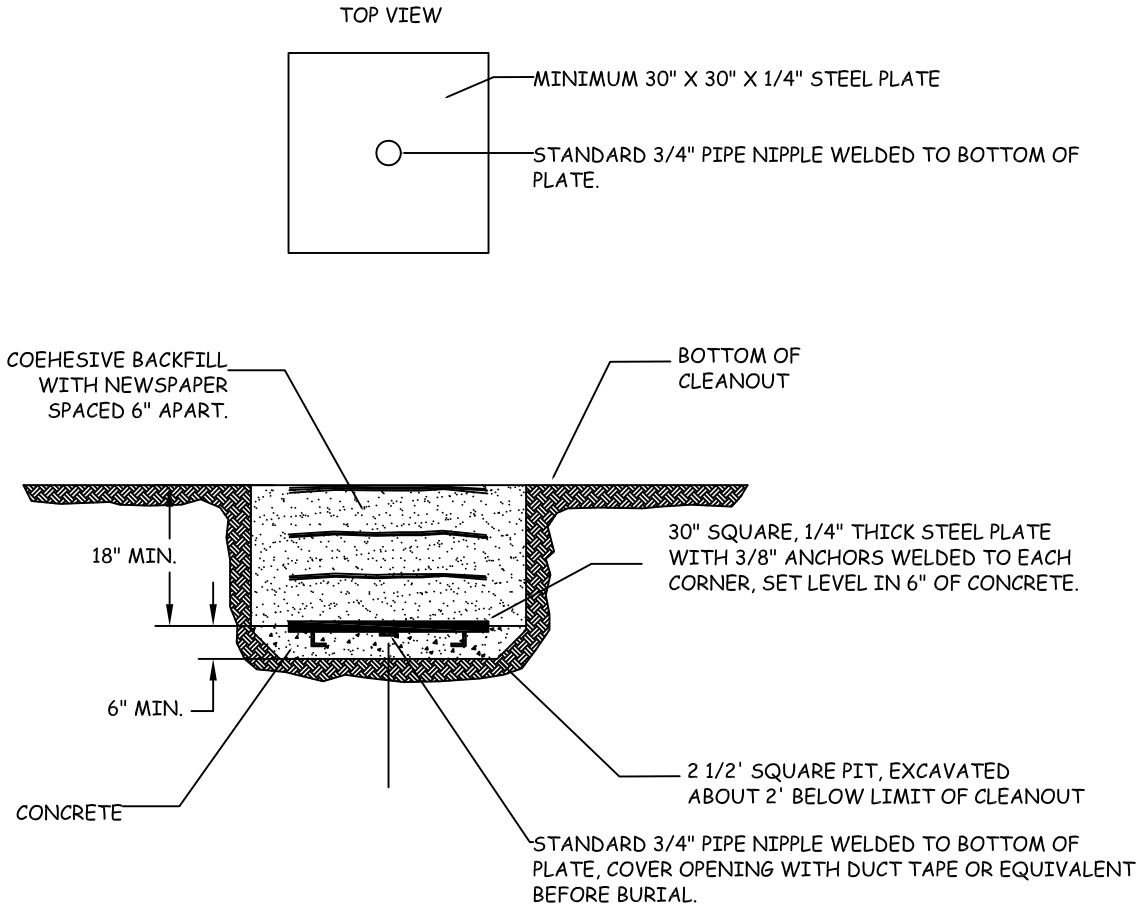
CANYON SUBDRAINS



NO CONSTRUCTION EQUIPMENT WITHIN 25 FEET
OF ANY INSTALLED SETTLEMENT MONUMENTS

LGC Geotechnical, Inc.

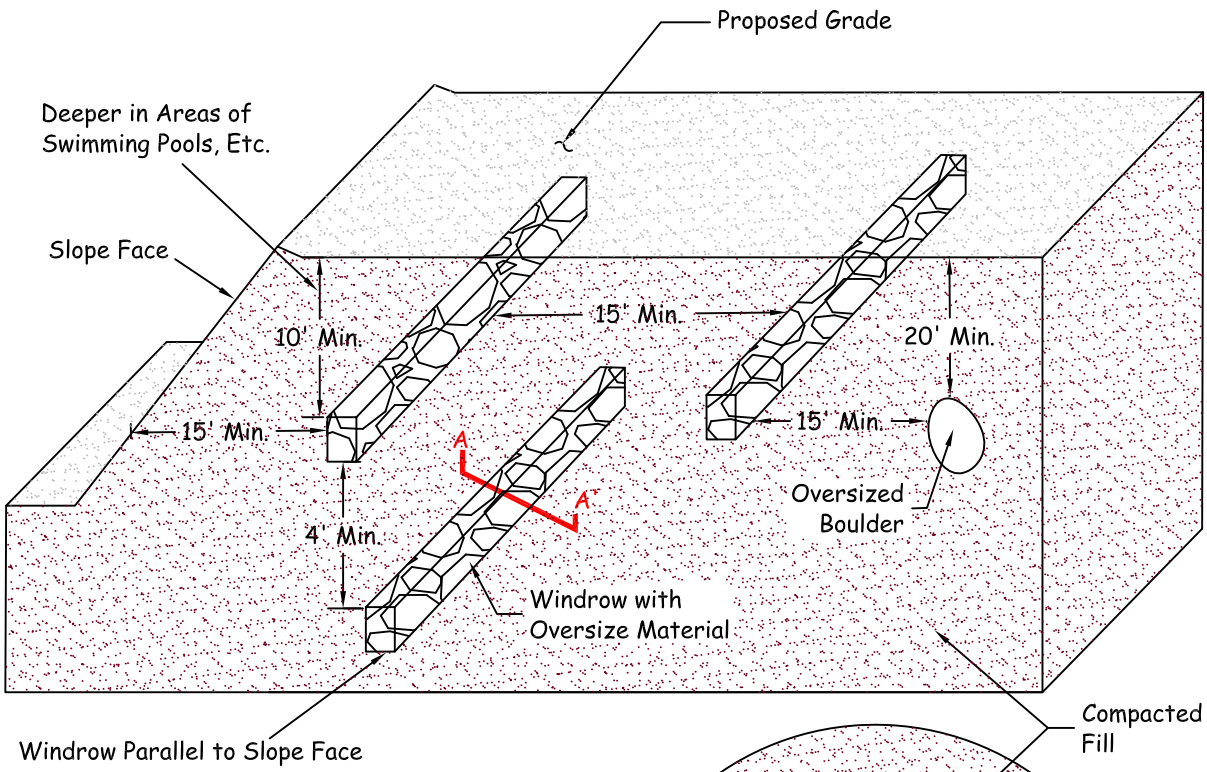
TYPICAL SURFACE SETTLEMENT MONUMENT

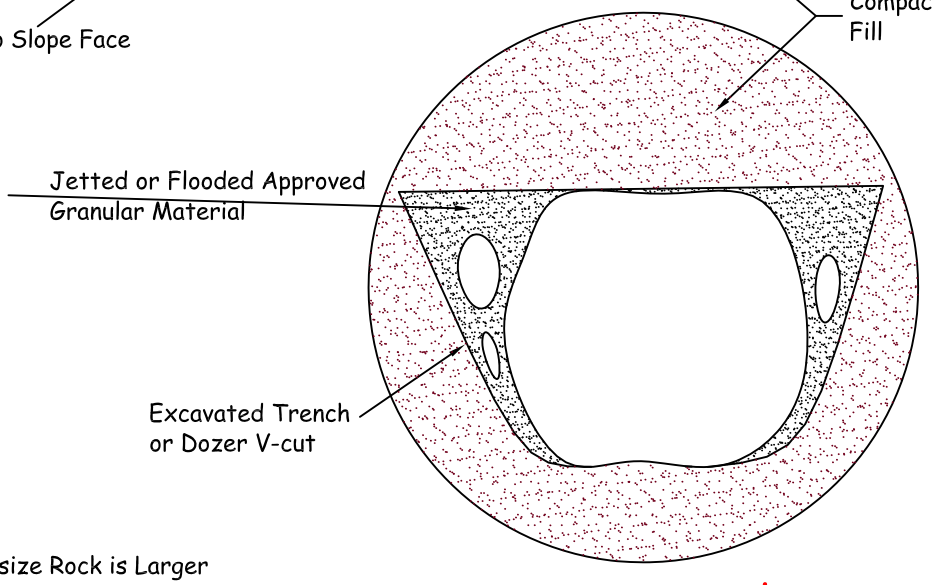


1. SURVEY FOR HORIZONTAL AND VERTICAL LOCATION TO NEAREST .01 INCH PRIOR TO BACKFILL USING KNOW LOCATIONS THAT WILL REMAIN INTACT DURING THE DURATION OF THE MONITORING PROGRAM. KNOW POINTS EXPLICITELY NOT ALLOWED ARE THOSE LOCATED ON FILL OR THAT WILL BE DESTROYED DURING GRADING.
2. IN THE EVENT OF DAMAGE TO SETTLEMENT PLATE DURING GRADING, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE GEOTECHNICAL ENGINEER AND SHALL BE RESPONSIBLE FOR RESTORING THE SETTLEMENT PLATES TO WORKING ORDER.
3. DRILL TO RECOVER AND ATTACH RISER PIPE.

LGC Geotechnical, Inc.

TYPICAL SETTLEMENT PLATE AND RISER





Note: Oversize Rock is Larger
than 8" in Maximum Dimension.

Section A-A'

LGC Geotechnical, Inc.

OVERSIZE ROCK DISPOSAL DETAIL

Attachment G

Notice of Responsibility of Transfer Form

Water Quality Management Plan
Notice of Transfer of Responsibility

Submission of this Notice of Transfer of Responsibility constitutes notice to the City of Los Alamitos that responsibility for the Water Quality Management Plan ("WQMP") for the subject property identified below, and implementation of that plan, is being transferred from the Previous Owner (and his/ her agent) of the site (or a portion thereof) to the New Owner, as further described below.

I. Previous Owner/ Previous Responsibility Party Information

Company/ Individual Name		Contact Person	
Street Address		Title	
City	State	Zip	Phone

II. Information about Site Transferred

Name of Project			
Title of WQMP Applicable to Site:			
Street Address of Site			
Tract Number(s) for Site		Lot Numbers	
Date WQMP Prepared (or Revised)			

III. New Owner/ New Responsible Party Information

Company/ Individual Name		Contact Person	
Street Address		Title	
City	State	Zip	Phone

IV. Ownership Transfer Information

General Description of Site Transferred to New Owner	General Description of Portion of Project/ Parcel Subject to WQMP Retained by Owner (if any)
Lot/ Tract Number(s) of Site Transferred to New Owner	
Remaining Lot/ Tract Number(s) to WQMP still held by Owner (if any)	
Date of Ownership Transfer	

Note: When the Previous Owner is transferring a Site that is a portion of a larger project/ parcel addressed by the WQMP, as opposed to the entire project/ parcel addressed by the WQMP, the General Description of the Site transferred and the remainder of the project/ parcel no transferred shall be set forth as maps attached to this notice. These maps shall show those portions of the project/ parcel addressed by the WQMP that are transferred to the New Owner (the Transferred Site), those portions retained by the Previous Owner, and those portions previously transferred by the Previous Owner. Those portions retained by the Previous Owner shall be labeled "Previous Owner," and those portions previously transferred by the Previous Owner shall be labeled as "Previously Transferred."

V. Purpose of Notice of Transfer

The purposes of this Notice of Transfer of Responsibility are: 1) to track transfer of responsibility for implementation and amendment of the WQMP when property to which the WQMP is transferred from the Previous Owner to the New Owner, and 2) to facilitate notification to a transferee of property subject to a WQMP that such New Owner is now the Responsible Party of record for the WQMP for this portions of the site that it owns.

VI. Certifications

A. Previous Owner

I certify under penalty of law that I am no longer the owner of the Transferred Site as described in Section II above. I have provided the New Owner with a copy of the WQMP applicable to the Transferred Site that the New Owner is acquiring from the New Owner.

Print Name of Previous Owner Representative	Title
Signature of Previous Owner Representative	Date

B. New Owner

I certify under penalty of law that I am the owner of the Transferred Site, as described in Section II above, that I have been provided a copy of the WQMP, and that I have informed myself and understand the New Owner's responsibilities related to the WQMP, its implementation, and Best Management Practices associated with it. I understand that by signing this notice, the New Owner is accepting all ongoing responsibilities for implementation and amendment of the WQMP for the Transferred Site, which the New Owner has acquired from the Previous Owner.

Print Name of New Owner Representative	Title
Signature of New Owner Representative	Date

4665 Lampson Avenue

NOISE IMPACT ANALYSIS

CITY OF LOS ALAMITOS

PREPARED BY:

Bill Maddux
bmaddux@urbanxroads.com
(619) 788-1971

JULY 12, 2024

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
AELUP	Airport Environs Land Use Plan
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
INCE	Institute of Noise Control Engineering
Leq	Equivalent continuous (average) sound level
Lmax	Maximum level measured over the time interval
Lmin	Minimum level measured over the time interval
MM	Mitigation Measure
mph	Miles per hour
OCTA	Orange County Transportation Agency
PPV	Peak Particle Velocity
Project	4665 Lampson Avenue
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to evaluate potential noise associated with proposed development at 4665 Lampson Avenue ("Project") in the City of Los Alamitos. The Project is proposed to include the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units) and demolition of the existing 88,000 square foot commercial office building. This study has been prepared to evaluate the Project's potential noise impacts in light of the thresholds of significance identified in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

ON-SITE TRAFFIC NOISE ANALYSIS

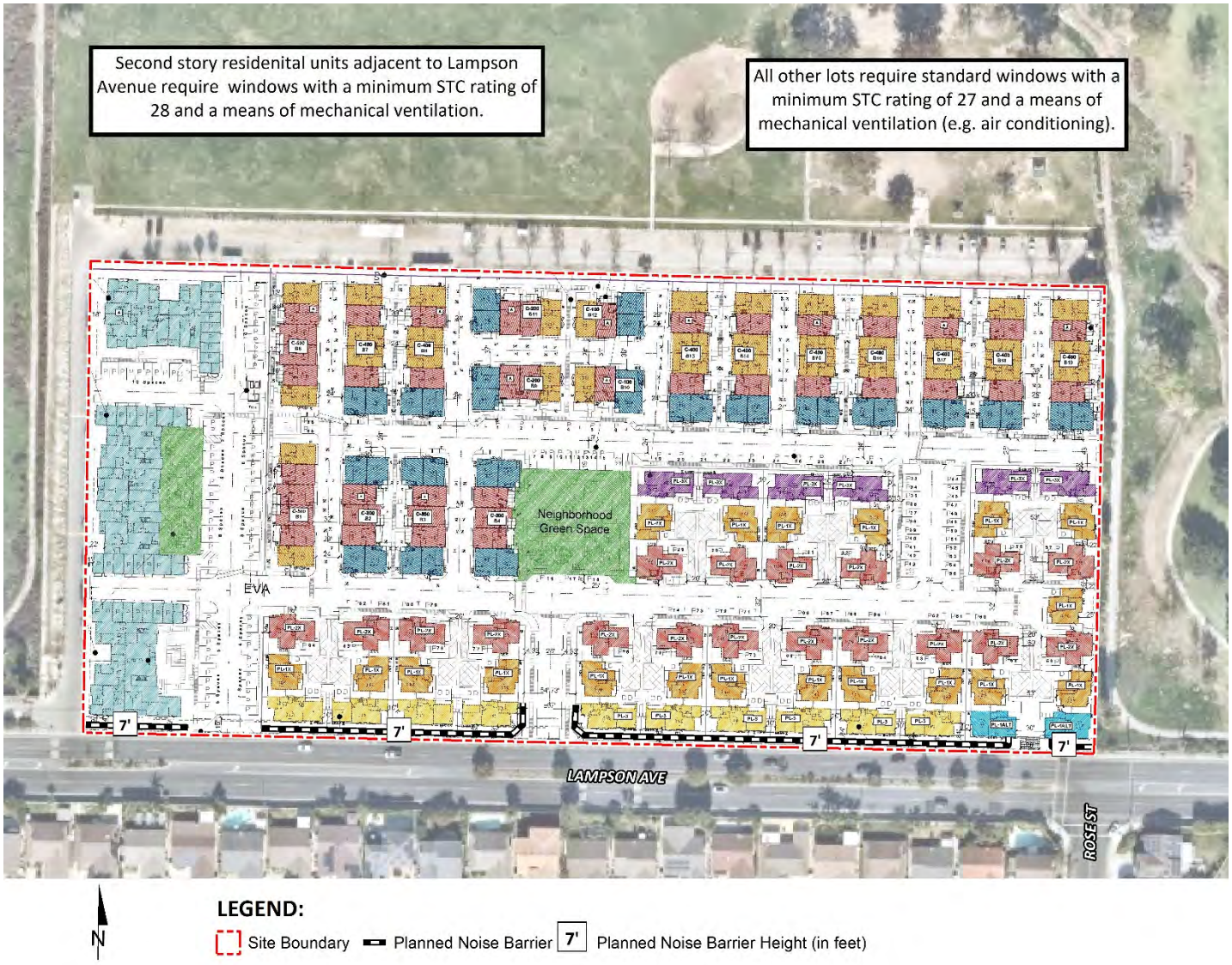
An on-site exterior and interior noise impact analysis has been completed to determine the traffic-related noise levels and to identify potential necessary abatement measures for the proposed Project. It is expected that the primary source of traffic-related noise impacts to the Project site will be from Lampson Avenue.

EXTERIOR TRAFFIC NOISE ANALYSIS

The on-site traffic noise level impacts indicate that noise levels at the Project buildings adjacent to Lampson Avenue would experience exterior noise levels ranging from 64.6 to 72.8 dBA CNEL. Therefore, to reduce noise levels to 65 dBA CNEL or less in compliance with the City of Los Alamitos exterior noise level noise and land use compatibility policies, the Project would include Noise 1 in the Project design and construct a seven (7) foot-high noise barrier along Lampson Avenue, shown in Exhibit ES-A. With the barrier, exterior noise levels will range from 58.3 to 63.8 dBA CNEL at backyards of residential units and common outdoor activity areas of multi-family residential units. This noise analysis shows that with the proposed noise barrier the Project will satisfy the City of Los Alamitos 65 dBA CNEL normally acceptable exterior noise level standards for residential land uses. The identified noise barrier heights represent the minimum wall and/or berm combination height required to satisfy the City of Los Alamitos exterior noise level standards.

Noise 1 The Project will construct a 7-foot-high noise barrier along Lampson Avenue, as shown in Exhibit ES-A. The noise control barrier will be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. (2) The noise barrier shall be constructed using the following materials:

EXHIBIT ES-A: NOISE CONTROL MEASURE SUMMARY



- masonry block;
- stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of sufficient weight per square foot;
- glass (1/4-inch-thick),
- material with sufficient weight per square foot capable of providing a minimum transmission loss of 20 dBA;
- earthen berm; or,
- any combination of these construction materials.

INTERIOR TRAFFIC NOISE ABATEMENT

Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (3) (4) The Project will provide mechanical ventilation (e.g. air conditioning) for all units which would allow a windows-closed condition. Based on predicted exterior noise levels, to satisfy the State of California and the City of Los Alamitos 45 dBA CNEL interior noise level criteria, first-floor units are being designed to meet a Noise Reduction (NR) of 20.3 dBA at first floors and 26.3 dBA at second floors for units adjacent to Lampson Avenue. Therefore, the Project will provide second floor units with windows that have an STC rating of 29. The Project includes the following Project design feature:

Noise: 2 To comply with the State of California and City of Los Alamitos 45 dBA CNEL interior noise standards for residential land use the Project will provide the following or equivalent noise abatement measures on building plans:

- Windows & Glass Doors: At a minimum the Project will provide windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 27. Additionally, all second floor facades adjacent to Lampson Avenue will be provided windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 29.
- Doors (Non-Glass): All exterior doors shall be well weather-stripped and have. Well-sealed perimeter gaps around the doors are essential to achieve the optimal STC rating. (5)
- Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.
- Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system

(e.g. fresh air supply) shall be provided which satisfies the requirements of the Uniform Building Code.

OFF-SITE TRAFFIC NOISE ANALYSIS

Traffic generated by the operation of the proposed Project will influence the traffic noise levels in surrounding off-site areas. To quantify the traffic noise increases on the surrounding off-site areas, the changes in traffic noise levels on sixteen roadway segments surrounding the Project site were calculated based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in *4665 Lampson Avenue Traffic Impact Analysis* prepared by Urban Crossroads, Inc. (6) To assess the off-site noise level impacts associated with the proposed Project, noise level contour boundaries were developed for Existing 2023, Opening Year 2026 (OY 2026), and General Plan Buildout 2045(GBPO 2045) without and with Project traffic conditions. Land uses along roadway segments analyzed would experience Project related traffic noise level increases of up to 1.0 dBA CNEL. Therefore, the analysis shows that the Project-related traffic noise level increases under all scenarios would be *less than significant*.

OPERATIONAL NOISE ANALYSIS

The Project would include specific type of operational noise attributable to the Project, including roof-top and ground-mounted air conditioning units, parking lot vehicle movements, outdoor activity, and trash enclosure activities. Project operational noise levels during the daytime hours at off-site receiver locations are expected to range from 20.4 to 46.9 dBA $L_{eq.}$ Project operational noise levels during the nighttime hours at off-site receiver locations are expected to range from 16.8 to 43.7 dBA L_{eq}. Project operational noise levels will satisfy Section 17.20.050 of the City of Los Alamitos Municipal Code daytime and nighttime noise standards of 55 dBA and 50 dBA L_{eq}, respectively, at all residential receivers. Therefore, potential operational noise impacts for the residential land use are anticipated to result in *less than significant* impacts.

CONSTRUCTION NOISE ANALYSIS

Construction noise levels are expected to create temporary and intermittent high-level noise conditions at receivers surrounding the Project site when certain activities occur at the closest point to the nearby receiver locations from the edge of primary Project construction activity. Using sample reference noise levels to represent the construction activities at the Project site, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations. The results of the analysis show the highest construction noise levels at the potentially impacted receiver locations are expected to approach 63.2 dBA L_{eq}.

The Project related construction equipment noise levels are anticipated to satisfy the FTA construction noise level standards of 80 dBA L_{eq} for mobile equipment during typical Project construction activities at all receiver locations. Additionally, construction activities are planned to typically occur between 7:00 a.m. and 6:00 p.m. and would comply with the City of Los Alamitos limitation on allowable hours of construction per Section 17.20.020. Therefore, based

on the results of this analysis, all nearby sensitive receiver locations will experience *less than significant* impacts due to Project construction noise levels.

CONSTRUCTION VIBRATION ANALYSIS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). At the nearest receivers Project construction vibration velocity levels are estimated to range from less than 0.00 to 0.02 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec), the typical Project construction vibration levels will not exceed the City of Los Alamitos thresholds at properties located adjacent to the Project site. Therefore, vibration impacts due to Project construction activities would be *less than significant*.

AIRCRAFT NOISE ABATEMENT

Based on a review of noise level contours for the Joint Forces Training Base (JFTB) Los Alamitos, a portion of the proposed residential uses would be located within the conditionally consistent 60-65 dBA noise contour under projected conditions. As discussed under the on-site traffic noise traffic noise analysis, typical modern residential construction can achieve a noise level reduction of 25 dBA with windows closed. Thus, with the Project design feature Noise-1, a windows closed condition is evaluated, which indicates maximum interior noise levels would range from 35 to 40 dBA CNEL from aircraft noise exposure. As discussed, in the following analysis, exposure of exterior use areas to noise levels in excess of 70 dBA CNEL would be considered significant, and exposure of residential land uses to noise levels in excess of 65 dBA CNEL would be significant unless noise levels in interior habitable rooms are reduced to 45 dBA CNEL. Therefore, the Project would not expose people residing or working in the project area to excessive interior noise levels from airport or aircraft operations, and impacts would be *less than significant*.

SUMMARY OF SIGNIFICANCE FINDINGS

The results of 4665 Lampson Avenue Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (7). Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA before and after any required mitigation measures.

TABLE ES-1: SUMMARY OF SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings		
		Unmitigated	Mitigated	Mitigated Measure
On-Site Traffic Noise	7	*Less Than Significant*[1]	-	-
Off-Site Traffic Noise	8	*Less Than Significant*	-	-
Operational Noise	10	*Less Than Significant*	-	-
Construction Noise	11	*Less Than Significant*	-	-
Construction Vibration		*Less Than Significant*	-	-
On-Site Aircraft Noise	12	*Less Than Significant*	-	-

[1] Less than significant with Project Design Features (Noise -1 and Noise -2)

1 INTRODUCTION

This noise analysis has been completed to evaluate the noise impacts associated with the development of the proposed 4665 Lampson Avenue project ("Project"). This noise study describes the Project, provides information regarding noise and vibration fundamentals, outlines the local regulatory setting, provides the study methods and procedures for performing noise analysis, evaluates potential noise impacts from the project, and identifies mitigation measures to reduce impacts, as necessary.

1.1 SITE LOCATION

The proposed Project is located at 4665 Lampson Avenue in the City of Los Alamitos. The Project's location in relation to the surrounding area is shown on Exhibit 1-A. The surrounding land use designations are Residential to the south, JFTB Los Alamitos to the north, the Navy Golf Course to the east, and Arbor Park (Community Facilities) to the west. Interstate 405 (I-405) is located approximately 0.48 miles south of the Project site.

1.2 PROJECT DESCRIPTION

The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). A preliminary site plan for the proposed Project is shown on Exhibit 1-B. The site is currently occupied by a two-story, 88,000 square foot commercial office building and parking lot. Access to the Project site will be accommodated to Lampson Avenue via two proposed driveways. The Project is anticipated to generate an increase of 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147 PM peak hour trips. The Project is anticipated to have an opening year of 2026.

EXHIBIT 1-A: LOCATION MAP

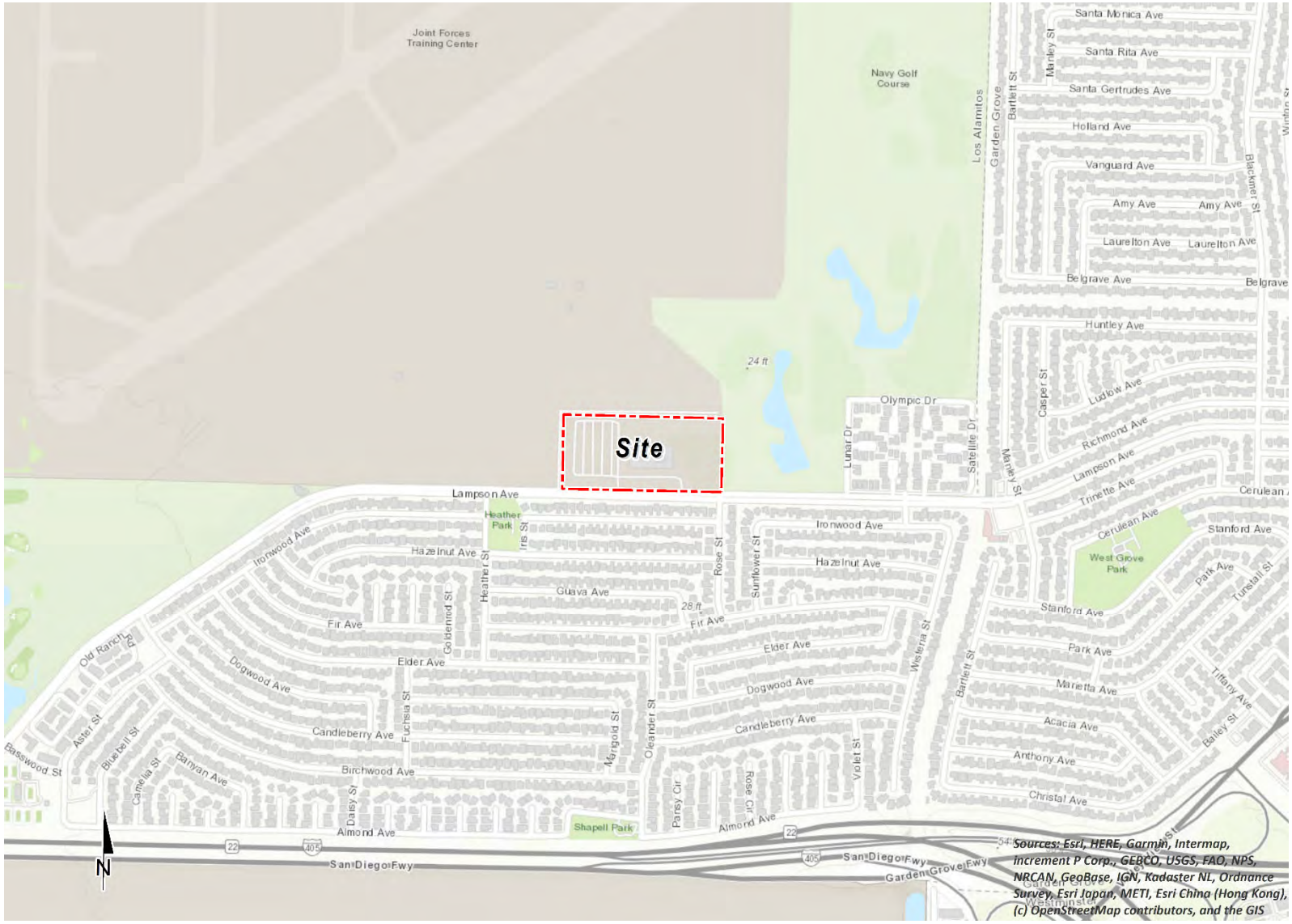


EXHIBIT 1-B: CONCEPTUAL SITE PLAN



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2 FUNDAMENTALS

Noise has been simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources result in a 3 dBA increase. However, it is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase (decrease) of 10 dBA

sounds twice (half) as loud (Caltrans 2009). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet, which can cause serious discomfort. (8) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{50}, L_{25}, L_8 and L_2, are commonly used. The percentile noise descriptors are the noise levels equaled or exceeded during 50 percent, 25 percent, 8 percent, and 2 percent of a stated time. Sound levels associated with the L_2 and L_8 typically describe transient or short-term events, while levels associated with the L_{50} describe the steady state (or median) noise conditions. While the L_{50} describes the median noise levels occurring 50 percent of the time, the L_{eq} accounts for the total energy (average) observed for the entire hour. Therefore, the L_{eq} noise descriptor is generally 1-2 dBA higher than the L_{50} noise level.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Los Alamitos relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

Sound levels used for compliance modeling, sound level limitations on equipment, and product labeling use another descriptor, are known as the sound power level (Lw). Sound power is the rate at which sound energy is emitted from a source per unit time. Knowing the sound power level of a device allows for the objective comparison of the sound output of different devices, without any knowledge of the environment in which they were tested or the distance at which measurements were taken. This makes sound power levels ideal for verifying compliance with property line noise level limits.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (9)

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (3)

2.3.3 ATMOSPHERIC EFFECTS

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (9)

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby resident. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to

completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The FHWA does not consider the planting of vegetation to be a noise abatement measure. (3)

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receptor by controlling the noise source, transmission path, receptor, or all three. This concept is known as the source-path-receptor concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source. (3)

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (10)

2.7 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual*, (7) vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

Additionally, in contrast to airborne noise, ground-borne vibration outdoors is not a common environmental problem and annoyance from ground-borne vibration is almost exclusively an indoor phenomenon. (7) Therefore, the effects of vibrations should only be evaluated at a structure and the effects of the building structure on the vibration should be considered. Wood-

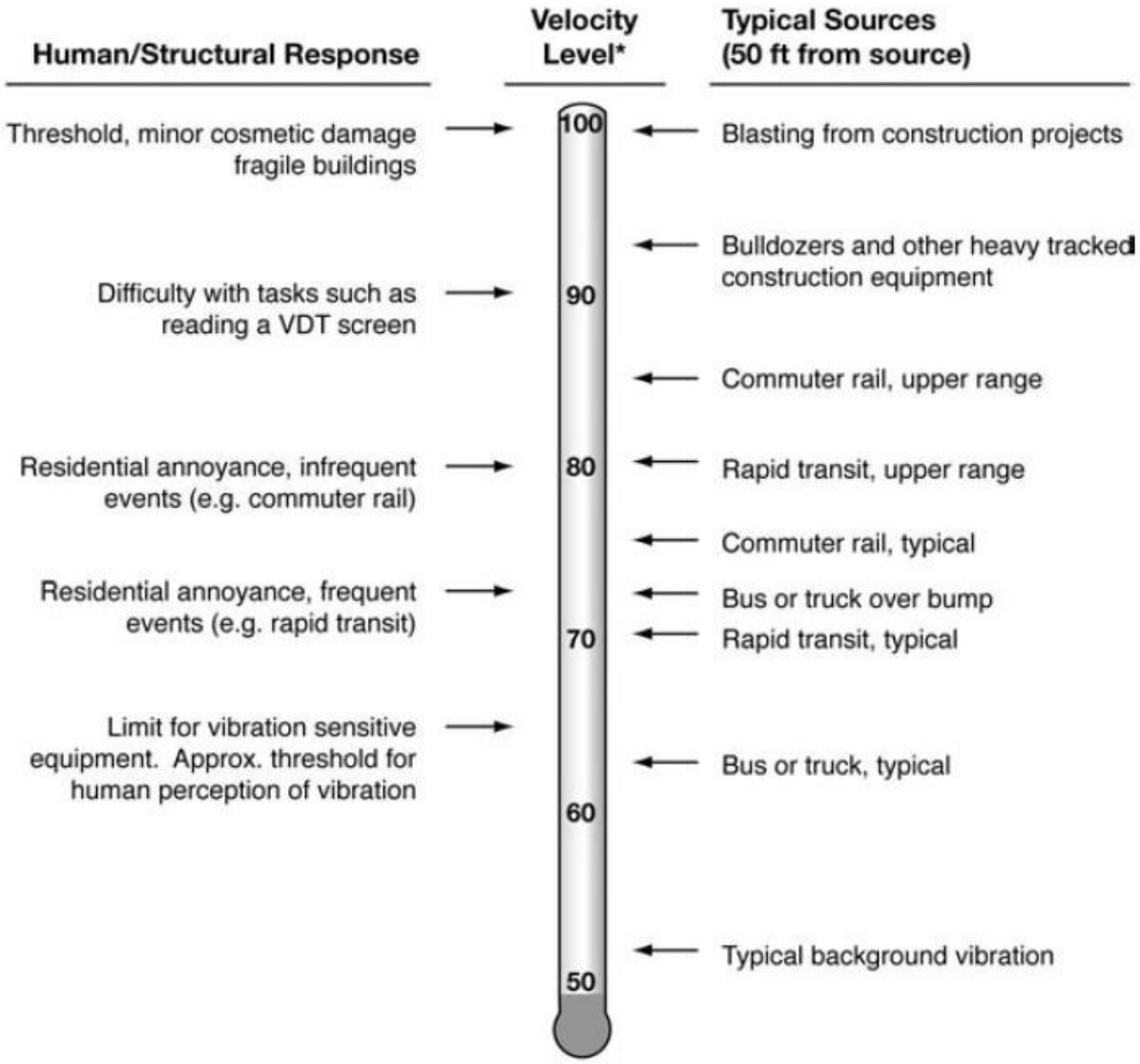
frame buildings, such as typical residential structures, are more easily excited by ground vibration than heavier buildings. In contrast, large masonry buildings with spread footings have a low response to ground vibration. (7) In general, the heavier a building is, the lower the response will be to the incident vibration energy. However, all structurers reduce vibration levels due to the coupling of the building to the soil.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. (7) The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. (7) However, the RMS amplitude and PPV are related mathematically, and the RMS amplitude of equipment is typically calculated from the PPV reference level. The RMS amplitude is approximately 70% of the PPV (11). Thus, thus either can be used on the description of vibration impacts.

Vibration decibel notation (VdB) is another vibration notation developed and used by the FTA in their guidance manual to describe vibration levels and provide a background of common vibration levels and set vibration limits. (7) Decibel notation (VdB) serves to reduce the range of numbers used to describe vibration levels and is used in this report to describe vibration levels.

As stated in the FTA guidance manual, the background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. (7) Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-B illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-B: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



** RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second*

Source: Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment.

3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes an element that addresses noise issues per guidelines adopted by the Governor's Office of Planning and Research. (12) The purpose of this element is to ensure a local planning area *limits the exposure of the community to excessive noise levels*. State law allows jurisdictions to organize their general plan in any format, including by consolidating elements. Here, noise issues are addressed in the City of Los Alamitos' Public Facilities and Safety Element of its General Plan. In addition, the California Environmental Quality Act (CEQA) requires that reasonably foreseeable environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA BUILDING CODE

The State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. (13) These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where a general plan or airport plan provide contours that show exterior noise levels exceed 65 dBA CNEL, such as within a noise level contour of an airport, freeway, or railroad; or if contours are unavailable, buildings exposed to a noise level of 65 dBA $L_{eq\text{-}1\text{-}hr}$ during any hour of operation; shall be constructed to provide an interior noise level environment attributable to exterior sources that does not exceed an hourly equivalent level of 50 dBA L_{eq} in occupied areas during any hour of operation.

3.3 CITY OF LOS ALAMITOS NOISE STANDARDS

The General Plan is a tool for managing noise by planning for and maintaining compatibility between sensitive land uses and noise sources. (14) The City of Los Alamitos has identified two separate types of noise sources: (1) transportation, and (2) stationary. To control transportation related noise sources such as arterial roads, freeways, airports, and railroads, the City of Los Alamitos has established guidelines for acceptable community noise levels in the Public Facilities

and Safety Element of the General Plan. Noise from stationary sources is regulated through specific standards in Chapter 17.20 of the Los Alamitos Municipal Code. and Division 6 of the Orange County Municipal Code (Rossmoor). The Public Facilities and Safety Element of the General Plan includes the following Noise Hazards goal and policies:

- Goal 4: An environment in which minimized noise contributes to the public's health, safety, and welfare.
- Policy 4.1 **Land use compatibility**. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the City's Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards, and the Airport Environs Land Use Plan for the JFTB.
- Policy 4.2 **New residential**. When new residential development is proposed adjacent to land designated for industrial or commercial uses, require the proposed development to assess potential noise impacts and fund feasible noise-related mitigation measures.
- Policy 4.3 **Control sound at the source**. Prioritize noise mitigation measures to control sound at the source over buffers, soundwalls, and other perimeter measures.
- Policy 4.4 **Noise impacts**. Minimize or eliminate persistent, periodic, or impulsive noise impacts of business operations.
- Policy 4.6 **Aircraft noise**. Work with the JFTB and Long Beach Airport to minimize the noise impact of small aircraft and helicopters on residential neighborhoods.

3.3.1 LAND USE COMPATIBILITY

The noise criteria identified in the City of Los Alamitos Public Facilities and Safety Element (Table 4) are guidelines to evaluate the land use compatibility of transportation-related noise. The compatibility criteria, shown on Exhibit 3-A, provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

The *Land Use and Noise Compatibility Matrix* describes categories of compatibility and not specific noise standards. The residential land uses of the Project are considered *clearly compatible* with unmitigated exterior noise levels of less than 60 dBA CNEL and *normally compatible* with unmitigated exterior noise levels approaching 70 dBA CNEL, *new construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.* For *normally incompatible* exterior noise levels, exceeding 70 dBA CNEL, *new construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements are made and needed noise insulation features must be included in the design.*

EXHIBIT 3-A: LAND USE AND NOISE COMPATIBILITY MATRIX

LAND USES	EXISTING NOISE LEVEL (dBA CNEL)						
Example Land Uses	**<**	**55**	**60**	**65**	**70**	**75**	**80>**
Amphitheater, concert hall, auditorium, meeting hall	B	B	C	C	D	D	D
Mobile home	A	A	B	C	C	D	D
Hospital, library, school, faith/religious uses	A	A	B	C	C	D	D
Hotel, motel, transient lodging	A	A	B	B	C	C	D
Single family, multifamily, faith/religious uses	A	A	B	B	C	D	D
Parks	A	A	A	B	C	D	D
Office building, research & development, professional office, city office building, and hotel	A	A	A	B	B	C	D
Amusement park, miniature golf, go-cart track, health club, equestrian center	A	A	A	B	B	D	D
Golf courses, nature centers, cemeteries, wildlife reserves, wildlife habitat	A	A	A	A	B	C	C
Commercial retail, bank, restaurant, movie theater	A	A	A	A	B	B	C
Automobile service station, auto dealer, manufacturing, warehousing, wholesale, utilities	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

Notes:

Community Noise Equivalent Level (CNEL). The energy-average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the levels from 7:00 PM to 10:00 PM and 10 dB added from 10:00 PM to 7:00 AM.

Compatibility Zones. The following zones indicate the degree to which listed land uses are compatible with noise levels shown in the table.

Zone A. Clearly Compatible. Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B. Normally Compatible. New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C. Normally Incompatible. New construction or development should normally be discouraged. If new construction or development does proceed, a detailed analysis or noise reduction requirements must be made and needed noise insulation features must be included in the design.

Zone D. Clearly Incompatible. New construction or development should generally not be undertaken.

Source: City of Los Alamitos General Plan Public Facilities and Safety Element, Table 4.

3.3.2 CITY OF LOS ALAMITOS OPERATIONAL NOISE STANDARDS

To control transportation-related noise sources such as arterial roads, freeways, airports, and railroads, the City of Los Alamitos has established the standards provided in Table 4 of General Plan Public Facilities and Safety Element for compatible community noise levels.

To analyze noise impacts originating from a designated fixed location or private property such as the Project, stationary-source (operational) noise such as the expected roof-top and ground-mounted air conditioning units, parking lot vehicle movements, outdoor activity, and trash enclosure activities are typically evaluated against standards established under a City's Municipal Code. Table 3-1 summarizes the City of Los Alamitos Municipal Code, Section 17.20.050 exterior noise standards that may be received at nearby land use uses. The City of Los Alamitos noise ordinance is included in Appendix 3.1.

TABLE 3-1: LOS ALAMITOS MUNICIPAL CODE EXTERIOR NOISE STANDARDS

Noise District	Maximum Noise Level[1]	Time Period
1 (Residential) day	55 dB(A)	7:00 a.m. to 10:00 p.m.
1 (Residential) night	50 dB(A)	10:00 p.m. to 7:00 a.m.
2 (Professional and Institutional)	55 dB(A)	Anytime
3 (Commercial)	60 dB(A)	Anytime
4 (Industrial)	70 dB(A)	Anytime

Notes: The noise levels at the affected property shall not exceed:
-The noise standard for a cumulative period of more than 30 minutes in any hour; or
-The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour; or
-The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour; or
-The noise standard plus 15 dBA for a cumulative period of more than one minute in any hour; or
-The noise standard plus 20 dBA for any period of time.
[1] Los Alamitos Municipal Code Chapter 17.20.050, Noise. (Appendix 3.1).

3.4 CONSTRUCTION NOISE STANDARDS

To control noise impacts associated with the construction of the Project, noise from construction activities are typically limited to the hours of operation established under a City's Municipal Code. The City of Los Alamitos Municipal Code, Section 17.20.020, states that construction activities are exempted from the noise ordinance if it occurs between the hours of 7:00 a.m. to 8:00 p.m. on weekdays and on Saturdays. Construction is not allowed at any time on Sundays or Federal holidays. (15) Neither the City's General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts, as discussed below.

According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise

environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use. (7 p. 179)

3.5 CONSTRUCTION VIBRATION STANDARDS

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. Occasionally large bulldozers and loaded trucks can cause perceptible vibration levels at close proximity.

To analyze vibration impacts originating from the operation and construction of 4665 Lampson Avenue, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Los Alamitos does not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual*, (11 p. 38) Table 19, vibration damage are used in this noise study to assess potential temporary construction-related impacts at adjacent building locations.

The construction vibration damage potential criteria include consideration of the building conditions. (8 p. 182) Table 3-2 describes the maximum acceptable transient and continuous vibration building damage potential levels by structure type and condition. The existing buildings adjacent to the Project site can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

TABLE 3-2: BUILDING DAMAGE VIBRATION CRITERIA

Structure and Condition	Maximum Transient Vibration Levels PPV (in/sec)	Maximum Continuous Vibration Levels PPV (in/sec)
Extremely fragile historic buildings	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Tables 19, p. 38.

3.6 AIRPORT LAND USE COMPATIBILITY

The JFTB Los Alamitos is located adjacent to, and northwest of the Project site. The Project site is located within the Airport Environs Land Use Plan Airport Planning Area (16).

Exhibit 3-B shows the Project site in relation to the airport's noise level contour boundaries, as provided by the *Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base Los Alamitos* (16). The AELUP noise level contours are based on a 1987 U.S. Army Environmental Hygiene Agency (USAEHA) assessment that was published in 1994 as part of the *Air Installation Compatible Use Zone (AICUZ) Study, Armed Forces Reserve Center Los Alamitos Airfield* (17). The 1994 ACUIZ noise level contours were based on 55,000 aircraft operations. The noise level contours shown on Exhibit 3-B are a modified version of the 1994 ACUIZ Noise Level Contours published by the ALUC in 1995. Based on the AELUP noise level contours, shown on Exhibit 3-B, the majority of the Project site sits within the 60 dBA CNEL but outside the 65 dBA CNEL noise level contour boundary of the JFTB Los Alamitos.

Exhibit 3-C shows the Project site in relation to the airport's noise level contour boundaries, as more recently published in 2020 by the US Army Public Health Center in the *Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos* (18). The more recent 2020 noise level contours are based on 46,235 aircraft operations. As shown on Exhibit 3-C, a portion of the northwestern portion of the Project site is within the 60 dBA CNEL noise level contour boundary of the JFTB Los Alamitos.

This analysis relies on the more recent 2020 noise level contours developed by the US Army Public Health Center. The reliance on this more recent information is justified because the noise level contours included in the AELUP were originally established based on data collected almost four decades ago in 1987 as part of an earlier US Army USAEHA assessment published in 1994. The 2020 noise level contours reflect the most current data and analysis as to existing and projected noise environments at the Project site. In addition, the 2020 noise level contours were generated based on current background information using the Department of Defense aircraft noise model NoiseMap, which is a suite of computer programs and components developed by the US Air Force to predict noise exposure near an airfield/runway due to aircraft flight, maintenance, and ground run-up operations. The 1994 report was based on information available at that time related to airfield and heliport planning criteria, air installation compatible use zone study documents from other military installations, environmental noise assessments for the Los Alamitos Armed Forces Reserve Center, then-existing and proposed airfield operations, and other information. By comparison, the 2020 noise level contours are more current, reflecting more recent existing and proposed airfield operations as well as other information.

The noise criteria identified in the *Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base Los Alamitos* (16) are guidelines to evaluate the land use compatibility of aircraft-related noise. The compatibility criteria, shown on Exhibit 3-D, provides a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. Residential land uses located outside the 60 dBA contour are considered normally consistent, residential land uses located within the 60 dBA contour are considered conditionally consistent and are required to

ensure that the interior CNEL does not exceed 45 dBA CNEL. Residential land uses located within the 65 dBA contour are considered normally inconsistent.

This is consistent with the City of Los Alamitos noise compatibility standards which states residential land uses exposed to noise levels ranging from 60-65 dBA CNEL are considered "Normally Compatible", and requires new construction or development to conduct a detailed analysis of the noise reduction requirements to verify any needed noise insulation features are included in the design. The City General Plan states, "conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice." Relative to noise from JFTB Los Alamitos, the General Plan states, "homes within the moderate noise impact zone (between 60 and 65 dBA CNEL) could be seriously disturbed by single noise events, but are still considered compatible by the AELUP."

EXHIBIT 3-B: AELUP AIRPORT NOISE LEVEL CONTOUR BOUNDARIES



EXHIBIT 3-C: APHC 2020 AIRPORT NOISE LEVEL CONTOUR BOUNDARIES



EXHIBIT 3-D: LIMITATIONS ON LAND USE DUE TO AIRCRAFT NOISE

TABLE 1

AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY
AIRPORT ENVIRONS LAND USE PLAN
LIMITATIONS ON LAND USE DUE TO NOISE
(Applicable to Aircraft Noise Sources)

LAND USE CATEGORY	COMMUNITY NOISE EQUIVALENT LEVEL dB						
	55	60	65	70	75	80	
Residential (all types): Single and Multi-Family Residences							
Community Facilities: Churches, Libraries, Schools, Preschools, Day-Care Centers, Hospitals, Nursing/Convalescent Homes, & Other noise sensitive uses							
Commercial: Retail, Office							
Industrial:							

NORMALLY CONSISTENT

Conventional construction methods used. No special noise reduction requirements.

CONDITIONALLY CONSISTENT

Must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations. Residential use sound attenuation required to ensure that the interior CNEL does not exceed 45 dB. Commercial and industrial structures shall be sound attenuated to meet Noise Impact Zone "1" criteria (refer to Section 3.2.3).

NORMALLY INCONSISTENT

All residential units are inconsistent unless sound attenuated to ensure that the interior CNEL does not exceed 45 dB, and that all units are indoor oriented so as to preclude noise impingement on outdoor living areas.

4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

While the City of Los Alamitos General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for use under Threshold A. Similarly, the City of Los Alamitos General Plan Guidelines do not define the vibration levels at which temporary or constant vibrations are considered substantial for use under Threshold B. CEQA Appendix G Threshold C applies to nearby public and private airports, if any, and the Project's land use compatibility. Table 4-1 shows the significance criteria summary matrix.

4.1 NOISE LEVEL INCREASES (THRESHOLD A)

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant environmental impact. This approach *recognizes that there is no single noise increase that renders the noise impact significant.* (19) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment.

In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. The Federal Interagency Committee on Noise (FICON) (20) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (3 p. 9) and Caltrans (21 p. 2_48).

4.2 VIBRATION (THRESHOLD B)

As described in Section 3.6 the vibration impacts originating from the construction of 4665 Lampson Avenue, vibration-generating activities are appropriately evaluated the thresholds of significance outlined in the Caltrans *Transportation and Construction Vibration Guidance Manual*, (11 p. 38). These guidelines identify the maximum acceptable continuous vibration building damage threshold of 0.3 PPV (in/sec) for "older residential structures" which is used in this noise study to assess potential impacts due to Project construction vibration levels.

4.3 AIRCRAFT/AIRPORT (THRESHOLD C)

The City provides policies regarding compatibility with JFTB Los Alamitos in Policy 4.1, Land use compatibility.

The noise compatibility criteria identified in the AELUP are guidelines to evaluate the land use compatibility of aircraft-related noise. The compatibility criteria, shown on Exhibit 3-D, indicates residential land uses exposed to noise levels less than 65 dBA CNEL are "normally consistent" and no special noise reduction requirements are identified. Residential land uses exposed to noise levels less than 70 dBA CNEL are considered "conditionally consistent" with the ALEUP and would be required to ensure that the interior CNEL does not exceed 45 dBA CNEL. For noise levels greater than 70 dBA CNEL, the ALUEP considers residential land use inconsistent, unless interior noise levels are reduced to 45 dBA CNEL and that all units are interior oriented to preclude impacts on exterior use areas. The ALEUP does not require any additional considerations for exterior locations exposed to noise levels below 70 dBA CNEL.

The AELUP compatibility criteria are generally consistent with the City of Los Alamitos General Plan Policy 4.1, where the residential land uses of the Project are considered *clearly compatible* with unmitigated exterior noise levels of less than 60 dBA CNEL and *normally compatible* with unmitigated exterior noise levels approaching 70 dBA CNEL, *new construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.* For *normally incompatible* exterior noise levels, exceeding 70 dBA CNEL, *new construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements are made and needed noise insulation features must be included in the design.*

Therefore, for purposes of this analysis, exposure of exterior use areas to noise levels in excess of 70 dBA CNEL would be considered significant, and exposure of residential land uses to noise levels in excess of 65 dBA CNEL would be significant unless noise levels in interior habitable rooms are reduced to 45 dBA CNEL.

4.4 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-1 shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Condition(s)	Significance Criteria	
		Daytime	Nighttime
On-Site Traffic[1]	Exterior Noise Level Criteria[1]	See Exhibit 3A	
	Interior Noise Level Standard[1]	45 dBA CNEL	
On-Site Aircraft[2]	Exterior Noise Level Criteria[1,2]	See Exhibits 3A and 3D	
	Interior Noise Level Standard[2]	45 dBA CNEL	
Off-Site Traffic[3]	If ambient is < 60 dBA CNEL[3]	≥ 5 dBA CNEL Project increase	
	If ambient is 60 - 65 dBA CNE[3]L	≥ 3 dBA CNEL Project increase	
	If ambient is > 65 dBA CNEL[3]	≥ 1.5 dBA CNEL Project increase	
Operational	Exterior Noise Level Standards[4]	55 dBA L_{eq}	50 dBA L_{eq}
	If ambient is < 60 dBA Leq[3]	≥ 5 dBA L_{eq} Project increase	
	If ambient is 60 - 65 dBA Leq[3]	≥ 3 dBA L_{eq} Project increase	
	If ambient is > 65 dBA Leq[3]	≥ 1.5 dBA L_{eq} Project increase	
Construction	Noise Level Threshold[5]	80 dBA L_{eq}	
	Vibration Level Threshold[6]	0.30 in/sec PPV	

[1] City of Los Alamitos General Plan Public Facilities and Safety Element.
[2] Orange County ALUC, Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos, August 2017.
[3] FICON, 1992
[4] City of Los Alamitos Municipal Code, Section 17.20.050
[5] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[6] Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

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5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, four 24-hour noise level measurements were taken at sensitive receiver locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Monday, May 23rd, 2022. Appendix 5.1 includes study area photos.

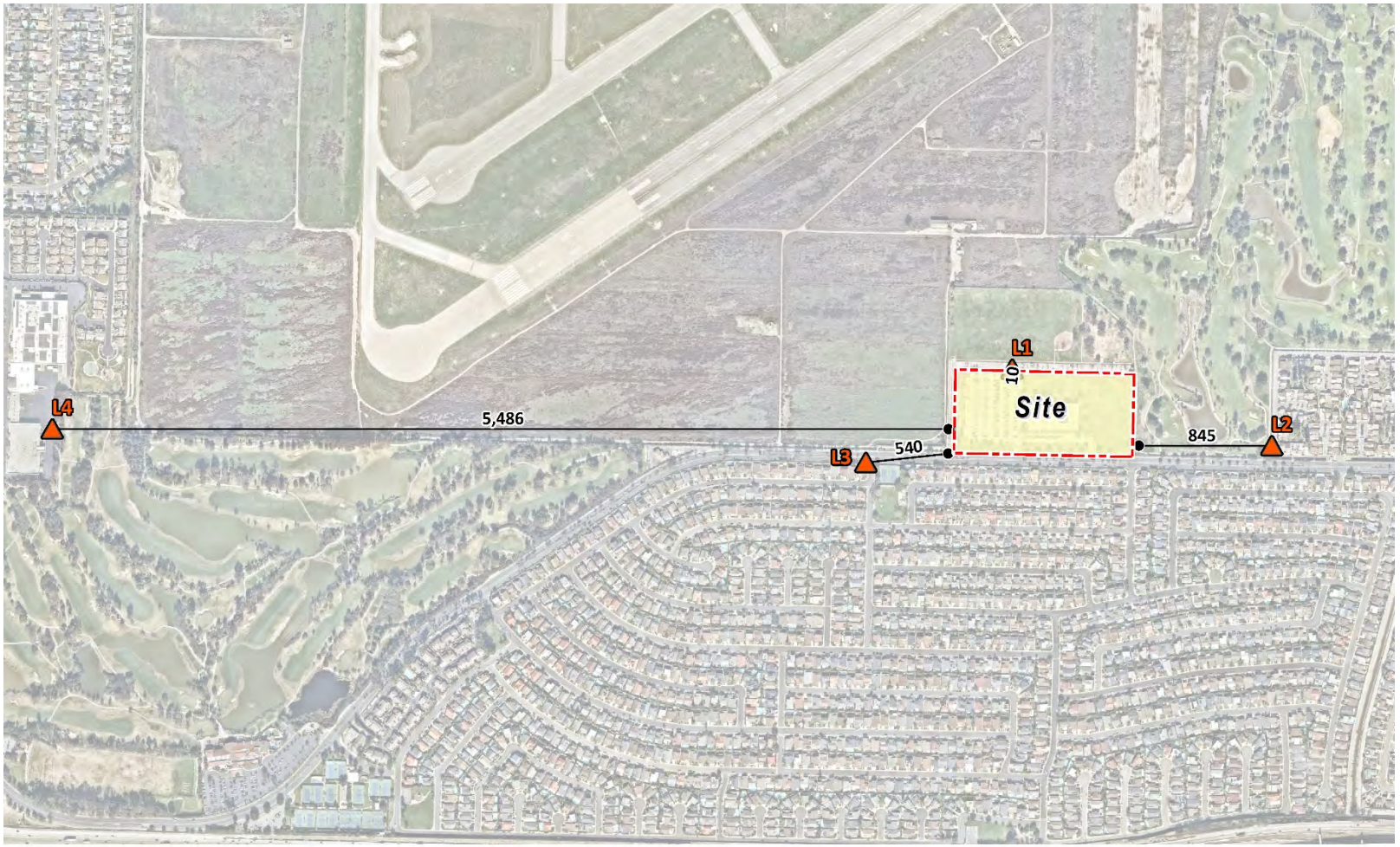
5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (22)

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Actual measurement locations may be affected by location access, equipment security, and proximity to noise sources or solid objects that would affect the measurement and thus may be located at locations that have similar acoustic conditions as the desired locations. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent any part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. (9) Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community*. (7)

EXHIBIT 5-A: AMBIENT NOISE MEASUREMENT LOCATIONS



Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each measurement represents a group of locations that share acoustical equivalence. (7) In other words, the area represented by the measurement location shares similar shielding, terrain, and geometric relationship to the reference noise source as the receiver location. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Appendix 5.2 provides a summary of the existing hourly ambient noise levels.

TABLE 5-1: 24 HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located north of the Project site near Arbor Dog Park at 4665 Lampson Avenue.	49.9	42.4
L2	Located east of the Project site near single-family residence at 5001 Lunar Drive.	60.8	52.4
L3	Located southwest of the Project site near single-family residence at 4701 Ironwood Avenue.	68.7	60.7
L4	Located west of the Project site near Old Ranch Country Club Golf Course at 3901 Lampson Avenue.	56.5	55.1

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as

the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with the arterial roadway network and the nearby community facility land uses, including but not limited to JFTB Los Alamitos, Navy Golf Course, and Arbor Park located adjacent to the northern, eastern, western Project site boundaries. This includes the auto and truck activities on Lampson Avenue adjacent to the Project site and near the noise level measurement locations. The 24-hour existing noise level measurements shown on Table 5-1 present the worst-case existing unmitigated ambient noise conditions.

6 TRAFFIC NOISE METHODS AND PROCEDURES

The following section outlines the methods and procedures used to estimate and analyze the future traffic noise environment. Consistent with the City of Los Alamitos General Plan Policies for residential land use, all transportation related noise levels are presented in terms of the 24-hour CNEL.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (23) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (24) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period.

6.1.2 ON-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

The on-site roadway parameters including the average daily traffic (ADT) volumes used for this study are presented on Table 6-1. Although the Project site is located within the City of Los Alamitos, the majority of the roadways lies within the City of Seal Beach. Based on the City of Seal Beach General Plan Circulation Element, Lampson Avenue is classified as 4-lane Secondary Arterial. (25) Future average daily traffic volumes needed to assess the future on-site traffic noise environment and to identify the appropriate noise abatement measures that address the worst-case future noise conditions, shown on Table 6-1, were obtained from the 4665 Lampson Avenue Traffic Analysis prepared by Urban Crossroads on February 3, 2023 (6). The vehicle speed is based on the posted speed limit for Lampson Avenue. Soft site conditions were used to analyze the traffic noise impacts within the Project study area which account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. Research conducted by Caltrans has shown that due to the mix of ground types in actual situations, the hard site condition over predicted traffic noise levels and the use of soft site conditions is more appropriate for the application of the FHWA traffic noise prediction model . (26)

TABLE 6-1: ON SITE ROADWAY PARAMATERS

Roadway Segment	Lanes	Classification[1]	Roadway Capacity Volume[1]	Speed Limit (mph)[2]	Site Conditions
Lampson Avenue	4	Secondary Arterial	15,150	45	Soft

[1] Source: 4665 *Lampson Avenue Traffic Analysis* Urban Crossroads, Inc. February 2023.
[2] Posted speed limits.

Table 6-2 presents the time-of-day vehicle splits by vehicle type, and Table 6-3 presents the total traffic flow distributions (vehicle mixes) used for this analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA Model based on roadway types. To predict the future noise environment at each building within the Project site, coordinate information was collected to identify the noise transmission path between the noise source and receiver. The coordinate information is based on the Project site plan showing the plotting of each Project building in relationship to Lampson Avenue, as shown in Exhibit 1-B and in Appendix 6.1.

TABLE 6-2: TIME OF DAY VEHICLE SPLITS

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7:00 a.m. - 7:00 p.m.)	77.5%	84.8%	86.5%
Evening (7:00 p.m. - 10:00 p.m.)	12.9%	4.9%	2.7%
Nighttime (10:00 p.m. - 7:00 a.m.)	9.6%	10.3%	10.8%
Total:	100.0%	100.0%	100.0%

Source: Typical Southern California vehicle mix.

TABLE 6-3: DISTRIBUTION OF FLOW BY VEHICLE TYPE (VEHICLE MIX)

Roadway	Total % Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Roadways	97.42%	1.84%	0.74%	100.00%

Source: Typical Southern California vehicle mix.

6.1.2 OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-4 presents the roadway parameters used to assess the Project's off-site transportation noise impacts for Existing, Opening Year (2026) and General Plan Buildout (2045) Conditions, with and without Project Conditions. Table 6-4 identifies the fourteen (14) study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Los Alamitos General Plan Circulation Element, and the posted vehicle speeds.

TABLE 6-4: OFF-SITE ROADWAY PARAMETERS

ID	Roadway	Segment	Receiving Land Use[1]	Distance from Centerline to Nearest Adjacent Land Use (Feet)[2]	Vehicle Speed (mph)[3]
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	40'	45
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	40'	45
3	Lampson Ave.	e/o Basswood St.	Sensitive	40'	45
4	Lampson Ave.	e/o Candleberry St.	Sensitive	40'	45
5	Lampson Ave.	e/o Heather St.	Sensitive	40'	45
6	Lampson Ave.	e/o Driveway 1	Sensitive	40'	45
7	Lampson Ave.	e/o Driveway 2	Sensitive	40'	45
8	Lampson Ave.	e/o Rose St.	Sensitive	40'	45
9	Lampson Ave.	e/o Tulip St.	Sensitive	40'	45
10	Lampson Ave.	e/o Valley View St.	Sensitive	40'	45
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	73'	40
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	73'	40
13	Valley View St.	n/o Lampson Ave.	Sensitive	73'	45
14	Valley View St.	s/o Lampson Ave.	Sensitive	73'	45

[1] Source: City of Los Alamitos Land Use Element Figure 1, City of Seal Beach General Plan Land Use Element, Figure 4.
[2] Distance to adjacent land use is based upon the right-of-way distances for each functional roadway classification provided in the City of Seal Beach Circulation Element.
[3] Posted speed limits in the Project study area.

The average daily traffic volumes used for this study are presented on Table 6-5 and are based on *4665 Lampson Avenue Traffic Analysis* prepared by Urban Crossroads, Inc. (6) Table 6-2 presents the time of day vehicle splits and Table 6-3 presents the traffic flow distributions (vehicle mix) used for this analysis. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA noise prediction model.

TABLE 6-5: AVERAGE DAILY TRAFFIC VOLUMES

ID	Roadway	Segment	Existing		OY 2026		GBPO 2045	
			Without Project	With Project	Without Project	With Project	Without Project	With Project
1	Lampson Ave.	e/o Los Alamitos Blvd.	17,350	18,250	20,350	21,250	22,350	23,300
2	Lampson Ave.	e/o Old Ranch Plaza	16,550	17,450	19,050	19,950	20,000	20,900
3	Lampson Ave.	e/o Basswood St.	13,150	14,100	15,200	16,150	16,000	16,900
4	Lampson Ave.	e/o Candleberry St.	11,450	12,350	13,500	14,400	14,150	15,100
5	Lampson Ave.	e/o Heather St.	11,650	12,600	13,750	14,700	14,450	15,350
6	Lampson Ave.	e/o Driveway 1	11,450	12,350	13,600	14,500	14,250	15,150
7	Lampson Ave.	e/o Driveway 2	11,450	12,200	13,600	14,350	14,250	15,000
8	Lampson Ave.	e/o Rose St.	12,050	12,800	14,300	15,050	15,000	15,750
9	Lampson Ave.	e/o Tulip St.	13,000	13,750	15,450	16,200	16,200	16,950
10	Lampson Ave.	e/o Valley View St.	10,200	10,450	11,400	11,650	12,700	12,950
11	Los Alamitos Blvd.	n/o Lampson Ave.	38,350	41,650	41,150	44,450	48,550	48,900
12	Los Alamitos Blvd.	s/o Lampson Ave.	36,650	37,250	42,250	42,850	46,500	47,050
13	Valley View St.	n/o Lampson Ave.	41,500	41,700	46,100	46,300	50,750	50,900
14	Valley View St.	s/o Lampson Ave.	40,850	41,200	45,150	45,500	49,650	50,000

[1] 4665 Lampson Traffic Analysis, Urban Crossroads, Inc.

7 ON-SITE TRAFFIC NOISE IMPACTS

An on-site exterior traffic noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent traffic noise sources in the Project study area, and to identify potential noise abatement measures for the proposed Project that would achieve acceptable Project exterior and interior noise levels in compliance with the City of Los Alamitos land use and noise compatibility policies. The primary source of traffic noise affecting the Project site is from Lampson Avenue. The Project will also experience some background traffic noise from the Project's internal local streets, however, due to low traffic volume/speed, traffic noise from these roads will not make a significant contribution to the noise environment.

7.1 ON-SITE EXTERIOR TRAFFIC NOISE ANALYSIS

Using the FHWA and FTA noise prediction methodologies and the parameters outlined in Tables 6-1 thru 6-3, the expected future exterior noise levels at the Project buildings facing Lampson Avenue were calculated. Table 8-1 presents a summary of future exterior noise levels at the building façade of each floor. The on-site traffic noise level impacts indicate that noise levels at the Project buildings adjacent to Lampson Avenue would experience unmitigated exterior noise levels of ranging from 64.6 to 72.8 dBA CNEL. The on-site traffic noise analysis calculations are provided in Appendix 7.1.

To satisfy the City of Los Alamitos normally acceptable exterior noise level standard for residential land uses construction of a seven-foot-high noise barrier along Lampson Avenue, as shown on the Exhibit ES-A. With construction of this barrier, common outdoor activity areas with exposure to Lampson Avenue traffic noise would be exposed to noise levels less than 65 dBA CNEL which would satisfy the City of Los Alamitos clearly acceptable exterior noise level standard for multi-family residential land uses. With the proposed noise barrier shown on Exhibit ES-A, the future exterior noise levels at the single-family backyards and multi-family common outdoor activity areas will range from 58.3 to 63.6 dBA CNEL. This noise analysis shows that the recommended noise barrier will satisfy the City of Los Alamitos normally acceptable exterior noise level standard for single-family and clearly acceptable exterior noise level standard for multi-family residential land uses.

TABLE 7-1: EXTERIOR NOISE LEVELS (DBA CNEL)

Receiver Location (Land Use Type)	Source	Unmitigated Noise Level (dBA CNEL)	Mitigated Noise Level (dBA CNEL)	Barrier Height (Feet)	Land Use Compatibility[3]
Apartments	Lampson Avenue	72.8	63.8	7.0	Clearly Acceptable
Single Family	Lampson Avenue	72.8	63.8	7.0	Clearly Acceptable
Park	Lampson Avenue	64.6	58.3	7.0	Clearly Acceptable

[1] Exterior noise level calculations are included in Appendix 7.1.
[2] Barrier heights are based on the Project site plan included in Appendix 6.1.
[3] City of Los Alamitos General Plan Public Facilities and Safety Element (Table 4).

7.2 ON-SITE INTERIOR TRAFFIC NOISE ANALYSIS

To ensure that the interior traffic noise levels comply with the City of Los Alamitos interior noise level standards, future noise levels were calculated at the first and second-floor building facades.

7.2.1 NOISE REDUCTION METHODOLOGY

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings.

7.2.2 INTERIOR NOISE LEVEL ASSESSMENT

It is our understanding that the Project will provide mechanical ventilation (e.g. air conditioning) in all units. Therefore, Tables 7-2 and 7-3 present interior noise levels based on a windows-closed condition. Table 7-2 shows that the future noise levels at the first-floor building façades adjacent to Lampson Avenue are estimated to be 63.6 dBA CNEL with interior noise levels of 38.6 dBA CNEL. The first-floor interior noise level analysis shows that the City of Los Alamitos 45 dBA CNEL interior noise standards can be satisfied using standard construction for all first-floor units. The on-site traffic interior noise analysis calculations are provided in Appendix 7.1.

TABLE 7-2: FIRST FLOOR INTERIOR TRAFFIC NOISE LEVELS

Receiver Location (Land Use Type)	Noise Level at Façade[1]	Required Interior NR[2]	Estimated Interior NR[3]	Upgraded Windows[4]	Interior Noise Level[5]	Threshold	Threshold Exceeded?
Apartments	63.6	18.6	25.0	No	38.6	45	No
Single Family	63.6	18.6	25.0	No	38.6	45	No

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] Estimated minimum interior noise reduction.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise reduction

Table 7-3 shows the future noise levels at the second-floor building façades adjacent to Lampson Avenue are estimated to be 71.3 dBA CNEL with interior noise levels of 46.3 dBA CNEL. Based on the second-floor interior noise level analysis, to comply with the City of Los Alamitos 45 dBA CNEL interior noise standards second floor units and habitable rooms would require windows with an STC rating of 29.

TABLE 7-3: SECOND FLOOR INTERIOR TRAFFIC NOISE LEVELS

Receiver Location (Land Use Type)	Noise Level at Façade[1]	Required Interior NR[2]	Estimated Interior NR[3]	Upgraded Windows[4]	Interior Noise Level[5]	Threshold	Threshold Exceeded?
Apartments	71.3	26.3	25.0	No	46.3	45	Yes
Single Family	71.3	26.3	25.0	No	46.3	45	Yes

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] Estimated minimum interior noise reduction.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise reduction

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8 OFF-SITE TRAFFIC NOISE IMPACTS

To assess the off-site traffic CNEL noise level impacts associated with development of the proposed Project, noise level contours were developed based on *4665 Lampson Avenue Traffic Impact Analysis.* (6) Noise level contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise level contours were developed for the following traffic scenarios:

- Existing Conditions (2023): This scenario refers to existing traffic conditions.
- Existing Plus Project Conditions (2023+P): This scenario refers to existing traffic conditions plus project traffic increases.
- Opening Year (2026) Conditions (OY 2026): This scenario includes Existing traffic volumes plus an ambient growth factor of 8.24% plus traffic from pending and approved but not yet constructed known development projects in the area.
- Opening Year (2026) Plus Project Conditions (OY 2026+P): This scenario includes Opening Year Cumulative (2026) Without Project volumes plus Project traffic increases.
- General Plan Buildout (2045) Without Project Conditions (GBPO): This scenario includes Existing traffic volumes plus an ambient growth factor of 14% plus traffic from pending and approved but not yet constructed known development projects in the area.
- General Plan Buildout (2045) With Project Conditions (GBPO+P): This scenario includes General Plan Buildout Without Project volumes plus Project traffic increases.

8.1 TRAFFIC NOISE LEVEL CONTOURS

Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables 8-1 through 8-6 present a summary of the exterior dBA CNEL traffic noise levels. Roadway segments are analyzed in each of the following timeframes: Existing, Opening Year 2022 with and without Project Buildout, General Plan Buildout (2045) with and without Project conditions. Appendix 8.1 includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

TABLE 8-1: EXISTING 2023 WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	71.6	RW	110	236
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4	RW	107	230
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4	RW	91	196
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8	RW	83	179
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8	RW	84	181
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8	RW	83	179
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8	RW	83	179
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0	RW	86	185
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3	RW	90	195
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	RW	RW	166
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1	RW	RW	296
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9	RW	RW	287
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	RW	176	379
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	RW	174	375

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 8-2: EXISTING 2023 WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	71.8	RW	113	244
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.6	RW	110	238
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.6	RW	95	204
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.1	RW	87	188
5	Lampson Ave.	e/o Heather St.	Sensitive	70.1	RW	88	190
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.1	RW	87	188
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.0	RW	86	186
8	Lampson Ave.	e/o Rose St.	Sensitive	70.2	RW	89	192
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.5	RW	94	202
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	RW	RW	168
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.2	RW	RW	298
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	69.0	RW	RW	290
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	RW	176	380
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	RW	175	377

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 8-3: OY 2026 WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	72.6	RW	129	277
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.0	RW	118	254
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.1	RW	102	219
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.6	RW	94	203
5	Lampson Ave.	e/o Heather St.	Sensitive	70.7	RW	95	205
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.6	RW	94	204
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.6	RW	94	204
8	Lampson Ave.	e/o Rose St.	Sensitive	70.8	RW	98	210
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.1	RW	103	221
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.8	RW	83	180
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.8	RW	152	328
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	69.6	RW	149	321
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.2	RW	189	407
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.1	RW	186	401

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 8-4: OY 2026 WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	72.8	RW	132	284
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.2	RW	121	261
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.3	RW	105	227
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.8	RW	98	211
5	Lampson Ave.	e/o Heather St.	Sensitive	70.9	RW	99	213
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.9	RW	98	212
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.8	RW	98	210
8	Lampson Ave.	e/o Rose St.	Sensitive	71.0	RW	101	217
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.3	RW	106	228
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.9	RW	84	182
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.8	RW	153	329
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	69.7	RW	150	324
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.2	RW	189	408
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.1	RW	187	403

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 8-5: GPBO 2045 WITHOUT PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	73.0	RW	137	295
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.2	RW	122	262
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.3	RW	105	226
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.8	RW	97	209
5	Lampson Ave.	e/o Heather St.	Sensitive	70.9	RW	98	212
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.8	RW	97	210
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.8	RW	97	210
8	Lampson Ave.	e/o Rose St.	Sensitive	71.0	RW	101	217
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.3	RW	106	228
10	Lampson Ave.	e/o Valley View St.	Sensitive	70.2	RW	89	192
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	70.2	RW	162	349
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	70.1	RW	159	342
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.6	RW	201	434
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.5	RW	199	428

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

TABLE 8-6: GPBO 2045 WITH PROJECT CONDITIONS NOISE LEVEL CONTOURS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]	Distance to Contour from Centerline (Feet)		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	73.2	RW	140	302
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.4	RW	125	269
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.5	RW	109	234
4	Lampson Ave.	e/o Candleberry St.	Sensitive	71.0	RW	101	217
5	Lampson Ave.	e/o Heather St.	Sensitive	71.1	RW	102	220
6	Lampson Ave.	e/o Driveway 1	Sensitive	71.0	RW	101	218
7	Lampson Ave.	e/o Driveway 2	Sensitive	71.0	RW	101	217
8	Lampson Ave.	e/o Rose St.	Sensitive	71.2	RW	104	224
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.5	RW	109	235
10	Lampson Ave.	e/o Valley View St.	Sensitive	70.3	RW	90	194
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	70.2	RW	163	351
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	70.1	RW	160	345
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.6	RW	202	435
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.5	RW	199	430

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
"RW" = Location of the respective noise contour falls within the right-of-way of the road.

8.2 EXISTING 2023 CONDITION PROJECT TRAFFIC NOISE LEVELS

Table 8-1 presents the Existing 2023 without Project conditions CNEL noise levels, which are expected to range from 68.9 to 71.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 8-2 shows the Existing 2023 with Project conditions will range from 69.0 to 71.8 dBA CNEL. As shown on Table 8-7 the Existing 2023 with Project will generate a noise level increase of up to 0.3 dBA CNEL on the study area roadway segments. Based on the significance criteria in Section 4.2 for off-site traffic noise impacts, the Project-related noise level increases are considered less than significant under Existing 2023 conditions at the land uses adjacent to roadways conveying Project traffic.

8.3 OY 2026 TRAFFIC NOISE LEVEL INCREASES

Table 8-3 presents the OY 2026 without Project conditions CNEL noise levels, which are expected to range from 69.6 to 72.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 8-4 shows the OY 2026 with Project conditions will range from 69.7 to 72.8 dBA CNEL. Table 8-8 shows that the OY 2026 Project off-site traffic noise level increases of up to 0.3 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Section 4.2 for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated OY 2026 Project-related traffic noise levels.

8.4 GPBO 2045 TRAFFIC NOISE LEVEL INCREASES

Table 8-5 presents the GPBO 2045 without Project conditions CNEL noise levels, which are expected to range from 70.1 to 73.0 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 8-6 shows the GPBO 2045 with Project conditions will range from 70.1 to 73.2 dBA CNEL. Table 8-9 shows that the GPBO 2045 Project off-site traffic noise level increases of up to 0.2 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Section 4.2 for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated GPBO 2045 Project-related traffic noise levels.

8.5 CUMULATIVE TRAFFIC NOISE LEVEL INCREASES

Table 8-10 shows that the Project off-site contribution to cumulative traffic noise level increases range from less than 0.1 to 0.2 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Section 4.2 for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to Project-related traffic noise level increases and would be considered a *less than significant impact*.

TABLE 8-7: EXISTING 2023 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	71.6	71.8	0.2	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4	71.6	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4	70.6	0.2	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8	70.1	0.3	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8	70.1	0.3	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8	70.1	0.3	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8	70.0	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0	70.2	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3	70.5	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	69.3	0.0	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1	69.2	0.1	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9	69.0	0.1	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	70.7	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	70.7	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 8-8: OY 2026 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	72.6	72.8	0.2	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.0	72.2	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.1	71.3	0.2	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.6	70.8	0.2	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	70.7	70.9	0.2	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.6	70.9	0.3	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.6	70.8	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.8	71.0	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.1	71.3	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.8	69.9	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.8	69.8	0.0	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	69.6	69.7	0.1	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.2	71.2	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.1	71.1	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 8-9: GPBO 2045 OFF-SITE PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	73.0	73.2	0.2	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.2	72.4	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.3	71.5	0.2	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.8	71.0	0.2	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	70.9	71.1	0.2	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.8	71.0	0.2	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.8	71.0	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	71.0	71.2	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.3	71.5	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	70.2	70.3	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	70.2	70.2	0.0	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	70.1	70.1	0.0	No	3.0	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.6	71.6	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.5	71.5	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

TABLE 8-10: CUMULATIVE PROJECT TRAFFIC NOISE INCREASES

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]					Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				Existing	GPBO 2045 Without Project	GPBO 2045 With Project	Cumulative Increase	Cumulative Contribution		Limit	Exceeded?
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	71.6	73.0	73.2	1.6	0.2	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4	72.2	72.4	1.0	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4	71.3	71.5	1.1	0.2	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8	70.8	71.0	1.2	0.2	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8	70.9	71.1	1.3	0.2	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8	70.8	71.0	1.2	0.2	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8	70.8	71.0	1.2	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0	71.0	71.2	1.2	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3	71.3	71.5	1.2	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	70.2	70.3	1.0	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1	70.2	70.2	1.1	0.0	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9	70.1	70.1	1.2	0.0	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	71.6	71.6	0.9	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	71.5	71.5	0.8	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

9 RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on Exhibit 9-A, were identified as representative locations for analysis. Receiver locations are modeled points used to assess impacts. The measurements shown on Exhibit 9-A are representative of receiver locations, because not all receiver locations are accessible (e.g., located on private property, unable to physically access, etc.) Thus, the receiver locations were chosen to be acoustically representative or similar in nature.

Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, four representative receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: Location R1 represents existing noise sensitive Arbor Dog Park at 4665 Lampson Avenue, approximately 173 feet north of the Project site. Receiver R1 is placed at the Park's open space. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents the existing noise sensitive residence at 12462 Lunar Drive, approximately 887 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R2 is placed at the building façade. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.

R3: Location R3 represents the existing noise sensitive residence at 4625 Ironwood Avenue, approximately 82 feet south of the Project site. Receiver R3 is placed at the private outdoor living areas (backyards) facing the Project site. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment.

R4: Location R4 represents the existing noise sensitive residence at 12322 Provincetown Street, approximately 5,046 feet west of the Project site. Receiver R4 is placed at the private outdoor living areas (backyards) facing the Project site.

EXHIBIT 9-A: RECEIVER LOCATIONS



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10 OPERATIONAL NOISE IMPACTS

This section analyzes the potential stationary-source operational noise impacts at the nearest receiver locations, identified in Section 9, resulting from the operation of the proposed 4665 Lampson Avenue Project. Exhibit 10-A identifies the representative noise source locations used to assess the operational noise levels. This section analyzes the potential operational noise impacts resulting from the operation of roof-top and ground-mounted air conditioning units, parking lot vehicle movements, outdoor activity, and trash enclosure activities associated with the Project.

10.1 OPERATIONAL NOISE SOURCES

This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. The proposed residential development is not expected to include any specific type of operational noise levels beyond the typical noise sources associated with residential land uses in the Project study area. However, to present a conservative approach, on-site Project-only operational noise sources are analyzed in this noise study and are expected to include: roof-top and ground-mounted air conditioning units, parking lot vehicle movements, outdoor activity, and trash enclosure activities.

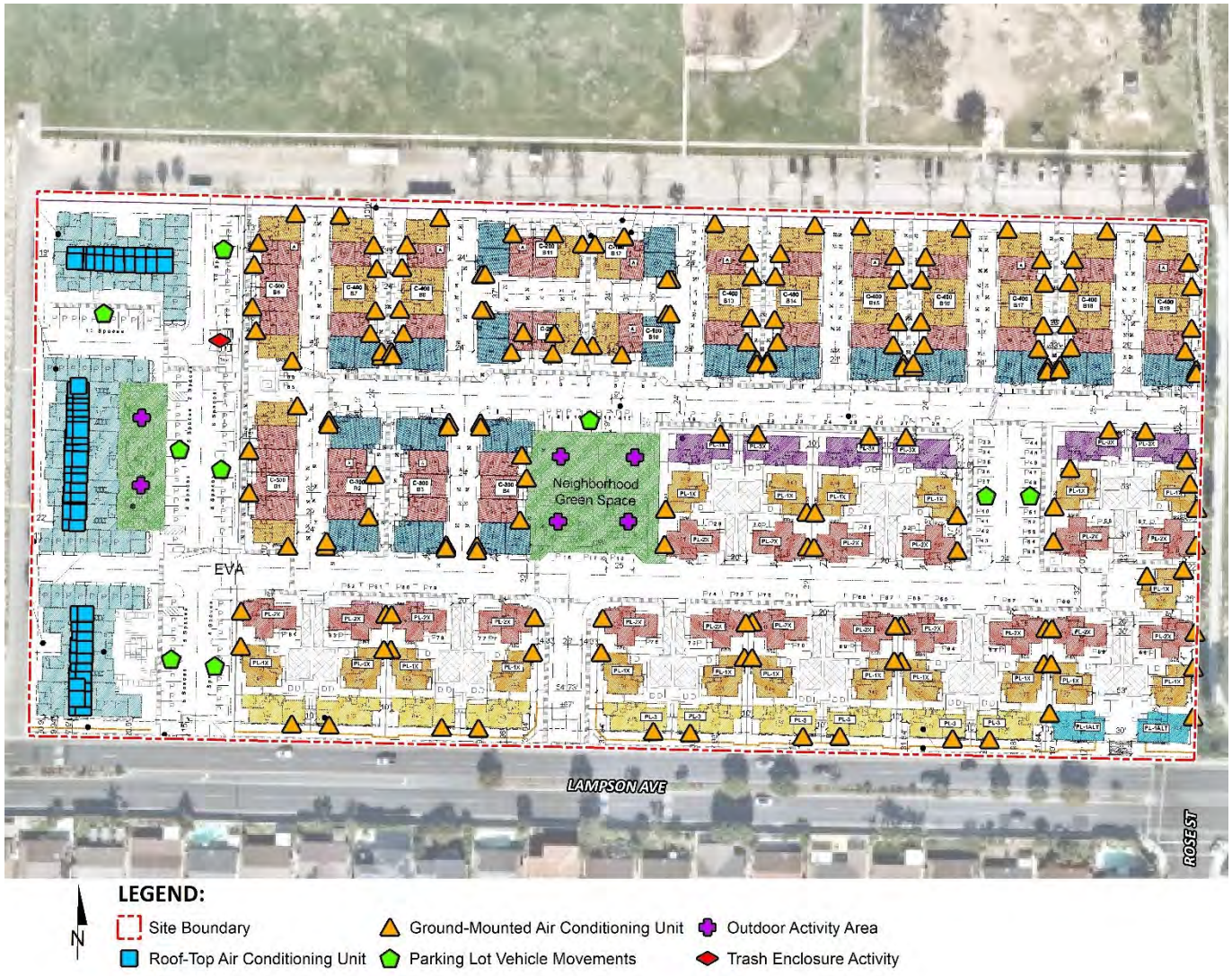
AIR CONDITIONING UNITS

To assess the noise levels created by the roof-top and ground-mounted air conditioning units, reference noise levels were taken from equipment specifications for a 3- to 5-ton residential packaged air conditioning unit (Carrier 24ABC6). The air conditioning units were modeled as operating 45 minutes per hour during the daytime and 30 minutes at nighttime, which represents the typical maximum operating time for properly sized AC systems. For this noise analysis, 77 air conditioning units are expected to be located on the roof of the proposed affordable apartment buildings and 169 ground-mounted air conditioning units are located adjacent to single family detached residential units (cluster homes) and multifamily units (low-rise), as indicated on the Project site plan. The roof-top air conditioning units are anticipated to be located 3 feet above the roof and ground. At a uniform reference distance of 50 feet the units would generate a reference noise level of 44.4 dBA L_{eq}.

PARKING LOT ACTIVITIES

To determine the noise levels associated with parking lot vehicle movements, Urban Crossroads collected reference noise level measurements over a 24-hour period, at the parking lot for the Panasonic Avionics Corporation in the City of Lake Forest. The peak hour of activity measured over the 24-hour noise level measurement period occurred between 12:00 p.m. to 1:00 p.m., or the typical lunch hour for employees working in the area. The measured reference noise level at 50 feet from parking lot vehicle movements was measured at 56.2 dBA L_{eq}. The parking lot noise levels are mainly due to cars pulling in and out of spaces during peak lunch hour activity and employees talking. Noise associated with parking lot vehicle movements is expected to operate for the entire hour (60 minutes).

EXHIBIT 10-A: OPERATIONAL NOISE SOURCE LOCATIONS



OUTDOOR ACTIVITY AREAS

To describe the outdoor common area courtyards activity areas, a reference noise level measurement was taken by Urban Crossroads, Inc, at Washington Street Park in the City of Escondido. The 4.5-acre park was active during the measurement, and included a gazebo for gathering/parties, picnic tables, restrooms, two half-court basketball courts, two age-appropriate children's playgrounds, game tables, and walking paths. At 50 feet, the reference noise level is 59.9 dBA L_{eq} at a noise source height of 5 feet. The reference noise level measurement includes outdoor eating, drinking, with patrons laughing and talking. Outdoor activities are limited to the daytime hours.

TRASH ENCLOSURE ACTIVITY

To describe the noise levels associated with a trash enclosure activity, Urban Crossroads collected a reference noise level measurement at an existing trash enclosure containing two dumpster bins, at the at the Old Town West Parking structure in the City of Orange. The trash enclosure noise levels describe metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, trash dropping into the metal dumpster. The reference noise levels describe trash enclosure noise activities when trash is dropped into an empty metal dumpster, as would occur at the Project site. The measured reference noise level at the uniform 50-foot reference distance is 72.7 dBA L_{max} and 57.4 dBA L_{eq} for the trash enclosure activity. The reference noise level describes the expected noise source activities associated with the trash enclosures for each of the Project buildings. Typical trash enclosure activities are estimated to occur for 10 minutes per hour.

10.2 REFERENCE NOISE LEVELS

To estimate the operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment. The reference project operational noise levels are based on the Project related noise sources shown on Exhibit 10-A. The reference Project operational sound power levels are summarized in Table 10-1.

TABLE 10-1: REFERENCE NOISE LEVELS

Noise Source	Noise Source Height (Feet)	Min./Hour[2]		Reference Noise Level (dBA L_{eq})		Sound Power Level (dBA)[6]
		Day	Night	@ Ref. Dist.	@ 50 Feet	
Air Conditioning Units[1]	5'	60	60	77.2	44.4	76.0
Parking Lot Movements	5'	60	60	66.6	56.1	87.8
Outdoor Activity	5'	60	0	62.8	59.9	91.5
Trash Enclosure Activity	5'	10	10	72.7	57.4	89.0

[1] Carrier 25HBC5 air conditioning unit assumed for ground-mounted and roof-top units, see Appendix 10.1.
[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

10.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the proposed Project operations that include trash enclosure activity, air conditioning, a loading dock, and parking lot activity, Urban Crossroads, Inc. calculated the unmitigated operational source noise levels that are expected to be generated

at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 10-2 shows the Project operational daytime noise levels. The hourly noise levels at the off-site receiver locations are expected to range from 18.9 to 48.4 dBA L_{eq}. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

TABLE 10-2: PROJECT DAYTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{max})			
	R1	R2	R3	R4
Air Conditioning Units	40.8	30.8	42.5	16.3
Parking Lot Movements	38.5	31.1	41.7	11.7
Outdoor Activity	40.7	32.7	45.7	13.0
Trash Enclosure Activity	25.6	18.1	28.8	7.1
Total (All Noise Sources)	**44.9**	**36.4**	**48.4**	**18.9**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

Table 10-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 15.6 to 43.3 dBA L_{eq}. Appendix 10.2 includes the detailed noise model inputs including the existing perimeter walls used to estimate the Project operational noise levels presented in this section.

TABLE 10-3: PROJECT NIGHTTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{max})			
	R1	R2	R3	R4
Air Conditioning Units	38.1	28.1	39.8	13.6
Parking Lot Movements	37.6	30.2	40.8	10.8
Outdoor Activity	0.0	0.0	0.0	0.0
Trash Enclosure Activity	24.6	17.1	27.8	6.2
Total (All Noise Sources)	**40.9**	**32.3**	**43.3**	**15.6**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

10.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

Tables 10-4 shows the Project operational noise levels during the daytime and nighttime hours. The daytime hourly noise levels at the off-site receiver locations are expected to range from 18.9 to 48.4 dBA $L_{eq.}$ The nighttime hourly noise levels at the off-site receiver locations are expected to range from 15.6 to 43.3 dBA L_{eq}. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

TABLE 10-4: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]		Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	44.9	40.9	50	55	No	No
R2	36.4	32.3	50	55	No	No
R3	48.4	43.3	50	55	No	No
R4	18.9	15.6	50	55	No	No

[1] See Exhibit 9-A for the receiver locations.
[2] Proposed Project operational noise levels as shown on Table 10-1.
[3] City of Los Alamitos Municipal Code, Section 17.20.050 (Appendix 3.1)
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (9) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \ldots 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describes the Project noise level increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented on Tables 10-2 and 10-3, respectively.

As indicated on Tables 10-5 and 10-6, the Project will generate an unmitigated daytime and nighttime operational noise level increases ranging from less than 0.0 to 1.2 dBA L_{eq} at the nearest receiver locations. In effect, the amount to which a given noise level increase is considered acceptable is reduced based on existing ambient noise conditions. Based on the operational noise level increase significance criteria presented in Section 4.2, the Project-related operational noise level increases will satisfy the operational noise level increase criteria at the nearest sensitive receiver locations and the impact will be *less than significant.*

TABLE 10-5: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria	Increase Criteria Exceeded?
R1	38.5	L1	49.9	50.2	0.3	5.0	No
R2	31.1	L2	60.8	60.8	0.0	3.0	No
R3	41.7	L3	68.7	68.7	0.0	1.5	No
R4	11.7	L4	56.5	56.5	0.0	5.0	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project daytime operational noise levels as shown on Table 10-2.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown on Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.

TABLE 10-6: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria	Increase Criteria Exceeded?
R1	37.6	L1	42.4	43.6	1.2	5.0	No
R2	30.2	L2	52.4	52.4	0.0	5.0	No
R3	40.8	L3	60.7	60.7	0.0	3.0	No
R4	10.8	L4	55.1	55.1	0.0	5.0	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project nighttime operational noise levels as shown on Table 10-3.
[3] Reference noise level measurement locations as shown on Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown on Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.

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11 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 11-A shows the construction noise source locations in relation to the nearest sensitive receiver locations previously described in Section 9. Section 17.20.020 of the City of Los Alamitos Code, construction activities are exempted from the noise ordinance if it occurs between the hours of 7:00 a.m. to 8:00 p.m. on weekdays and on Saturdays. No construction is allowed at any time on Sundays or Federal holidays.

In addition, since the City of Los Alamitos has not established a numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes, a numerical construction threshold based on Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use. (7 p. 179)

11.1 CONSTRUCTION NOISE LEVELS

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment is expected to occur in the following stages:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

11.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. (27) The RCNM equipment database, provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

EXHIBIT 11-A: CONSTRUCTION ACTIVITY AND RECEIVER LOCATIONS



TABLE 11-1: CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Demolition	Front End Loader	75.0	84.5	116.1
	Gradall	83.0		
	Excavator	77.0		
Site Preparation	Dozer	78.0	83.4	115.1
	Front End Loader	75.0		
	Grader	81.0		
Grading	Excavator	77.0	84.0	115.6
	Tractor	80.0		
	Scraper	80.0		
Building Construction	Crane	73.0	77.4	109.1
	Backhoe	74.0		
	Generator (<25kVA)	70.0		
Paving	Paver	74.0	77.8	109.5
	Dump Truck	72.0		
	Roller	73.0		
Architectural Coating	Man Lift	68.0	76.2	107.8
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model.

11.3 CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. To assess a reasonable worst-case construction scenario and account for the dynamic nature of construction activities, the Project construction noise analysis models the equipment combination with the highest reference level as a moving point within the construction area (Project site boundary). Construction impacts are based on the highest noise level calculated at each receiver location. As shown on Table 11-2, the construction noise levels are expected to range from 26.8 to 63.6 dBA L_{eq}, and the highest construction levels are expected to range from 35.1 to 63.6 dBA L_{eq} at the nearby receiver locations. Appendix 11.1 includes the detailed CadnaA construction noise model inputs.

The construction noise analysis presents a conservative approach with the highest noise-level-producing equipment for each stage of Project construction operating at the closest point from primary construction activity to the nearby sensitive receiver locations. This scenario is unlikely to occur during typical construction activities and likely overstates the construction noise levels which will be experienced at each receiver location.

TABLE 11-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})						
	Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	59.1	58.0	58.6	52.0	52.5	50.8	58.6
R2	54.8	53.7	54.3	47.7	48.2	46.5	54.3
R3	63.6	62.5	63.1	56.5	57.0	55.3	63.1
R4	35.1	34.0	34.6	28.0	28.5	26.8	34.6

[1] The nearest construction noise source and receiver locations are shown on Exhibit 11-A. All receivers are shown on Exhibit 9A
[2] Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

11.4 CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations will satisfy the reasonable daytime 80 dBA L_{eq} significance threshold during Project construction activities as shown on Table 11-3. Therefore, the noise impacts due to Project construction noise are considered *less than significant* at all receiver locations.

TABLE 11-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	58.8	80	No
R2	54.4	80	No
R3	63.2	80	No
R4	35.6	80	No

[1] Noise receiver locations are shown on Exhibit 11-A.
[2] Highest construction noise level operating at the Project site boundary to nearby receiver locations (Table 11-2).
[3] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

11.5 CONSTRUCTION VIBRATION IMPACTS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). (7) However, while vehicular traffic is rarely perceptible, construction has

the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with various types of construction equipment are summarized on Table 11-4. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

TABLE 11-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Using the vibration source level of construction equipment provided on Table 11-4 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 11-5 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 51 to 5,046 feet from the Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.03 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels will satisfy the building damage thresholds at all receiver locations. Therefore, the Project-related vibration impacts are considered less than significant during the construction activities at the Project site.

In addition, the typical construction vibration levels at the nearest sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site boundaries.

TABLE 11-5: PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver Location[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Level		
R1	173'	0.00	0.00	0.00	0.00	0.00	0.30	No
R2	91'	0.00	0.01	0.01	0.01	0.01	0.30	No
R3	51'	0.00	0.01	0.03	0.03	0.03	0.30	No
R4	5,046'	0.00	0.00	0.00	0.00	0.00	0.30	No

[1] Construction receiver locations are shown on Exhibit 11-A.
[2] Distance from receiver location to Project construction boundary.
[3] Based on the Vibration Source Levels of Construction Equipment (Table 11-4).
[4] FRTA Transit Noise and Vibration Impact Assessment, September 2018.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

12 ON-SITE AIRCRAFT NOISE IMPACTS

An on-site exterior aircraft noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent JFTB Los Alamitos aircraft noise sources in the Project study area, and to identify potential noise abatement measures for the proposed Project that would achieve acceptable Project noise levels.

The JFTB Los Alamitos is located adjacent to, and northwest of the Project. Exhibit 3-B shows the Project site in relation to the airport's projected noise level contour boundaries, as provided by the *2020 Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos* (18). As shown on Exhibit 12-A, the northwestern portion of the Project site would locate residential uses between the 60 and 65 dBA CNEL noise level contours of JFTB Los Alamitos. The compatibility criteria (16), shown on Exhibit 3-D, indicates residential land uses exposed to noise levels less than 60 dBA CNEL are "normally consistent", less than 65 dBA CNEL are considered "conditionally consistent" which requires an acoustical analysis to ensure that the interior CNEL does not exceed 45 dBA CNEL. The ALEUP does not require any additional considerations for exterior locations exposed to noise levels below 70 dBA CNEL.

As discussed in Section 7.2.1, typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." Based on future JFTB Los Alamitos aircraft noise levels ranging from 60 to 65 dBA CNEL, interior noise levels would range from 35 dBA to 40 dBA CNEL. This noise level analysis shows that the 45 dBA CNEL interior noise standard can be satisfied using standard construction and complying with statutory and regulatory noise requirements for all residential units exposed to aircraft noise from JFTB Los Alamitos. Therefore, the Project would not expose people residing or working in the project area to excessive noise levels from airport or aircraft operations, and impacts would be *less than significant*.

EXHIBIT 12-A: ON-SITE AIRCRAFT NOISE LEVEL CONTOURS



13 REFERENCES

1. **State of California.** *California Environmental Quality Act, Appendix G & Amendments and Additions to the State CEQA Guidelines.* 2019.
2. **U.S. Department of Transportation Federal Highway Administration.** Acoustical Consideration. *Noise Barrier Design Handbook.* [Online] [Cited: November 28, 2016.] https://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/design/design03.cfm.
3. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch.** *Highway Traffic Noise Analysis and Abatement Policy and Guidance.* December 2011.
4. **California Department of Transportation.** *Traffic Noise Analysis Protocol.* May 2011.
5. **Harris, Cyril M.** *Noise Control in Buildings.* s.l. : McGraw-Hill, Inc., 1994.
6. **Urban Crossroads, Inc.** *4665 Lampson Avenue Traffic Analysis.* February 3, 2023.
7. **U.S. Department of Transportation, Federal Transit Administration.** *Transit Noise and Vibration Impact Assessment Manual, FTA Report No. 0123.* September 2018.
8. **Environmental Protection Agency Office of Noise Abatement and Control.** *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.* March 1974. EPA/ONAC 550/9/74-004.
9. **California Department of Transportation Environmental Program.** *Technical Noise Supplement - A Technical Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA : s.n., September 2013.
10. **U.S. Department of Transportation, Federal Highway Administration.** *Highway Traffic Noise in the United States, Problem and Response.* April 2000. p. 3.
11. **California Department of Transportation.** *Transportation and Construction Vibration Guidance Manual.* April 2020.
12. **Office of Planning and Research.** *State of California General Plan Guidlines 2003.* October 2003.
13. **State of California.** *2019 California Green Building Standards Code.* January 2020.
14. **Alamitos, City of Los.** *Los Alamitos General Plan .* March 23, 2015.
15. **City of Los Alamitos.** *Municipal Code, Section 17.20.020.*
16. **Commision, Orange Count Airport Land Use.** *Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base Los Alamitos.* August 17, 2017.
17. **Office of the Adjutant General California National Gaurd.** *Air Installation Compatible Use Zone (AICUZ) Study, Armed Forces Reserve Center Los Alamitos Airfield.* March 1994.
18. **U.S. Army Public Health Center.** *Noise Assessment for Los Alamitos Airfield, Joint Forces Trainig Base Los Alamitos.* June 1, 2020.
19. **California Court of Appeal.** *Gray v. County of Madera, F053661.* 167 Cal.App.4th 1099; - Cal.Rptr.3d, October 2008.
20. **Federal Interagency Committee on Noise.** *Federal Agency Review of Selected Airport Noise Analysis Issues.* August 1992.
21. **California Department of Transportation.** *Technical Noise Supplement.* November 2009.

22. **Urban Crossroads, Inc.** *The Lumberyard (DEV2020-00262).* 2022.

23. **U.S. Department of Transportation, Federal Highway Administration.** *FHWA Highway Traffic Noise Prediction Model.* December 1978. FHWA-RD-77-108.

24. **California Department of Transportation Environmental Program, Office of Environmental Engineering.** *Use of California Vehicle Noise Reference Energy Mean Emission Levels (Calveno REMELs) in FHWA Highway Traffic Noise Prediction.* September 1995. TAN 95-03.

25. **City of Seal Beach.** *City of Seal Beach General Plan Circulation Element.* December 2003.

26. **California Department of Transportation.** *Traffic Noise Attenuation as a Function of Ground and Vegetation Final Report.* June 1995. FHWA/CA/TL-95/23.

27. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning.** *FHWA Roadway Construction Noise Model.* January, 2006.

14 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed 4665 Lampson Avenue Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 788-1971.

William Maddux
Senior Associate
URBAN CROSSROADS, INC.
(619) 788-1971
bmaddux@urbanxroads.com

EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
APA – American Planning Association
AWMA – Air and Waste Management Association

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

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APPENDIX 3.1:

CITY OF LOS ALAMITOS MUNICIPAL CODE

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Los Alamitos, California Municipal Code

Title 17 ZONING

Division 3: SITE PLANNING AND GENERAL DEVELOPMENT STANDARDS

Chapter 17.20 NOISE

17.20.010 Purpose

17.20.020 Exemptions

17.20.030 Noise Level Measurement Criteria

17.20.040 Designated Noise Districts

17.20.050 Exterior Noise Standards

17.20.060 Interior Noise Standards

17.20.070 Special Provisions—Schools, Hospitals, and Places of Public Assembly

17.20.080 Manner of Enforcement

17.20.090 Relief from Standards—Application Procedure

17.20.010 Purpose

A. The City establishes the noise regulations in this chapter to control unnecessary, excessive, and annoying sounds emanating from all properties and land uses in the City. It is the declared policy of the City to prohibit these sounds generated from all sources, as specified in this chapter.

B. The City recognizes and declares, based on published scientific and health data, that certain noise levels are detrimental to the public health, welfare, and general safety and contrary to public interest. Therefore, the Council does ordain and declare that creating, maintaining, causing, or allowing to create, maintain, or cause any noise in a manner prohibited by, or not in conformity with the provisions of this chapter, is a public nuisance and shall be abated and when such abated is not achieved, to be punishable as a public nuisance pursuant to Section 17.20.080 (Manner of Enforcement) of this title. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.020 Exemptions

The following activities shall be exempt from the provisions of this chapter.

A. School bands, school athletic events, and school entertainment events, provided these events are conducted on school property or authorized by special permit from the City;

B. Activities lawfully conducted in public parks, public playgrounds, and public or private school grounds;

C. A mechanical device, apparatus, or equipment used, related to, or connected with emergency machinery, vehicle, or work;

D. Noise sources associated with construction, repair, remodeling, or grading of any real property, provided a permit has been obtained from the City, and further provided the activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays and on Saturdays, or at any time on Sundays or Federal holidays;

E. Noise sources associated with the maintenance of real property, provided the activities take place between the hours of 8:00 a.m. and 8:00 p.m. on weekdays and on Saturdays, or between the hours of 9:00 a.m. and 6:00 p.m. on Sunday or a Federal holiday;

F. An activity or equipment to the extent that design regulation of it has been preempted by State or Federal laws. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.030 Noise Level Measurement Criteria

Noise level measurements made in compliance with the provisions of this chapter shall be performed using a sound level meter as defined in Division 7 (Definitions). The location selected for measuring exterior noise levels shall be at any point on the property line of the offender or anywhere on the affected property. Interior noise measurements shall be made within the affected building. The measurement shall be made at a point in the affected building at least four feet from the wall, ceiling, or floor nearest the noise source. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.040 Designated Noise Districts

A. **Noise Districts.** For the purposes of controlling noise and its impacts, the City shall be divided into noise districts defined as follows:

1. Noise District 1: All properties zoned R-1, R-2, R-3, and MH.

2. Noise District 2: All properties zoned C-O, C-F, and O-A, and with an MOZ overlay.

3. Noise District 3: All properties zoned C-G and TCMU, and with the ROZ overlay.

4. Noise District 4: All properties zoned P-L-I.

B. **Unclassified.** For any property or group of properties zoned SP, the Director shall assign an applicable noise district based upon the prevailing land uses within the specific plan area. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.050 Exterior Noise Standards

A. **Baseline.** The following noise standards, unless otherwise specifically indicated, shall apply to properties within the identified noise districts. No person shall cause any noise to occur that exceeds these standards except as authorized in subsection B, below.

Table 3-01: Exterior Noise Standards

Noise District	Maximum Noise Level	Time Period
1—Daytime	55 dB(A)	7:00 a.m. to 10:00 p.m.
1—Nighttime	50 dB(A)	10:00 p.m. to 7:00 a.m.
2	55 dB(A)	Anytime
3	60 dB(A)	Anytime
4	70 dB(A)	Anytime

B. **Temporary Exceedances.** It is unlawful for any person to create noise, or to allow the creation of noise, on property owned, leased, occupied, or otherwise controlled by a person, that causes the baseline noise levels established in subsection A, either within or outside of the City, to exceed the applicable noise standard as follows:

1. For a cumulative period of more than 30 minutes in any hour;
2. Plus five dB(A) for a cumulative period of more than 15 minutes in any hour;
3. Plus 10 dB(A) for a cumulative period of more than five minutes in any hour;
4. Plus 15 dB(A) for a cumulative period of more than one minute in any hour; or
5. Plus 20 dB(A) for any period of time.

C. **Maximum Allowable Noise Levels.** In the event the ambient noise level exceeds the noise limit categories described in subsections (B)(1) through (5) of this section above, the cumulative period applicable to the category shall be increased to reflect the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under that category shall be increased to reflect the maximum ambient noise level. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.060 Interior Noise Standards

A. **Baseline.** Interior noise standards established by the State Health and Safety Code (California Code of Regulations, Title 24, Part 2) shall apply to all multi-family residential construction and uses. For all other uses, the following interior noise standards shall apply.

Table 3-02: Interior Noise Standards

Noise District	Maximum Noise Level	Time Period
1—Daytime	55 dB(A)	7:00 a.m. to 10:00 p.m.
1—Nighttime	45 dB(A)	10:00 p.m. to 7:00 a.m.
2, 3, 4	55 dB(A)	Anytime

B. **Temporary Exceedances.** It is unlawful for any person to create noise, or to allow the creation of noise, on property owned, leased, occupied, or otherwise controlled by a person, that causes the noise level, when measured within structures in the applicable noise district, to exceed:

1. The noise standard for a cumulative period of more than five minutes in an hour;

2. The noise standard plus five dB(A) for a cumulative period of more than one minute in an hour; or

3. The noise standard plus ten 10 dB(A) for any period of time.

C. **Maximum Allowable Noise Levels.** In the event the ambient noise level exceeds either of the first two noise limit categories described in subsections (B)(1) and (2) of this section, the cumulative period applicable to the category shall be increased to reflect the ambient noise level. In the event the ambient noise level exceeds the third noise limit category, the maximum allowable noise level under that category shall be increased to reflect the maximum ambient noise level.

D. **Different Noise Districts.** In the event that the noise source and the affected property are within different noise districts, the noise standards of the affected property shall apply. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.070 Special Provisions—Schools, Hospitals, and Places of Public Assembly

It is unlawful for a person to create noise that causes the noise level at a school, hospital, or place of public assembly—while the facility is in use—to exceed the noise limits specified for exterior noise in this chapter, or which noise level unreasonably interferes with the use of the facility or which unreasonably disturbs or annoys patients in a hospital, provided conspicuous signs are displayed in three separate locations within one-tenth of a mile of the school, hospital, or place of public assembly indicating the presence of such school, hospital, or place of public assembly. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.080 Manner of Enforcement

A. The Director and duly authorized representatives are directed to enforce the provisions of this chapter. The Police Chief and duly authorized representatives are authorized in compliance with Penal Code Section 836.5 to arrest any person without a warrant when they have reasonable cause to believe that a person has committed a misdemeanor in their presence.

B. Persons shall not interfere with, oppose, or resist an authorized person charged with enforcement of this chapter while any person is engaged in the performance of his or her duty. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

17.20.090 Relief from Standards—Application Procedure

A. **Application Requirements.** The owner or operator of a noise source that violates any of the provisions of this chapter may file an application with the Director for relief from the provisions, and the owner or operator shall detail all actions taken to comply with the provisions, the reasons why immediate compliance cannot be achieved, a proposed method of achieving compliance, and a proposed time schedule for its accomplishment. The application shall be accompanied by a fee as established by resolution of the Council.

B. **Separate Applications.** A separate application shall be filed for each noise source. However, in the circumstance that several mobile sources are under common ownership, or several fixed sources occur on a single property, such request for relief may be combined into one application. Upon receipt of the application and fee, the Director shall refer it with his/her recommendation in compliance with the provisions of this chapter.

C. **Compliance Required Until Relief Granted.** An applicant for relief shall remain subject to prosecution under the terms of this title until such relief is granted.

D. **Review Authority.** The Planning Commission shall evaluate all applications for relief from the requirements of this chapter and may grant relief with respect to time for compliance subject to the terms, conditions, and requirements as it may deem reasonable to achieve maximum compliance with the provisions of this chapter. These terms, conditions, and requirements may include, but shall not be limited to, limitations on noise levels and operating hours. Each relief application granted shall identify in detail the approved method of achieving maximum compliance and a time schedule for its accomplishment.

E. **Factors to Be Considered.** In its determinations, the Planning Commission shall consider the magnitude of nuisance caused by the offensive noise; the uses of property within the area of impingement by the noise; the time factors related to study, design, financing and construction of remedial work; the economic factors related to age and useful life of equipment; and the general public interest and welfare.

F. **Violations.** Any relief granted shall be by resolution and shall be transmitted to the Director for enforcement. A violation of the terms of the relief is unlawful. (Ord. 19-03 § 3, 2019; Ord. 688 § 1, 2006)

Contact:

City Clerk: 562-431-3538

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APPENDIX 5.1:

STUDY AREA PHOTOS

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JN: 14501 Study Area Photos



L1_E
33, 46' 57.570000"118, 2' 59.680000"



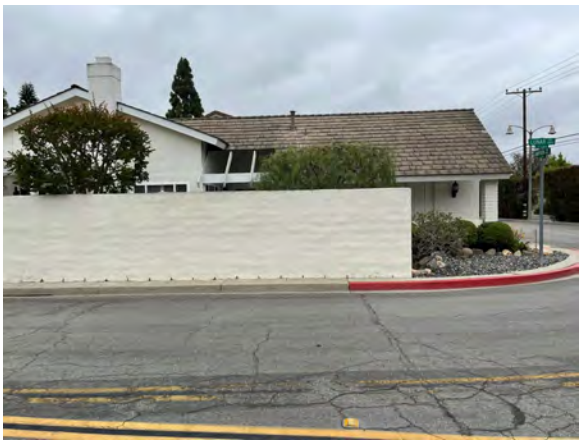
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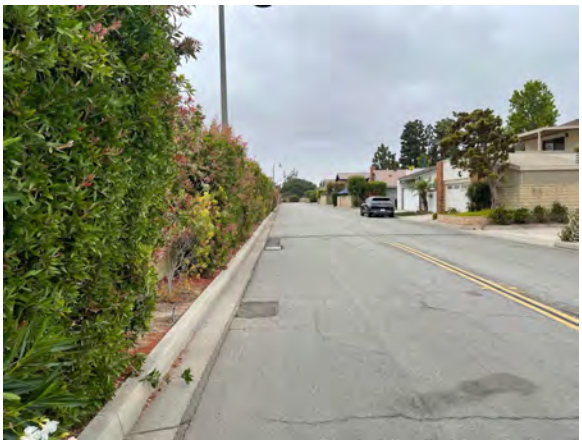
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L1_W
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L2_E
33, 46' 53.210000"118, 2' 40.920000"



L2_N
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JN: 14501 Study Area Photos



L2_S
33, 46' 53.240000"118, 2' 40.920000"



L2_W
33, 46' 53.230000"118, 2' 40.920000"



L3_E
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L3_N
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L3_S
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L3_W
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JN: 14501 Study Area Photos



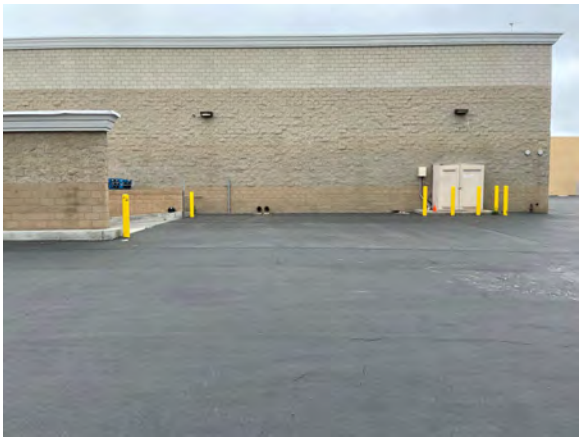
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L4_S
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L4_W
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APPENDIX 5.2:

NOISE LEVEL MEASUREMENTS

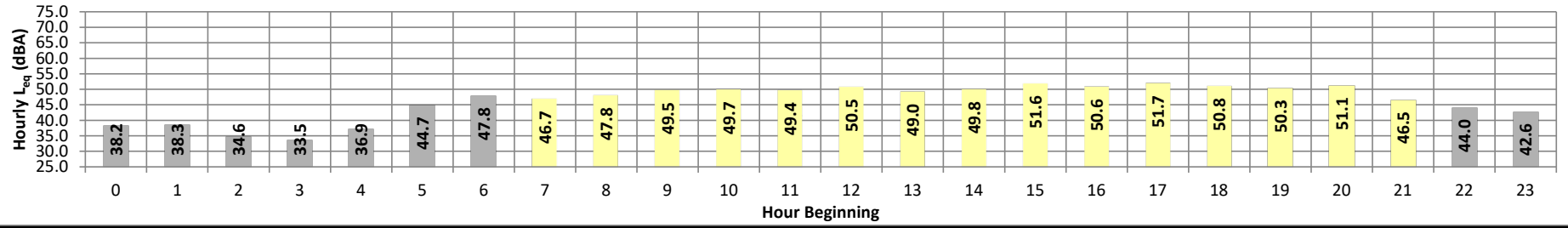
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24-Hour Noise Level Measurement Summary

Date: Monday, May 23, 2022 *Location:* L1 - Located north of the Project site near Arbor Dog Park at *Meter:* Piccolo II *JN:* 14501

Project: 4665 Lampson *Source:* 4665 Lampson Avenue. *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	38.2	41.9	35.9	41.6	41.4	40.8	40.3	39.0	37.6	36.5	36.3	36.0	38.2	10.0	48.2
	1	38.3	43.5	35.9	43.0	42.7	41.6	40.5	38.7	37.6	36.4	36.3	36.0	38.3	10.0	48.3
	2	34.6	37.8	33.0	37.5	37.2	36.5	36.1	34.9	34.2	33.4	33.3	33.1	34.6	10.0	44.6
	3	33.5	36.4	32.4	36.1	35.8	35.2	34.7	33.7	33.2	32.7	32.6	32.5	33.5	10.0	43.5
	4	36.9	42.1	35.2	41.4	40.7	39.3	38.3	37.1	36.5	35.6	35.5	35.3	36.9	10.0	46.9
	5	44.7	51.5	38.9	51.0	50.4	49.2	48.2	45.8	43.2	40.2	39.6	39.1	44.7	10.0	54.7
	6	47.8	53.7	43.0	53.3	53.0	51.9	51.5	48.6	46.3	44.0	43.6	43.2	47.8	10.0	57.8
Day	7	46.7	52.9	42.4	52.4	52.0	51.0	50.2	47.6	45.4	43.1	42.8	42.5	46.7	0.0	46.7
	8	47.8	56.1	42.5	55.0	54.3	52.8	51.7	48.2	45.6	43.3	43.0	42.7	47.8	0.0	47.8
	9	49.5	57.2	45.5	56.5	55.6	54.0	52.9	49.7	48.0	46.1	45.9	45.6	49.5	0.0	49.5
	10	49.7	54.4	46.5	54.0	53.7	53.1	52.6	50.3	48.9	47.1	46.9	46.6	49.7	0.0	49.7
	11	49.4	53.7	46.7	53.4	53.1	52.4	51.9	50.2	48.6	47.2	47.0	46.8	49.4	0.0	49.4
	12	50.5	69.7	48.9	68.2	67.1	63.6	61.9	57.3	53.8	50.2	49.8	49.3	50.5	0.0	50.5
	13	49.0	55.5	44.7	55.1	54.6	53.2	52.3	49.9	47.4	45.4	45.1	44.8	49.0	0.0	49.0
	14	49.8	56.5	46.1	55.9	55.3	54.0	53.1	50.3	48.4	46.7	46.5	46.2	49.8	0.0	49.8
	15	51.6	57.7	46.6	57.3	56.8	55.9	55.2	52.8	49.5	47.2	47.0	46.7	51.6	0.0	51.6
	16	50.6	55.3	47.5	55.0	54.5	53.7	53.1	51.3	49.8	48.1	47.9	47.6	50.6	0.0	50.6
	17	51.7	57.4	47.8	57.1	56.6	55.8	55.2	52.6	50.2	48.5	48.2	47.9	51.7	0.0	51.7
	18	50.8	56.4	47.5	56.0	55.7	55.0	54.2	51.5	49.4	48.0	47.8	47.6	50.8	0.0	50.8
	19	50.3	54.9	47.1	54.6	54.3	53.6	53.1	51.3	49.1	47.6	47.4	47.2	50.3	5.0	55.3
	20	51.1	57.4	45.1	57.1	56.9	56.5	55.9	51.9	48.8	45.8	45.5	45.2	51.1	5.0	56.1
	21	46.5	51.8	42.2	51.4	51.1	50.3	49.7	47.6	45.3	42.9	42.6	42.4	46.5	5.0	51.5
Night	22	44.0	49.3	40.3	48.9	48.5	47.8	47.2	44.9	42.5	40.8	40.6	40.4	44.0	10.0	54.0
	23	42.6	47.6	38.6	47.3	47.0	46.4	46.0	44.0	40.8	39.1	38.9	38.7	42.6	10.0	52.6

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	46.5	51.8	42.2	51.4	51.1	50.3	49.7	47.6	45.3	42.9	42.6	42.4
	Max	51.7	69.7	48.9	68.2	67.1	63.6	61.9	57.3	53.8	50.2	49.8	49.3
Energy Average		49.9	Average:		55.9	55.4	54.3	53.5	50.8	48.5	46.5	46.2	45.9
Night	Min	33.5	36.4	32.4	36.1	35.8	35.2	34.7	33.7	33.2	32.7	32.6	32.5
	Max	47.8	53.7	43.0	53.3	53.0	51.9	51.5	48.6	46.3	44.0	43.6	43.2
Energy Average		42.4	Average:		44.5	44.1	43.2	42.5	40.7	39.1	37.6	37.4	37.1

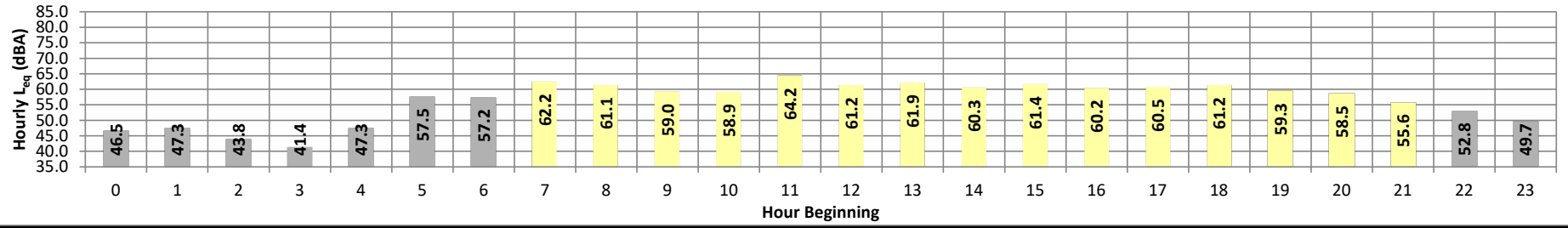
L_{eq} (dBA)		
24-Hour	Daytime (7am-10pm)	Nighttime (10pm-7am)
48.3	**49.9**	**42.4**

24-Hour Noise Level Measurement Summary

Date: Monday, May 23, 2022 | *Location:* L2 - Located east of the Project site near single-family | *Meter:* Piccolo II | *JN:* 14501

Project: 4665 Lampson | *Source:* residence at 5001 Lunar Drive. | *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	46.5	56.8	40.3	56.5	56.0	53.7	50.9	44.4	42.2	40.9	40.7	40.4	46.5	10.0	56.5
	1	47.3	58.0	40.7	57.8	57.1	55.0	51.8	44.7	43.0	41.4	41.1	40.8	47.3	10.0	57.3
	2	43.8	54.9	36.1	54.5	54.0	51.5	48.6	40.9	37.9	36.6	36.4	36.2	43.8	10.0	53.8
	3	41.4	52.5	34.8	52.1	51.6	49.3	46.3	37.7	36.0	35.2	35.0	34.8	41.4	10.0	51.4
	4	47.3	58.8	36.9	58.4	57.8	55.2	52.8	43.8	39.2	37.2	37.1	36.9	47.3	10.0	57.3
	5	57.5	65.6	45.8	65.3	64.9	63.5	62.3	58.9	54.6	48.6	47.6	46.1	57.5	10.0	67.5
	6	57.2	66.5	47.6	66.2	65.6	63.6	62.1	57.2	53.3	48.7	48.2	47.7	57.2	10.0	67.2
Day	7	62.2	73.6	48.8	73.2	72.5	69.2	66.6	61.1	56.9	50.6	49.6	48.9	62.2	0.0	62.2
	8	61.1	71.2	49.8	70.6	69.9	67.5	65.6	61.0	57.7	51.5	50.6	50.0	61.1	0.0	61.1
	9	59.0	68.2	49.5	67.7	67.0	65.1	63.6	59.5	55.6	50.5	50.0	49.6	59.0	0.0	59.0
	10	58.9	66.8	51.3	66.6	66.1	64.2	63.0	59.7	56.5	52.4	51.8	51.4	58.9	0.0	58.9
	11	64.2	77.3	52.1	76.9	75.7	71.4	67.6	61.0	57.3	53.1	52.6	52.2	64.2	0.0	64.2
	12	61.2	72.4	52.5	71.2	69.9	67.7	66.4	62.1	58.9	54.5	53.5	52.8	61.2	0.0	61.2
	13	61.9	72.9	48.8	72.3	71.7	69.1	66.6	60.6	56.4	50.3	49.6	49.0	61.9	0.0	61.9
	14	60.3	69.6	50.3	69.0	68.2	66.3	64.4	60.8	57.7	52.2	51.1	50.5	60.3	0.0	60.3
	15	61.4	70.7	51.1	70.2	69.5	67.5	65.9	61.5	58.4	52.6	51.8	51.2	61.4	0.0	61.4
	16	60.2	67.8	52.6	67.5	66.9	65.3	64.0	61.1	58.4	54.0	53.4	52.8	60.2	0.0	60.2
	17	60.5	67.9	53.0	67.5	67.0	65.2	64.1	61.4	58.9	54.5	53.8	53.2	60.5	0.0	60.5
	18	61.2	71.0	53.3	70.4	69.8	67.0	64.7	61.1	58.3	54.5	54.0	53.4	61.2	0.0	61.2
	19	59.3	66.3	53.7	66.0	65.5	64.1	63.0	60.2	57.6	54.6	54.2	53.8	59.3	5.0	64.3
	20	58.5	66.8	51.9	66.4	65.7	63.8	62.4	59.1	55.9	52.9	52.4	52.0	58.5	5.0	63.5
	21	55.6	63.3	49.0	63.0	62.5	61.1	60.0	56.3	53.0	49.8	49.4	49.1	55.6	5.0	60.6
Night	22	52.8	61.9	45.8	61.5	61.1	59.0	57.5	52.8	49.1	46.4	46.1	45.9	52.8	10.0	62.8
	23	49.7	59.2	43.2	58.9	58.4	56.2	54.3	48.9	45.9	43.8	43.6	43.3	49.7	10.0	59.7

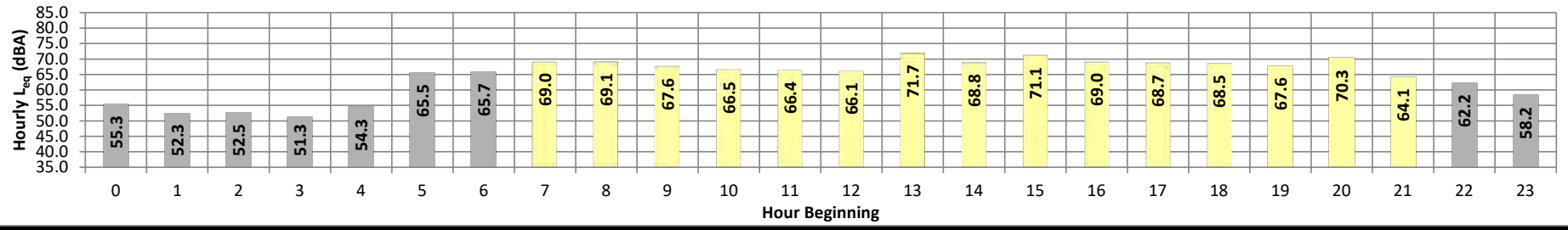
Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	55.6	63.3	48.8	63.0	62.5	61.1	60.0	56.3	53.0	49.8	49.4	48.9
	Max	64.2	77.3	53.7	76.9	75.7	71.4	67.6	62.1	58.9	54.6	54.2	53.8
Energy Average		60.8	Average:		69.2	68.5	66.3	64.5	60.4	57.2	52.5	51.9	51.3
Night	Min	41.4	52.5	34.8	52.1	51.6	49.3	46.3	37.7	36.0	35.2	35.0	34.8
	Max	57.5	66.5	47.6	66.2	65.6	63.6	62.3	58.9	54.6	48.7	48.2	47.7
Energy Average		52.4	Average:		59.0	58.5	56.3	54.1	47.7	44.6	42.1	41.7	41.3

L_{eq} (dBA)		
24-Hour	Daytime (7am-10pm)	Nighttime (10pm-7am)
59.1	**60.8**	**52.4**

24-Hour Noise Level Measurement Summary

Date: Monday, May 23, 2022 *Location:* L3 - Located southwest of the Project site near single-family *Meter:* Piccolo II *JN:* 14501
Project: 4665 Lampson *Source:* residence at 4701 Ironwood Avenue. *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	55.3	68.3	43.2	67.9	66.9	63.4	60.1	48.4	44.8	43.5	43.4	43.2	55.3	10.0	65.3
	1	52.3	65.0	43.2	64.5	63.7	60.5	57.0	46.1	44.6	43.6	43.4	43.3	52.3	10.0	62.3
	2	52.5	65.7	38.6	65.3	64.3	60.5	57.1	45.1	40.4	39.0	38.9	38.7	52.5	10.0	62.5
	3	51.3	64.6	38.4	64.2	63.2	59.8	56.0	42.7	39.4	38.6	38.5	38.4	51.3	10.0	61.3
	4	54.3	67.2	39.4	66.7	65.8	62.4	59.4	48.5	42.1	39.8	39.7	39.5	54.3	10.0	64.3
	5	65.5	77.0	48.8	76.6	75.8	73.1	70.8	63.5	58.0	50.3	49.5	49.0	65.5	10.0	75.5
	6	65.7	76.6	53.4	76.0	75.0	72.1	70.5	65.4	60.5	55.1	54.3	53.6	65.7	10.0	75.7
Day	7	69.0	78.6	53.1	78.1	77.4	75.3	74.1	69.4	64.9	56.5	54.8	53.3	69.0	0.0	69.0
	8	69.1	78.6	53.0	78.2	77.5	75.6	74.2	69.6	64.4	55.8	54.4	53.3	69.1	0.0	69.1
	9	67.6	77.2	52.1	76.8	76.1	74.2	72.8	67.9	62.9	54.0	52.9	52.2	67.6	0.0	67.6
	10	66.5	76.1	52.9	75.6	74.8	72.9	71.5	67.0	62.0	54.6	53.8	53.1	66.5	0.0	66.5
	11	66.4	76.3	52.4	75.9	75.1	72.7	71.2	66.9	61.7	54.0	53.2	52.5	66.4	0.0	66.4
	12	66.1	75.5	53.8	74.9	74.1	72.2	71.2	66.6	62.2	55.8	54.9	54.0	66.1	0.0	66.1
	13	71.7	84.6	51.7	83.7	82.2	79.3	76.9	69.4	63.7	54.1	52.9	51.9	71.7	0.0	71.7
	14	68.8	77.9	53.2	77.4	76.6	74.8	73.6	69.7	65.1	56.3	54.8	53.5	68.8	0.0	68.8
	15	71.1	82.3	53.7	81.5	80.6	77.8	75.9	70.7	65.9	56.9	55.5	54.0	71.1	0.0	71.1
	16	69.0	78.4	53.8	77.9	77.3	75.3	73.8	69.5	65.0	56.7	55.2	54.0	69.0	0.0	69.0
	17	68.7	77.8	53.7	77.4	76.7	74.7	73.4	69.6	64.8	56.2	55.2	54.0	68.7	0.0	68.7
	18	68.5	77.0	53.1	76.6	75.9	74.6	73.7	69.7	64.1	55.5	54.3	53.2	68.5	0.0	68.5
	19	67.6	77.0	53.2	76.4	75.8	73.9	72.9	68.5	62.5	54.8	53.9	53.3	67.6	5.0	72.6
	20	70.3	84.0	51.9	83.1	81.6	76.7	73.7	67.9	62.0	53.7	52.5	52.0	70.3	5.0	75.3
	21	64.1	74.7	48.9	74.2	73.4	71.4	69.9	63.4	57.1	50.4	49.8	49.1	64.1	5.0	69.1
Night	22	62.2	73.9	46.5	73.4	72.5	69.7	67.9	60.2	52.3	47.2	46.9	46.6	62.2	10.0	72.2
	23	58.2	70.9	44.5	70.4	69.4	66.1	63.1	54.2	48.4	45.0	44.8	44.6	58.2	10.0	68.2

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	64.1	74.7	48.9	74.2	73.4	71.4	69.9	63.4	57.1	50.4	49.8	49.1
	Max	71.7	84.6	53.8	83.7	82.2	79.3	76.9	70.7	65.9	56.9	55.5	54.0
Energy Average		68.7	Average:		77.8	77.0	74.8	73.3	68.4	63.2	55.0	53.9	52.9
Night	Min	51.3	64.6	38.4	64.2	63.2	59.8	56.0	42.7	39.4	38.6	38.5	38.4
	Max	65.7	77.0	53.4	76.6	75.8	73.1	70.8	65.4	60.5	55.1	54.3	53.6
Energy Average		60.7	Average:		69.4	68.5	65.3	62.4	52.7	47.8	44.7	44.4	44.1

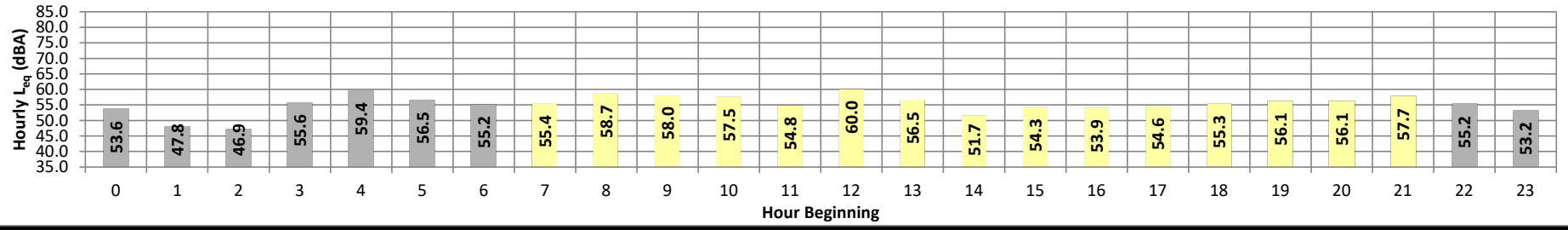
L_{eq} (dBA)		
24-Hour	*Daytime (7am-10pm)*	*Nighttime (10pm-7am)*
67.0	**68.7**	**60.7**

24-Hour Noise Level Measurement Summary

Date: Monday, May 23, 2022 *Location:* L4 - Located west of the Project site near Old Ranch Country Club Golf Course at 3901 Lampson Avenue. *Meter:* Piccolo II *JN:* 14501

Project: 4665 Lampson *Analyst:* A. Khan

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	53.6	59.0	49.7	58.7	58.5	57.8	57.1	54.9	51.8	50.3	49.9	49.8	53.6	10.0	63.6
	1	47.8	51.0	45.7	50.7	50.4	49.9	49.4	48.3	47.5	46.3	46.1	45.9	47.8	10.0	57.8
	2	46.9	50.5	44.7	50.1	49.5	48.8	48.4	47.5	46.7	45.4	45.2	44.9	46.9	10.0	56.9
	3	55.6	65.8	44.1	65.3	64.4	62.4	61.0	54.9	51.5	44.8	44.5	44.2	55.6	10.0	65.6
	4	59.4	69.3	46.1	68.7	68.2	66.8	65.4	58.7	52.6	47.1	46.5	46.3	59.4	10.0	69.4
	5	56.5	67.3	51.7	66.6	65.3	62.3	59.4	55.9	53.3	52.1	52.0	51.8	56.5	10.0	66.5
	6	55.2	63.9	50.7	62.9	61.8	60.1	58.0	55.2	53.5	51.6	51.2	50.8	55.2	10.0	65.2
Day	7	55.4	66.7	47.4	65.8	64.3	61.1	59.8	54.7	51.0	48.2	47.9	47.6	55.4	0.0	55.4
	8	58.7	69.4	49.0	69.0	68.4	66.2	63.9	56.8	52.9	50.1	49.6	49.2	58.7	0.0	58.7
	9	58.0	66.1	54.4	65.6	65.0	63.4	61.7	57.5	55.9	54.8	54.7	54.5	58.0	0.0	58.0
	10	57.5	68.6	51.7	67.5	66.1	63.2	61.1	56.7	54.3	52.3	52.1	51.8	57.5	0.0	57.5
	11	54.8	62.9	51.6	62.1	61.3	59.3	57.8	54.7	53.2	52.1	51.9	51.7	54.8	0.0	54.8
	12	60.0	69.6	52.7	68.9	67.9	66.1	64.1	59.4	57.7	54.2	53.7	53.1	60.0	0.0	60.0
	13	56.5	67.3	49.6	66.4	65.4	62.3	60.1	56.0	53.7	50.4	50.0	49.7	56.5	0.0	56.5
	14	51.7	58.9	49.1	58.1	57.2	55.3	53.9	51.7	50.6	49.6	49.4	49.2	51.7	0.0	51.7
	15	54.3	59.8	50.5	59.5	59.1	58.2	57.5	55.2	52.8	51.0	50.8	50.6	54.3	0.0	54.3
	16	53.9	60.6	51.3	60.1	59.6	57.5	56.0	54.0	52.9	51.9	51.6	51.4	53.9	0.0	53.9
	17	54.6	59.5	52.0	59.0	58.7	57.9	57.0	54.9	53.7	52.5	52.3	52.1	54.6	0.0	54.6
	18	55.3	62.1	52.4	61.8	61.6	59.9	58.4	54.9	53.8	52.9	52.7	52.5	55.3	0.0	55.3
	19	56.1	63.0	53.1	62.6	61.9	60.3	59.0	56.2	54.7	53.7	53.5	53.2	56.1	5.0	61.1
	20	56.1	63.5	52.1	63.2	62.7	61.3	59.7	56.0	54.5	52.8	52.5	52.2	56.1	5.0	61.1
	21	57.7	65.3	52.1	65.0	64.4	62.7	61.1	58.4	56.1	52.7	52.5	52.2	57.7	5.0	62.7
Night	22	55.2	59.8	52.8	59.5	59.1	58.5	58.1	55.8	54.1	53.1	53.0	52.8	55.2	10.0	65.2
	23	53.2	61.8	48.5	60.9	59.8	57.5	56.0	53.3	51.4	50.0	49.7	48.7	53.2	10.0	63.2

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	51.7	58.9	47.4	58.1	57.2	55.3	53.9	51.7	50.6	48.2	47.9	47.6
	Max	60.0	69.6	54.4	69.0	68.4	66.2	64.1	59.4	57.7	54.8	54.7	54.5
Energy Average		56.5	Average:		63.6	62.9	61.0	59.4	55.8	53.9	51.9	51.7	51.4
Night	Min	46.9	50.5	44.1	50.1	49.5	48.8	48.4	47.5	46.7	44.8	44.5	44.2
	Max	59.4	69.3	52.8	68.7	68.2	66.8	65.4	58.7	54.1	53.1	53.0	52.8
Energy Average		55.1	Average:		60.4	59.7	58.2	57.0	53.8	51.4	49.0	48.7	48.3

L_{eq} (dBA)		
24-Hour	Daytime (7am-10pm)	Nighttime (10pm-7am)
56.0	**56.5**	**55.1**

APPENDIX 6.1:

SITE PLAN

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PARKING DATA

For Sale
Parking Provided:

Garages (2 cars each)	338 spaces
(D) Driveways (1&2 cars each)	55 spaces
(P) Open Parking	64 spaces
Total Parking Provided	457 spaces (2.70 sp/unit)
(MC) Motor Cycle Parking	4 spaces

For Rent
Parking Provided:

Garages (1 car each)	30 spaces
Open Parking	69 spaces
Total Parking Provided	99 spaces (1.27 sp/unit)

ktgy

Architecture + Planning
17911 Von Karman Ave,
Suite 200
Irvine, CA 92614
949.851.2133
ktgy.com

MW INVESTMENT GROUP

MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

SCHEMATIC DESIGN

Plot Date:	11.11.2022
Pre-App Submittal:	01.28.2022
1st Planning Submittal:	06.30.2022
2nd Planning Submittal:	10.10.2022

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PARKING

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APPENDIX 7.1:

ON-SITE TRAFFIC NOISE LEVEL CALCULATIONS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Lampson Avenue
Lot No: Apartments

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	57.0	feet
Barrier Distance to Observer:	5.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	25.534
Medium Trucks:	25.185
Heavy Trucks:	25.220

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	4.27	-1.20	*-1.67*	0.000	0.000
Medium Trucks:	77.62	-17.39	4.36	-1.20	*-2.01*	0.000	0.000
Heavy Trucks:	82.14	-21.34	4.36	-1.20	*-2.96*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.3	70.4	68.6	62.6	71.2	71.8
Medium Trucks:	63.4	61.9	55.5	54.0	62.4	62.7
Heavy Trucks:	64.0	62.5	53.5	54.7	63.1	63.2
Vehicle Noise:	73.3	71.5	68.9	63.7	72.3	72.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.3	70.4	68.6	62.6	71.2	71.8
Medium Trucks:	63.4	61.9	55.5	54.0	62.4	62.7
Heavy Trucks:	64.0	62.5	53.5	54.7	63.1	63.2
Vehicle Noise:	73.3	71.5	68.9	63.7	72.3	72.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Lampson Avenue
Lot No: Single Family

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**0.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	57.0	feet
Barrier Distance to Observer:	5.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	25.534
Medium Trucks:	25.185
Heavy Trucks:	25.220

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	4.27	-1.20	*-1.67*	0.000	0.000
Medium Trucks:	77.62	-17.39	4.36	-1.20	*-2.01*	0.000	0.000
Heavy Trucks:	82.14	-21.34	4.36	-1.20	*-2.96*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.3	70.4	68.6	62.6	71.2	71.8
Medium Trucks:	63.4	61.9	55.5	54.0	62.4	62.7
Heavy Trucks:	64.0	62.5	53.5	54.7	63.1	63.2
Vehicle Noise:	73.3	71.5	68.9	63.7	72.3	72.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.3	70.4	68.6	62.6	71.2	71.8
Medium Trucks:	63.4	61.9	55.5	54.0	62.4	62.7
Heavy Trucks:	64.0	62.5	53.5	54.7	63.1	63.2
Vehicle Noise:	73.3	71.5	68.9	63.7	72.3	72.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Lampson Avenue
Lot No: Park

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	120.0 feet
Barrier Distance to Observer:	68.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	94.366
Medium Trucks:	94.273
Heavy Trucks:	94.282

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	-4.24	-1.20	*-0.05*	0.000	0.000
Medium Trucks:	77.62	-17.39	-4.23	-1.20	*-0.23*	0.000	0.000
Heavy Trucks:	82.14	-21.34	-4.24	-1.20	*-1.20*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.8	61.9	60.1	54.0	62.7	63.3
Medium Trucks:	54.8	53.3	46.9	45.4	53.8	54.1
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	64.8	63.0	60.4	55.2	63.7	64.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.8	61.9	60.1	54.0	62.7	63.3
Medium Trucks:	54.8	53.3	46.9	45.4	53.8	54.1
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	64.8	63.0	60.4	55.2	63.7	64.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Lampson Avenue
Lot No: Apartments

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	57.0	feet
Barrier Distance to Observer:	5.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	23.754
Medium Trucks:	23.147
Heavy Trucks:	22.876

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	4.75	-1.20	*0.34*	-7.700	-10.700
Medium Trucks:	77.62	-17.39	4.91	-1.20	*0.22*	-6.940	-9.940
Heavy Trucks:	82.14	-21.34	4.99	-1.20	*0.03*	-5.300	-8.300

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.7	70.8	69.1	63.0	71.6	72.3
Medium Trucks:	64.0	62.4	56.1	54.5	63.0	63.2
Heavy Trucks:	64.6	63.2	54.1	55.4	63.7	63.9
Vehicle Noise:	73.8	72.0	69.4	64.2	72.8	73.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.0	63.1	61.4	55.3	63.9	64.6
Medium Trucks:	57.0	55.5	49.1	47.6	56.1	56.3
Heavy Trucks:	59.3	57.9	48.8	50.1	58.4	58.6
Vehicle Noise:	66.6	64.8	61.9	57.0	65.5	66.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Lampson Avenue
Lot No: Single Family

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	57.0 feet
Barrier Distance to Observer:	5.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	23.754
Medium Trucks:	23.147
Heavy Trucks:	22.876

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	4.75	-1.20	*0.34*	-7.700	-10.700
Medium Trucks:	77.62	-17.39	4.91	-1.20	*0.22*	-6.940	-9.940
Heavy Trucks:	82.14	-21.34	4.99	-1.20	*0.03*	-5.300	-8.300

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.7	70.8	69.1	63.0	71.6	72.3
Medium Trucks:	64.0	62.4	56.1	54.5	63.0	63.2
Heavy Trucks:	64.6	63.2	54.1	55.4	63.7	63.9
Vehicle Noise:	73.8	72.0	69.4	64.2	72.8	73.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	65.0	63.1	61.4	55.3	63.9	64.6
Medium Trucks:	57.0	55.5	49.1	47.6	56.1	56.3
Heavy Trucks:	59.3	57.9	48.8	50.1	58.4	58.6
Vehicle Noise:	66.6	64.8	61.9	57.0	65.5	66.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Lampson Avenue
Lot No: Park

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	120.0	feet
Barrier Distance to Observer:	68.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	86.662
Medium Trucks:	86.055
Heavy Trucks:	94.282

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	-3.69	-1.20	*0.48*	-8.400	-11.400
Medium Trucks:	77.62	-17.39	-3.64	-1.20	*0.20*	-6.800	-9.800
Heavy Trucks:	82.14	-21.34	-4.24	-1.20	*-0.03*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.6	54.6	63.2	63.8
Medium Trucks:	55.4	53.9	47.5	46.0	54.4	54.7
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	65.3	63.5	61.0	55.7	64.2	64.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	55.9	54.0	52.2	46.2	54.8	55.4
Medium Trucks:	48.6	47.1	40.7	39.2	47.6	47.9
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	59.1	57.4	53.2	49.6	58.1	58.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Lampson Avenue
Lot No: Apartments

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.717
Medium Trucks:	26.110
Heavy Trucks:	25.839

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	3.98	-1.20	*0.33*	-7.650	-10.650
Medium Trucks:	77.62	-17.39	4.13	-1.20	*0.19*	-6.720	-9.720
Heavy Trucks:	82.14	-21.34	4.20	-1.20	*0.01*	-5.100	-8.100

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.0	70.1	68.3	62.3	70.9	71.5
Medium Trucks:	63.2	61.7	55.3	53.8	62.2	62.4
Heavy Trucks:	63.8	62.4	53.3	54.6	62.9	63.1
Vehicle Noise:	73.1	71.3	68.7	63.4	72.0	72.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.7	54.6	63.2	63.8
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	58.7	57.3	48.2	49.5	57.8	58.0
Vehicle Noise:	65.9	64.1	61.2	56.3	64.9	65.3

Wednesday, February 15, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Lampson Avenue
Lot No: Single Family

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.717
Medium Trucks:	26.110
Heavy Trucks:	25.839

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	3.98	-1.20	*0.33*	-7.650	-10.650
Medium Trucks:	77.62	-17.39	4.13	-1.20	*0.19*	-6.720	-9.720
Heavy Trucks:	82.14	-21.34	4.20	-1.20	*0.01*	-5.100	-8.100

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	72.0	70.1	68.3	62.3	70.9	71.5
Medium Trucks:	63.2	61.7	55.3	53.8	62.2	62.4
Heavy Trucks:	63.8	62.4	53.3	54.6	62.9	63.1
Vehicle Noise:	73.1	71.3	68.7	63.4	72.0	72.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.7	54.6	63.2	63.8
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	58.7	57.3	48.2	49.5	57.8	58.0
Vehicle Noise:	65.9	64.1	61.2	56.3	64.9	65.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Lampson Avenue
Lot No: Park

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	120.0 feet
Barrier Distance to Observer:	68.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	86.662
Medium Trucks:	86.055
Heavy Trucks:	94.282

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	-3.69	-1.20	*0.48*	-8.400	-11.400
Medium Trucks:	77.62	-17.39	-3.64	-1.20	*0.20*	-6.800	-9.800
Heavy Trucks:	82.14	-21.34	-4.24	-1.20	*-0.03*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.6	54.6	63.2	63.8
Medium Trucks:	55.4	53.9	47.5	46.0	54.4	54.7
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	65.3	63.5	61.0	55.7	64.2	64.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	55.9	54.0	52.2	46.2	54.8	55.4
Medium Trucks:	48.6	47.1	40.7	39.2	47.6	47.9
Heavy Trucks:	55.4	53.9	44.9	46.2	54.5	54.6
Vehicle Noise:	59.1	57.4	53.2	49.6	58.1	58.5

Wednesday, February 15, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Fourth Floor With Wall
Road Name: Lampson Avenue
Lot No: Apartments

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	60.0	feet
Barrier Distance to Observer:	8.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.174
Medium Trucks:	41.500
Heavy Trucks:	37.626

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	0.85	-1.20	*-7.73*	0.000	0.000
Medium Trucks:	77.62	-17.39	1.11	-1.20	*-8.80*	0.000	0.000
Heavy Trucks:	82.14	-21.34	1.75	-1.20	*-11.91*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.0	65.2	59.1	67.8	68.4
Medium Trucks:	60.1	58.6	52.3	50.7	59.2	59.4
Heavy Trucks:	61.3	59.9	50.9	52.1	60.5	60.6
Vehicle Noise:	70.0	68.2	65.6	60.4	69.0	69.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.0	65.2	59.1	67.8	68.4
Medium Trucks:	60.1	58.6	52.3	50.7	59.2	59.4
Heavy Trucks:	61.3	59.9	50.9	52.1	60.5	60.6
Vehicle Noise:	70.0	68.2	65.6	60.4	69.0	69.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Fourth Floor With Wall
Road Name: Lampson Avenue
Lot No: Single Family

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	60.0	feet
Barrier Distance to Observer:	8.0	feet
Observer Height (Above Pad):	32.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.174
Medium Trucks:	41.500
Heavy Trucks:	37.626

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	0.85	-1.20	*-7.73*	0.000	0.000
Medium Trucks:	77.62	-17.39	1.11	-1.20	*-8.80*	0.000	0.000
Heavy Trucks:	82.14	-21.34	1.75	-1.20	*-11.91*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.0	65.2	59.1	67.8	68.4
Medium Trucks:	60.1	58.6	52.3	50.7	59.2	59.4
Heavy Trucks:	61.3	59.9	50.9	52.1	60.5	60.6
Vehicle Noise:	70.0	68.2	65.6	60.4	69.0	69.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.0	65.2	59.1	67.8	68.4
Medium Trucks:	60.1	58.6	52.3	50.7	59.2	59.4
Heavy Trucks:	61.3	59.9	50.9	52.1	60.5	60.6
Vehicle Noise:	70.0	68.2	65.6	60.4	69.0	69.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Fourth Floor With Wall
Road Name: Lampson Avenue
Lot No: Park

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	120.0 feet
Barrier Distance to Observer:	68.0 feet
Observer Height (Above Pad):	32.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	99.519
Medium Trucks:	98.804
Heavy Trucks:	97.240

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	-4.59	-1.20	*-0.27*	0.000	0.000
Medium Trucks:	77.62	-17.39	-4.54	-1.20	*-0.58*	0.000	0.000
Heavy Trucks:	82.14	-21.34	-4.44	-1.20	*-1.90*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.4	61.5	59.7	53.7	62.3	62.9
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	55.2	53.7	44.7	46.0	54.3	54.4
Vehicle Noise:	64.5	62.7	60.1	54.9	63.4	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.4	61.5	59.7	53.7	62.3	62.9
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	55.2	53.7	44.7	46.0	54.3	54.4
Vehicle Noise:	64.5	62.7	60.1	54.9	63.4	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Lampson Avenue
Lot No: Apartments

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	32.187
Medium Trucks:	31.256
Heavy Trucks:	29.596

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	2.77	-1.20	*-1.34*	0.000	0.000
Medium Trucks:	77.62	-17.39	2.96	-1.20	*-1.70*	0.000	0.000
Heavy Trucks:	82.14	-21.34	3.31	-1.20	*-2.84*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.8	68.9	67.1	61.0	69.7	70.3
Medium Trucks:	62.0	60.5	54.1	52.6	61.0	61.3
Heavy Trucks:	62.9	61.5	52.5	53.7	62.1	62.2
Vehicle Noise:	71.9	70.1	67.5	62.3	70.8	71.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.8	68.9	67.1	61.0	69.7	70.3
Medium Trucks:	62.0	60.5	54.1	52.6	61.0	61.3
Heavy Trucks:	62.9	61.5	52.5	53.7	62.1	62.2
Vehicle Noise:	71.9	70.1	67.5	62.3	70.8	71.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Lampson Avenue
Lot No: Single Family

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	60.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	32.187
Medium Trucks:	31.256
Heavy Trucks:	29.596

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	2.77	-1.20	*-1.34*	0.000	0.000
Medium Trucks:	77.62	-17.39	2.96	-1.20	*-1.70*	0.000	0.000
Heavy Trucks:	82.14	-21.34	3.31	-1.20	*-2.84*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.8	68.9	67.1	61.0	69.7	70.3
Medium Trucks:	62.0	60.5	54.1	52.6	61.0	61.3
Heavy Trucks:	62.9	61.5	52.5	53.7	62.1	62.2
Vehicle Noise:	71.9	70.1	67.5	62.3	70.8	71.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.8	68.9	67.1	61.0	69.7	70.3
Medium Trucks:	62.0	60.5	54.1	52.6	61.0	61.3
Heavy Trucks:	62.9	61.5	52.5	53.7	62.1	62.2
Vehicle Noise:	71.9	70.1	67.5	62.3	70.8	71.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Lampson Avenue
Lot No: Park

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	1,515 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	52.0 feet
Centerline Dist. to Observer:	120.0 feet
Barrier Distance to Observer:	68.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	87.124
Medium Trucks:	86.516
Heavy Trucks:	94.424

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	-3.72	-1.20	*0.08*	-5.800	-8.800
Medium Trucks:	77.62	-17.39	-3.68	-1.20	*0.00*	-4.900	-7.900
Heavy Trucks:	82.14	-21.34	-4.25	-1.20	*-0.35*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.3	62.4	60.6	54.6	63.2	63.8
Medium Trucks:	55.4	53.9	47.5	45.9	54.4	54.6
Heavy Trucks:	55.4	53.9	44.9	46.1	54.5	54.6
Vehicle Noise:	65.3	63.5	60.9	55.6	64.2	64.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	50.5	49.0	42.6	41.0	49.5	49.7
Heavy Trucks:	55.4	53.9	44.9	46.1	54.5	54.6
Vehicle Noise:	60.6	58.9	55.5	51.1	59.6	60.1

Wednesday, February 15, 2023

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Lampson Avenue
Lot No: Apartments

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	60.0	feet
Barrier Distance to Observer:	8.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	37.000
Medium Trucks:	35.618
Heavy Trucks:	32.632

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	1.86	-1.20	*-4.73*	0.000	0.000
Medium Trucks:	77.62	-17.39	2.11	-1.20	*-5.50*	0.000	0.000
Heavy Trucks:	82.14	-21.34	2.68	-1.20	*-7.76*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.9	68.0	66.2	60.1	68.8	69.4
Medium Trucks:	61.1	59.6	53.3	51.7	60.2	60.4
Heavy Trucks:	62.3	60.9	51.8	53.1	61.4	61.6
Vehicle Noise:	71.0	69.2	66.6	61.4	70.0	70.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.9	68.0	66.2	60.1	68.8	69.4
Medium Trucks:	61.1	59.6	53.3	51.7	60.2	60.4
Heavy Trucks:	62.3	60.9	51.8	53.1	61.4	61.6
Vehicle Noise:	71.0	69.2	66.6	61.4	70.0	70.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Lampson Avenue
Lot No: Single Family

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	60.0	feet
Barrier Distance to Observer:	8.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	37.000
Medium Trucks:	35.618
Heavy Trucks:	32.632

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	1.86	-1.20	*-4.73*	0.000	0.000
Medium Trucks:	77.62	-17.39	2.11	-1.20	*-5.50*	0.000	0.000
Heavy Trucks:	82.14	-21.34	2.68	-1.20	*-7.76*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.9	68.0	66.2	60.1	68.8	69.4
Medium Trucks:	61.1	59.6	53.3	51.7	60.2	60.4
Heavy Trucks:	62.3	60.9	51.8	53.1	61.4	61.6
Vehicle Noise:	71.0	69.2	66.6	61.4	70.0	70.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.9	68.0	66.2	60.1	68.8	69.4
Medium Trucks:	61.1	59.6	53.3	51.7	60.2	60.4
Heavy Trucks:	62.3	60.9	51.8	53.1	61.4	61.6
Vehicle Noise:	71.0	69.2	66.6	61.4	70.0	70.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Lampson Avenue
Lot No: Park

Project Name: 4665 Lampson Avenue
Job Number: 14501
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,150	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	1,515	vehicles
Vehicle Speed:	45	mph
Near/Far Lane Distance:	46	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	52.0	feet
Centerline Dist. to Observer:	120.0	feet
Barrier Distance to Observer:	68.0	feet
Observer Height (Above Pad):	23.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	97.000
Medium Trucks:	96.481
Heavy Trucks:	95.419

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	69.34	-0.15	-4.42	-1.20	*-0.02*	0.000	0.000
Medium Trucks:	77.62	-17.39	-4.39	-1.20	*-0.14*	0.000	0.000
Heavy Trucks:	82.14	-21.34	-4.31	-1.20	*-0.99*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.6	61.7	59.9	53.9	62.5	63.1
Medium Trucks:	54.7	53.1	46.8	45.2	53.7	53.9
Heavy Trucks:	55.3	53.9	44.8	46.1	54.4	54.6
Vehicle Noise:	64.6	62.8	60.2	55.0	63.6	64.1

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	63.6	61.7	59.9	53.9	62.5	63.1
Medium Trucks:	54.7	53.1	46.8	45.2	53.7	53.9
Heavy Trucks:	55.3	53.9	44.8	46.1	54.4	54.6
Vehicle Noise:	64.6	62.8	60.2	55.0	63.6	64.1

APPENDIX 8.1:

OFF-SITE TRANSPORTATION NOISE LEVEL CONTOURS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Los Alamitos Blvd.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	17,339 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,430 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.40	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.63	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.59	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.4	68.4	66.6	60.6	69.2	69.8
Medium Trucks:	63.3	62.6	56.2	54.7	63.1	63.4
Heavy Trucks:	64.1	63.5	54.5	55.7	64.1	64.2
Vehicle Noise:	71.3	70.4	67.2	62.6	71.1	71.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	47	102	220	474
CNEL:	51	110	236	508

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Old Ranch Plaza

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,668 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,375 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.57	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.81	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.76	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.3	68.2	66.4	60.4	69.0	69.6
Medium Trucks:	63.1	62.4	56.0	54.5	63.0	63.2
Heavy Trucks:	63.9	63.3	54.3	55.5	63.9	64.0
Vehicle Noise:	71.1	70.2	67.1	62.4	70.9	71.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	46	99	214	462
CNEL:	50	107	230	495

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Basswood St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,134 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,084 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.60	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.84	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.80	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.2	67.2	65.4	59.4	68.0	68.6
Medium Trucks:	62.0	61.4	55.0	53.5	61.9	62.2
Heavy Trucks:	62.9	62.3	53.3	54.5	62.9	63.0
Vehicle Noise:	70.1	69.2	66.0	61.4	69.9	70.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	39	85	183	394
CNEL:	42	91	196	422

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Candleberry St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,474 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	947 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.19	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.43	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.38	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.7	66.6	64.8	58.8	67.4	68.0
Medium Trucks:	61.5	60.8	54.4	52.9	61.3	61.6
Heavy Trucks:	62.3	61.7	52.7	53.9	62.3	62.4
Vehicle Noise:	69.5	68.6	65.4	60.8	69.3	69.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	78	167	360
CNEL:	39	83	179	386

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Heather St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,644 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	961 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.13	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.36	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.32	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.7	66.7	64.9	58.8	67.5	68.1
Medium Trucks:	61.5	60.8	54.5	52.9	61.4	61.6
Heavy Trucks:	62.4	61.8	52.7	54.0	62.3	62.5
Vehicle Noise:	69.6	68.7	65.5	60.8	69.4	69.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	78	169	364
CNEL:	39	84	181	390

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Driveway 1

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,474 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	947 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.19	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.43	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.38	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.7	66.6	64.8	58.8	67.4	68.0
Medium Trucks:	61.5	60.8	54.4	52.9	61.3	61.6
Heavy Trucks:	62.3	61.7	52.7	53.9	62.3	62.4
Vehicle Noise:	69.5	68.6	65.4	60.8	69.3	69.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	78	167	360
CNEL:	39	83	179	386

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Driveway 2

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,474 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	947 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.19	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.43	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.38	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.7	66.6	64.8	58.8	67.4	68.0
Medium Trucks:	61.5	60.8	54.4	52.9	61.3	61.6
Heavy Trucks:	62.3	61.7	52.7	53.9	62.3	62.4
Vehicle Noise:	69.5	68.6	65.4	60.8	69.3	69.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	78	167	360
CNEL:	39	83	179	386

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Rose St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,059 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	995 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.97	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.21	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.17	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.9	66.8	65.0	59.0	67.6	68.2
Medium Trucks:	61.7	61.0	54.6	53.1	61.6	61.8
Heavy Trucks:	62.5	61.9	52.9	54.1	62.5	62.6
Vehicle Noise:	69.7	68.8	65.7	61.0	69.5	70.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	37	80	173	372
CNEL:	40	86	185	399

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Tulip St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,007 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,073 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.64	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.88	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.84	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.2	67.1	65.4	59.3	67.9	68.5
Medium Trucks:	62.0	61.3	55.0	53.4	61.9	62.1
Heavy Trucks:	62.8	62.3	53.2	54.5	62.8	63.0
Vehicle Noise:	70.0	69.1	66.0	61.3	69.9	70.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	39	84	182	391
CNEL:	42	90	195	420

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Lampson Ave.
Road Segment: e/o Valley View St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,186 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	840 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.71	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.94	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.90	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.1	66.1	64.3	58.3	66.9	67.5
Medium Trucks:	60.9	60.3	53.9	52.4	60.8	61.1
Heavy Trucks:	61.8	61.2	52.2	53.4	61.8	61.9
Vehicle Noise:	69.0	68.1	64.9	60.3	68.8	69.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	33	72	154	333
CNEL:	36	77	166	357

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Los Alamitos Blvd.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	38,360 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,165 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	3.56	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-13.67	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-17.63	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.8	65.8	64.0	58.0	66.6	67.2
Medium Trucks:	60.8	60.2	53.8	52.2	60.7	60.9
Heavy Trucks:	62.1	61.6	52.5	53.8	62.1	62.3
Vehicle Noise:	68.9	68.0	64.7	60.1	68.7	69.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	60	128	276	595
CNEL:	64	137	296	638

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Los Alamitos Blvd.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	36,668 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,025 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	3.37	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-13.87	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-17.83	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.7	65.6	63.8	57.8	66.4	67.0
Medium Trucks:	60.6	60.0	53.6	52.1	60.5	60.7
Heavy Trucks:	62.0	61.4	52.3	53.6	61.9	62.1
Vehicle Noise:	68.7	67.8	64.5	59.9	68.5	68.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	58	124	268	578
CNEL:	62	133	287	619

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Valley View St.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	41,521 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,426 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.40	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.84	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.80	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.6	67.6	65.8	59.7	68.4	69.0
Medium Trucks:	62.4	61.7	55.4	53.8	62.3	62.5
Heavy Trucks:	63.2	62.7	53.6	54.9	63.2	63.3
Vehicle Noise:	70.5	69.6	66.4	61.7	70.3	70.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	76	164	353	762
CNEL:	82	176	379	817

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E
Road Name: Valley View St.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	40,851 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,370 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.33	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.91	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.87	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.6	67.5	65.7	59.7	68.3	68.9
Medium Trucks:	62.3	61.6	55.3	53.7	62.2	62.4
Heavy Trucks:	63.2	62.6	53.5	54.8	63.2	63.3
Vehicle Noise:	70.4	69.5	66.3	61.7	70.2	70.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	75	162	350	753
CNEL:	81	174	375	808

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Los Alamitos Blvd.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	18,185 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,500 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.19	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.43	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.38	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.7	68.6	66.8	60.8	69.4	70.0
Medium Trucks:	63.5	62.8	56.4	54.9	63.3	63.6
Heavy Trucks:	64.3	63.7	54.7	55.9	64.3	64.4
Vehicle Noise:	71.5	70.6	67.4	62.8	71.3	71.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	49	105	227	489
CNEL:	52	113	244	525

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Old Ranch Plaza

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	17,514 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,445 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.35	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.59	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.55	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.5	68.4	66.7	60.6	69.2	69.8
Medium Trucks:	63.3	62.6	56.3	54.7	63.2	63.4
Heavy Trucks:	64.1	63.6	54.5	55.8	64.1	64.2
Vehicle Noise:	71.3	70.4	67.3	62.6	71.2	71.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	48	103	222	477
CNEL:	51	110	238	512

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Basswood St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,980 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,153 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.33	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.57	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.53	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.5	67.4	65.7	59.6	68.2	68.9
Medium Trucks:	62.3	61.6	55.3	53.7	62.2	62.4
Heavy Trucks:	63.2	62.6	53.5	54.8	63.1	63.3
Vehicle Noise:	70.4	69.5	66.3	61.6	70.2	70.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	41	88	191	411
CNEL:	44	95	204	440

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Candleberry St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,320 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,016 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.88	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.12	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.07	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.0	66.9	65.1	59.1	67.7	68.3
Medium Trucks:	61.8	61.1	54.7	53.2	61.6	61.9
Heavy Trucks:	62.6	62.0	53.0	54.2	62.6	62.7
Vehicle Noise:	69.8	68.9	65.7	61.1	69.6	70.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	38	81	175	377
CNEL:	40	87	188	405

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Heather St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,490 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,030 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.82	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.06	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.01	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.0	67.0	65.2	59.1	67.8	68.4
Medium Trucks:	61.8	61.2	54.8	53.2	61.7	61.9
Heavy Trucks:	62.7	62.1	53.0	54.3	62.7	62.8
Vehicle Noise:	69.9	69.0	65.8	61.1	69.7	70.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	38	82	177	381
CNEL:	41	88	190	409

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Driveway 1

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,321 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,016 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.88	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.12	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.07	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.0	66.9	65.1	59.1	67.7	68.3
Medium Trucks:	61.8	61.1	54.7	53.2	61.6	61.9
Heavy Trucks:	62.6	62.0	53.0	54.2	62.6	62.7
Vehicle Noise:	69.8	68.9	65.7	61.1	69.6	70.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	38	81	175	377
CNEL:	40	87	188	405

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Driveway 2

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,166 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,004 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.94	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.17	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.13	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.9	66.8	65.1	59.0	67.6	68.3
Medium Trucks:	61.7	61.0	54.7	53.1	61.6	61.8
Heavy Trucks:	62.6	62.0	52.9	54.2	62.5	62.7
Vehicle Noise:	69.8	68.9	65.7	61.0	69.6	70.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	37	81	174	374
CNEL:	40	86	186	401

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Rose St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,751 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,052 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.73	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.97	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.93	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.1	67.0	65.3	59.2	67.9	68.5
Medium Trucks:	61.9	61.2	54.9	53.3	61.8	62.0
Heavy Trucks:	62.8	62.2	53.1	54.4	62.7	62.9
Vehicle Noise:	70.0	69.1	65.9	61.2	69.8	70.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	39	83	179	386
CNEL:	41	89	192	414

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Tulip St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,699 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,130 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.42	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.66	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.61	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.4	67.4	65.6	59.5	68.2	68.8
Medium Trucks:	62.2	61.6	55.2	53.6	62.1	62.3
Heavy Trucks:	63.1	62.5	53.4	54.7	63.1	63.2
Vehicle Noise:	70.3	69.4	66.2	61.5	70.1	70.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	41	87	188	405
CNEL:	43	94	202	435

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Lampson Ave.
Road Segment: e/o Valley View St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	10,416 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	859 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.61	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.85	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.80	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.2	66.2	64.4	58.3	67.0	67.6
Medium Trucks:	61.0	60.4	54.0	52.5	60.9	61.2
Heavy Trucks:	61.9	61.3	52.3	53.5	61.9	62.0
Vehicle Noise:	69.1	68.2	65.0	60.4	68.9	69.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	34	73	157	337
CNEL:	36	78	168	362

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Los Alamitos Blvd.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	38,668 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,190 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	3.60	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-13.64	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-17.60	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.9	65.8	64.1	58.0	66.6	67.2
Medium Trucks:	60.9	60.2	53.8	52.3	60.7	61.0
Heavy Trucks:	62.2	61.6	52.6	53.8	62.2	62.3
Vehicle Noise:	68.9	68.0	64.7	60.2	68.7	69.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	60	129	278	599
CNEL:	64	138	298	641

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Los Alamitos Blvd.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	37,206 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,069 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	3.43	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-13.81	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-17.76	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	66.7	65.7	63.9	57.8	66.5	67.1
Medium Trucks:	60.7	60.0	53.7	52.1	60.6	60.8
Heavy Trucks:	62.0	61.4	52.4	53.6	62.0	62.1
Vehicle Noise:	68.7	67.8	64.6	60.0	68.5	69.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	58	126	271	583
CNEL:	62	135	290	625

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Valley View St.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	41,675 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,438 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.41	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.83	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.78	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.6	67.6	65.8	59.8	68.4	69.0
Medium Trucks:	62.4	61.7	55.4	53.8	62.3	62.5
Heavy Trucks:	63.3	62.7	53.6	54.9	63.2	63.4
Vehicle Noise:	70.5	69.6	66.4	61.7	70.3	70.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	76	164	354	763
CNEL:	82	176	380	819

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: E + P
Road Name: Valley View St.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	41,159 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,396 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.36	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.88	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.84	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.6	67.5	65.8	59.7	68.3	68.9
Medium Trucks:	62.4	61.7	55.3	53.8	62.2	62.5
Heavy Trucks:	63.2	62.6	53.6	54.8	63.2	63.3
Vehicle Noise:	70.4	69.5	66.4	61.7	70.2	70.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	76	163	351	757
CNEL:	81	175	377	812

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Los Alamitos Blvd.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	22,038 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,818 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.65	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-16.59	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-20.55	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.5	69.4	67.7	61.6	70.2	70.8
Medium Trucks:	64.3	63.6	57.3	55.7	64.2	64.4
Heavy Trucks:	65.1	64.5	55.5	56.8	65.1	65.2
Vehicle Noise:	72.3	71.4	68.3	63.6	72.1	72.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	56	120	258	556
CNEL:	60	129	277	597

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Old Ranch Plaza

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	19,346 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,596 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.08	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.16	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.11	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.9	68.9	67.1	61.0	69.7	70.3
Medium Trucks:	63.7	63.1	56.7	55.1	63.6	63.8
Heavy Trucks:	64.6	64.0	54.9	56.2	64.6	64.7
Vehicle Noise:	71.8	70.9	67.7	63.0	71.6	72.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	51	110	237	510
CNEL:	55	118	254	547

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Basswood St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,521 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,280 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.88	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.12	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.07	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.0	67.9	66.1	60.1	68.7	69.3
Medium Trucks:	62.8	62.1	55.7	54.2	62.7	62.9
Heavy Trucks:	63.6	63.0	54.0	55.2	63.6	63.7
Vehicle Noise:	70.8	69.9	66.8	62.1	70.6	71.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	95	204	440
CNEL:	47	102	219	472

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Candleberry St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,804 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,139 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.39	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.62	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.58	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.5	67.4	65.6	59.6	68.2	68.8
Medium Trucks:	62.3	61.6	55.2	53.7	62.1	62.4
Heavy Trucks:	63.1	62.5	53.5	54.7	63.1	63.2
Vehicle Noise:	70.3	69.4	66.2	61.6	70.1	70.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	41	88	189	407
CNEL:	44	94	203	437

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Heather St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,070 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,161 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.30	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.54	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.50	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.5	67.5	65.7	59.7	68.3	68.9
Medium Trucks:	62.3	61.7	55.3	53.8	62.2	62.5
Heavy Trucks:	63.2	62.6	53.6	54.8	63.2	63.3
Vehicle Noise:	70.4	69.5	66.3	61.7	70.2	70.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	41	89	191	412
CNEL:	44	95	205	442

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 1

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,886 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,146 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.36	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.60	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.55	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.5	67.4	65.7	59.6	68.2	68.8
Medium Trucks:	62.3	61.6	55.3	53.7	62.2	62.4
Heavy Trucks:	63.1	62.5	53.5	54.8	63.1	63.2
Vehicle Noise:	70.3	69.4	66.3	61.6	70.1	70.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	41	88	190	409
CNEL:	44	94	204	438

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 2

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	13,886 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,146 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.36	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.60	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.55	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.5	67.4	65.7	59.6	68.2	68.8
Medium Trucks:	62.3	61.6	55.3	53.7	62.2	62.4
Heavy Trucks:	63.1	62.5	53.5	54.8	63.1	63.2
Vehicle Noise:	70.3	69.4	66.3	61.6	70.1	70.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	41	88	190	409
CNEL:	44	94	204	438

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Rose St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,599 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,204 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.14	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.38	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.34	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.6	65.9	59.8	68.4	69.0
Medium Trucks:	62.5	61.8	55.5	53.9	62.4	62.6
Heavy Trucks:	63.3	62.8	53.7	55.0	63.3	63.5
Vehicle Noise:	70.6	69.6	66.5	61.8	70.4	70.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	42	91	196	423
CNEL:	45	98	210	453

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Tulip St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,737 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,298 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.82	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.06	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.01	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.0	68.0	66.2	60.1	68.8	69.4
Medium Trucks:	62.8	62.2	55.8	54.3	62.7	62.9
Heavy Trucks:	63.7	63.1	54.0	55.3	63.7	63.8
Vehicle Noise:	70.9	70.0	66.8	62.1	70.7	71.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	96	206	444
CNEL:	48	103	221	477

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Lampson Ave.
Road Segment: e/o Valley View St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,516 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.17	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.41	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.37	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.7	66.6	64.8	58.8	67.4	68.0
Medium Trucks:	61.5	60.8	54.4	52.9	61.4	61.6
Heavy Trucks:	62.3	61.7	52.7	53.9	62.3	62.4
Vehicle Noise:	69.5	68.6	65.5	60.8	69.3	69.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	36	78	167	361
CNEL:	39	83	180	387

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Los Alamitos Blvd.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	44,738 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,691 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.23	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-13.01	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-16.96	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.5	66.5	64.7	58.6	67.3	67.9
Medium Trucks:	61.5	60.8	54.5	52.9	61.4	61.6
Heavy Trucks:	62.8	62.2	53.2	54.4	62.8	62.9
Vehicle Noise:	69.5	68.6	65.4	60.8	69.3	69.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	66	142	306	660
CNEL:	71	152	328	706

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Los Alamitos Blvd.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	43,352 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,577 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.10	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-13.14	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-17.10	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.4	66.3	64.5	58.5	67.1	67.7
Medium Trucks:	61.4	60.7	54.3	52.8	61.2	61.5
Heavy Trucks:	62.7	62.1	53.1	54.3	62.7	62.8
Vehicle Noise:	69.4	68.5	65.2	60.7	69.2	69.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	65	139	300	646
CNEL:	69	149	321	692

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Valley View St.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	46,216 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,813 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.86	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.38	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.33	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.1	68.0	66.3	60.2	68.8	69.4
Medium Trucks:	62.9	62.2	55.8	54.3	62.7	63.0
Heavy Trucks:	63.7	63.1	54.1	55.3	63.7	63.8
Vehicle Noise:	70.9	70.0	66.9	62.2	70.7	71.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	82	176	380	818
CNEL:	88	189	407	877

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) NP
Road Name: Valley View St.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	45,244 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,733 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.77	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.47	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.43	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.0	67.9	66.2	60.1	68.7	69.3
Medium Trucks:	62.8	62.1	55.7	54.2	62.6	62.9
Heavy Trucks:	63.6	63.0	54.0	55.2	63.6	63.7
Vehicle Noise:	70.8	69.9	66.8	62.1	70.6	71.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	81	174	374	806
CNEL:	86	186	401	865

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Los Alamitos Blvd.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	22,884 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,888 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.81	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-16.43	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-20.39	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.7	69.6	67.8	61.8	70.4	71.0
Medium Trucks:	64.5	63.8	57.4	55.9	64.3	64.6
Heavy Trucks:	65.3	64.7	55.7	56.9	65.3	65.4
Vehicle Noise:	72.5	71.6	68.4	63.8	72.3	72.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	57	123	265	570
CNEL:	61	132	284	612

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Old Ranch Plaza

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	20,192 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,666 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.27	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-16.97	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-20.93	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.1	69.0	67.3	61.2	69.8	70.5
Medium Trucks:	63.9	63.2	56.9	55.3	63.8	64.0
Heavy Trucks:	64.8	64.2	55.1	56.4	64.7	64.9
Vehicle Noise:	72.0	71.1	67.9	63.2	71.8	72.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	52	113	244	525
CNEL:	56	121	261	563

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Basswood St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,367 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,350 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.65	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.89	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.84	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.2	68.1	66.4	60.3	68.9	69.5
Medium Trucks:	63.0	62.3	56.0	54.4	62.9	63.1
Heavy Trucks:	63.8	63.3	54.2	55.5	63.8	64.0
Vehicle Noise:	71.0	70.1	67.0	62.3	70.9	71.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	46	98	212	456
CNEL:	49	105	227	489

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Candleberry St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,650 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,209 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.13	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.37	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.32	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.7	65.9	59.8	68.5	69.1
Medium Trucks:	62.5	61.8	55.5	53.9	62.4	62.6
Heavy Trucks:	63.4	62.8	53.7	55.0	63.3	63.5
Vehicle Noise:	70.6	69.7	66.5	61.8	70.4	70.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	42	91	197	424
CNEL:	45	98	211	454

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Heather St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,916 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,231 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.05	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.29	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.24	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.8	67.7	66.0	59.9	68.5	69.1
Medium Trucks:	62.6	61.9	55.6	54.0	62.5	62.7
Heavy Trucks:	63.4	62.9	53.8	55.1	63.4	63.5
Vehicle Noise:	70.6	69.7	66.6	61.9	70.5	70.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	92	199	429
CNEL:	46	99	213	460

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 1

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,733 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,215 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.10	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.34	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.30	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.7	65.9	59.9	68.5	69.1
Medium Trucks:	62.5	61.9	55.5	54.0	62.4	62.7
Heavy Trucks:	63.4	62.8	53.8	55.0	63.4	63.5
Vehicle Noise:	70.6	69.7	66.5	61.9	70.4	70.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	92	197	425
CNEL:	46	98	212	456

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 2

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,578 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,203 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.15	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.39	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.34	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.6	65.9	59.8	68.4	69.0
Medium Trucks:	62.5	61.8	55.5	53.9	62.4	62.6
Heavy Trucks:	63.3	62.8	53.7	55.0	63.3	63.4
Vehicle Noise:	70.5	69.6	66.5	61.8	70.4	70.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	42	91	196	422
CNEL:	45	98	210	453

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Rose St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,291 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,262 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.94	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.18	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.14	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.8	66.1	60.0	68.6	69.2
Medium Trucks:	62.7	62.0	55.7	54.1	62.6	62.8
Heavy Trucks:	63.5	63.0	53.9	55.2	63.5	63.7
Vehicle Noise:	70.8	69.8	66.7	62.0	70.6	71.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	94	202	436
CNEL:	47	101	217	468

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Tulip St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,429 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,355 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.63	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.87	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.82	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.2	68.1	66.4	60.3	69.0	69.6
Medium Trucks:	63.0	62.3	56.0	54.4	62.9	63.1
Heavy Trucks:	63.9	63.3	54.2	55.5	63.8	64.0
Vehicle Noise:	71.1	70.2	67.0	62.3	70.9	71.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	46	99	212	457
CNEL:	49	106	228	490

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Lampson Ave.
Road Segment: e/o Valley View St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	11,746 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	969 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-2.09	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-19.33	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-23.28	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.8	66.7	64.9	58.9	67.5	68.1
Medium Trucks:	61.6	60.9	54.5	53.0	61.4	61.7
Heavy Trucks:	62.4	61.8	52.8	54.0	62.4	62.5
Vehicle Noise:	69.6	68.7	65.5	60.9	69.4	69.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	37	79	170	366
CNEL:	39	84	182	392

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Los Alamitos Blvd.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	45,046 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,716 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.26	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-12.98	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-16.93	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.5	66.5	64.7	58.7	67.3	67.9
Medium Trucks:	61.5	60.9	54.5	52.9	61.4	61.6
Heavy Trucks:	62.8	62.3	53.2	54.5	62.8	63.0
Vehicle Noise:	69.6	68.7	65.4	60.8	69.4	69.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	66	143	308	663
CNEL:	71	153	329	710

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Los Alamitos Blvd.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	43,890 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,621 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.15	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-13.09	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-17.05	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.4	66.4	64.6	58.5	67.2	67.8
Medium Trucks:	61.4	60.7	54.4	52.8	61.3	61.5
Heavy Trucks:	62.7	62.1	53.1	54.4	62.7	62.8
Vehicle Noise:	69.4	68.5	65.3	60.7	69.3	69.7

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	65	140	302	651
CNEL:	70	150	324	697

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Valley View St.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	46,370 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,826 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.88	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.36	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.32	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.1	68.0	66.3	60.2	68.8	69.5
Medium Trucks:	62.9	62.2	55.8	54.3	62.8	63.0
Heavy Trucks:	63.7	63.1	54.1	55.3	63.7	63.8
Vehicle Noise:	70.9	70.0	66.9	62.2	70.8	71.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	82	177	380	820
CNEL:	88	189	408	879

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: OY(2026) WP
Road Name: Valley View St.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	45,552 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,758 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	3.80	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.44	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.40	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.0	68.0	66.2	60.1	68.8	69.4
Medium Trucks:	62.8	62.1	55.8	54.2	62.7	62.9
Heavy Trucks:	63.6	63.1	54.0	55.3	63.6	63.8
Vehicle Noise:	70.9	70.0	66.8	62.1	70.7	71.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	81	175	376	810
CNEL:	87	187	403	869

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Los Alamitos Blvd.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	24,242 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	2,000 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	1.06	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-16.18	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-20.13	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.9	69.8	68.1	62.0	70.6	71.2
Medium Trucks:	64.7	64.0	57.7	56.1	64.6	64.8
Heavy Trucks:	65.5	65.0	55.9	57.2	65.5	65.7
Vehicle Noise:	72.8	71.8	68.7	64.0	72.6	73.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	59	128	275	593
CNEL:	64	137	295	636

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Old Ranch Plaza

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	20,306 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,675 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.29	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-16.95	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-20.90	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.1	69.1	67.3	61.2	69.9	70.5
Medium Trucks:	63.9	63.3	56.9	55.4	63.8	64.1
Heavy Trucks:	64.8	64.2	55.2	56.4	64.8	64.9
Vehicle Noise:	72.0	71.1	67.9	63.3	71.8	72.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	53	113	244	527
CNEL:	56	122	262	565

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Basswood St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,277 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,343 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.67	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.91	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.86	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.2	68.1	66.3	60.3	68.9	69.5
Medium Trucks:	63.0	62.3	55.9	54.4	62.9	63.1
Heavy Trucks:	63.8	63.2	54.2	55.4	63.8	63.9
Vehicle Noise:	71.0	70.1	67.0	62.3	70.8	71.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	45	98	211	454
CNEL:	49	105	226	487

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Candleberry St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,464 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,193 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.18	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.42	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.38	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.6	65.8	59.8	68.4	69.0
Medium Trucks:	62.5	61.8	55.4	53.9	62.3	62.6
Heavy Trucks:	63.3	62.7	53.7	54.9	63.3	63.4
Vehicle Noise:	70.5	69.6	66.4	61.8	70.3	70.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	42	91	195	420
CNEL:	45	97	209	451

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Heather St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,741 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,216 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.10	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.34	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.30	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.7	65.9	59.9	68.5	69.1
Medium Trucks:	62.5	61.9	55.5	54.0	62.4	62.7
Heavy Trucks:	63.4	62.8	53.8	55.0	63.4	63.5
Vehicle Noise:	70.6	69.7	66.5	61.9	70.4	70.9

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	92	197	425
CNEL:	46	98	212	456

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 1

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,546 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,200 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.16	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.40	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.35	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.6	65.9	59.8	68.4	69.0
Medium Trucks:	62.5	61.8	55.5	53.9	62.4	62.6
Heavy Trucks:	63.3	62.7	53.7	55.0	63.3	63.4
Vehicle Noise:	70.5	69.6	66.5	61.8	70.3	70.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	42	91	196	422
CNEL:	45	97	210	452

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 2

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	14,546 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,200 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.16	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.40	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.35	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.7	67.6	65.9	59.8	68.4	69.0
Medium Trucks:	62.5	61.8	55.5	53.9	62.4	62.6
Heavy Trucks:	63.3	62.7	53.7	55.0	63.3	63.4
Vehicle Noise:	70.5	69.6	66.5	61.8	70.3	70.8

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	42	91	196	422
CNEL:	45	97	210	452

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Rose St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,294 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,262 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.94	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.18	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.14	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.8	66.1	60.0	68.6	69.2
Medium Trucks:	62.7	62.0	55.7	54.1	62.6	62.8
Heavy Trucks:	63.5	63.0	53.9	55.2	63.5	63.7
Vehicle Noise:	70.8	69.8	66.7	62.0	70.6	71.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	94	202	436
CNEL:	47	101	217	468

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Tulip St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	16,486 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,360 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.62	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.85	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.81	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.2	68.2	66.4	60.3	69.0	69.6
Medium Trucks:	63.0	62.4	56.0	54.5	62.9	63.1
Heavy Trucks:	63.9	63.3	54.3	55.5	63.9	64.0
Vehicle Noise:	71.1	70.2	67.0	62.3	70.9	71.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	46	99	213	458
CNEL:	49	106	228	492

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Lampson Ave.
Road Segment: e/o Valley View St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,685 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,047 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.75	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.99	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.95	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.1	67.0	65.3	59.2	67.8	68.4
Medium Trucks:	61.9	61.2	54.9	53.3	61.8	62.0
Heavy Trucks:	62.7	62.1	53.1	54.4	62.7	62.8
Vehicle Noise:	69.9	69.0	65.9	61.2	69.7	70.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	38	83	179	385
CNEL:	41	89	192	413

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Los Alamitos Blvd.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	49,212 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	4,060 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.65	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-12.59	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-16.55	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.9	66.9	65.1	59.0	67.7	68.3
Medium Trucks:	61.9	61.2	54.9	53.3	61.8	62.0
Heavy Trucks:	63.2	62.6	53.6	54.9	63.2	63.3
Vehicle Noise:	69.9	69.0	65.8	61.2	69.8	70.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	70	151	326	703
CNEL:	75	162	349	753

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Los Alamitos Blvd.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	47,688 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,934 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.51	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-12.73	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-16.69	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.8	66.7	65.0	58.9	67.5	68.1
Medium Trucks:	61.8	61.1	54.7	53.2	61.7	61.9
Heavy Trucks:	63.1	62.5	53.5	54.7	63.1	63.2
Vehicle Noise:	69.8	68.9	65.6	61.1	69.6	70.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	69	148	320	688
CNEL:	74	159	342	737

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Valley View St.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	50,838 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	4,194 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	4.28	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-12.96	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-16.92	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.5	68.4	66.7	60.6	69.2	69.9
Medium Trucks:	63.3	62.6	56.2	54.7	63.2	63.4
Heavy Trucks:	64.1	63.5	54.5	55.7	64.1	64.2
Vehicle Noise:	71.3	70.4	67.3	62.6	71.2	71.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	87	188	405	872
CNEL:	93	201	434	935

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) NP
Road Name: Valley View St.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	49,769 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	4,106 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	4.18	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.06	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-17.01	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.4	68.4	66.6	60.5	69.2	69.8
Medium Trucks:	63.2	62.5	56.1	54.6	63.1	63.3
Heavy Trucks:	64.0	63.4	54.4	55.7	64.0	64.1
Vehicle Noise:	71.3	70.3	67.2	62.5	71.1	71.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	86	185	399	859
CNEL:	92	199	428	922

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Los Alamitos Blvd.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	25,088 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	2,070 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	1.21	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-16.03	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-19.99	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	71.1	70.0	68.2	62.2	70.8	71.4
Medium Trucks:	64.9	64.2	57.8	56.3	64.7	65.0
Heavy Trucks:	65.7	65.1	56.1	57.3	65.7	65.8
Vehicle Noise:	72.9	72.0	68.8	64.2	72.7	73.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	61	131	281	606
CNEL:	65	140	302	650

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Old Ranch Plaza

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,152 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,745 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	0.47	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-16.77	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-20.73	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	70.3	69.2	67.5	61.4	70.0	70.7
Medium Trucks:	64.1	63.4	57.1	55.5	64.0	64.2
Heavy Trucks:	65.0	64.4	55.3	56.6	64.9	65.1
Vehicle Noise:	72.2	71.3	68.1	63.4	72.0	72.4

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	54	117	251	541
CNEL:	58	125	269	580

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Basswood St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	17,123 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,413 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.45	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.69	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.64	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.4	68.3	66.6	60.5	69.1	69.7
Medium Trucks:	63.2	62.5	56.2	54.6	63.1	63.3
Heavy Trucks:	64.0	63.5	54.4	55.7	64.0	64.1
Vehicle Noise:	71.2	70.3	67.2	62.5	71.1	71.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	47	101	218	470
CNEL:	50	109	234	504

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Candleberry St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,310 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,263 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.94	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.17	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.13	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.8	66.1	60.0	68.6	69.3
Medium Trucks:	62.7	62.0	55.7	54.1	62.6	62.8
Heavy Trucks:	63.6	63.0	53.9	55.2	63.5	63.7
Vehicle Noise:	70.8	69.9	66.7	62.0	70.6	71.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	94	203	436
CNEL:	47	101	217	468

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Heather St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,587 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,286 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.86	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.10	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.05	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.0	67.9	66.2	60.1	68.7	69.3
Medium Trucks:	62.8	62.1	55.8	54.2	62.7	62.9
Heavy Trucks:	63.6	63.0	54.0	55.3	63.6	63.7
Vehicle Noise:	70.8	69.9	66.8	62.1	70.6	71.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	95	205	442
CNEL:	47	102	220	474

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 1

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,393 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,270 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.91	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.15	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.11	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.9	66.1	60.0	68.7	69.3
Medium Trucks:	62.7	62.1	55.7	54.2	62.6	62.8
Heavy Trucks:	63.6	63.0	54.0	55.2	63.6	63.7
Vehicle Noise:	70.8	69.9	66.7	62.0	70.6	71.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	44	94	203	438
CNEL:	47	101	218	470

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Driveway 2

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,238 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,257 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.96	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.20	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.15	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.9	67.8	66.1	60.0	68.6	69.2
Medium Trucks:	62.7	62.0	55.7	54.1	62.6	62.8
Heavy Trucks:	63.5	62.9	53.9	55.2	63.5	63.6
Vehicle Noise:	70.7	69.8	66.7	62.0	70.5	71.0

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	43	94	202	435
CNEL:	47	101	217	466

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Rose St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	15,986 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,319 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.75	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.99	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.94	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.1	68.0	66.3	60.2	68.8	69.4
Medium Trucks:	62.9	62.2	55.9	54.3	62.8	63.0
Heavy Trucks:	63.7	63.2	54.1	55.4	63.7	63.8
Vehicle Noise:	70.9	70.0	66.9	62.2	70.8	71.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	45	97	208	449
CNEL:	48	104	224	482

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Tulip St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	17,178 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,417 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-0.44	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-17.68	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-21.63	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.4	68.3	66.6	60.5	69.1	69.7
Medium Trucks:	63.2	62.5	56.2	54.6	63.1	63.3
Heavy Trucks:	64.1	63.5	54.4	55.7	64.0	64.2
Vehicle Noise:	71.3	70.4	67.2	62.5	71.1	71.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	47	101	219	471
CNEL:	51	109	235	505

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Lampson Ave.
Road Segment: e/o Valley View St.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	12,915 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	1,065 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	46 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	40.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.106
Medium Trucks:	32.838
Heavy Trucks:	32.864

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	-1.68	2.58	-1.20	*-4.59*	0.000	0.000
Medium Trucks:	79.45	-18.91	2.64	-1.20	*-4.87*	0.000	0.000
Heavy Trucks:	84.25	-22.87	2.63	-1.20	*-5.56*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.2	67.1	65.3	59.3	67.9	68.5
Medium Trucks:	62.0	61.3	54.9	53.4	61.9	62.1
Heavy Trucks:	62.8	62.2	53.2	54.4	62.8	62.9
Vehicle Noise:	70.0	69.1	66.0	61.3	69.8	70.3

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	39	84	181	390
CNEL:	42	90	194	418

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Los Alamitos Blvd.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	49,520 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	4,085 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.67	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-12.57	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-16.52	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	68.0	66.9	65.1	59.1	67.7	68.3
Medium Trucks:	61.9	61.3	54.9	53.4	61.8	62.0
Heavy Trucks:	63.3	62.7	53.6	54.9	63.2	63.4
Vehicle Noise:	70.0	69.1	65.8	61.2	69.8	70.2

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	71	152	328	706
CNEL:	76	163	351	756

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Los Alamitos Blvd.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	48,226 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	3,979 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	66.51	4.56	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	77.72	-12.68	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	82.99	-16.64	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	67.8	66.8	65.0	59.0	67.6	68.2
Medium Trucks:	61.8	61.1	54.8	53.2	61.7	61.9
Heavy Trucks:	63.1	62.6	53.5	54.8	63.1	63.3
Vehicle Noise:	69.9	69.0	65.7	61.1	69.7	70.1

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	69	149	322	694
CNEL:	74	160	345	743

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Valley View St.
Road Segment: n/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	50,992 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	4,207 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	4.29	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-12.95	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-16.91	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.5	68.5	66.7	60.6	69.3	69.9
Medium Trucks:	63.3	62.6	56.3	54.7	63.2	63.4
Heavy Trucks:	64.1	63.5	54.5	55.8	64.1	64.2
Vehicle Noise:	71.4	70.5	67.3	62.6	71.2	71.6

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	87	188	405	873
CNEL:	94	202	435	937

Monday, July 1, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

Scenario: GBPO (2045) WP
Road Name: Valley View St.
Road Segment: s/o Lampson Ave.

Project Name: 4665 Lampson Avenue
Job Number: 14501

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	50,077 vehicles
Peak Hour Percentage:	8.25%
Peak Hour Volume:	4,131 vehicles
Vehicle Speed:	45 mph
Near/Far Lane Distance:	58 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	73.0 feet
Centerline Dist. to Observer:	73.0 feet
Barrier Distance to Observer:	0.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Road Grade:	0.0%
Left View:	-90.0 degrees
Right View:	90.0 degrees

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.000		
Medium Trucks:	2.297		
Heavy Trucks:	8.006	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	67.179
Medium Trucks:	67.047
Heavy Trucks:	67.060

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	68.46	4.21	-2.03	-1.20	*-4.72*	0.000	0.000
Medium Trucks:	79.45	-13.03	-2.01	-1.20	*-4.88*	0.000	0.000
Heavy Trucks:	84.25	-16.98	-2.02	-1.20	*-5.26*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	69.4	68.4	66.6	60.6	69.2	69.8
Medium Trucks:	63.2	62.5	56.2	54.6	63.1	63.3
Heavy Trucks:	64.1	63.5	54.4	55.7	64.0	64.2
Vehicle Noise:	71.3	70.4	67.2	62.5	71.1	71.5

Centerline Distance to Noise Contour (in feet)

	70 dBA	*65 dBA*	*60 dBA*	*55 dBA*
Ldn:	86	186	400	863
CNEL:	93	199	430	926

Monday, July 1, 2024

APPENDIX 10.1:

CARRIER 25HBC5 AIR CONDITIONING UNIT

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24ABC6
Comfort™ 16 Air Conditioner with Puron® Refrigerant 1–1/2 to 5 Nominal Tons

Carrier
turn to the experts

Product Data



Puron™
the environmentally sound refrigerant

Comfort SERIES

Carrier's Air Conditioners with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 24ABC has been designed utilizing Carrier's Puron refrigerant. The environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

INDUSTRY LEADING FEATURES / BENEFITS

Efficiency

- 14 - 16.5 SEER/11.0- 13.5 EER
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

Sound

- Sound level as low as 76 dBA
- Sound level as low as 74 dBA with accessory sound blanket

Comfort

- System supports Edge® Thermidistat™ or standard thermostat controls

Reliability

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime servce cost.
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Filter drier
- Balanced refrigeration system for maximum reliability

Durability

WeatherArmor™ protection package:

- Solid, durable sheet metal construction
- Dense wire coil guard standard
- Baked-on, complete outer coverage, powder paint

Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient (down to -20°F/-28.9°C)) with accessory kit

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13
N	N	A	A	A/N	N	N	N	A/N	A/N	A/N	N	N
2	**4**	**A**	**B**	**C**	**6**	**3**	**6**	**A**	**0**	**0**	**3**	0
Product Series		Product Family	Tier	Major Series	SEER	Cooling Capacity		Grille Variations	Open	Open	Voltage	Series
24=AC		A=RES AC	B=Comfort	C=Puron	6=16 SEER			A = Dense W = Standard	0=Not Defined	0=Not Defined	3=208/230–1	0 = Original Series

Puron™ the environmentally sound refrigerant

AHRI CERTIFIED™ www.ahridirectory.org

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to www.ahridirectory.org.

Certified System™

ISO 9001 QMI-SAI Global

c UL us

ENERGY STAR

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

24ABC6

STANDARD FEATURES

Feature	**18**	**24**	**30**	**36**	**42**	**48 / 49**	**60 / 61**
Puron Refrigerant	X	X	X	X	X	X	X
Maximum SEER *	16.0	16.0	16.5	16.5	16.0	16.0	16.0
Scroll Compressor	X	X	X	X	X	X	X
Field Installed Filter Drier	X	X	X	X	X	X	X
Front Seating Service Valves	X	X	X	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X	X	X	X
Internal Thermal Overload	X	X	X	X	X	X	X
Long Line capability	X	X	X	X	X	X	X
Low Ambient capability with Kit	X	X	X	X	X	X	X
Dense Grille	X	X	X	X	X	X	X

* With approved combinations

X = Standard

PHYSICAL DATA

UNIT SIZE–VOLTAGE, SERIES	**18–31**	**24–30**	**30–30**	**36–30**	**42–30**	**48–31**	**49–30**	**60–30**	**61–30**
Operating Weight lb (kg)	125 (56.7)	147 (66.5)	153 (69.3)	165 (74.8)	213 (96.4)	264 (119.7)	231 (104.8)	272 (123.4)	272 (123.4)
Shipping Weight lb (kg)	154 (69.9)	183 (82.8)	188 (85.2)	204 (92.5)	254 (115.2)	317 (143.8)	269 (222.0)	310 (140.6)	310 (140.6)
Compressor Type	Scroll								
REFRIGERANT	Puron® (R–410A)								
Control	TXV (Puron® Hard Shutoff)								
Charge lb (kg)	4.60 (2.09)	6.00 (2.72)	6.81 (3.09)	7.00 (3.18)	8.62 (3.91)	13.0 (5.90)	9.00 (4.08)	14.50 (6.58)	14.50 (6.58)
COND FAN	Propeller Type, Direct Drive								
Air Discharge	Vertical								Vertical
Air Qty (CFM)	1881	2614	2614	3223	3810	4046	4046	4046	4046
Motor HP	1/12	1/10	1/10	1/12	1/5	1/4	1/4	1/4	1/4
Motor RPM	1100	1100	1100	800	800	800	800	800	800
COND COIL									
Face Area (Sq ft)	11.50	15.10	17.20	17.60	25.15	25.15	25.15	30.15	30.15
Fins per In.	25	25	25	25	25	20	20	20	20
Rows	1	1	1	1	1	2	1	2	2
Circuits	3	4	4	4	6	7	7	8	8
VALVE CONNECT. (In. ID)									
Vapor	3/4	3/4	3/4	7/8	7/8	7/8	7/8	7/8	7/8
Liquid	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
REFRIGERANT TUBES (In. OD)									
Rated Vapor*	3/4			7/8				1–1/8	
Max Liquid Line †	3/8								

* Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.
Note: See unit Installation Instruction for proper installation.

† See *Liquid Line Sizing For Cooling Only Systems with Puron Refrigerant* tables.

REFRIGERANT PIPING LENGTH LIMITATIONS

Liquid Line Sizing and Maximum Total Equivalent Lengths† for Cooling Only Systems with Puron® Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

Maximum Total Equivalent Length
Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m)								
			0–5 (0–1.5)	6–10 (1.8–3.0)	11–20 (3.4–6.1)	21–30 (6.4–9.1)	31–40 (9.4–12.2)	41–50 (12.5–15.2)	51–60 (15.5–18.3)	61–70 (18.6–21.3)	71–80 (21.6–24.4)
18000 AC with Puron	3/8	1/4	150	150	125	100	100	75	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	250*	250*	225*	150
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
24000 AC with Puron	3/8	1/4	75	75	75	50	50	– –	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	225*	175	125	100
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
30000 AC with Puron	3/8	1/4	30	– –	– –	– –	– –	– –	– –	– –	– –
		5/16	175	225*	200	175	125	100	75	– –	– –
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
36000 AC with Puron	3/8	5/16	175	150	150	100	100	100	75	– –	– –
		3//8	250*	250*	250*	250*	250*	250*	250*	250*	250*
42000 AC with Puron	3/8	5/16	125	100	100	75	75	50	– –	– –	– –
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	150
48000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	– –
49000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	– –
60000 AC with Puron	3/8	3/8	250*	250*	250*	225*	190	150	110	– –	– –
61000 AC with Puron	3/8	3/8	250*	250*	250*	225*	190	150	110	– –	– –

*** Maximum actual length not to exceed 200 ft (61 m)**

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

– – = outside acceptable range

Maximum Total Equivalent Length
Outdoor Unit ABOVE Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit ABOVE Indoor Vertical Separation ft (m)							
			25 (7.6)	26–50 (7.9–15.2)	51–75 (15.5–22.9)	76–100 (23.2–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–53.3)	176–200 (53.6–61.0)
18000 AC with Puron	3/8	1/4	175	250*	250*	250*	250*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
24000 AC with Puron	3/8	1/4	100	125	175	200	225*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
30000 AC with Puron	3/8	1/4	30	– –	– –	– –	– –	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
36000 AC with Puron	3/8	5/16	225*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
42000 AC with Puron	3/8	5/16	175	200	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
48000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
49000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
60000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
61000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*

*** Maximum actual length not to exceed 200 ft (61 m)**

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

– – = outside acceptable range

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	Puron Charge oz/ft
3/8	0.60 (Factory charge for lineset = 9 oz)
5/16	0.40
1/4	0.27

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz. When using other length or diameter liquid lines, charge adjustments are required per the chart above.

Charging Formula:

[(Lineset oz/ft x total length) – (factory charge for lineset)] = charge adjustment

Example 1: System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) – (9 oz) = (-4.95) oz.

Net result is to remove 4.95 oz of refrigerant from the system

Example 2: System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) – (9 oz.) = 9 oz.

Net result is to add 9 oz of refrigerant to the system

LONG LINE APPLICATIONS

An application is considered Long Line, when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. See Accessory Usage Guideline table for required accessories. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

AC WITH PURON® REFRIGERANT LONG LINE DESCRIPTION ft (m)
Beyond these lengths, long line accessories are required

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
1/4	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16	120 (36.6)	50 (15.2)	120 (36.6)
3/8	80 (24.4)	35 (10.7)	80 (24.4)

Note: See Long Line Guideline for details

VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for AC systems with Puron refrigerant:

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In. OD)	Cooling Capacity Loss (%) Total Equivalent Line Length ft. (m)								
			26–50 (7.9–15.2)	51–80 (15.5–24.4)	81–100 (24.7–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–53.3)	176–200 (53.6–61.0)	201–225 (61.3–68.6)	226–250 (68.9–76.2)
18000 1 Stage AC with Puron	3/8	1/2	1	2	3	5	6	7	8	9	11
		5/8	0	1	1	1	2	2	2	3	3
		3/4	0	0	0	0	1	1	1	1	1
24000 1 Stage AC with Puron	3/8	5/8	0	1	2	2	3	3	4	5	5
		3/4	0	0	1	1	1	1	1	2	2
		7/8	0	0	0	0	0	1	1	1	1
30000 1 Stage AC with Puron	3/8	5/8	1	2	3	3	4	5	6	7	8
		3/4	0	0	1	1	1	2	2	2	3
		7/8	0	0	0	0	1	1	1	1	1
36000 1 Stage AC with Puron	3/8	5/8	1	2	4	5	6	8	9	10	12
		3/4	0	1	1	2	2	3	3	4	4
		7/8	0	0	0	1	1	1	1	2	2
42000 1 Stage AC with Puron	3/8	3/4	0	1	2	2	3	4	4	5	6
		7/8	0	0	1	1	1	2	2	2	3
		1 1/8	0	0	0	0	0	0	0	0	0
48000, 49000 1 Stage AC with Puron	3/8	3/4	0	1	2	3	4	5	5	6	7
		7/8	0	0	1	1	2	2	2	3	3
		1 1/8	0	0	0	0	0	0	0	1	1
60000, 61000 1 Stage AC with Puron	3/8	3/4	1	2	4	5	6	7	9	10	11
		7/8	0	1	2	2	3	4	4	5	5
		1 1/8	0	0	0	1	1	1	1	1	1

Applications in this area may be long line and may have height restrictions. See the *Residential Piping and Long Line Guideline*.

ACCESSORY THERMOSTATS

PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT PUMP	HEAT	COOL
Comfort						
TC–PAC01	5–2 Day	√	√		1	1
TC–NAC01	NP	√	√		1	1
TCSNAC01	NP	√	√		1	1

THERMOSTAT ACCESSORIES		
PART NUMBER	**DESCRIPTION**	**THERMOSTATS USED WITH**
TSTATXXCNV10‡	Thermostat Conversion Kit (4 to 5 wire) – 10 pack	All Carrier® branded thermostats
TX–LBP01	Large Decorative Backplate	TP–Pxx, TP–Nxx, TC–Pxx
TX–MBP01	Medium Decorative Backplate	TC–Nxx, TB–Pxx

ACCESSORIES

KIT NUMBER	DESCRIPTION	Unit Sizes – Series								
		18–31	24–30	30–30	36–30	42–30	48–31	49–30	60–30	61–30
KAAFT0101AAA	FREEZE THERMOSTAT	X	X	X	X	X	X	X	X	X
KAATD0101TDR	TIME DELAY RELAY	X	X	X	X	X	X	X	X	X
KSALA0301410	LOW AMBIENT PSW	X	X	X	X	X	X	X	X	X
KSALA0601AAA†	MOTORMASTER 230V	X	X	X	X	X	X	X	X	X
HC32GE234	MOTOR FAN BALL BEARING	X								
HC34GE240	MOTOR FAN BALL BEARING		X	X						
HC32GE229	MOTOR FAN BALL BEARING				X					
HC38GE228	MOTOR FAN BALL BEARING					X				
HC40GE228	MOTOR FAN BALL BEARING						X	X	X	X
KSAHS1701AAA	HARD START (CAP / RELAY)	X	X	X	X	X	X	X	X	X
KSACY0101AAA	CYCLE PROTECTOR	X	X	X	X	X	X	X	X	X
KSASF0101AAA	SUPPORT FEET	X	X	X	X	X	X	X	X	X
KAACS0201PTC	START ASSIST PTC	X	X	X	X	X	X	X	X	X
KAALS0201LLS	LIQUID LINE SOLENOID	X	X	X	X	X	X	X	X	X
KAAWS0101AAA	WINTER START	X	X	X	X	X	X	X	X	X
KAACH1701AAA	CRANKCASE HTR	X	X	X	X					
KAACH1601AAA	CRANKCASE HTR					X	S	S	S	S
KSATX0201PUR	TXV PURON HSO	X	X	X						
KSATX0301PUR	TXV PURON HSO				X					
KSATX0401PUR	TXV PURON HSO					X		X		
KSATX0501PUR	TXV PURON HSO						X		X	X
KSASH0601COP	SOUND HOOD	X	X	X	X			X		
KSASH2101COP	SOUND HOOD					X	X		X	X
KAALP0401PUR	LOW PRESSURE SWITCH	X	X	X	X	X	X	X	X	X
KAAHI0501PUR	HIGH PRESSURE SWITCH	X	X	X	X	X	X	X	X	X

† Required accessories include ball bearing fan motor, compressor start assist (CAP / Relay), crankcase heater, evaporator freeze stat, hard shut–off TXV.
X = Accessory / S – Standard

ACCESSORY USAGE GUIDELINE

ACCESSORY	REQUIRED FOR LOW–AMBIENT COOLING APPLICATIONS (Below 55°F/12.8°C)	REQUIRED FOR LONG LINE APPLICATIONS* (Over 80 ft./24.38 m)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles/3.22 km)
Ball Bearing Fan Motor	Yes†	No	No
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shut–Off TXV	Yes	Yes	Yes
Liquid Line Solenoid Valve	No	No	No
Motor Master® Control or Low–ambient Pressure Switch	Yes	No	No
Support Feet	Recommended	No	Recommended
Winter Start Control	Yes	No	No

* For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Split–System Longline Application Guideline.

† Required for Low–Ambient Controller (full modulation feature) MotorMaster® Control.

Accessory Description and Usage (Listed Alphabetically)

1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

Usage Guideline:

Required on all units when MotorMaster® is used.

2. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a ”hard” boost to compressor motor at each start up.

Usage Guideline:

Required for reciprocating compressors in the following applications:

Long line

Low ambient cooling

Hard shut off expansion valve on indoor coil

Liquid line solenoid on indoor coil

Required for single-phase scroll compressors in the following applications:

Long line

Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

3. Compressor Start Assist — PTC Type

Solid state electrical device which gives a ”soft” boost to the compressor at each start-up.

Usage Guideline:

Suggested in installations with marginal power supply.

4. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

5. Cycle Protector

The cycle protector is designed to prevent compressor short cycling. This control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including power outage, protector control trip, thermostat jiggling, or normal cycling.

6. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

7. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits (approximately 100 psig to 225 psig). The control will maintain working head pressure at low-ambient temperatures down to 0°F (-18°C) when properly installed.

Usage Guideline:

A Low-Ambient Pressure Switch or MotorMaster® Low-Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

8. MotorMaster® Low-Ambient Controller

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F (-28.9°C), it maintains condensing temperature at 100°F ±10°F (37.8°C ± 5.5°C).

Usage Guideline:

A MotorMaster® Low Ambient Controller or Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

Suggested for all commercial applications.

9. Outdoor Air Temperature Sensor

Designed for use with Carrier Thermostats listed in this publication. This device enables the thermostat to display the outdoor temperature. This device also

is required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for all Carrier thermostats listed in this publication.

Accessory Description and Usage (Listed Alphabetically) (Continued)

10. Sound Hood

Wraparound sound reducing cover for the compressor. Reduces the sound level by about 2 dBA.

Usage Guideline:

Suggested when unit is installed closer than 15 ft (4.57 m) to quiet areas, bedrooms, etc.

Suggested when unit is installed between two houses less than 10 ft (3.05 m) apart.

11. Support Feet

Four stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

For improved sound ratings.

12. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

NOTE: When using a hard shut off TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.

Hard shut off TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

13. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

NOTE: Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to AHRI Unitary Directory.

14. Winter Start Control

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

ELECTRICAL DATA

UNIT SIZE	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MIN WIRE SIZE† 60° C	MIN WIRE SIZE† 75° C	MAX LENGTH ft. (m)‡ 60° C	MAX LENGTH ft. (m)‡ 75° C	MAX FUSE** or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA						
18–31	208/230/1–60	253	197	48.0	9.0	0.50	11.8	14	14	67 (20.4)	64 (19.5)	20
24–30				58.3	13.5	0.75	17.7	14	14	46 (14.0)	43 (13..1)	25
30–30				64.0	12.8	0.75	16.8	14	14	44 (13.4)	41 (12.5)	25
36–30				77.0	14.1	0.50	18.1	12	12	57 (17.4)	54 (16.5)	30
42–30				112.0	17.9	1.20	23.6	10	10	85 (25.9)	81 (24.7)	40
48–31				109.0	19.9	1.20	26.1	10	10	70 (21.3)	67 (20.4)	40
49–30				117.0	21.8	1.20	26.1	10	10	70 (21.3)	67 (20.4)	40
60–30				135.0	21.4	1.20	28.0	8	10	91 (27.7)	56 (17.1)	40
61–30				134.0	25.0	1.20	32.5	8	10	94 (28.7)	58 (17.7)	50

* Permissible limits of the voltage range at which the unit will operate satisfactorily

† If wire is applied at ambient greater than 30°C, consult table 310–16 of the NEC (NFPA 70). The ampacity of non–metallic–sheathed cable (NM), trade name ROMEX, shall be that of 60°C conditions, per the NEC (NFPA 70) Article 334–80. If other than uncoated (no–plated), 60 or 75°C insulation, copper wire (solid wire for 10 AWG or smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (NFPA 70).

‡ Length shown is as measured one way along wire path between unit and service panel for voltage drop not to exceed 2%.

** Time–Delay fuse.

FLA – Full Load Amps

LRA – Locked Rotor Amps

MCA – Minimum Circuit Amps

RLA – Rated Load Amps

NOTE: Control circuit is 24–V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

Complies with 2007 requirements of ASHRAE Standards 90.1

24ABC6

A–WEIGHTED SOUND POWER LEVEL (dBA)

Unit Size – Voltage, Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018–31	76	52.5	59.0	65.5	70.5	64.5	59.0	54.5
024–30	76	57.5	64.0	69.0	71.0	69.0	64.5	60.0
030–30	76	55.0	63.5	68.0	69.5	67.0	63.5	58.5
036–30	76	50.5	59.5	64.5	70.5	62.0	59.5	54.5
042–30	78	52.5	62.0	66.0	73.5	68.0	62.0	55.5
048–31	78	57.5	61.5	66.0	70.5	65.5	59.5	53.5
049–30	78	51.5	62.0	67.5	73.5	69.0	64.5	62.0
060–30	78	55.0	62.5	67.5	70.5	65.0	61.0	53.5
061–30	78	56.5	63.0	65.5	69.0	67.0	61.5	56.0

NOTE: Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

A–WEIGHTED SOUND POWER LEVEL (dBA) WITH SOUND SHIELD

Unit Size – Voltage, Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018–31	74	55.5	59.0	65.0	68.5	63.5	58.0	52.0
024–30	75	58.0	64.0	69.0	70.5	68.5	64.5	59.5
030–30	75	55.5	63.0	68.0	69.0	67.0	63.0	58.5
036–30	74	51.5	58.5	62.0	65.0	61.0	58.0	52.0
042–30	76	53.0	62.0	65.5	72.0	65.0	61.0	54.0
048–31	76	58.5	61.5	66.0	69.0	64.0	58.5	51.0
049–30	76	53.0	61.5	67.5	72.0	68.0	61.5	59.0
060–30	75	56.5	62.5	66.5	68.0	63.0	59.5	51.5
061–30	75	57.0	63.0	65.5	67.0	65.5	59.0	52.5

NOTE: Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

CHARGING SUBCOOLING (TXV–TYPE EXPANSION DEVICE)

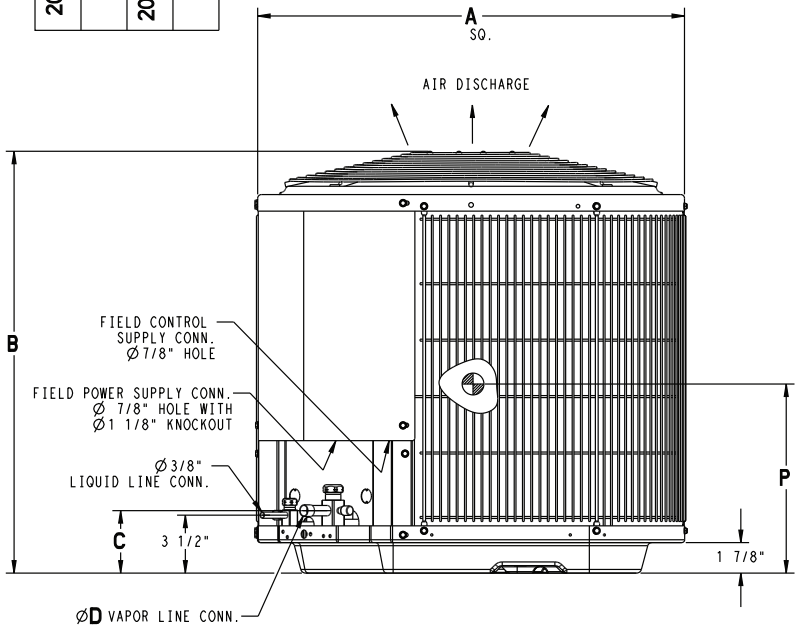
UNIT SIZE–VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C)
18–31	10 (5.6)
24–30	10 (5.6)
30–30	10 (5.6)
36–30	10 (5.6)
42–30	9 (5.0)
48–31	10 (5.6)
49–30	8 (4.4)
60–30	9 (5.0)
61–30	9 (5.0)

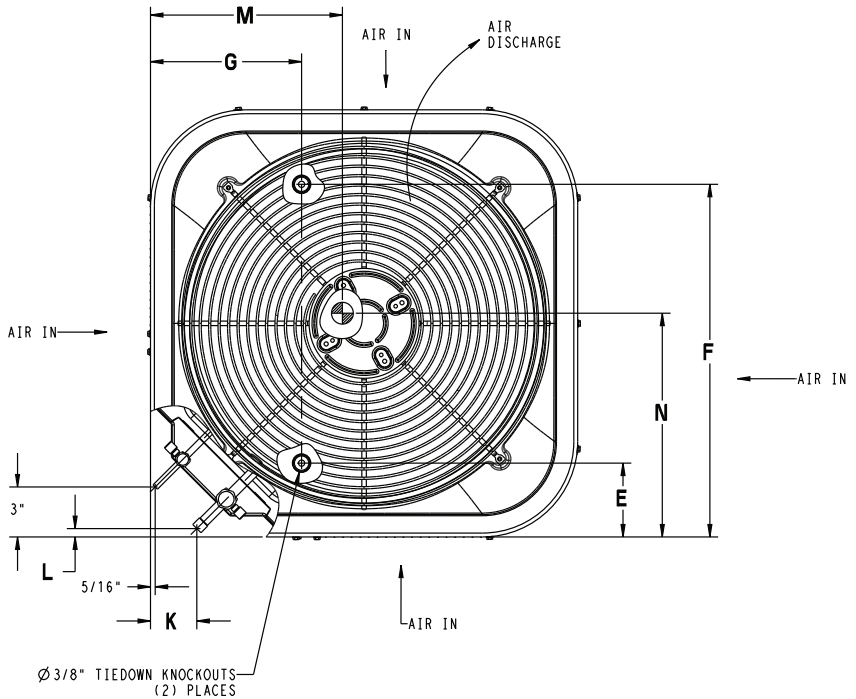
DIMENSIONS – ENGLISH

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (lbs)	SHIPPING WEIGHT (lbs)	SHIPPING DIMENSIONS (L x W x H)
24ABC618	0	X	O	O	O	23 1/8"	28 11/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1/2"	13"	12"	13"	118	141	24 1/4" X 27 3/8" X 32 9/16"
24ABC624	0	X	O	O	O	31 3/16"	28 5/16"	3 3/4"	3/4"	6 9/16"	24 11/16"	9 1/8"	2 13/16"	1/2"	16"	16"	13"	147	183	32 3/8" X 35 1/2" X 32 9/16"
24ABC630	0	X	O	O	O	31 3/16"	32 5/16"	3 3/4"	3/4"	6 9/16"	24 11/16"	9 1/8"	2 13/16"	1/2"	15 1/2"	16"	14 1/4"	153	188	32 3/8" X 35 1/2" X 35 15/16"
24ABC636	0	X	O	O	O	35"	28 5/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16"	16"	13"	165	204	36 1/8" X 39 5/16" X 32 9/16"
24ABC642	0	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17 1/2"	17 1/2"	213	254	36 1/8" X 39 5/16" X 42 3/4"
24ABC648	0	X	O	O	O	35"	32 5/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17"	17 1/2"	14 1/4"	231	274	36 1/8" X 39 5/16" X 35 15/16"
24ABC660	0	X	O	O	O	35"	45 15/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17"	16 1/4"	272	310	36 1/8" X 39 5/16" X 49 9/16"
24ABC618	1	X	O	O	O	25 3/4"	28 11/16"	3 3/4"	3/4"	4 7/16"	21 1/4"	7 13/16"	2 13/16"	1/2"	13 5/8"	13 1/2"	12 3/4"	125	154	26 7/8" X 30 1/16" X 32 9/16"
24ABC661	0	X	O	O	O	35"	45 15/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17"	16 1/4"	272	310	36 1/8" X 39 5/16" X 49 9/16"
24ABC648	1	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17 1/2"	16 1/2"	15"	264	317	36 1/8" X 39 5/16" X 42 3/4"
24ABC649	0	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17 1/2"	16 1/2"	15"	231	269	36 1/8" X 39 5/16" X 42 3/4"

208-230-1-60	230-1-60	208/230-3-60	460-3-60

X = YES
O = NO



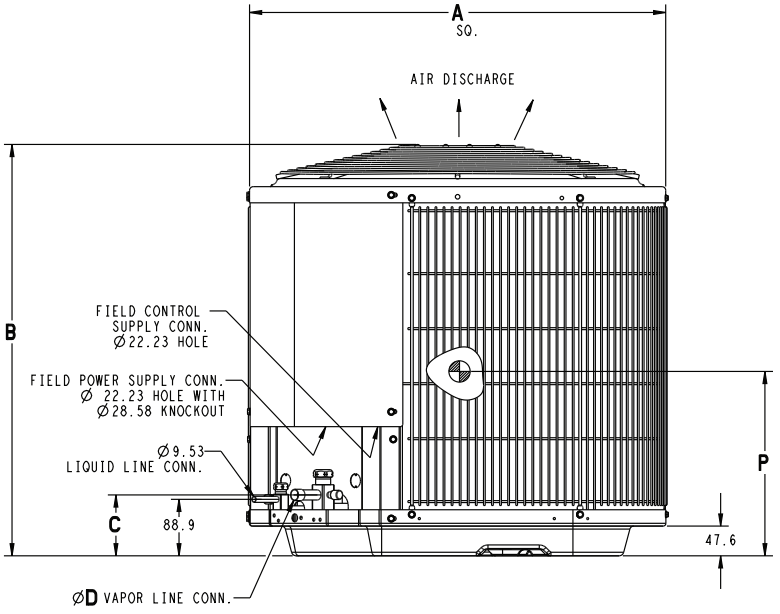


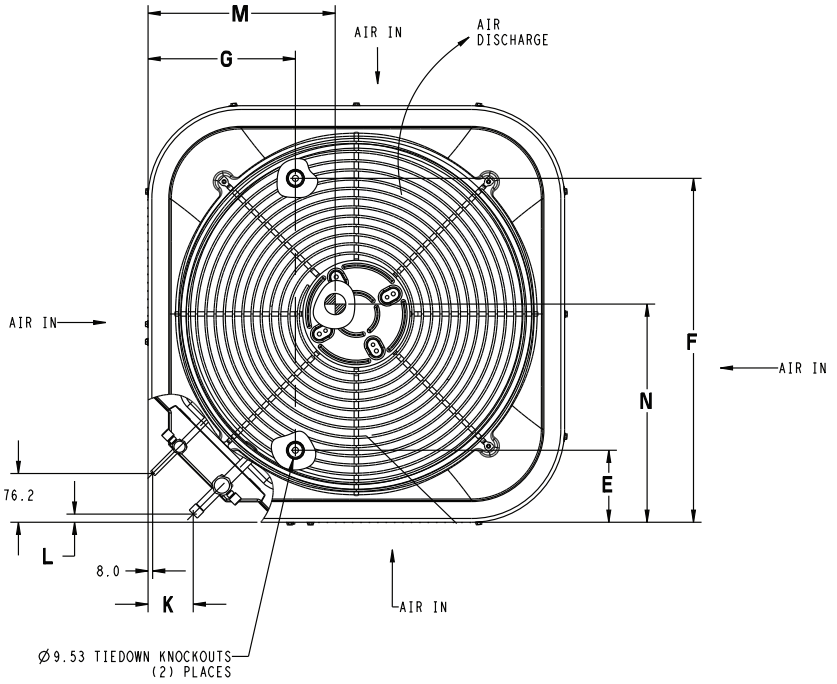
UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18	26" X 26"
24,30	31 1/2" X 31 1/2"
36, 48, 49, 60, 61	35" X 35"

DIMENSIONS – SI

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (Kgs)	SHIPPING WEIGHT (Kgs)	SHIPPING DIMENSIONS (L x W x H)
24ABC618	0	X	O	O	O	587.3	728.7	95.2	19.0	112.7	458.8	198.4	71.4	12.7	330.2	304.8	330.2	53.4	64.0	616.0 X 695.3 X 827.1
24ABC624	0	X	O	O	O	792.2	719.2	95.2	19.0	166.7	627.1	231.8	71.4	12.7	406.4	406.4	330.2	66.5	82.8	822.3 X 901.7 X 827.1
24ABC630	0	X	O	O	O	792.2	820.8	95.2	19.0	166.7	627.1	231.8	71.4	12.7	393.7	406.4	362.0	69.3	85.2	822.3 X 901.7 X 912.8
24ABC636	0	X	O	O	O	889.0	719.2	98.6	22.2	166.7	722.3	231.8	74.6	15.9	406.4	406.4	330.2	74.8	92.5	917.6 X 998.6 X 827.1
24ABC642	0	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	444.5	444.5	96.4	115.2	917.6 X 998.6 X 1085.8
24ABC648	0	X	O	O	O	889.0	820.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	431.8	444.5	362.0	104.8	124.3	917.6 X 998.6 X 912.8
24ABC660	0	X	O	O	O	889.0	1166.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	431.8	412.8	123.4	140.6	917.6 X 998.6 X 1258.9
24ABC618	1	X	O	O	O	654.0	728.7	95.2	19.0	112.7	539.8	198.4	71.4	12.7	346.1	342.9	323.9	56.7	69.9	682.6 X 763.6 X 827.1
24ABC661	0	X	O	O	O	889.0	1166.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	431.8	412.8	123.4	140.6	917.6 X 998.6 X 1258.9
24ABC648	1	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	444.5	419.1	381.0	119.7	143.8	917.6 X 998.6 X 1085.8
24ABC649	0	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	444.5	419.1	381.0	104.8	122.0	917.6 X 998.6 X 1085.8
		208-230-1-60	230-1-60	208/230-3-60	460-3-60															

X = YES
O = NO

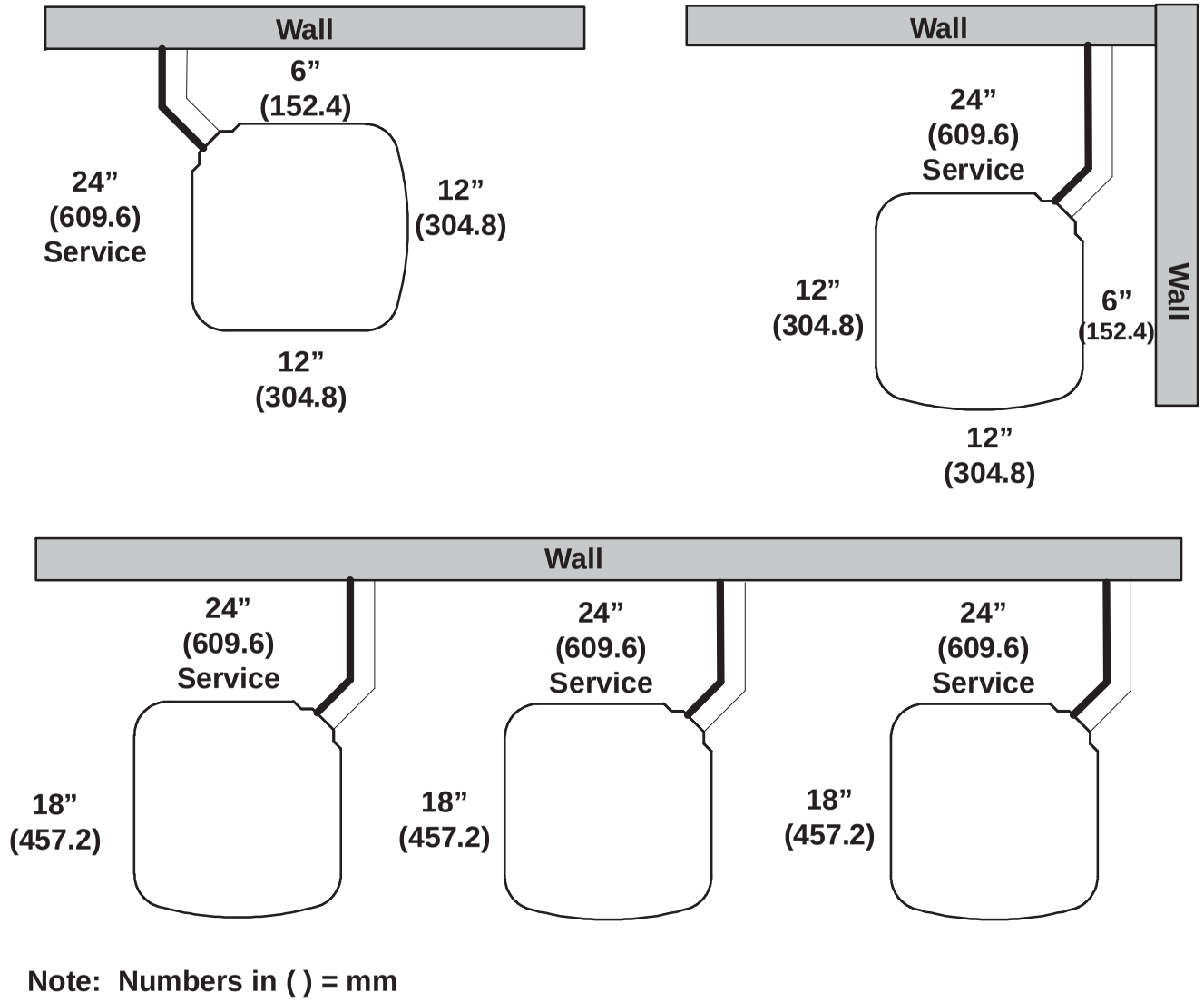




UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18	660.4 X 660.4
24,30	800.1 X 800.1
36, 48, 49, 60, 61	889.0 X 889.0

CLEARANCES

Clearances (various examples)



Note: Numbers in ( ) = mm

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

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Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Replaces: 24ABC6–2PD

APPENDIX 10.2:

OPERATIONAL NOISE LEVEL CALCULATIONS

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14501 - 4665 Lampson Ave

CadnaA Noise Prediction Model: 14501-03_Operatrion.cna
Date: 16.05.23
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (#(Unit,LEN))	**2000.01**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (#(Unit,LEN))	**999.99**
Min. Length of Section (#(Unit,LEN))	**1.01**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**100.00**
Search Radius Rcvr	**100.00**
Max. Distance Source - Rcvr	**1000.00 1000.00**
Min. Distance Rvcr - Reflector	**1.00 1.00**
Min. Distance Source - Reflector	**0.10**
Industrial (ISO 9613)	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (#(Unit,TEMP))	**10**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (#(Unit,SPEED))	**3.0**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
R1		R1	45.0	40.9	47.9	0.0	0.0	0.0		x	Total	5.00	r	6015314.98	2233283.64	5.00	
R2		R2	36.5	32.4	39.4	0.0	0.0	0.0		x	Total	5.00	r	6016385.39	2232771.38	5.00	
R3		R3	48.5	43.4	50.7	0.0	0.0	0.0		x	Total	5.00	r	6014862.95	2232536.23	5.00	
R4		R4	19.2	15.9	22.7	0.0	0.0	0.0		x	Total	5.00	r	6009375.12	2233274.30	5.00	

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
Outdoor1		Outdoor1	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6014515.46	2232859.89	5.00
Outdoor2		Outdoor2	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6014905.88	2232886.67	5.00
Outdoor3		Outdoor3	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6014974.79	2232885.96	5.00
Outdoor4		Outdoor4	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6014968.40	2232826.34	5.00
Outdoor5		Outdoor5	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6014516.32	2232922.72	5.00
Outdoor6		Outdoor6	91.5	91.5	91.5	Lw	91.5		900.00	0.00	0.00	5.00	r	6014903.31	2232826.34	5.00
PARK1		PARK1	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6014551.64	2232893.53	5.00
PARK2		PARK2	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6014543.80	2232698.46	5.00
PARK3		PARK3	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6015301.33	2232850.26	5.00
PARK4		PARK4	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6014933.04	2232920.66	5.00
PARK5		PARK5	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6015342.10	2232850.08	5.00
PARK6		PARK6	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6014592.61	2233079.31	5.00
PARK7		PARK7	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6014590.09	2232874.97	5.00
PARK8		PARK8	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6014481.15	2233019.85	5.00
PARK9		PARK9	87.8	87.8	87.8	Lw	87.8		900.00	0.00	540.00	5.00	r	6014584.35	2232692.26	5.00
TRASH1		TRASH1	89.0	89.0	89.0	Lw	89.0		150.00	0.00	90.00	8.00	r	6014589.16	2232994.47	8.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
TRASH2		TRASH2	89.0	89.0	89.0	Lw	89.0		150.00	0.00	90.00	8.00	r	6014589.16	2232994.47	8.00
GMAC001		AC001	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014991.90	2232631.19	3.00
GMAC002		AC002	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015026.19	2232629.67	3.00
GMAC003		AC003	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015130.79	2232626.41	3.00
GMAC004		AC004	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015165.28	2232626.48	3.00
GMAC005		AC005	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014943.37	2232704.41	3.00
GMAC006		AC006	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014944.89	2232736.31	3.00
GMAC007		AC007	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015083.70	2232732.75	3.00
GMAC008		AC008	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015077.84	2232731.88	3.00
GMAC009		AC009	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015076.32	2232699.76	3.00
GMAC010		AC010	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015083.48	2232699.55	3.00
GMAC011		AC011	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014881.44	2232736.87	3.00
GMAC012		AC012	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014687.26	2232802.85	3.00
GMAC013		AC013	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014690.47	2232637.05	3.00
GMAC014		AC014	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014879.92	2232704.32	3.00
GMAC015		AC015	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014747.98	2232707.36	3.00
GMAC016		AC016	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014741.25	2232707.14	3.00
GMAC017		AC017	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014743.20	2232739.91	3.00
GMAC018		AC018	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014748.63	2232739.69	3.00
GMAC019		AC019	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014608.31	2232710.22	3.00
GMAC020		AC020	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014608.74	2232742.99	3.00
GMAC021		AC021	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014652.21	2232803.06	3.00
GMAC022		AC022	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014616.18	2232852.50	3.00
GMAC023		AC023	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014727.12	2232830.54	3.00
GMAC024		AC024	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014831.20	2232917.82	3.00
GMAC025		AC025	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014867.70	2232827.32	3.00
GMAC026		AC026	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015002.34	2232804.67	3.00
GMAC027		AC027	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015003.12	2232837.57	3.00
GMAC028		AC028	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014799.30	2232804.49	3.00
GMAC029		AC029	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014798.95	2232801.37	3.00
GMAC030		AC030	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015088.54	2232907.10	3.00
GMAC031		AC031	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015054.16	2232907.36	3.00
GMAC032		AC032	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014869.53	2232887.57	3.00
GMAC033		AC033	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014873.87	2232866.43	3.00
GMAC034		AC034	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014732.46	2232869.69	3.00
GMAC035		AC035	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014690.27	2232920.38	3.00
GMAC036		AC036	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014660.93	2232933.66	3.00
GMAC037		AC037	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014616.23	2232891.91	3.00
GMAC038		AC038	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014688.14	2232807.62	3.00
GMAC039		AC039	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014655.94	2232975.46	3.00
GMAC040		AC040	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014622.26	2233003.37	3.00
GMAC041		AC041	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014619.31	2233025.37	3.00
GMAC042		AC042	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014620.83	2233064.65	3.00
GMAC043		AC043	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014624.73	2233085.48	3.00
GMAC044		AC044	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014739.49	2232979.84	3.00
GMAC045		AC045	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014739.06	2232983.97	3.00
GMAC046		AC046	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014748.39	2232983.97	3.00
GMAC047		AC047	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014749.69	2232980.28	3.00
GMAC048		AC048	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014759.67	2233000.46	3.00
GMAC049		AC049	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014756.42	2233023.03	3.00
GMAC050		AC050	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014733.41	2233022.16	3.00
GMAC051		AC051	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014728.86	2233000.46	3.00
GMAC052		AC052	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014734.93	2233061.01	3.00
GMAC053		AC053	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014758.15	2233062.09	3.00
GMAC054		AC054	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014762.71	2233083.14	3.00
GMAC055		AC055	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014731.89	2233082.92	3.00
GMAC056		AC056	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014700.64	2233110.48	3.00
GMAC057		AC057	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014659.41	2233112.22	3.00
GMAC058		AC058	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014793.31	2233108.53	3.00
GMAC059		AC059	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014832.16	2233055.36	3.00
GMAC060		AC060	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014861.24	2233093.56	3.00
GMAC061		AC061	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014899.65	2233093.12	3.00
GMAC062		AC062	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014925.91	2233084.01	3.00
GMAC063		AC063	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014835.63	2233055.80	3.00
GMAC064		AC064	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014935.45	2232989.39	3.00
GMAC065		AC065	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014925.04	2232989.39	3.00
GMAC066		AC066	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014900.08	2233000.46	3.00
GMAC067		AC067	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014870.78	2233001.33	3.00
GMAC068		AC068	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014835.84	2233022.38	3.00
GMAC069		AC069	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014832.37	2233022.81	3.00
GMAC070		AC070	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014898.56	2232982.23	3.00
GMAC071		AC071	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014859.93	2232983.53	3.00
GMAC072		AC072	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015097.91	2232975.68	3.00
GMAC073		AC073	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014962.45	2232981.14	3.00
GMAC074		AC074	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015088.10	2232976.67	3.00
GMAC075		AC075	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015087.97	2232972.64	3.00
GMAC076		AC076	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015078.86	2232992.56	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
GMAC077		AC077	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015004.03	2233018.69	3.00
GMAC078		AC078	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015007.50	2233018.69	3.00
GMAC079		AC079	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015082.50	2233015.17	3.00
GMAC080		AC080	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015083.59	2233053.58	3.00
GMAC081		AC081	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015008.37	2233051.24	3.00
GMAC082		AC082	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015080.51	2233075.46	3.00
GMAC083		AC083	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015004.90	2233051.02	3.00
GMAC084		AC084	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014937.62	2233083.57	3.00
GMAC085		AC085	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014964.53	2233090.74	3.00
GMAC086		AC086	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015049.00	2233103.06	3.00
GMAC087		AC087	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015105.29	2233053.58	3.00
GMAC088		AC088	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015109.46	2233074.81	3.00
GMAC089		AC089	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015104.51	2233013.87	3.00
GMAC090		AC090	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015107.37	2232992.52	3.00
GMAC091		AC091	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015184.85	2233100.46	3.00
GMAC092		AC092	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015219.09	2233051.11	3.00
GMAC093		AC093	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015097.87	2232972.72	3.00
GMAC094		AC094	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015218.70	2233011.53	3.00
GMAC095		AC095	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015214.79	2232990.17	3.00
GMAC096		AC096	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015142.14	2233101.37	3.00
GMAC097		AC097	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015216.10	2233072.72	3.00
GMAC098		AC098	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015277.81	2233098.51	3.00
GMAC099		AC099	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015224.17	2232972.98	3.00
GMAC100		AC100	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015223.91	2232969.08	3.00
GMAC101		AC101	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015233.80	2232969.60	3.00
GMAC102		AC102	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015233.54	2232972.72	3.00
GMAC103		AC103	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015240.31	2233011.53	3.00
GMAC104		AC104	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015243.44	2232989.91	3.00
GMAC105		AC105	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015321.04	2233097.46	3.00
GMAC106		AC106	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015352.55	2233069.08	3.00
GMAC107		AC107	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015382.50	2233069.43	3.00
GMAC108		AC108	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015413.41	2233095.86	3.00
GMAC109		AC109	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015378.08	2233048.07	3.00
GMAC110		AC110	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015355.42	2233047.46	3.00
GMAC111		AC111	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015354.12	2233008.14	3.00
GMAC112		AC112	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015376.77	2233008.75	3.00
GMAC113		AC113	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015349.69	2232986.53	3.00
GMAC114		AC114	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015380.16	2232987.65	3.00
GMAC115		AC115	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015358.28	2232969.60	3.00
GMAC116		AC116	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015358.02	2232965.43	3.00
GMAC117		AC117	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015369.74	2232971.25	3.00
GMAC118		AC118	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015369.48	2232967.08	3.00
GMAC119		AC119	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015496.48	2232967.39	3.00
GMAC120		AC120	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015486.19	2232984.27	3.00
GMAC121		AC121	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015491.92	2233005.62	3.00
GMAC122		AC122	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015492.18	2233044.43	3.00
GMAC123		AC123	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015489.32	2233066.56	3.00
GMAC124		AC124	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015457.29	2233094.16	3.00
GMAC125		AC125	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014827.97	2232803.56	3.00
GMAC126		AC126	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014827.97	2232799.00	3.00
GMAC127		AC127	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015244.85	2233071.83	3.00
GMAC128		AC128	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015241.04	2233050.65	3.00
GMAC129		AC129	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015192.86	2232905.21	3.00
GMAC130		AC130	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015226.76	2232904.25	3.00
GMAC131		AC131	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015274.11	2232831.81	3.00
GMAC132		AC132	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014831.40	2232913.97	3.00
GMAC133		AC133	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015379.36	2232875.61	3.00
GMAC134		AC134	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015364.47	2232839.89	3.00
GMAC135		AC135	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015134.35	2232834.85	3.00
GMAC136		AC136	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015142.03	2232834.20	3.00
GMAC137		AC137	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015363.74	2232807.46	3.00
GMAC138		AC138	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015274.41	2232799.22	3.00
GMAC139		AC139	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015135.00	2232802.60	3.00
GMAC140		AC140	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015141.17	2232802.12	3.00
GMAC141		AC141	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015222.24	2232729.56	3.00
GMAC142		AC142	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015222.33	2232696.40	3.00
GMAC143		AC143	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015496.89	2232838.19	3.00
GMAC144		AC144	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015450.54	2232775.35	3.00
GMAC145		AC145	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015484.39	2232781.12	3.00
GMAC146		AC146	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015495.85	2232804.34	3.00
GMAC147		AC147	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015490.69	2232861.02	3.00
GMAC148		AC148	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015487.30	2232883.16	3.00
GMAC149		AC149	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015449.37	2232910.07	3.00
GMAC150		AC150	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015415.43	2232911.11	3.00
GMAC151		AC151	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015496.24	2232963.54	3.00
GMAC152		AC152	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015216.48	2232729.28	3.00
GMAC153		AC153	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015215.72	2232696.62	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
GMAC154		AC154	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015269.86	2232624.09	3.00
GMAC155		AC155	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015304.24	2232623.47	3.00
GMAC156		AC156	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015354.63	2232694.08	3.00
GMAC157		AC157	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015361.75	2232693.74	3.00
GMAC158		AC158	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015356.54	2232726.72	3.00
GMAC159		AC159	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015362.09	2232726.38	3.00
GMAC160		AC160	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015360.14	2232647.73	3.00
GMAC161		AC161	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015493.39	2232644.87	3.00
GMAC162		AC162	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015493.89	2232690.79	3.00
GMAC163		AC163	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6015495.10	2232723.42	3.00
GMAC164		AC164	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014655.85	2232637.97	3.00
GMAC165		AC165	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014829.33	2232633.94	3.00
GMAC166		AC166	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	r	6014795.22	2232634.72	3.00
RTAC001		AC167	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014462.45	2232672.83	43.00
RTAC002		AC168	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014456.55	2232683.76	43.00
RTAC003		AC169	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014462.45	2232683.76	43.00
RTAC004		AC170	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.76	2232694.35	43.00
RTAC005		AC171	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014462.80	2232694.18	43.00
RTAC006		AC172	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.07	2232701.99	43.00
RTAC007		AC173	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014463.32	2232701.99	43.00
RTAC008		AC174	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.42	2232711.54	43.00
RTAC009		AC175	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014463.49	2232711.02	43.00
RTAC010		AC176	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014458.80	2232723.17	43.00
RTAC011		AC177	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014463.49	2232722.65	43.00
RTAC012		AC178	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014458.63	2232731.51	43.00
RTAC013		AC179	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014463.84	2232731.16	43.00
RTAC014		AC180	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014456.29	2232653.55	43.00
RTAC015		AC181	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014462.10	2232653.55	43.00
RTAC016		AC182	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.85	2232740.53	43.00
RTAC017		AC183	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014464.10	2232740.53	43.00
RTAC018		AC184	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014449.94	2232825.27	43.00
RTAC019		AC185	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014456.15	2232824.83	43.00
RTAC020		AC186	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014450.48	2232843.17	43.00
RTAC021		AC187	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.75	2232843.06	43.00
RTAC022		AC188	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014450.85	2232851.68	43.00
RTAC023		AC189	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.75	2232851.70	43.00
RTAC024		AC190	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014451.46	2232860.51	43.00
RTAC025		AC191	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.86	2232860.33	43.00
RTAC026		AC192	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014452.05	2232869.60	43.00
RTAC027		AC193	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014458.30	2232869.45	43.00
RTAC028		AC194	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014451.63	2232878.48	43.00
RTAC029		AC195	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014458.47	2232878.39	43.00
RTAC030		AC196	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014452.07	2232890.91	43.00
RTAC031		AC197	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.14	2232891.11	43.00
RTAC032		AC198	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014452.33	2232897.40	43.00
RTAC033		AC199	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.47	2232897.05	43.00
RTAC034		AC200	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014452.85	2232905.30	43.00
RTAC035		AC201	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.27	2232905.43	43.00
RTAC036		AC202	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014453.82	2232917.17	43.00
RTAC037		AC203	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.68	2232917.01	43.00
RTAC038		AC204	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014453.80	2232924.31	43.00
RTAC039		AC205	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.92	2232924.27	43.00
RTAC040		AC206	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014453.96	2232930.93	43.00
RTAC041		AC207	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014460.01	2232930.86	43.00
RTAC042		AC208	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014454.15	2232937.27	43.00
RTAC043		AC209	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.47	2232937.05	43.00
RTAC044		AC210	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014454.48	2232943.56	43.00
RTAC045		AC211	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.90	2232943.67	43.00
RTAC046		AC212	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014463.99	2233074.18	43.00
RTAC047		AC213	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014463.45	2233067.45	43.00
RTAC048		AC214	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014472.56	2233074.29	43.00
RTAC049		AC215	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014471.91	2233067.13	43.00
RTAC050		AC216	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014479.83	2233074.18	43.00
RTAC051		AC217	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014479.83	2233066.70	43.00
RTAC052		AC218	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014488.51	2233073.75	43.00
RTAC053		AC219	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014488.30	2233066.26	43.00
RTAC054		AC220	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014497.52	2233073.42	43.00
RTAC055		AC221	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014497.52	2233065.39	43.00
RTAC056		AC222	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014507.50	2233073.21	43.00
RTAC057		AC223	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014507.94	2233065.39	43.00
RTAC058		AC224	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014517.49	2233073.21	43.00
RTAC059		AC225	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014517.92	2233064.53	43.00
RTAC060		AC226	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014527.47	2233072.77	43.00
RTAC061		AC227	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014527.79	2233064.42	43.00
RTAC062		AC228	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014537.88	2233072.77	43.00
RTAC063		AC229	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014537.88	2233064.53	43.00
RTAC064		AC230	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014462.16	2232661.29	43.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
RTAC065		AC231	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014450.30	2232835.35	43.00
RTAC066		AC232	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.35	2232835.02	43.00
RTAC067		AC233	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014452.03	2232884.50	43.00
RTAC068		AC234	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014458.98	2232884.17	43.00
RTAC069		AC235	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014454.81	2233074.20	43.00
RTAC070		AC236	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014454.16	2233067.91	43.00
RTAC071		AC237	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014453.63	2232911.41	43.00
RTAC072		AC238	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.62	2232911.54	43.00
RTAC073		AC239	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014454.75	2232948.63	43.00
RTAC074		AC240	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014459.96	2232948.19	43.00
RTAC075		AC241	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014457.56	2232952.28	43.00
RTAC076		AC242	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014456.19	2232673.04	43.00
RTAC077		AC243	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014456.10	2232661.67	43.00
RTAC078		AC244	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014690.11	2232916.17	3.00
RTAC079		AC245	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014801.92	2232918.25	3.00
RTAC080		AC246	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6014801.22	2232914.08	3.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
BUILDING			BUILDING00001	x	0		40.00	r	6014559.58	2233110.87	40.00	0.00
									6014557.15	2233012.95	40.00	0.00
									6014536.32	2233012.95	40.00	0.00
									6014537.01	2233039.86	40.00	0.00
									6014525.73	2233039.86	40.00	0.00
									6014525.56	2233041.08	40.00	0.00
									6014514.62	2233041.08	40.00	0.00
									6014514.62	2233041.77	40.00	0.00
									6014491.01	2233042.29	40.00	0.00
									6014491.01	2233041.43	40.00	0.00
									6014479.90	2233041.43	40.00	0.00
									6014479.90	2233040.56	40.00	0.00
									6014468.96	2233040.56	40.00	0.00
									6014468.79	2233039.34	40.00	0.00
									6014457.33	2233039.34	40.00	0.00
									6014457.50	2233041.25	40.00	0.00
									6014448.47	2233041.43	40.00	0.00
									6014448.30	2233039.86	40.00	0.00
									6014436.84	2233039.86	40.00	0.00
									6014437.19	2233053.23	40.00	0.00
									6014435.97	2233053.23	40.00	0.00
									6014435.97	2233065.21	40.00	0.00
									6014434.41	2233065.04	40.00	0.00
									6014434.93	2233088.47	40.00	0.00
									6014437.19	2233088.47	40.00	0.00
									6014437.19	2233100.63	40.00	0.00
									6014437.88	2233100.63	40.00	0.00
									6014438.58	2233114.00	40.00	0.00
									6014470.00	2233113.13	40.00	0.00

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
									6014469.83	2233108.96	40.00	0.00
									6014493.26	2233108.61	40.00	0.00
									6014493.26	2233091.25	40.00	0.00
									6014514.45	2233090.90	40.00	0.00
									6014514.97	2233107.57	40.00	0.00
									6014538.23	2233107.40	40.00	0.00
									6014538.40	2233111.74	40.00	0.00
BUILDING			BUILDING00002	x	0		40.00	r	6014426.08	2232978.80	40.00	0.00
									6014522.95	2232976.72	40.00	0.00
									6014522.26	2232955.01	40.00	0.00
									6014495.87	2232956.06	40.00	0.00
									6014493.44	2232819.08	40.00	0.00
									6014520.00	2232818.56	40.00	0.00
									6014519.65	2232795.99	40.00	0.00
									6014421.91	2232798.59	40.00	0.00
									6014422.43	2232820.12	40.00	0.00
									6014434.24	2232819.94	40.00	0.00
									6014434.58	2232840.78	40.00	0.00
									6014428.51	2232840.78	40.00	0.00
									6014429.20	2232865.26	40.00	0.00
									6014425.73	2232865.26	40.00	0.00
									6014426.42	2232911.61	40.00	0.00
									6014430.07	2232911.44	40.00	0.00
									6014430.59	2232936.09	40.00	0.00
									6014436.84	2232936.09	40.00	0.00
									6014437.01	2232956.58	40.00	0.00
									6014425.38	2232957.10	40.00	0.00
BUILDING			BUILDING00003	x	0		40.00	r	6014421.61	2232768.33	40.00	0.00
									6014519.26	2232765.94	40.00	0.00
									6014518.61	2232744.46	40.00	0.00
									6014492.35	2232744.68	40.00	0.00
									6014491.70	2232666.12	40.00	0.00
									6014516.22	2232665.47	40.00	0.00
									6014516.01	2232644.20	40.00	0.00
									6014467.40	2232645.72	40.00	0.00
									6014466.96	2232642.25	40.00	0.00
									6014443.96	2232642.90	40.00	0.00
									6014443.96	2232645.50	40.00	0.00
									6014419.44	2232645.50	40.00	0.00
									6014419.65	2232678.05	40.00	0.00
									6014423.34	2232678.05	40.00	0.00
									6014423.99	2232701.27	40.00	0.00
									6014440.70	2232700.62	40.00	0.00
									6014440.92	2232723.19	40.00	0.00
									6014424.86	2232723.19	40.00	0.00
									6014424.86	2232746.20	40.00	0.00
									6014420.74	2232746.85	40.00	0.00

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

APPENDIX 11.1:

CONSTRUCTION NOISE LEVEL CALCULATIONS

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14501 - 4665 Lampson Ave

CadnaA Noise Prediction Model: 14501-06_Construction.cna
Date: 02.04.24
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (#(Unit,LEN))	**2000.01**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (#(Unit,LEN))	**999.99**
Min. Length of Section (#(Unit,LEN))	**1.01**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**100.00**
Search Radius Rcvr	**100.00**
Max. Distance Source - Rcvr	**1000.00 1000.00**
Min. Distance Rvcr - Reflector	**1.00 1.00**
Min. Distance Source - Reflector	**0.10**
Industrial (ISO 9613)	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (#(Unit,TEMP))	**10**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (#(Unit,SPEED))	**3.0**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	59.1	-43.9	56.1	0.0	0.0	0.0		x	Total	0.00	a	6015314.98	2233283.64	0.00
R2		R2	54.8	-48.2	51.8	0.0	0.0	0.0		x	Total	0.00	a	6016382.65	2232669.61	0.00
R3		R3	63.6	-39.4	60.6	0.0	0.0	0.0		x	Total	0.00	a	6014936.74	2232530.15	0.00
R4		R4	35.1	-67.7	32.1	0.0	0.0	0.0		x	Total	0.00	a	6009375.12	2233274.30	0.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)	

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
CONSTRUCTION_ACTIVITY		CONSTRUCTION_ACTIVITY1	118.6	15.6	15.6	71.2	-31.8	-31.8	PWL-Pt	115.6					8	a

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)
CONSTRUCTION_ACTIVITY	CONSTRUCTION_ACTIVITY1	8.00	a			6016380.34	2232578.54	8.00	0.00
						6016380.16	2232549.89	8.00	0.00
						6014933.66	2232581.11	8.00	0.00
						6014933.72	2232616.25	8.00	0.00
						6014457.04	2232626.27	8.00	0.00
						6014411.41	2232627.23	8.00	0.00
						6014419.54	2233133.01	8.00	0.00
						6015505.92	2233105.37	8.00	0.00
						6015494.54	2232604.46	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(ft)	(%)
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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September 19, 2022

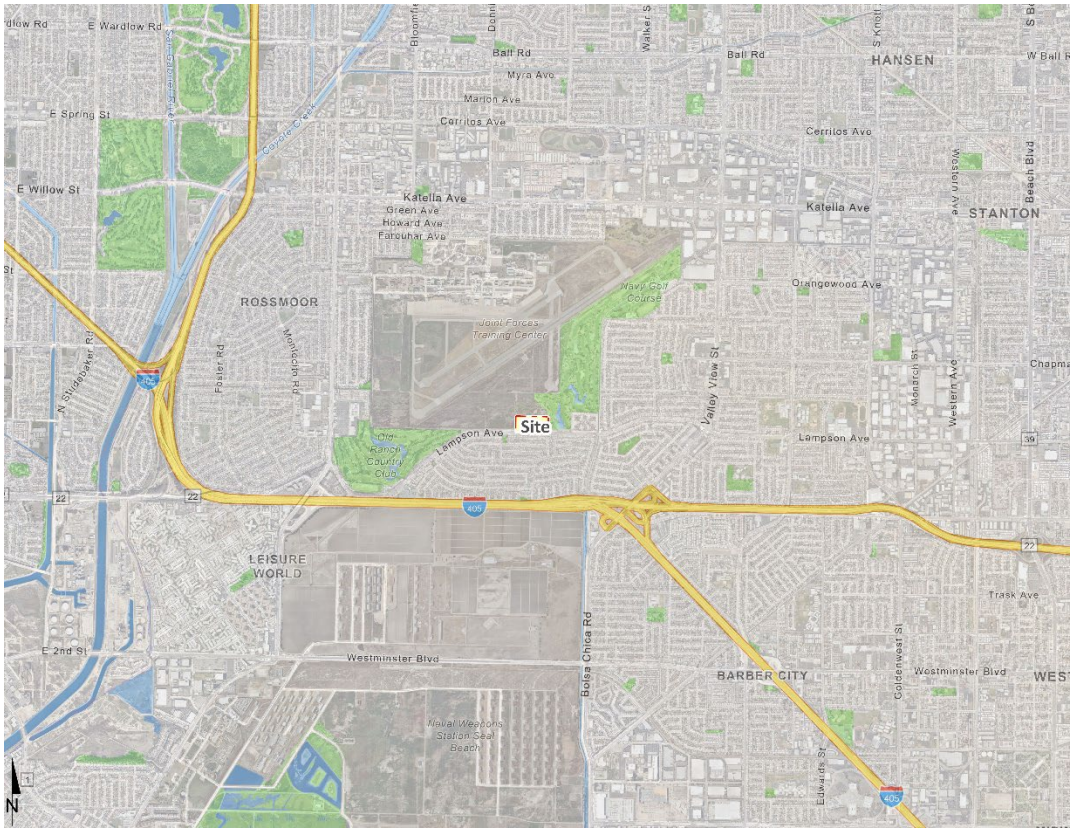
Mr. Tom Oliver
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

4665 LAMPSON AVENUE TRAFFIC ANALYSIS SCOPING AGREEMENT

Mr. Tom Oliver,

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic analysis for 4665 Lampson Avenue development (**Project**), which is located in the City of Los Alamitos (see Exhibit 1). This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations.

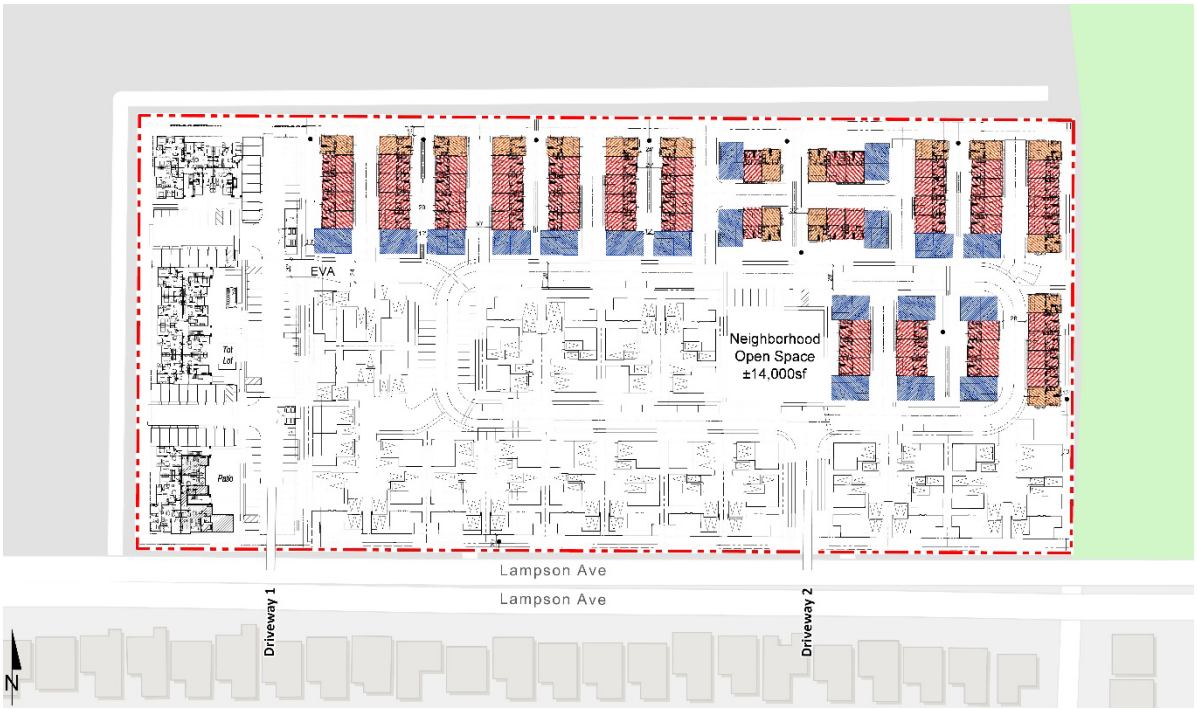
EXHIBIT 1: LOCATION MAP



PROJECT DESCRIPTION

The Project is anticipated to have an Opening Year of 2026. The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). A preliminary site plan for the proposed Project is shown on Exhibit 2. Access to the Project site will be accommodated via Lampson Avenue. The site is currently occupied by the California Department of Fish and Wildlife building and parking lot, however, no credit will be taken for the existing use for the purposes of this analysis. Although the proposed Project is located in the City of Los Alamitos, however, access to the site is via intersections controlled by the City of Seal Beach.

EXHIBIT 2: PRELIMINARY SITE PLAN



TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the Single Family Detached Residential Land Use category (ITE Land Use Code 210), Multifamily (Low-Rise) Housing (ITE Land Use Code 220), and Affordable Housing (ITE Land Use Code 223) were used to calculate the trip generation.

TABLE 1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
Single Family Detached	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily Housing (Low-Rise) (2-3 Floors)	DU	220	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Affordable Housing	DU	223	0.10	0.26	0.36	0.27	0.19	0.46	4.81

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] DU = Dwelling Units

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project are shown on Table 2. The proposed Project is anticipated to generate 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147PM peak hour trips (see Table 2).

TABLE 2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
Single Family Detached	55	DU	10	28	38	33	19	52	520
Mulifamily Housing	114	DU	11	35	46	37	22	59	768
Affordable Housing	77	DU	8	20	28	21	15	36	370
Project Total Trips			**29**	**83**	**112**	**91**	**56**	**147**	**1,658**

[1] DU = Dwelling Units

ANALYSIS SCENARIOS

Peak hour operations at each of the study area intersections and site access driveways will be assessed for the following analysis scenarios:

- Existing (2022) Conditions
- Opening Year Cumulative (2026) Without Project
- Opening Year Cumulative (2026) With Buildout
- General Plan Buildout (2042) Without Project
- General Plan Buildout (2042) With Project

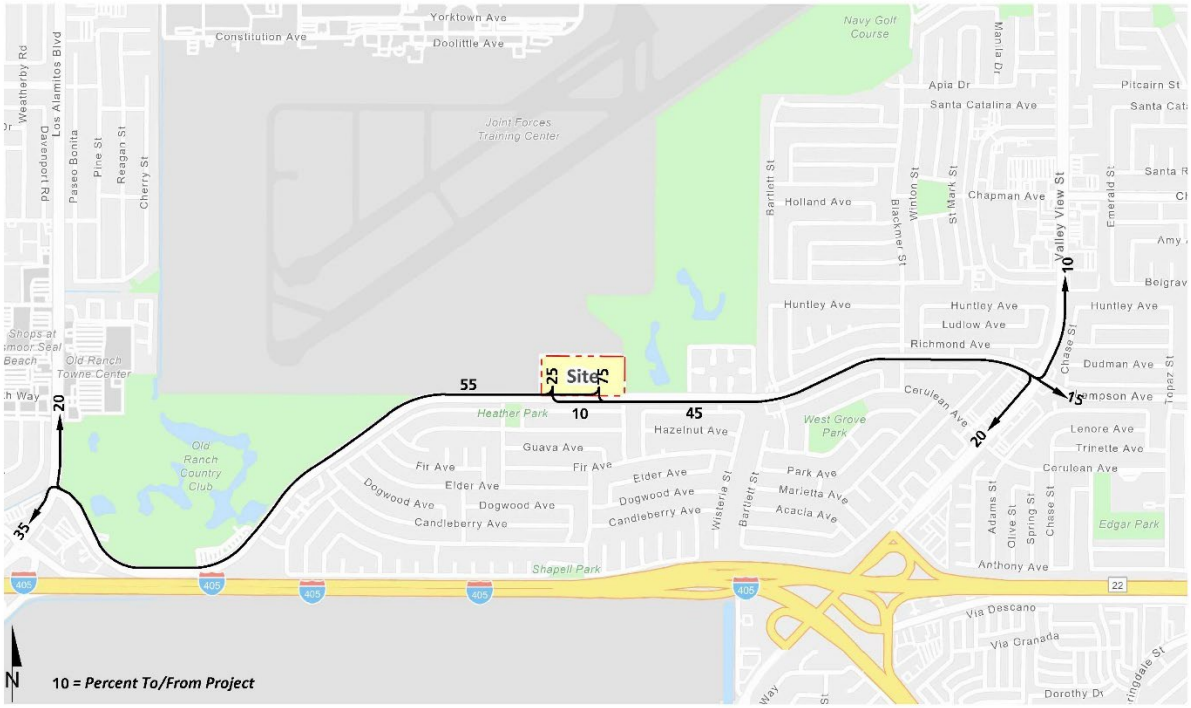
As most of the study area intersections lie within the City of Seal Beach, the City of Seal Beach Transportation Analysis Guidelines (dated June 2020) have been utilized for the purposes of the traffic study. Per the Guidelines, the signalized intersections will be evaluated using the Intersection Capacity Utilization (ICU) methodology while unsignalized intersections will be evaluated using the Highway Capacity Manual (HCM 6th Edition) methodology.

PROJECT TRIP DISTRIBUTIONS

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses

and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution patterns are heavily influenced by the geographical location of the site, the location of surrounding land uses, and the proximity to the regional freeway system. The Project trip distribution patterns are graphically depicted on Exhibit 3.

EXHIBIT 3: PROJECT TRIP DISTRIBUTION



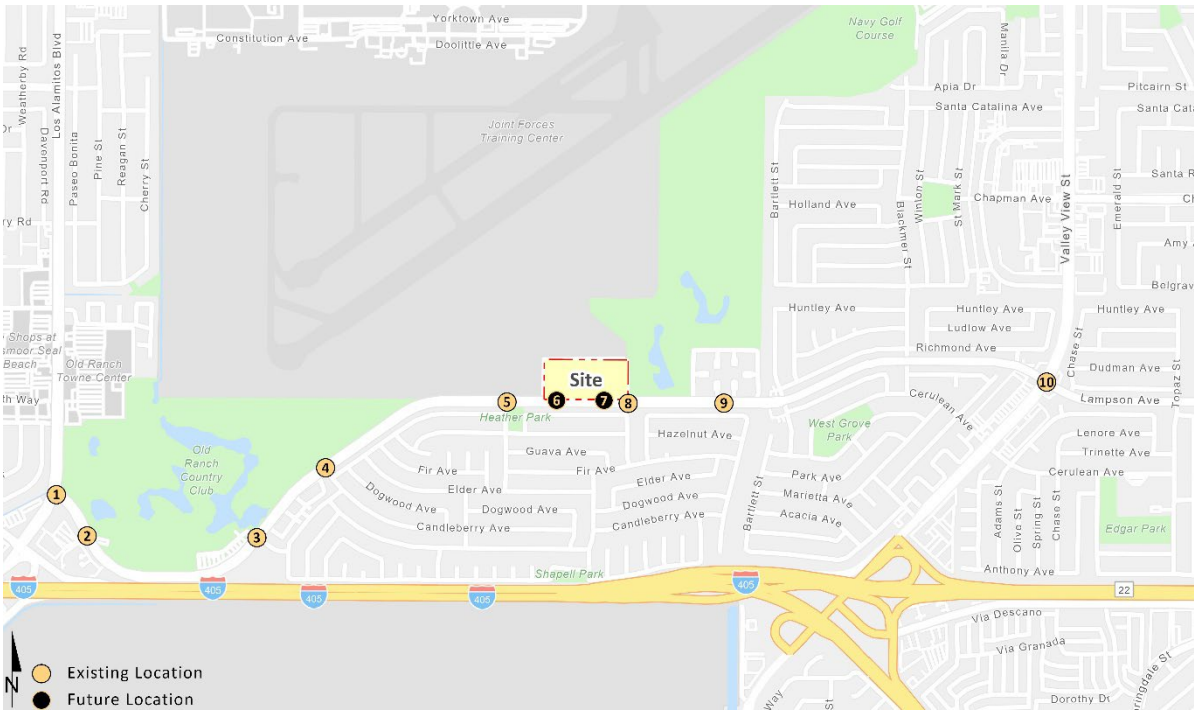
STUDY AREA

Per the City's guidelines, the proposed intersection analysis locations have been identified on Exhibit 4 and listed on Table 3.

TABLE 3: LIST OF STUDY INTERSECTIONS

#	Intersection	#	Intersection
1	Seal Beach Bl. & Lampson Av.	6	Rose St. & Lampson Av.
2	Old Ranch Plaza & Lampson Av.	7	Driveway 1 & Lampson Av.
3	Basswood St. & Lampson Av.	8	Driveway 2 & Lampson Av.
4	Candleberry Av. & Lampson Av.	9	Tulip St. & Lampson Av.
5	Heather St. & Lampson Av.	10	Valley View St. & Lampson Av.

EXHIBIT 4: STUDY AREA



LEVEL OF SERVICE (LOS) CRITERIA

The City of Los Alamitos and City of Seal Beach have established LOS D as the minimum level of service for all roadways/intersections within the City. Therefore, any intersection operating at LOS E or F will be considered deficient for the purposes of this analysis.

EXISTING COUNT DATA

Traffic counts (classified by vehicle type) were conducted in May 2022 during a typical weekday when local schools were in session and operating on a typical bell schedule. Time periods counted were from 7:00-9:00 AM and 4:00-6:00 PM and include pedestrian and bicycle counts at each analysis location. No adjustments are proposed to the new traffic counts for the baseline traffic condition as traffic counts were conducted while local schools were in session (before Summer Break).

AMBIENT GROWTH RATE

Consistent with other City of Los Alamitos traffic studies performed by Urban Crossroads, an ambient growth rate of 2 percent per year, compounded annually, will be used for this analysis (2% per year over 4 years or 8.24% for 2026).

DEFICIENCY CRITERIA

City of Seal Beach:

To determine whether the addition of project traffic at a study intersection result in a deficiency, the following thresholds of significance will be utilized to determine when an intersection requires improvements:

Existing ICU	Project Related Increase in ICU
0.00 - 0.69	0.06
0.70 - 0.79	0.04
0.80 - 0.89	0.02
0.90+	0.01

City of Garden Grove:

To determine whether the addition of project traffic at a study intersection result in a deficiency, the following thresholds of significance will be utilized:

- Any signalized study intersection operating at an acceptable LOS D or better without project in which the addition of project traffic causes the intersection to degrade to LOS E or F shall identify improvements to improve the operations to LOS D or better.
- Any signalized intersection that is operating at LOS E or F without project traffic where the project increases v/c by 0.010 or more shall identify improvements to offset the increase in delay.
- An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur at unsignalized study intersections:

  a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or LOS F.

  AND

  b) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

CUMULATIVE DEVELOPMENT PROJECTS

It is requested the City provide a list of cumulative projects to be included. The adjacent Cities of Long Beach, Seal Beach, and Garden Grove will be contacted to obtain current lists in their respective agencies as well.

SPECIAL ISSUES

The following special issues will be addressed as part of the TA:

- Traffic signal warrant analyses will be conducted for all unsignalized study area intersections for all applicable analysis scenarios.
- Evaluate the peak hour queuing at the Project driveways located along Lampson Avenue.

- Vehicle Miles Traveled (VMT) will be evaluated under separate cover but concurrently to the Traffic Study.

If you have any questions or comments, I can be reached at cso@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.



Charlene So, PE
Principal



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APPENDIX 1.2: SITE ACCESS QUEUING ANALYSIS WORKSHEETS

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Intersection: 6: Lampson Av. & Driveway 1

Movement	SB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	14
95th Queue (ft)	39
Link Distance (ft)	175
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Lampson Av. & Driveway 2

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	29	74
Average Queue (ft)	5	32
95th Queue (ft)	23	58
Link Distance (ft)		154
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	150	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 6: Lampson Av. & Driveway 1

Movement	SB
Directions Served	R
Maximum Queue (ft)	36
Average Queue (ft)	12
95th Queue (ft)	37
Link Distance (ft)	175
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Lampson Av. & Driveway 2

Movement	EB	WB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	52	4	4	76
Average Queue (ft)	15	0	0	29
95th Queue (ft)	42	3	3	60
Link Distance (ft)		522	522	154
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 0

APPENDIX 3.1: EXISTING TRAFFIC COUNTS

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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:					
Wed, Jun 1, 22	LOCATION:	Seal Beach	PROJECT #:	SC3468	
	NORTH & SOUTH:	Seal Beach	LOCATION #:	1	
	EAST & WEST:	Lampson	CONTROL:	SIGNAL	

NOTES:

AM PM MD OTHER OTHER — ▲ N, ◄ W, E ►, S ▼

☐ Add U-Turns to Left Turns

		NORTHBOUND Seal Beach			SOUTHBOUND Seal Beach			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL X	NT 3	NR 1	SL 2	ST 3	SR X	EL X	ET X	ER X	WL 2	WT X	WR 1	TOTAL
AM	7:00 AM	0	184	37	17	232	0	0	0	0	66	0	76	612
	7:15 AM	0	276	35	33	284	0	0	0	0	84	0	138	850
	7:30 AM	0	261	56	39	249	0	0	0	0	131	0	175	911
	7:45 AM	0	418	72	113	363	0	0	0	0	71	0	182	1,219
	8:00 AM	0	243	67	128	369	0	0	0	0	73	0	93	973
	8:15 AM	0	277	71	84	263	0	0	0	0	56	0	106	857
	8:30 AM	0	251	60	86	286	0	0	0	0	76	0	75	834
	8:45 AM	0	330	63	54	231	0	0	0	0	57	0	82	817
	VOLUMES	0	2,240	461	554	2,277	0	0	0	0	614	0	927	7,074
	APPROACH %	0%	83%	17%	20%	80%	0%	0%	0%	0%	40%	0%	60%	
	APP/DEPART	2,701	/	3,167	2,831	/	2,891	0	/	1,016	1,542	/	0	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	1,199	266	364	1,244	0	0	0	0	331	0	556	3,960
	APPROACH %	0%	82%	18%	23%	77%	0%	0%	0%	0%	37%	0%	63%	
	PEAK HR FACTOR		0.747			0.809			0.000			0.725		0.812
	APP/DEPART	1,465	/	1,755	1,608	/	1,575	0	/	630	887	/	0	0
PM	4:00 PM	0	354	100	109	309	0	0	0	0	82	0	105	1,059
	4:15 PM	0	370	89	107	298	0	0	0	0	58	0	97	1,019
	4:30 PM	0	351	96	110	324	0	0	0	0	81	0	110	1,072
	4:45 PM	0	399	101	129	282	0	0	0	0	67	0	109	1,087
	5:00 PM	0	397	104	116	293	0	0	0	0	92	0	104	1,106
	5:15 PM	0	361	112	92	303	0	0	0	0	71	0	108	1,047
	5:30 PM	0	383	98	99	296	0	0	0	0	84	0	101	1,061
	5:45 PM	0	420	87	101	294	0	0	0	0	85	0	85	1,072
	VOLUMES	0	3,035	787	863	2,399	0	0	0	0	620	0	819	8,526
	APPROACH %	0%	79%	21%	26%	74%	0%	0%	0%	0%	43%	0%	57%	
	APP/DEPART	3,825	/	3,854	3,262	/	3,022	0	/	1,650	1,439	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	1,508	413	447	1,202	0	0	0	0	311	0	431	4,315
	APPROACH %	0%	78%	21%	27%	73%	0%	0%	0%	0%	42%	0%	58%	
	PEAK HR FACTOR		0.956			0.950			0.000			0.946		0.974
	APP/DEPART	1,924	/	1,939	1,649	/	1,516	0	/	860	742	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
2	0	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
3	0	0	0	3

RTOR

NRR	SRR	ERR	WRR
0	X	X	0
5	0	0	48
7	0	0	77
10	0	0	68
14	0	0	64
4	0	0	48
22	0	0	50
8	0	0	47
10	0	0	40
80	0	0	442
50	0	0	230
34	0	0	42
14	0	0	54
28	0	0	38
27	0	0	42
28	0	0	48
21	0	0	37
47	0	0	44
4	0	0	46
203	0	0	351
104	0	0	165

Seal Beach

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Seal Beach

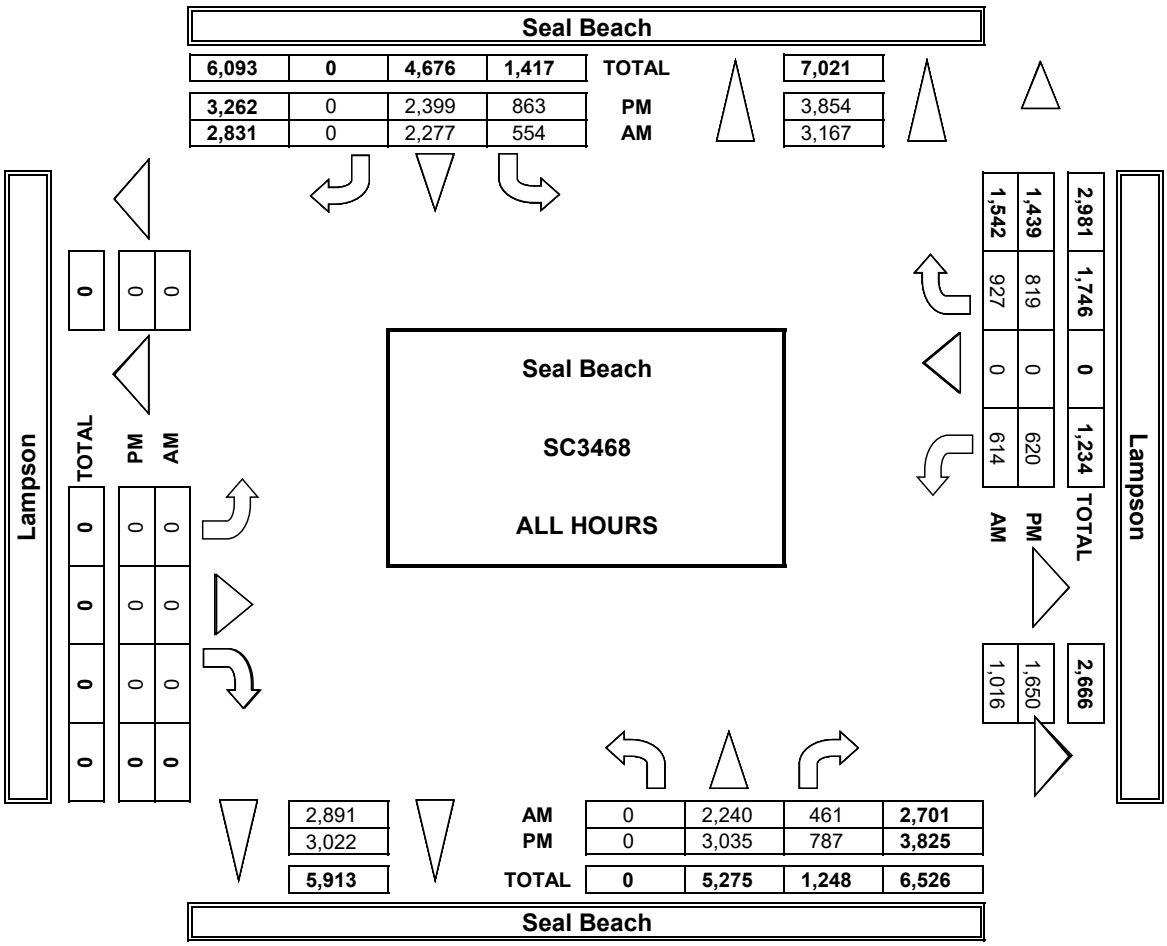
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	2	0	1	3
	7:15 AM	4	2	0	2	8
	7:30 AM	1	1	0	0	2
	7:45 AM	1	2	0	0	3
	8:00 AM	0	2	0	2	4
	8:15 AM	2	3	0	2	7
	8:30 AM	2	2	0	0	4
	8:45 AM	0	4	0	0	4
	TOTAL	10	18	0	7	35
PM	4:00 PM	2	2	0	4	8
	4:15 PM	1	0	0	0	1
	4:30 PM	0	4	0	2	6
	4:45 PM	2	0	0	2	4
	5:00 PM	0	2	0	2	4
	5:15 PM	0	0	0	0	0
	5:30 PM	1	0	0	1	2
	5:45 PM	1	3	1	2	7
	TOTAL	7	11	1	13	32

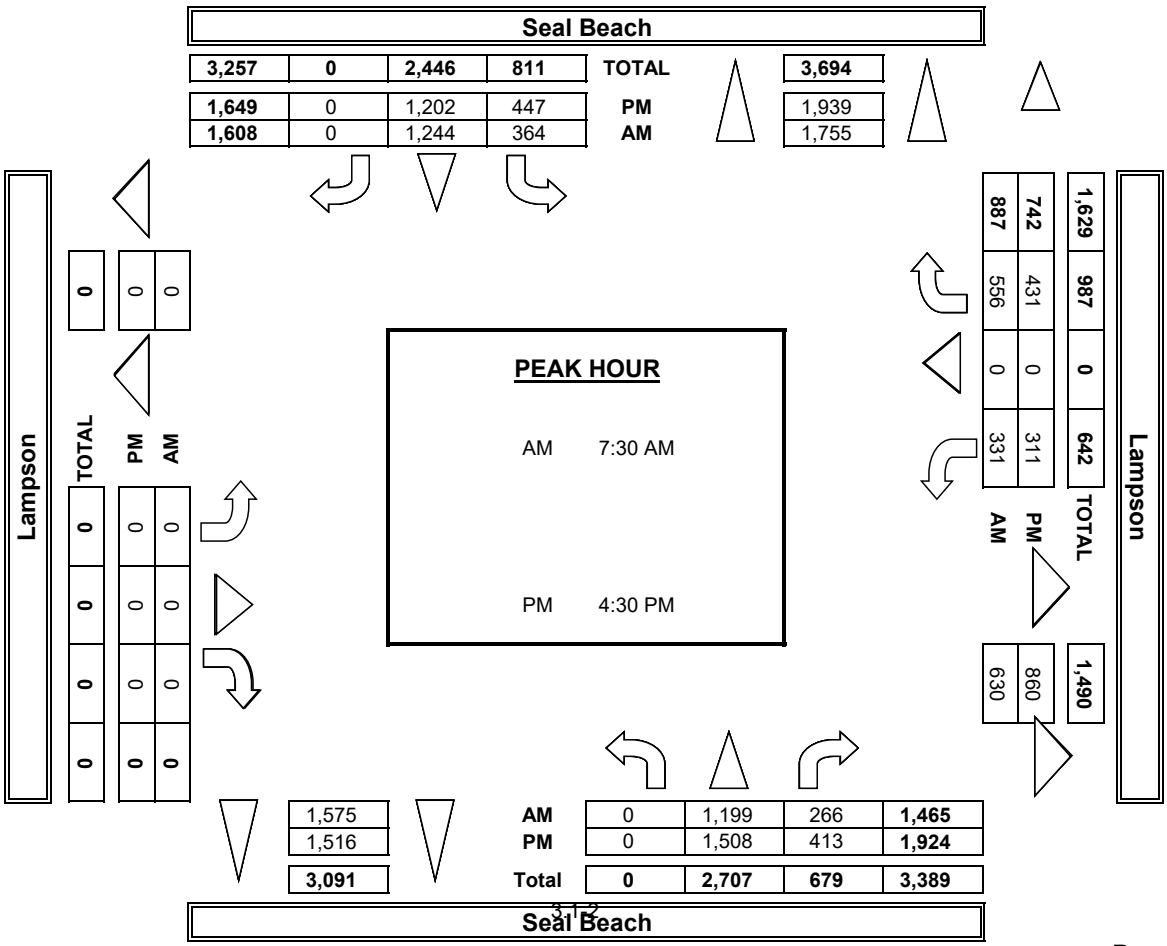
		PEDESTRIAN CROSSINGS				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	0	0	0
	7:15 AM	1	0	0	0	1
	7:30 AM	0	0	0	0	0
	7:45 AM	0	2	0	0	2
	8:00 AM	0	0	0	0	0
	8:15 AM	2	2	0	0	4
	8:30 AM	2	0	0	0	2
	8:45 AM	0	1	0	0	1
	TOTAL	5	5	0	0	10
PM	4:00 PM	0	0	0	2	2
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	0	0	0
	4:45 PM	0	0	0	0	0
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	0	0	0
	5:30 PM	0	0	0	0	0
	5:45 PM	1	0	0	1	2
	TOTAL	1	0	0	3	4

		BICYCLE CROSSINGS				
		ES	WS	SS	NS	TOTAL
AM	7:00 AM	0	2	0	1	3
	7:15 AM	3	2	0	2	7
	7:30 AM	1	1	0	0	2
	7:45 AM	1	0	0	0	1
	8:00 AM	0	2	0	2	4
	8:15 AM	0	1	0	2	3
	8:30 AM	0	2	0	0	2
	8:45 AM	0	3	0	0	3
	TOTAL	5	13	0	7	25
PM	4:00 PM	2	2	0	2	6
	4:15 PM	1	0	0	0	1
	4:30 PM	0	4	0	2	6
	4:45 PM	2	0	0	2	4
	5:00 PM	0	2	0	2	4
	5:15 PM	0	0	0	0	0
	5:30 PM	1	0	0	1	2
	5:45 PM	0	3	1	1	5
	TOTAL	6	11	1	10	28

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
6/1/22	NORTH & SOUTH:	Seal Beach	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Lampson	CONTROL:	SIGNAL

CLASS 2:	NOTES:
2-AXLE WORK VEHICLES/ TRUCKS	

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

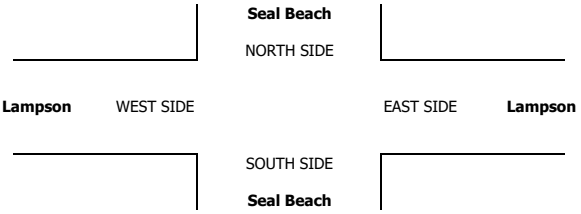
	NORTHBOUND (Seal Beach)			SOUTHBOUND (Seal Beach)			EASTBOUND (Lampson)			WESTBOUND (Lampson)			
LANES:	NL X	NT 3	NR 1	SL 2	ST 3	SR X	EL X	ET X	ER X	WL 2	WT X	WR 1	TOTAL
7:00 AM	0	13	4	0	11	0	0	0	0	2	0	2	32
7:15 AM	0	19	1	4	12	0	0	0	0	2	0	4	42
7:30 AM	0	17	5	3	6	0	0	0	0	9	0	5	45
7:45 AM	0	19	2	3	12	0	0	0	0	1	0	4	41
8:00 AM	0	19	5	1	16	0	0	0	0	5	0	2	48
8:15 AM	0	21	4	4	9	0	0	0	0	2	0	1	41
8:30 AM	0	15	3	2	17	0	0	0	0	3	0	2	42
8:45 AM	0	14	5	1	13	0	0	0	0	3	0	5	41
AM VOLUMES	0	137	29	18	96	0	0	0	0	27	0	25	332
AM APPROACH %	0%	83%	17%	16%	84%	0%	0%	0%	0%	52%	0%	48%	
AM APP/DEPART	166	/	162	114	/	123	0	/	47	52	/	0	0
BEGIN PEAK HR	7:30 AM												
AM PEAK VOLUMES	0	76	16	11	43	0	0	0	0	17	0	12	175
AM PEAK APPROACH %	0%	83%	17%	20%	80%	0%	0%	0%	0%	59%	0%	41%	
AM PEAK HR FACTOR		0.920			0.794			0.000			0.518		0.911
AM PEAK APP/DEPART	92	/	88	54	/	60	0	/	27	29	/	0	0
4:00 PM	0	11	6	7	10	0	0	0	0	3	0	5	42
4:15 PM	0	14	1	1	16	0	0	0	0	3	0	1	36
4:30 PM	0	9	1	1	10	0	0	0	0	4	0	3	28
4:45 PM	0	13	3	2	11	0	0	0	0	1	0	4	34
5:00 PM	0	9	1	4	10	0	0	0	0	8	0	7	39
5:15 PM	0	9	3	1	5	0	0	0	0	1	0	3	22
5:30 PM	0	13	2	1	11	0	0	0	0	2	0	4	33
5:45 PM	0	5	2	1	8	0	0	0	0	2	0	1	19
PM VOLUMES	0	83	19	18	81	0	0	0	0	24	0	28	253
PM APPROACH %	0%	81%	19%	18%	82%	0%	0%	0%	0%	46%	0%	54%	
PM APP/DEPART	102	/	111	99	/	105	0	/	37	52	/	0	0
BEGIN PEAK HR	4:30 PM												
PM PEAK VOLUMES	0	40	8	8	36	0	0	0	0	14	0	17	123
PM PEAK APPROACH %	0%	83%	17%	18%	82%	0%	0%	0%	0%	45%	0%	55%	
PM PEAK HR FACTOR		0.750			0.786			0.000			0.517		0.788
PM PEAK APP/DEPART	48	/	57	44	/	50	0	/	16	31	/	0	0

U-TURNS

	NB	SB	EB	WB	TTL
AM	0	0	0	0	0
PM	0	0	0	0	0
AM PEAK					
PM PEAK					

RTOR

	NRR 0	SRR X	ERR X	WRR 0
AM	7	0	0	9
AM PEAK	5	0	0	2
PM	7	0	0	10
PM PEAK	4	0	0	7



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
6/1/22	NORTH & SOUTH:	Seal Beach	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Lampson	CONTROL:	SIGNAL

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

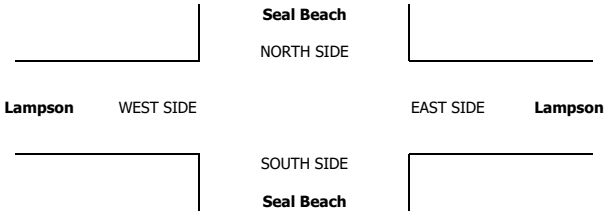
		NORTHBOUND Seal Beach			SOUTHBOUND Seal Beach			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL X	NT 3	NR 1	SL 2	ST 3	SR X	EL X	ET X	ER X	WL 2	WT X	WR 1	TOTAL
AM	7:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
	7:15 AM	0	0	0	0	1	0	0	0	0	0	0	1	2
	7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	2
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	1	1	0	1	0	0	0	0	0	0	0	3
	8:45 AM	0	1	0	0	0	0	0	0	0	2	0	0	3
	VOLUMES	0	6	3	0	4	0	0	0	0	2	0	1	16
	APPROACH %	0%	67%	33%	0%	100%	0%	0%	0%	0%	67%	0%	33%	
	APP/DEPART	9	/	7	4	/	6	0	/	3	3	/	0	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	2	2	0	1	0	0	0	0	0	0	0	5
	APPROACH %	0%	50%	50%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR		0.500			0.250			0.000			0.000		0.625
	APP/DEPART	4	/	2	1	/	1	0	/	2	0	/	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	4:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	2
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	0	0	1	4	0	0	0	0	0	0	1	6
	APPROACH %	0%	0%	0%	20%	80%	0%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	0	/	1	5	/	4	0	/	1	1	/	0	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	1	2	0	0	0	0	0	0	1	4
	APPROACH %	0%	0%	0%	33%	67%	0%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR		0.000			0.375			0.000			0.250		0.500
	APP/DEPART	0	/	1	3	/	2	0	/	1	1	/	0	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR 0	SRR X	ERR X	WRR 0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

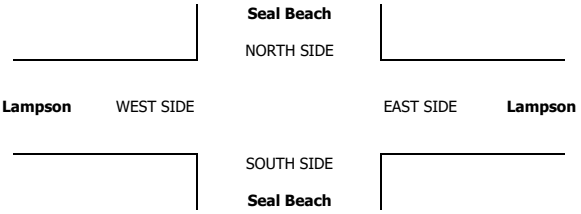
DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
6/1/22	NORTH & SOUTH:	Seal Beach	LOCATION #:	1
WEDNESDAY	EAST & WEST:	Lampson	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND (Seal Beach)			SOUTHBOUND (Seal Beach)			EASTBOUND (Lampson)			WESTBOUND (Lampson)				U-TURNS					RTOR			
	LANES:	NL X	NT 3	NR 1	SL 2	ST 3	SR X	EL X	ET X	ER X	WL 2	WT X	WR 1	TOTAL	NB	SB	EB	WB	TTL	NRR 0	SRR X	ERR X	WRR 0
AM	7:00 AM	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
	7:15 AM	0	2	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	7:30 AM	0	1	1	0	2	0	0	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	8:30 AM	0	1	1	1	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
	VOLUMES	0	5	2	2	8	0	0	0	0	3	0	0	20	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	71%	29%	20%	80%	0%	0%	0%	0%	100%	0%	0%										
	APP/DEPART	7	/	5	10	/	11	0	/	4	3	/	0	0									
	BEGIN PEAK HR		7:30 AM																				
	VOLUMES	0	2	1	0	5	0	0	0	0	1	0	0	9						0	0	0	0
	APPROACH %	0%	67%	33%	0%	100%	0%	0%	0%	0%	100%	0%	0%										
	PEAK HR FACTOR		0.375			0.625			0.000			0.250		0.450									
	APP/DEPART	3	/	2	5	/	6	0	/	1	1	/	0	0									
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	2	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	3	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%										
	APP/DEPART	3	/	3	1	/	1	0	/	0	0	/	0	0									
	BEGIN PEAK HR		4:30 PM																				
	VOLUMES	0	2	0	0	1	0	0	0	0	0	0	0	3						0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%										
	PEAK HR FACTOR		0.250			0.250			0.000			0.000		0.250									
	APP/DEPART	2	/	2	1	/	1	0	/	0	0	/	0	0									



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3651
Tue, Sep 27, 22	NORTH & SOUTH:	Ayres Hotel Driveway	LOCATION #:	1a
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Ayres Hotel Driveway			SOUTHBOUND Ayres Hotel Driveway			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 0.5	NT 0.5	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	9	0	0	0	0	1	2	58	11	0	152	1	234
	7:15 AM	7	0	3	0	0	1	1	70	4	1	176	0	263
	7:30 AM	5	0	1	0	0	1	2	81	8	0	279	0	377
	7:45 AM	5	1	1	0	0	0	1	122	3	2	251	0	386
	8:00 AM	10	1	2	0	0	1	3	147	11	5	174	2	356
	8:15 AM	9	1	3	1	0	1	1	120	10	3	176	1	326
	8:30 AM	8	0	3	1	1	1	5	124	8	3	131	1	286
	8:45 AM	9	0	4	1	0	0	3	98	8	1	138	0	262
	VOLUMES	62	3	17	3	1	6	18	820	63	15	1,477	5	2,490
	APPROACH %	76%	4%	21%	30%	10%	60%	2%	91%	7%	1%	99%	0%	
	APP/DEPART	82	/	23	10	/	79	901	/	840	1,497	/	1,548	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	29	3	7	1	0	3	7	470	32	10	880	3	1,445
	APPROACH %	74%	8%	18%	25%	0%	75%	1%	92%	6%	1%	99%	0%	
	PEAK HR FACTOR		0.750			0.500			0.790			0.800		0.936
	APP/DEPART	39	/	11	4	/	42	509	/	478	893	/	914	0
PM	4:00 PM	6	0	1	0	0	2	4	174	2	2	160	0	351
	4:15 PM	10	0	2	0	0	0	1	178	7	4	169	0	371
	4:30 PM	8	0	3	1	0	2	1	178	4	1	144	0	342
	4:45 PM	14	0	3	0	1	0	0	200	9	1	176	0	404
	5:00 PM	13	0	3	0	0	0	1	179	9	0	174	0	379
	5:15 PM	8	0	2	0	0	0	3	187	5	3	191	0	399
	5:30 PM	7	0	2	0	0	0	0	203	11	3	186	0	412
	5:45 PM	14	0	7	0	0	0	1	173	13	3	171	0	382
	VOLUMES	80	0	23	1	1	4	11	1,472	60	17	1,371	0	3,040
	APPROACH %	78%	0%	22%	17%	17%	67%	1%	95%	4%	1%	99%	0%	
	APP/DEPART	103	/	2	6	/	78	1,543	/	1,496	1,388	/	1,464	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	42	0	10	0	1	0	4	769	34	7	727	0	1,594
	APPROACH %	81%	0%	19%	0%	100%	0%	0%	95%	4%	1%	99%	0%	
	PEAK HR FACTOR		0.765			0.250			0.943			0.946		0.967
	APP/DEPART	52	/	0	1	/	42	807	/	779	734	/	773	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	3	0	3
0	0	2	0	2
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	3	0	3
0	0	0	0	0
0	0	1	0	1
0	0	9	0	9

RTOR

NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	1	0
0	1	0	0
1	0	0	0
2	1	1	0
1	0	1	0
0	2	0	0
2	0	0	0
0	1	0	0
0	0	0	0
1	0	0	0
2	0	0	0
1	0	0	0
3	0	1	0
9	3	1	0
4	0	0	0

Ayres Hotel Driveway

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Ayres Hotel Driveway

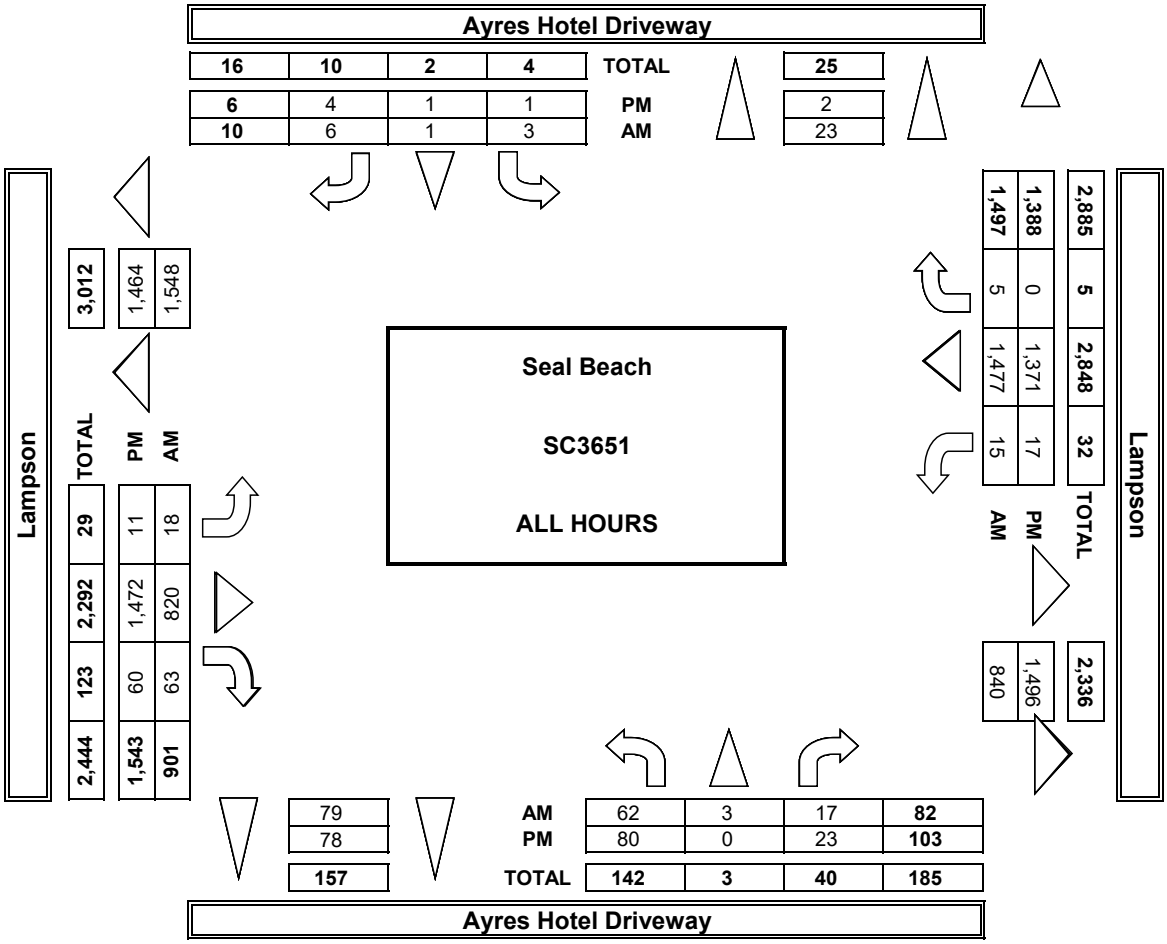
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	1	1	2
	7:15 AM	0	0	1	0	1
	7:30 AM	0	0	4	2	6
	7:45 AM	0	0	2	1	3
	8:00 AM	0	0	3	1	4
	8:15 AM	0	0	1	1	2
	8:30 AM	0	0	1	3	4
	8:45 AM	0	0	1	4	5
	TOTAL	0	0	14	13	27
PM	4:00 PM	0	0	7	0	7
	4:15 PM	0	0	0	0	0
	4:30 PM	1	0	0	0	1
	4:45 PM	0	0	2	0	2
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	2	1	3
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	3	0	3
	TOTAL	1	0	14	1	16

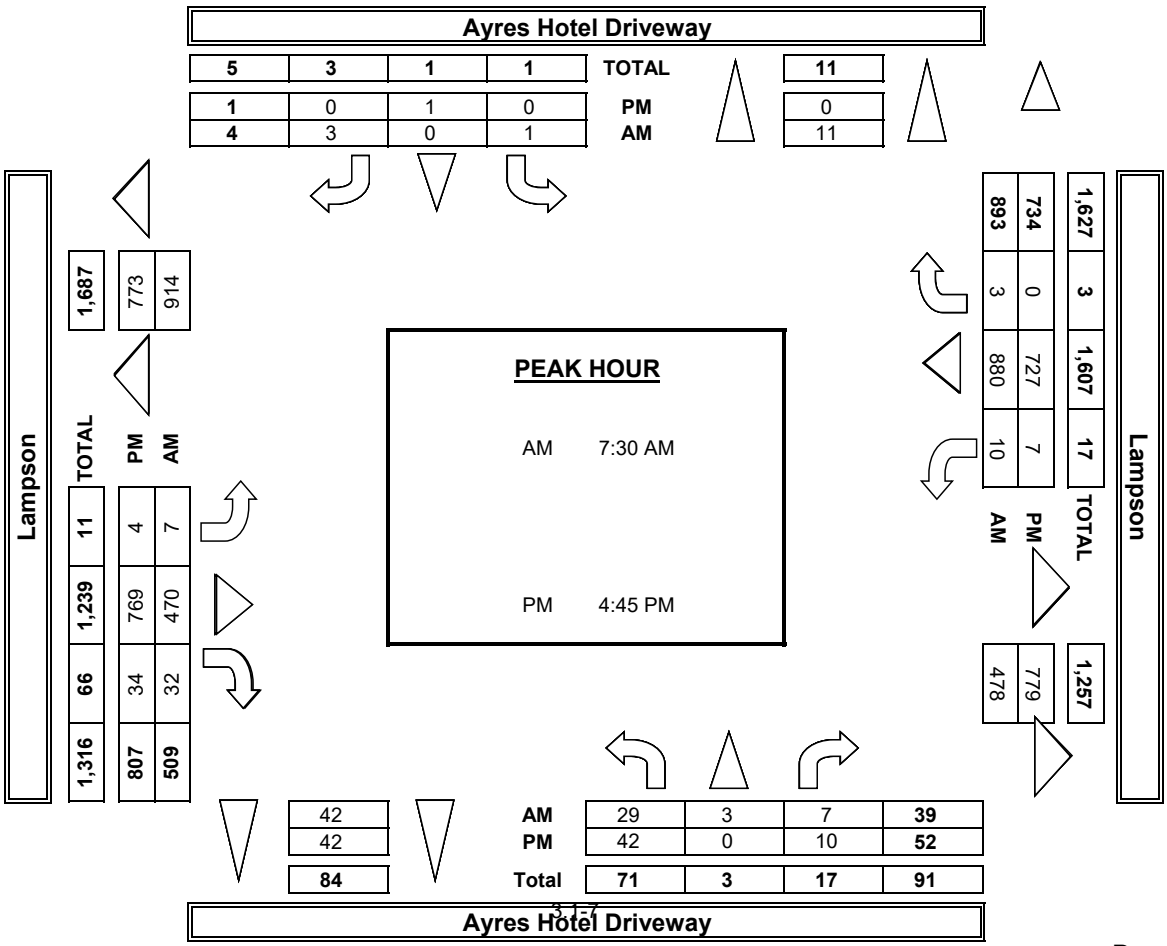
PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	1	0	1
0	0	2	0	2
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	3	0	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	1	1	2
0	0	0	0	0
0	0	2	2	4
0	0	2	1	3
0	0	2	1	3
0	0	1	1	2
0	0	1	3	4
0	0	1	4	5
0	0	7	5	23
0	0	7	0	7
0	0	0	0	0
1	0	0	0	1
0	0	2	0	2
0	0	0	0	0
0	0	2	1	3
0	0	0	0	0
0	0	3	0	3
0	0	4	1	16

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3651
Tue, Sep 27, 22	NORTH & SOUTH:	Basswood	LOCATION #:	2a
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Basswood			SOUTHBOUND Basswood			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 1	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	31	0	1	0	0	1	12	35	6	1	124	2	213
	7:15 AM	32	1	1	1	0	2	14	47	13	1	143	5	260
	7:30 AM	60	1	1	0	0	3	9	58	12	2	224	2	372
	7:45 AM	60	0	1	0	0	2	4	91	22	3	185	4	372
	8:00 AM	57	0	1	0	0	1	2	102	29	2	131	0	325
	8:15 AM	27	0	0	1	0	1	3	96	16	2	149	0	295
	8:30 AM	20	0	1	1	1	1	5	89	13	0	111	1	243
	8:45 AM	28	0	1	1	0	4	9	74	18	3	107	1	246
	VOLUMES	315	2	7	4	1	15	58	592	129	14	1,174	15	2,326
	APPROACH %	97%	1%	2%	20%	5%	75%	7%	76%	17%	1%	98%	1%	
	APP/DEPART	324	/	75	20	/	144	779	/	603	1,203	/	1,504	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	204	1	3	1	0	7	18	347	79	9	689	6	1,364
	APPROACH %	98%	0%	1%	13%	0%	88%	4%	78%	18%	1%	98%	1%	
	PEAK HR FACTOR		0.839			0.667			0.835			0.772		0.917
	APP/DEPART	208	/	25	8	/	88	444	/	351	704	/	900	0
PM	4:00 PM	30	0	3	1	0	6	5	133	35	3	117	2	335
	4:15 PM	21	0	2	0	0	6	4	144	34	0	143	0	354
	4:30 PM	19	0	4	2	0	5	3	142	18	3	121	1	318
	4:45 PM	30	0	1	1	1	8	11	168	29	1	134	0	384
	5:00 PM	34	0	3	1	0	14	3	152	35	3	135	0	380
	5:15 PM	35	0	2	1	0	7	5	147	28	5	149	2	381
	5:30 PM	25	0	4	1	2	9	7	148	24	2	145	1	368
	5:45 PM	25	0	0	3	0	8	7	138	35	1	128	3	348
	VOLUMES	219	0	19	10	3	63	45	1,172	238	18	1,072	9	2,868
	APPROACH %	92%	0%	8%	13%	4%	83%	3%	81%	16%	2%	98%	1%	
	APP/DEPART	238	/	54	76	/	259	1,455	/	1,201	1,099	/	1,354	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	124	0	10	4	3	38	26	615	116	11	563	3	1,513
	APPROACH %	93%	0%	7%	9%	7%	84%	3%	81%	15%	2%	98%	1%	
	PEAK HR FACTOR		0.905			0.750			0.910			0.925		0.985
	APP/DEPART	134	/	29	45	/	130	757	/	629	577	/	725	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR

NRR	SRR	ERR	WRR
0	0	1	1
0	1	1	0
0	3	2	0
0	1	5	0
1	1	5	0
0	0	1	0
0	0	0	0
0	2	0	0
1	8	15	1
1	5	13	0
1	5	1	1
1	3	0	0
3	5	2	0
1	3	3	0
0	7	3	0
0	5	2	0
1	5	2	0
0	4	4	0
7	37	17	1
2	20	10	0

Basswood

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Basswood

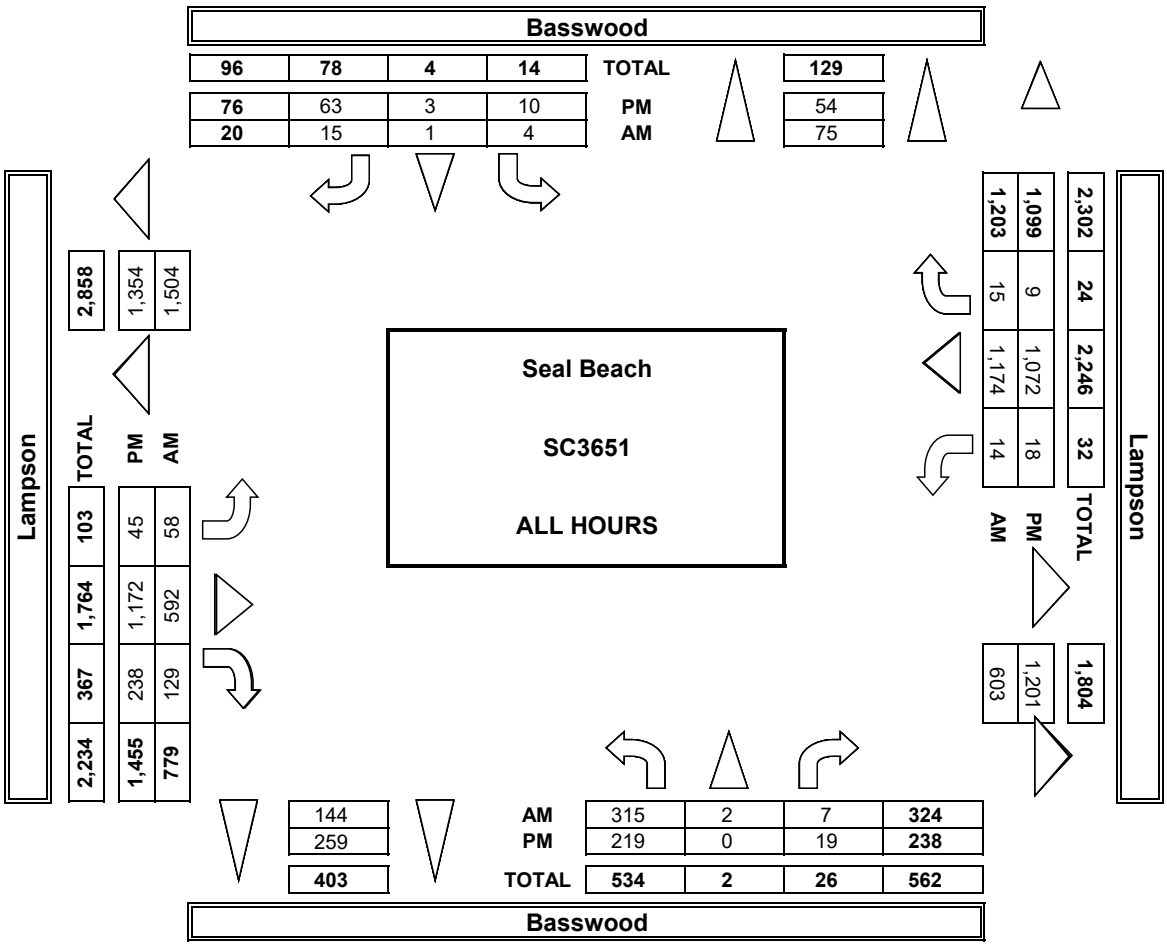
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	0	1	1
	7:15 AM	0	0	1	0	1
	7:30 AM	0	0	4	2	6
	7:45 AM	0	0	2	1	3
	8:00 AM	0	0	0	1	1
	8:15 AM	0	0	1	2	3
	8:30 AM	1	0	0	2	3
	8:45 AM	0	1	3	2	6
	TOTAL	1	1	11	11	24
PM	4:00 PM	0	0	1	0	1
	4:15 PM	1	0	0	1	2
	4:30 PM	0	0	2	1	3
	4:45 PM	3	0	3	0	6
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	0	1	1
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	3	0	3
	TOTAL	4	0	9	3	16

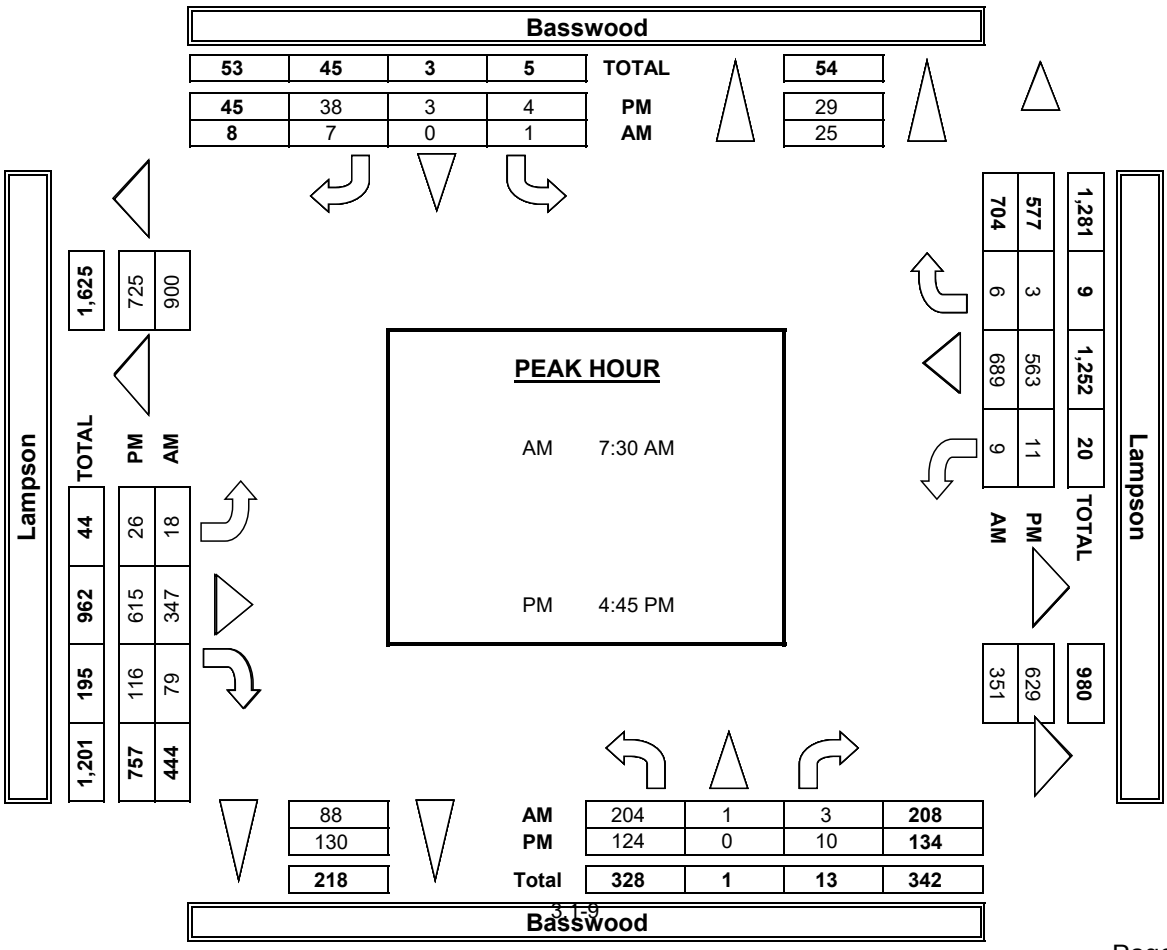
PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	2	0	3
0	0	0	0	0
1	0	0	1	2
0	0	0	0	0
3	0	3	0	6
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
3	0	3	0	8

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	0	1	1
0	0	1	0	1
0	0	4	2	6
0	0	1	1	2
0	0	0	1	1
0	0	0	2	2
1	0	0	2	3
0	1	2	2	5
0	0	5	6	21
0	0	1	0	1
0	0	0	0	0
0	0	2	1	3
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	3	0	3
0	0	0	1	8

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Sep 27, 22

LOCATION: Seal Beach
NORTH & SOUTH: Candleberry
EAST & WEST: Lampson

PROJECT #: SC3651
LOCATION #: 3a
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Candleberry			SOUTHBOUND Candleberry			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	29	0	6	0	0	0	0	27	8	3	108	0	181
	7:15 AM	26	0	4	0	0	0	0	34	15	1	115	0	195
	7:30 AM	55	0	9	0	0	0	0	50	8	2	187	0	311
	7:45 AM	45	0	8	0	0	0	0	61	20	3	136	0	273
	8:00 AM	36	0	5	0	0	0	0	84	28	5	96	0	254
	8:15 AM	35	0	7	0	0	0	0	73	21	6	121	0	263
	8:30 AM	21	0	7	0	0	0	0	70	20	6	88	0	212
	8:45 AM	15	0	4	0	0	0	0	61	13	8	98	0	199
	VOLUMES	262	0	50	0	0	0	0	460	133	34	949	0	1,888
	APPROACH %	84%	0%	16%	0%	0%	0%	0%	78%	22%	3%	97%	0%	
	APP/DEPART	312	/	0	0	/	167	593	/	510	983	/	1,211	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	171	0	29	0	0	0	0	268	77	16	540	0	1,101
	APPROACH %	86%	0%	15%	0%	0%	0%	0%	78%	22%	3%	97%	0%	
	PEAK HR FACTOR		0.781			0.000			0.770			0.735		0.885
	APP/DEPART	200	/	0	0	/	93	345	/	297	556	/	711	0
PM	4:00 PM	20	0	4	0	0	0	0	119	27	6	109	0	285
	4:15 PM	18	0	4	0	0	0	0	123	22	8	122	0	297
	4:30 PM	22	0	2	0	0	0	0	125	26	3	102	0	280
	4:45 PM	18	0	5	0	0	0	0	141	23	6	117	0	310
	5:00 PM	9	0	5	0	0	0	0	132	28	5	130	0	309
	5:15 PM	21	0	2	0	0	0	0	111	32	6	134	0	306
	5:30 PM	22	0	6	0	0	0	0	136	28	7	131	0	330
	5:45 PM	18	0	6	0	0	0	0	110	24	6	116	0	280
	VOLUMES	148	0	34	0	0	0	0	997	210	47	961	0	2,397
	APPROACH %	81%	0%	19%	0%	0%	0%	0%	83%	17%	5%	95%	0%	
	APP/DEPART	182	/	0	0	/	255	1,207	/	1,033	1,008	/	1,109	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	70	0	18	0	0	0	0	520	111	24	512	0	1,255
	APPROACH %	80%	0%	20%	0%	0%	0%	0%	82%	18%	4%	96%	0%	
	PEAK HR FACTOR		0.786			0.000			0.962			0.957		0.951
	APP/DEPART	88	/	0	0	/	134	631	/	539	536	/	582	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2

RTOR

NRR	SRR	ERR	WRR
2	0	1	0
3	0	1	0
6	0	4	0
4	0	5	0
2	0	2	0
6	0	4	0
2	0	0	0
4	0	0	0
29	0	17	0
18	0	15	0
1	0	1	0
1	0	3	0
2	0	0	0
1	0	1	0
2	0	1	0
1	0	5	0
3	0	3	0
5	0	3	0
16	0	17	0
7	0	10	0

Candleberry

NORTH SIDE

Lampson — WEST SIDE — EAST SIDE — Lampson

SOUTH SIDE

Candleberry

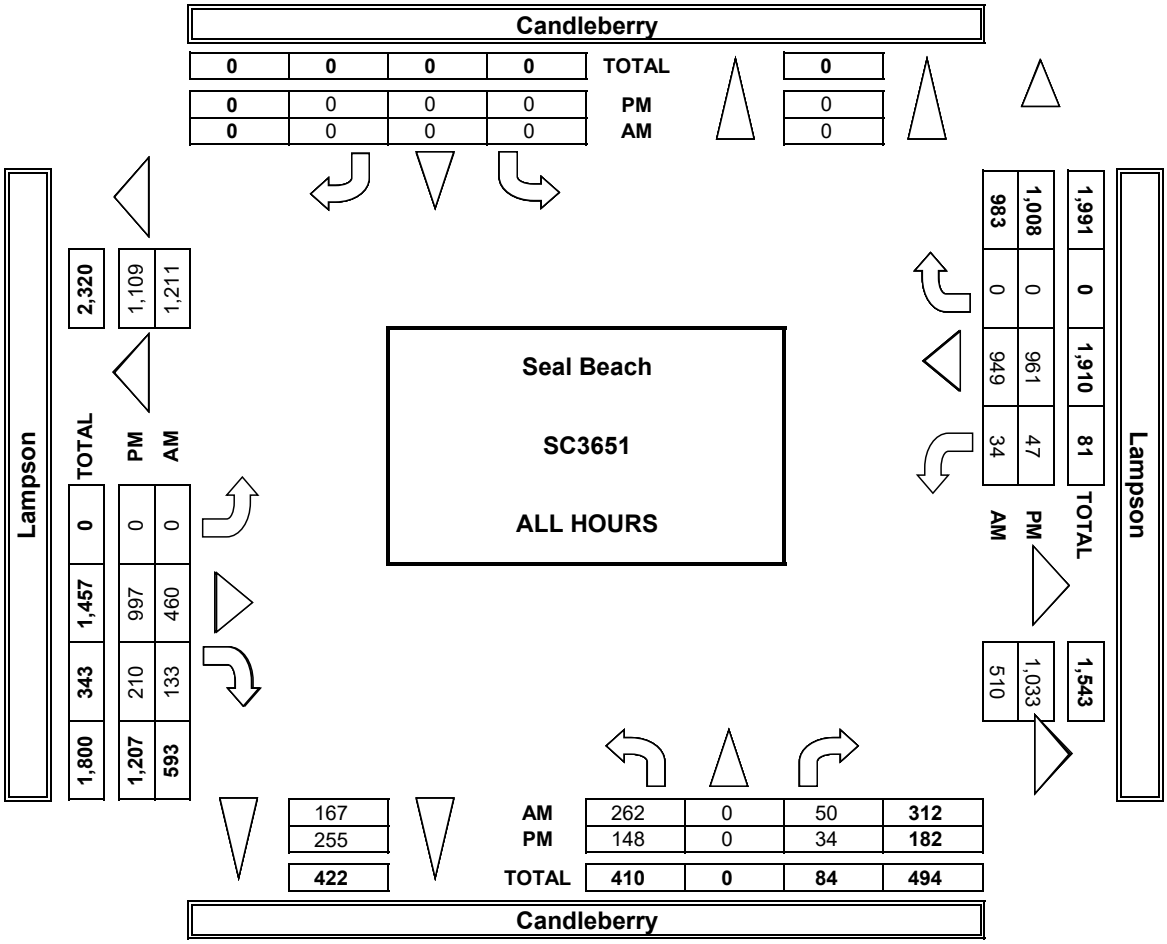
		ALL PED AND BIKE				
		E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM	7:00 AM	0	0	0	1	1
	7:15 AM	0	0	1	0	1
	7:30 AM	1	0	4	2	7
	7:45 AM	0	0	3	1	4
	8:00 AM	0	0	2	1	3
	8:15 AM	0	0	1	2	3
	8:30 AM	0	0	1	1	2
	8:45 AM	0	0	1	3	4
	TOTAL	1	0	13	11	25
PM	4:00 PM	0	0	1	0	1
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	2	1	3
	4:45 PM	0	0	2	1	3
	5:00 PM	0	0	0	1	1
	5:15 PM	0	0	0	0	0
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	3	0	3
	TOTAL	0	0	8	3	11

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	3	0	3
0	0	2	0	2
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	6	0	7
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	2	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	2	0	2

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	0	1	1
0	0	1	0	1
1	0	4	2	7
0	0	0	1	1
0	0	0	1	1
0	0	0	2	2
0	0	0	1	1
0	0	1	3	4
1	0	4	6	18
0	0	1	0	1
0	0	0	0	0
0	0	2	1	3
0	0	0	1	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	3	0	3
0	0	0	2	9

AimTD LLC

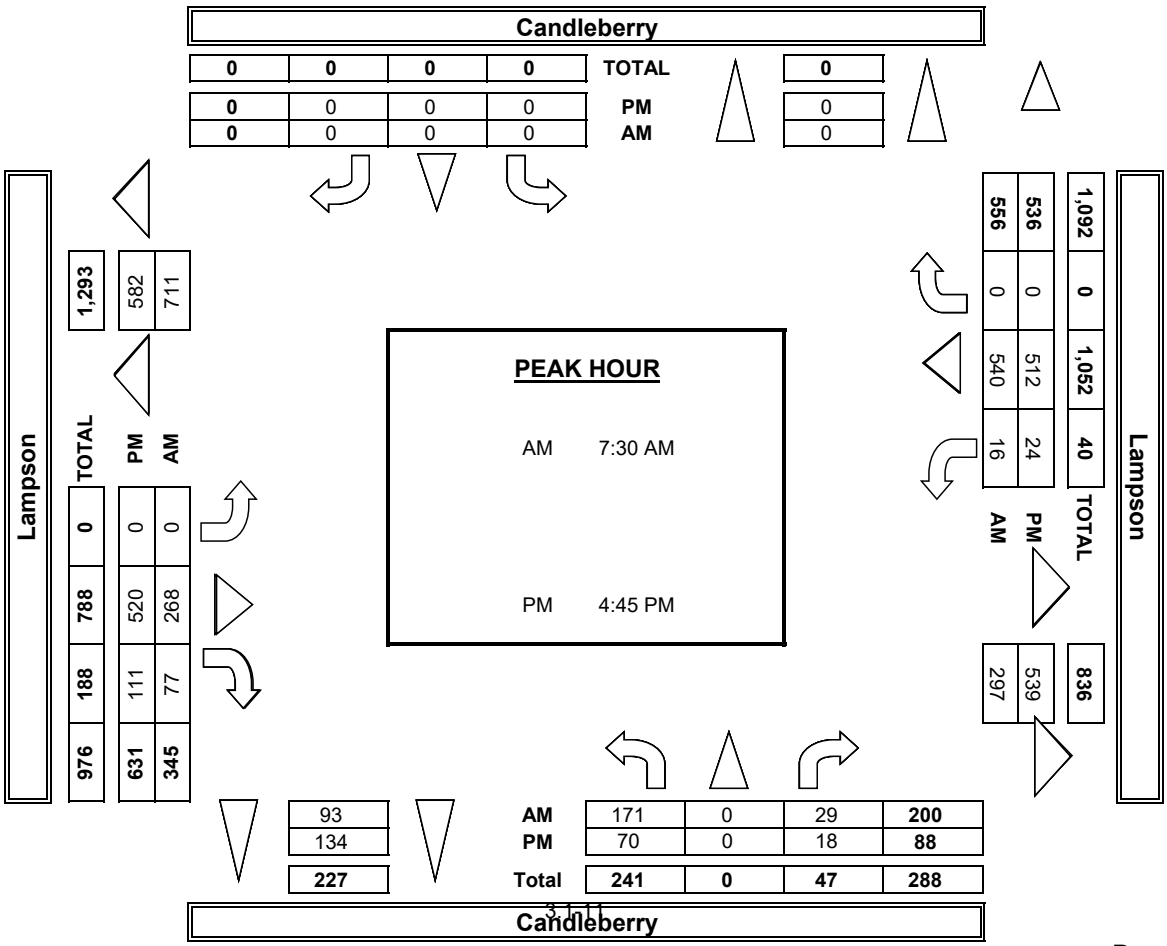
TURNING MOVEMENT COUNTS



	0	0	0	0	TOTAL	0		
	0	0	0	0	PM	0		
	0	0	0	0	AM	0		

	2,320	1,109	1,211			1,991	1,008	983
	0	0	0			0	0	0
	1,457	997	460			1,910	961	949
	343	210	133			81	47	34
	1,800	1,207	593			1,543	1,033	510
	TOTAL	PM	AM			TOTAL	PM	AM

	167				
	255				
	422				
AM	262	0	50	312	
PM	148	0	34	182	
TOTAL	410	0	84	494	



	0	0	0	0	TOTAL	0		
	0	0	0	0	PM	0		
	0	0	0	0	AM	0		

	1,293	582	711			1,092	536	556
	0	0	0			0	0	0
	788	520	268			1,052	512	540
	188	111	77			40	24	16
	976	631	345			836	539	297
	TOTAL	PM	AM			TOTAL	PM	AM

	93				
	134				
	227				
AM	171	0	29	200	
PM	70	0	18	88	
Total	241	0	47	288	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
Wed, Jun 1, 22	NORTH & SOUTH:	Heather	LOCATION #:	2
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND Heather			SOUTHBOUND Heather			EASTBOUND Lampson			WESTBOUND Lampson			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	11	0	9	0	0	0	0	24	7	5	76	0	132
	7:15 AM	35	0	16	0	0	0	0	53	7	5	94	0	210
	7:30 AM	24	0	12	0	0	0	0	53	10	3	140	0	242
	7:45 AM	22	0	15	0	0	0	0	90	15	9	128	0	279
	8:00 AM	19	0	17	0	0	0	0	97	20	9	89	0	251
	8:15 AM	18	0	11	0	0	0	0	74	17	9	82	0	211
	8:30 AM	13	0	7	0	0	0	0	73	10	7	82	0	192
	8:45 AM	14	0	15	0	0	0	0	72	5	10	102	0	218
	VOLUMES	156	0	102	0	0	0	0	536	91	57	793	0	1,735
	APPROACH %	60%	0%	40%	0%	0%	0%	0%	85%	15%	7%	93%	0%	
	APP/DEPART	258	/	0	0	/	142	627	/	644	850	/	949	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	83	0	55	0	0	0	0	314	62	30	439	0	983
	APPROACH %	60%	0%	40%	0%	0%	0%	0%	84%	16%	6%	94%	0%	
	PEAK HR FACTOR		0.932			0.000			0.803			0.820		0.881
	APP/DEPART	138	/	0	0	/	88	376	/	373	469	/	522	0
PM	4:00 PM	18	0	10	0	0	0	0	131	11	10	92	0	272
	4:15 PM	20	0	16	0	0	0	0	106	22	18	88	0	270
	4:30 PM	18	0	16	0	0	0	0	120	13	16	111	0	294
	4:45 PM	12	0	9	0	0	0	0	137	14	18	111	0	301
	5:00 PM	8	0	12	0	0	0	0	121	15	17	119	0	292
	5:15 PM	14	0	9	0	0	0	0	121	18	14	114	0	290
	5:30 PM	14	0	4	0	0	0	0	104	16	11	102	0	251
	5:45 PM	11	0	6	0	0	0	0	108	13	13	96	0	247
	VOLUMES	115	0	82	0	0	0	0	948	122	117	833	0	2,217
	APPROACH %	58%	0%	42%	0%	0%	0%	0%	89%	11%	12%	88%	0%	
	APP/DEPART	197	/	0	0	/	225	1,070	/	1,044	950	/	948	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	52	0	46	0	0	0	0	499	60	65	455	0	1,177
	APPROACH %	53%	0%	47%	0%	0%	0%	0%	89%	11%	13%	88%	0%	
	PEAK HR FACTOR		0.721			0.000			0.925			0.956		0.978
	APP/DEPART	98	/	0	0	/	119	559	/	551	520	/	507	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	2	2
0	0	0	6	6
0	0	0	1	1
0	0	0	2	2
0	0	0	3	3
0	0	0	1	1
0	0	0	2	2
0	0	0	3	3
0	0	0	2	2
0	0	0	14	14

RTOR

NRR	SRR	ERR	WRR
0	X	0	X
6	0	0	0
9	0	2	0
10	0	2	0
12	0	2	0
10	0	1	0
10	0	1	0
5	0	1	0
11	0	1	0
73	0	10	0
42	0	6	0
9	0	3	0
12	0	3	0
15	0	1	0
8	0	0	0
11	0	0	0
9	0	1	0
3	0	0	0
6	0	0	0
73	0	8	0
43	0	2	0

Heather

NORTH SIDE

Lampson WEST SIDE EAST SIDE **Lampson**

SOUTH SIDE

Heather

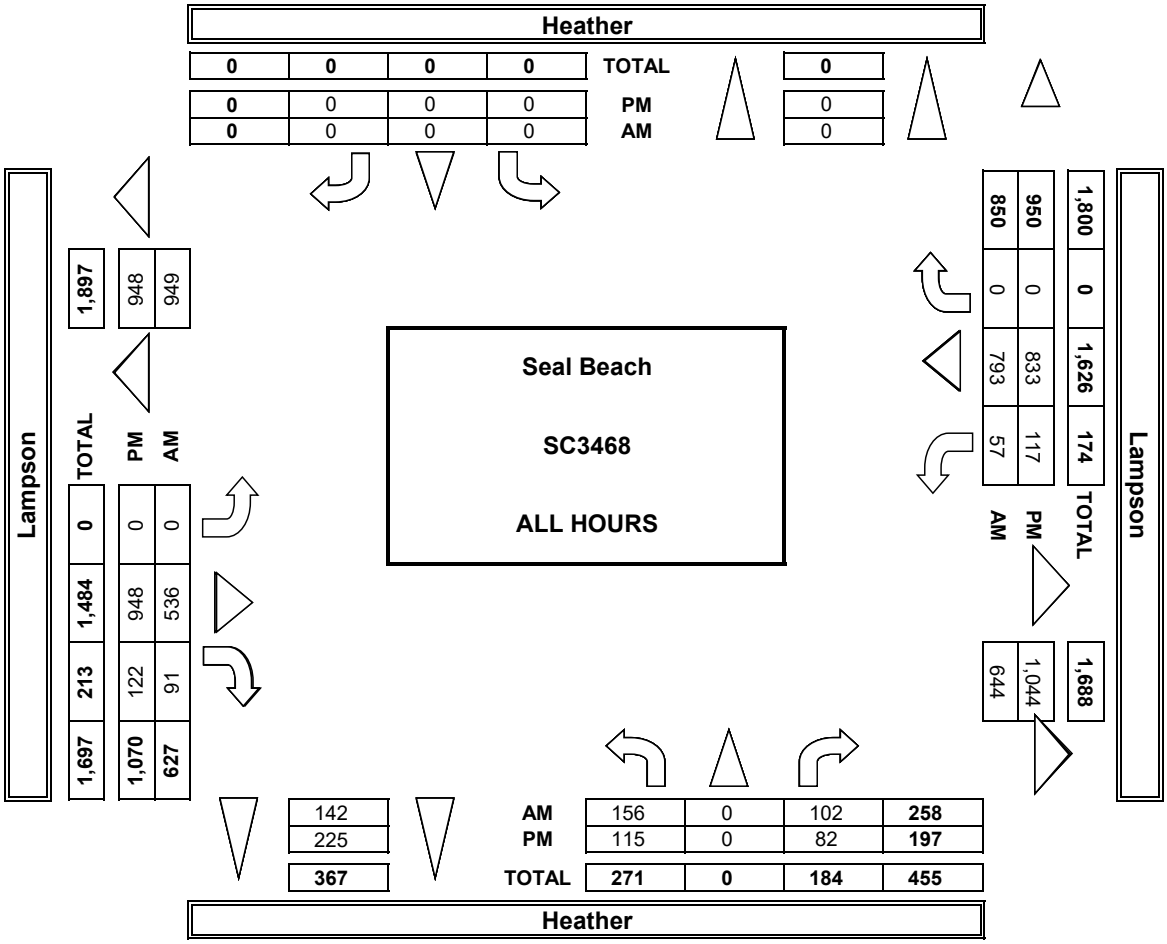
	ALL PED AND BIKE				
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM 7:00 AM	0	0	2	1	3
7:15 AM	0	0	1	1	2
7:30 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1
8:00 AM	0	0	0	2	2
8:15 AM	2	0	0	0	2
8:30 AM	0	0	0	0	0
8:45 AM	2	0	0	0	2
TOTAL	5	0	3	4	12
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	1	2
5:00 PM	0	0	1	0	1
5:15 PM	0	0	1	0	1
5:30 PM	0	0	0	1	1
5:45 PM	0	0	2	0	2
TOTAL	0	0	5	2	7

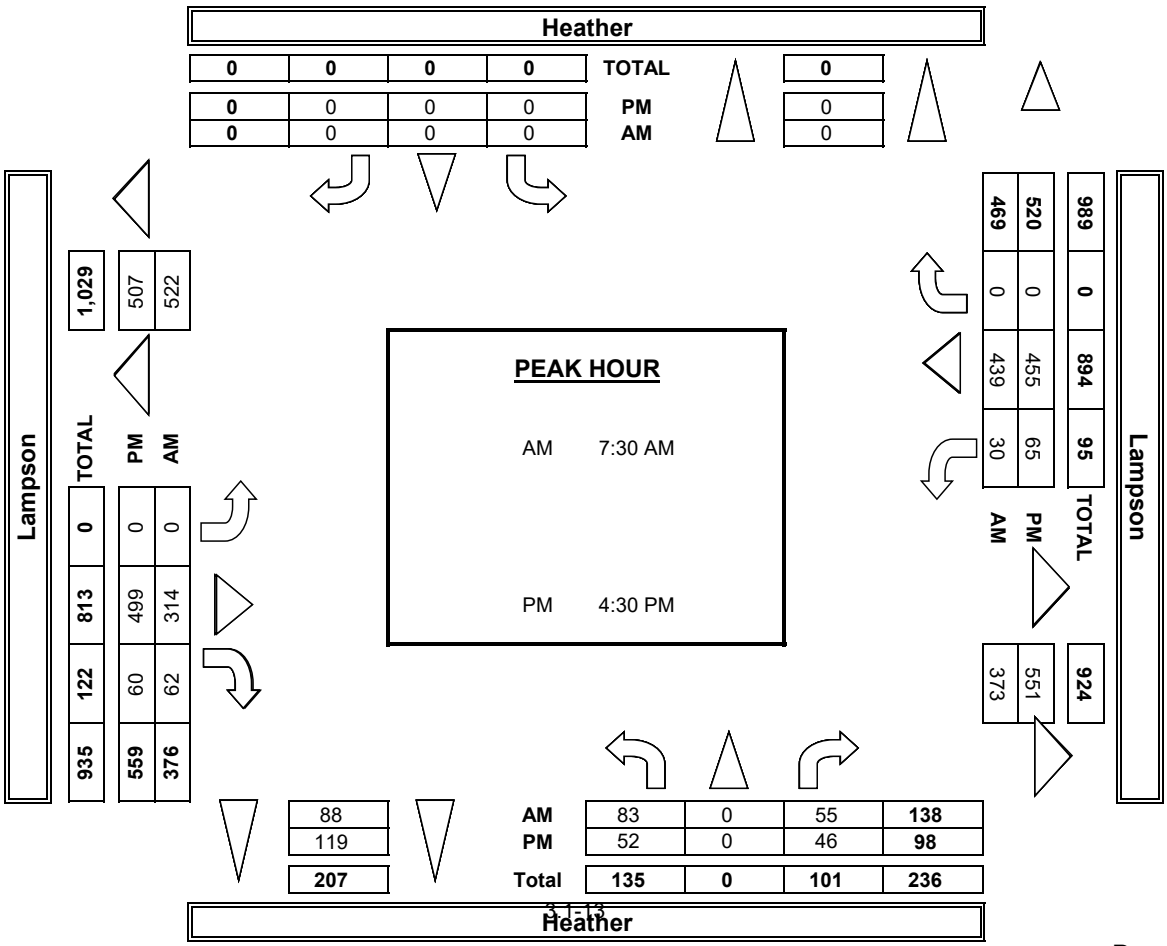
	PEDESTRIAN CROSSINGS				
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM 7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	2	0	0	0	2
8:30 AM	0	0	0	0	0
8:45 AM	2	0	0	0	2
TOTAL	3	0	0	0	5
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	1	0	1
TOTAL	0	0	0	0	2

	BICYCLE CROSSINGS				
	ES	WS	SS	NS	TOTAL
AM 7:00 AM	0	0	2	1	3
7:15 AM	0	0	1	1	2
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	2	7
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	1	2
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	0	0	1	0	1
TOTAL	0	0	0	0	5

AimTD LLC

TURNING MOVEMENT COUNTS





3.1-13

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
Wed, Jun 1, 22	NORTH & SOUTH:	Rose	LOCATION #:	3
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

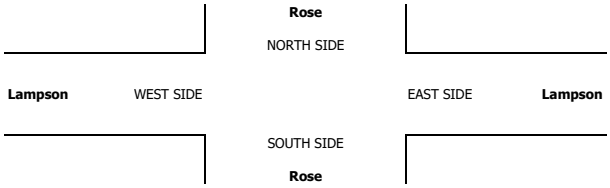
		NORTHBOUND (Rose)			SOUTHBOUND (Rose)			EASTBOUND (Lampson)			WESTBOUND (Lampson)			
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL
AM	7:00 AM	8	0	17	0	0	0	0	31	1	4	75	0	136
	7:15 AM	10	0	17	0	0	0	0	66	3	4	98	0	198
	7:30 AM	17	0	7	0	0	0	0	59	1	9	139	0	232
	7:45 AM	9	0	12	0	0	0	0	96	11	7	134	0	269
	8:00 AM	8	0	6	0	0	0	0	98	6	7	86	0	211
	8:15 AM	3	0	21	0	0	0	0	83	6	2	90	0	205
	8:30 AM	8	0	14	0	0	0	0	73	5	11	86	0	197
	8:45 AM	5	0	18	0	0	0	0	74	4	11	110	0	222
	VOLUMES	68	0	112	0	0	0	0	580	37	55	818	0	1,670
	APPROACH %	38%	0%	62%	0%	0%	0%	0%	94%	6%	6%	94%	0%	
	APP/DEPART	180	/	0	0	/	92	617	/	692	873	/	886	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	37	0	46	0	0	0	0	336	24	25	449	0	917
	APPROACH %	45%	0%	55%	0%	0%	0%	0%	93%	7%	5%	95%	0%	
	PEAK HR FACTOR		0.865			0.000			0.841			0.801		0.852
	APP/DEPART	83	/	0	0	/	49	360	/	382	474	/	486	0
PM	4:00 PM	4	0	12	0	0	0	0	127	8	13	89	0	253
	4:15 PM	9	0	7	0	0	0	0	127	7	20	96	0	266
	4:30 PM	6	0	14	0	0	0	0	125	13	17	120	0	295
	4:45 PM	4	0	12	0	0	0	0	139	7	16	107	0	285
	5:00 PM	7	0	14	0	0	0	0	140	7	15	115	0	298
	5:15 PM	11	0	11	0	0	0	0	124	6	17	119	0	288
	5:30 PM	3	0	10	0	0	0	0	102	7	14	107	0	243
	5:45 PM	5	0	10	0	0	0	0	113	7	9	103	0	247
	VOLUMES	49	0	90	0	0	0	0	997	62	121	856	0	2,175
	APPROACH %	35%	0%	65%	0%	0%	0%	0%	94%	6%	12%	88%	0%	
	APP/DEPART	139	/	0	0	/	181	1,059	/	1,089	977	/	905	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	28	0	51	0	0	0	0	528	33	65	461	0	1,166
	APPROACH %	35%	0%	65%	0%	0%	0%	0%	94%	6%	12%	88%	0%	
	PEAK HR FACTOR		0.898			0.000			0.954			0.960		0.978
	APP/DEPART	79	/	0	0	/	96	561	/	581	526	/	489	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2
0	0	0	2	2

RTOR

NRR	SRR	ERR	WRR
0	X	0	X
14	0	0	0
11	0	0	0
4	0	0	0
9	0	0	0
4	0	1	0
14	0	2	0
8	0	0	0
13	0	2	0
77	0	5	0
31	0	3	0
9	0	1	0
5	0	1	0
13	0	0	0
11	0	0	0
8	0	0	0
8	0	0	0
10	0	0	0
9	0	0	0
73	0	2	0
40	0	0	0



ALL PED AND BIKE

	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM 7:00 AM	0	0	1	1	2
7:15 AM	0	0	0	1	1
7:30 AM	0	0	2	0	2
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	2	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
TOTAL	0	0	5	4	9
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	1	2
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	2	1	3
5:45 PM	0	0	1	0	1
TOTAL	0	0	6	2	8

PEDESTRIAN CROSSINGS

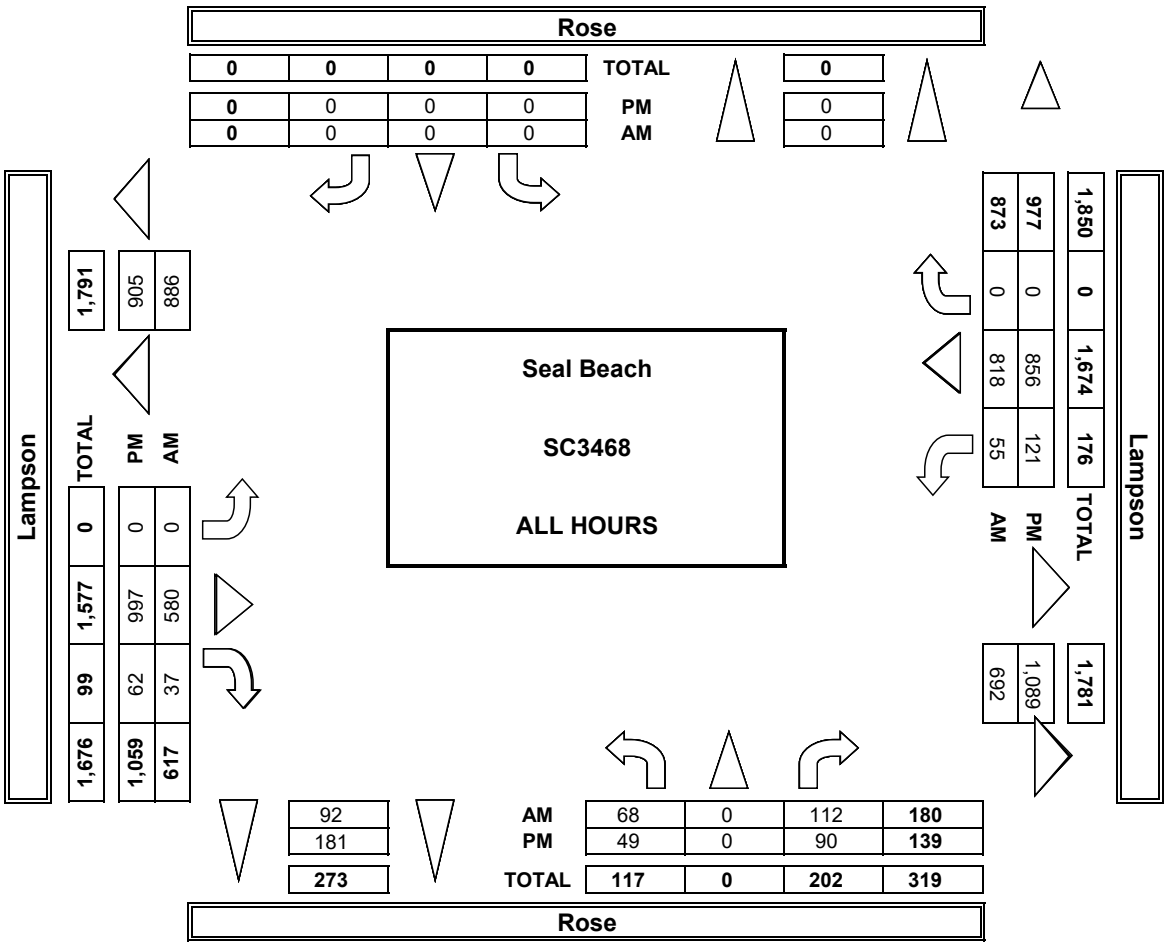
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM 7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
TOTAL	0	0	2	0	3
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	2	0	2
5:45 PM	0	0	1	0	1
TOTAL	0	0	1	0	4

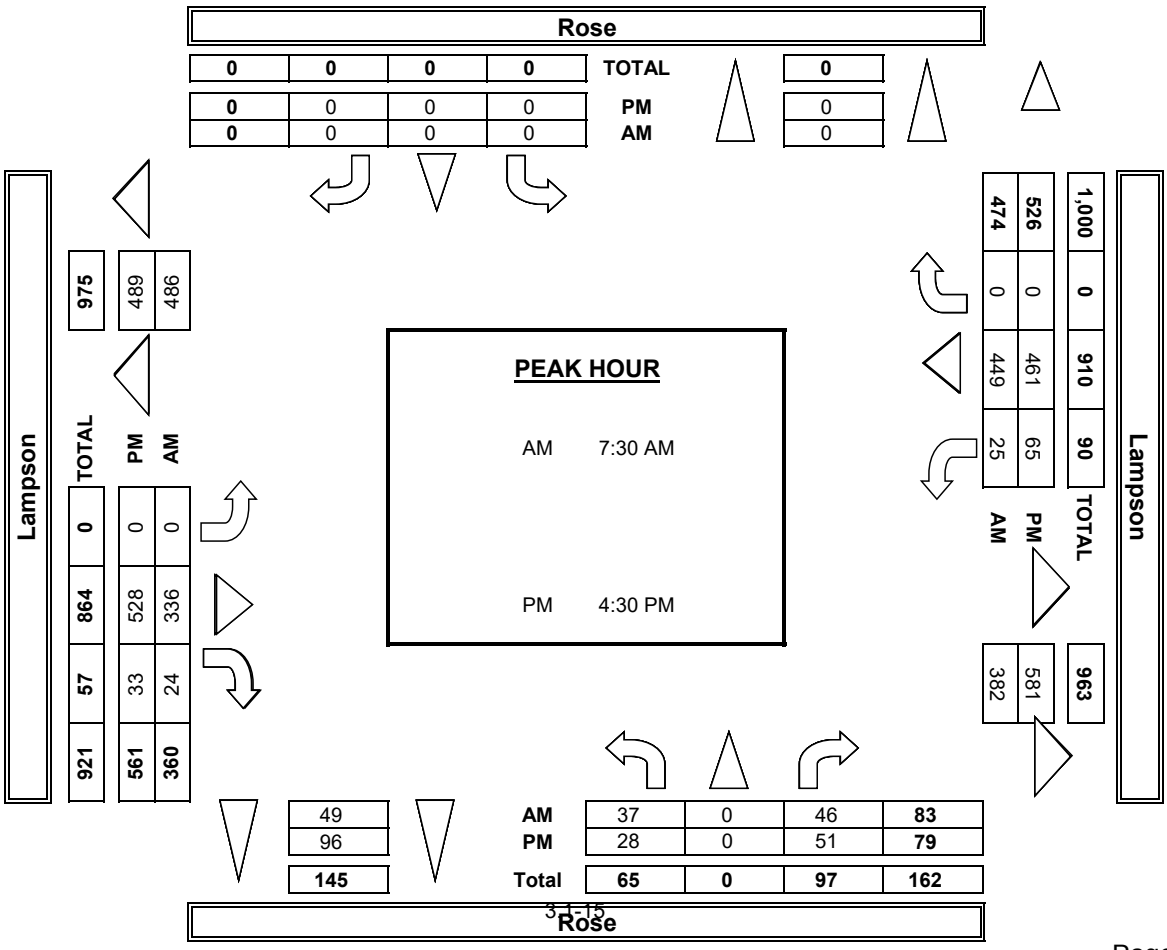
BICYCLE CROSSINGS

	ES	WS	SS	NS	TOTAL
AM 7:00 AM	0	0	1	1	2
7:15 AM	0	0	0	1	1
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	1	2	6
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	1	2
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	4

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3651
Tue, Sep 27, 22	NORTH & SOUTH:	Tulip	LOCATION #:	4a
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

		NORTHBOUND (Tulip)			SOUTHBOUND (Tulip)			EASTBOUND (Lampson)			WESTBOUND (Lampson)			
	LANES:	NL 1	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	5	0	18	5	0	6	2	41	0	6	72	1	156
	7:15 AM	6	0	18	3	0	7	1	61	0	7	103	0	206
	7:30 AM	15	1	22	3	1	3	1	79	2	7	153	0	287
	7:45 AM	12	0	19	0	0	4	0	77	0	6	110	3	231
	8:00 AM	7	0	22	4	0	4	2	77	6	7	95	1	225
	8:15 AM	5	0	10	3	0	3	2	78	3	12	119	3	238
	8:30 AM	4	0	15	1	1	2	4	69	6	16	91	1	210
	8:45 AM	7	0	15	2	0	3	4	65	8	15	106	2	227
	VOLUMES	61	1	139	21	2	32	16	547	25	76	849	11	1,780
	APPROACH %	30%	0%	69%	38%	4%	58%	3%	93%	4%	8%	91%	1%	
	APP/DEPART	201	/	27	55	/	101	588	/	709	936	/	943	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	39	1	73	10	1	14	5	311	11	32	477	7	981
	APPROACH %	35%	1%	65%	40%	4%	56%	2%	95%	3%	6%	92%	1%	
	PEAK HR FACTOR		0.743			0.781			0.962			0.806		0.855
	APP/DEPART	113	/	13	25	/	43	327	/	395	516	/	530	0
PM	4:00 PM	7	0	16	3	0	0	3	116	5	19	133	2	304
	4:15 PM	9	0	15	0	0	4	1	107	7	14	132	2	291
	4:30 PM	3	0	15	1	0	2	1	111	6	26	115	4	284
	4:45 PM	8	0	14	4	0	5	2	122	9	17	136	9	326
	5:00 PM	7	0	12	1	0	2	5	106	8	19	122	5	287
	5:15 PM	5	0	11	1	0	4	4	99	7	13	149	1	294
	5:30 PM	7	0	13	2	0	1	1	125	11	28	103	4	295
	5:45 PM	4	0	17	2	0	4	2	110	8	27	111	7	292
	VOLUMES	50	0	113	14	0	22	19	896	61	163	1,001	34	2,373
	APPROACH %	31%	0%	69%	39%	0%	61%	2%	92%	6%	14%	84%	3%	
	APP/DEPART	163	/	52	36	/	223	976	/	1,024	1,198	/	1,074	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	27	0	60	8	0	11	7	456	27	76	516	17	1,205
	APPROACH %	31%	0%	69%	42%	0%	58%	1%	93%	6%	12%	85%	3%	
	PEAK HR FACTOR		0.906			0.528			0.921			0.940		0.924
	APP/DEPART	87	/	24	19	/	103	490	/	524	609	/	554	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	0	1
0	0	1	2	3
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2

RTOR

NRR	SRR	ERR	WRR
0	0	0	0
12	3	0	0
14	1	0	0
11	0	1	0
19	2	0	0
15	2	1	0
3	2	0	0
9	0	0	0
7	2	0	0
90	12	2	0
48	6	2	0
12	0	0	0
13	1	3	0
8	0	0	0
11	1	0	1
9	1	0	0
6	1	0	0
11	0	2	0
11	1	0	0
81	5	5	1
44	2	3	1

Tulip

NORTH SIDE

Lampson — WEST SIDE — EAST SIDE — Lampson

SOUTH SIDE

Tulip

ALL PED AND BIKE

	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
AM 7:00 AM	1	0	1	0	2
7:15 AM	0	1	1	2	4
7:30 AM	0	0	1	0	1
7:45 AM	0	0	1	3	4
8:00 AM	1	0	0	0	1
8:15 AM	0	0	0	2	2
8:30 AM	2	0	1	2	5
8:45 AM	0	3	1	3	7
TOTAL	4	4	6	12	26
PM 4:00 PM	0	0	0	0	0
4:15 PM	0	0	2	0	2
4:30 PM	0	0	0	1	1
4:45 PM	2	0	3	3	8
5:00 PM	0	0	1	1	2
5:15 PM	1	0	2	1	4
5:30 PM	0	0	0	0	0
5:45 PM	0	0	2	0	2
TOTAL	3	0	10	6	19

PEDESTRIAN CROSSINGS

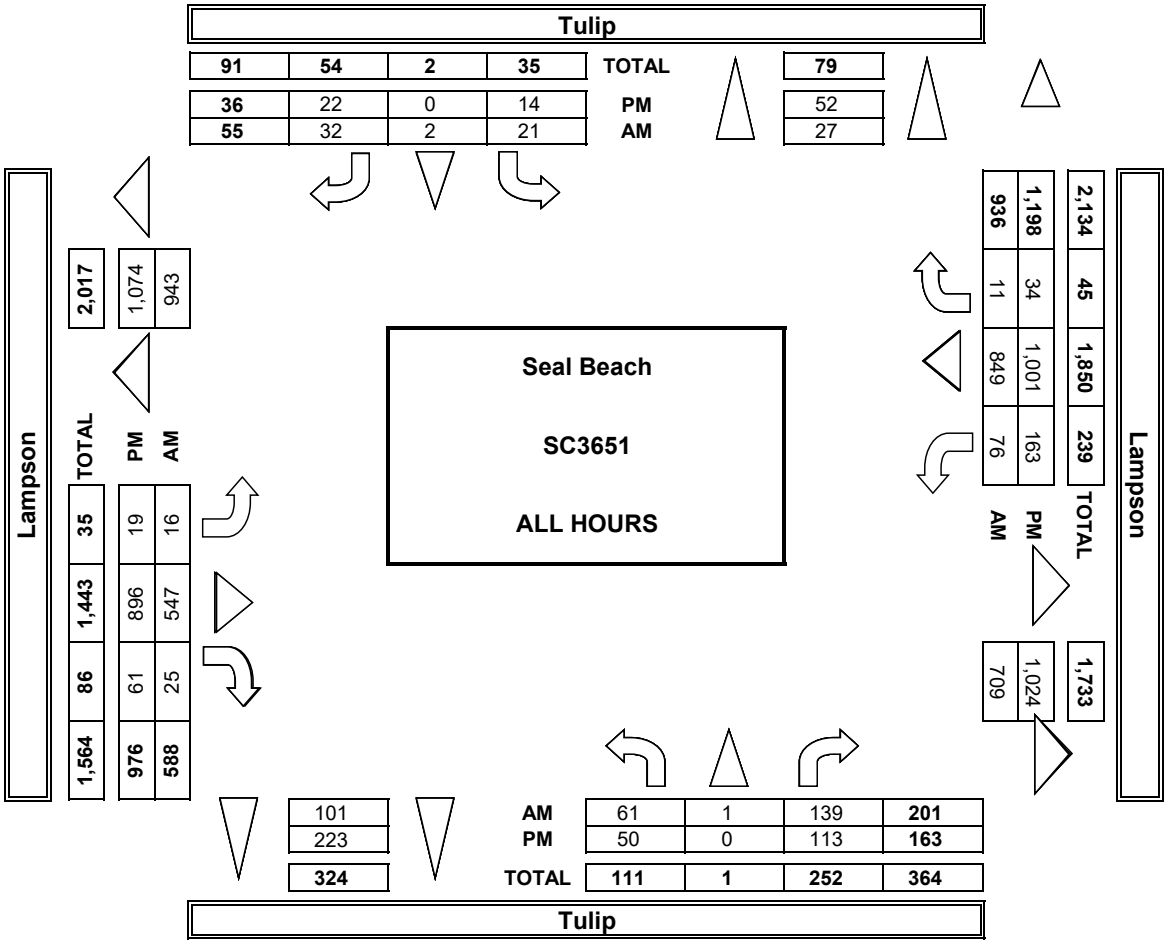
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
1	0	1	0	2
0	1	1	1	3
0	0	0	0	0
0	0	0	1	1
1	0	0	0	1
0	0	0	0	0
2	0	1	1	4
0	3	0	0	3
1	0	0	1	14
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
2	0	0	2	4
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
2	0	1	2	8

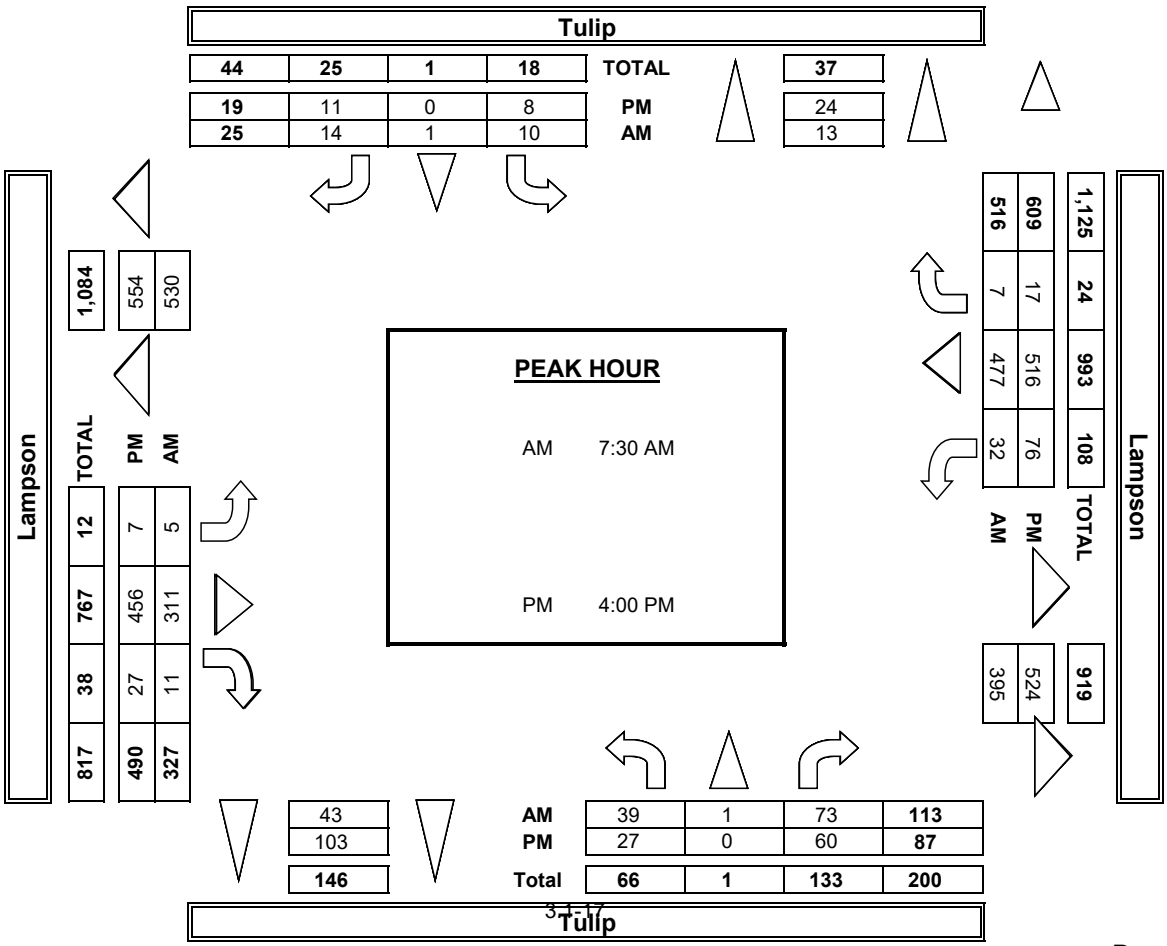
BICYCLE CROSSINGS

ES	WS	SS	NS	TOTAL
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	1	2	3
0	0	0	0	0
0	0	0	2	2
0	0	0	1	1
0	0	1	3	4
0	0	2	4	12
0	0	0	0	0
0	0	1	0	1
0	0	0	1	1
0	0	3	1	4
0	0	0	1	1
1	0	2	0	3
0	0	0	0	0
0	0	1	0	1
0	0	4	2	11

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Seal Beach	PROJECT #:	SC3468
Wed, Jun 1, 22	NORTH & SOUTH:	Valley View	LOCATION #:	4
	EAST & WEST:	Lampson	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

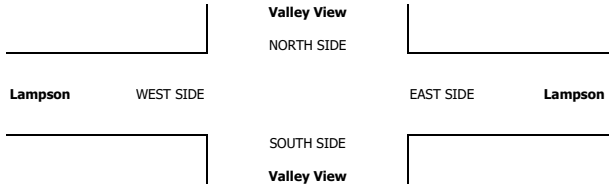
	NORTHBOUND Valley View			SOUTHBOUND Valley View			EASTBOUND Lampson			WESTBOUND Lampson			
LANES:	NL 1	NT 3	NR 1	SL 1	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	20	221	23	16	395	23	42	30	24	35	17	12	858
7:15 AM	11	287	20	22	405	29	36	38	36	55	31	31	1,001
7:30 AM	30	309	20	25	364	43	34	65	35	38	41	28	1,032
7:45 AM	23	378	45	33	426	39	35	58	38	48	61	48	1,232
8:00 AM	35	353	57	20	362	44	42	54	27	50	49	66	1,159
8:15 AM	27	360	43	27	377	25	39	57	26	48	33	36	1,098
8:30 AM	32	322	22	19	339	35	42	42	27	32	35	20	967
8:45 AM	52	359	29	19	305	49	36	21	41	32	29	18	990
AM VOLUMES	230	2,589	259	181	2,973	287	306	365	254	338	296	259	8,337
AM APPROACH %	7%	84%	8%	5%	86%	8%	33%	39%	27%	38%	33%	29%	
AM APP/DEPART	3,078	/	3,163	3,441	/	3,574	925	/	796	893	/	804	0
BEGIN PEAK HR		7:30 AM											
AM VOLUMES	115	1,400	165	105	1,529	151	150	234	126	184	184	178	4,521
AM APPROACH %	7%	83%	10%	6%	86%	8%	29%	46%	25%	34%	34%	33%	
AM PEAK HR FACTOR		0.942			0.896			0.951			0.827		0.917
AM APP/DEPART	1,680	/	1,732	1,785	/	1,843	510	/	500	546	/	446	0
4:00 PM	38	366	35	28	375	40	45	47	30	43	35	18	1,100
4:15 PM	53	418	43	21	415	41	47	43	31	41	48	19	1,220
4:30 PM	33	389	30	36	429	52	50	48	23	46	52	17	1,205
4:45 PM	58	402	33	33	392	46	63	63	30	50	58	31	1,259
5:00 PM	40	381	38	46	415	54	53	44	25	41	45	28	1,210
5:15 PM	54	382	33	30	452	50	45	45	30	32	53	25	1,231
5:30 PM	53	386	36	35	378	53	43	48	29	34	40	19	1,154
5:45 PM	36	394	30	29	393	36	47	50	31	38	40	15	1,139
PM VOLUMES	365	3,118	278	258	3,249	372	393	388	229	325	371	172	9,518
PM APPROACH %	10%	83%	7%	7%	84%	10%	39%	38%	23%	37%	43%	20%	
PM APP/DEPART	3,761	/	3,692	3,879	/	3,806	1,010	/	915	868	/	1,105	0
BEGIN PEAK HR		4:30 PM											
PM VOLUMES	185	1,554	134	145	1,688	202	211	200	108	169	208	101	4,905
PM APPROACH %	10%	83%	7%	7%	83%	10%	41%	39%	21%	35%	44%	21%	
PM PEAK HR FACTOR		0.950			0.956			0.832			0.860		0.974
PM APP/DEPART	1,873	/	1,870	2,035	/	1,967	519	/	475	478	/	593	0

U-TURNS

	NB	SB	EB	WB	TTL
7:00 AM	0	2	0	0	2
7:15 AM	0	1	0	0	1
7:30 AM	1	0	0	0	1
7:45 AM	0	3	0	0	3
8:00 AM	1	0	0	0	1
8:15 AM	2	1	0	0	3
8:30 AM	3	0	0	0	3
8:45 AM	2	2	0	0	4
AM	9	9	0	0	18
4:00 PM	0	1	0	0	1
4:15 PM	0	2	0	0	2
4:30 PM	1	2	0	0	3
4:45 PM	0	2	0	0	2
5:00 PM	0	0	0	0	0
5:15 PM	1	0	0	0	1
5:30 PM	0	1	0	0	1
5:45 PM	1	1	0	0	2
PM	3	9	0	0	12

RTOR

	NRR	SRR	ERR	WRR
7:00 AM	2	5	8	7
7:15 AM	7	11	12	11
7:30 AM	8	14	9	10
7:45 AM	12	8	12	16
8:00 AM	23	15	10	17
8:15 AM	15	8	4	10
8:30 AM	10	17	15	5
8:45 AM	8	17	19	4
AM	85	95	89	80
AM PEAK HR	58	45	35	53
4:00 PM	14	10	13	7
4:15 PM	12	14	10	2
4:30 PM	6	26	3	3
4:45 PM	9	16	11	6
5:00 PM	12	15	5	6
5:15 PM	11	19	14	6
5:30 PM	12	20	8	4
5:45 PM	8	13	5	2
PM	84	133	69	36
PM PEAK HR	38	76	33	21



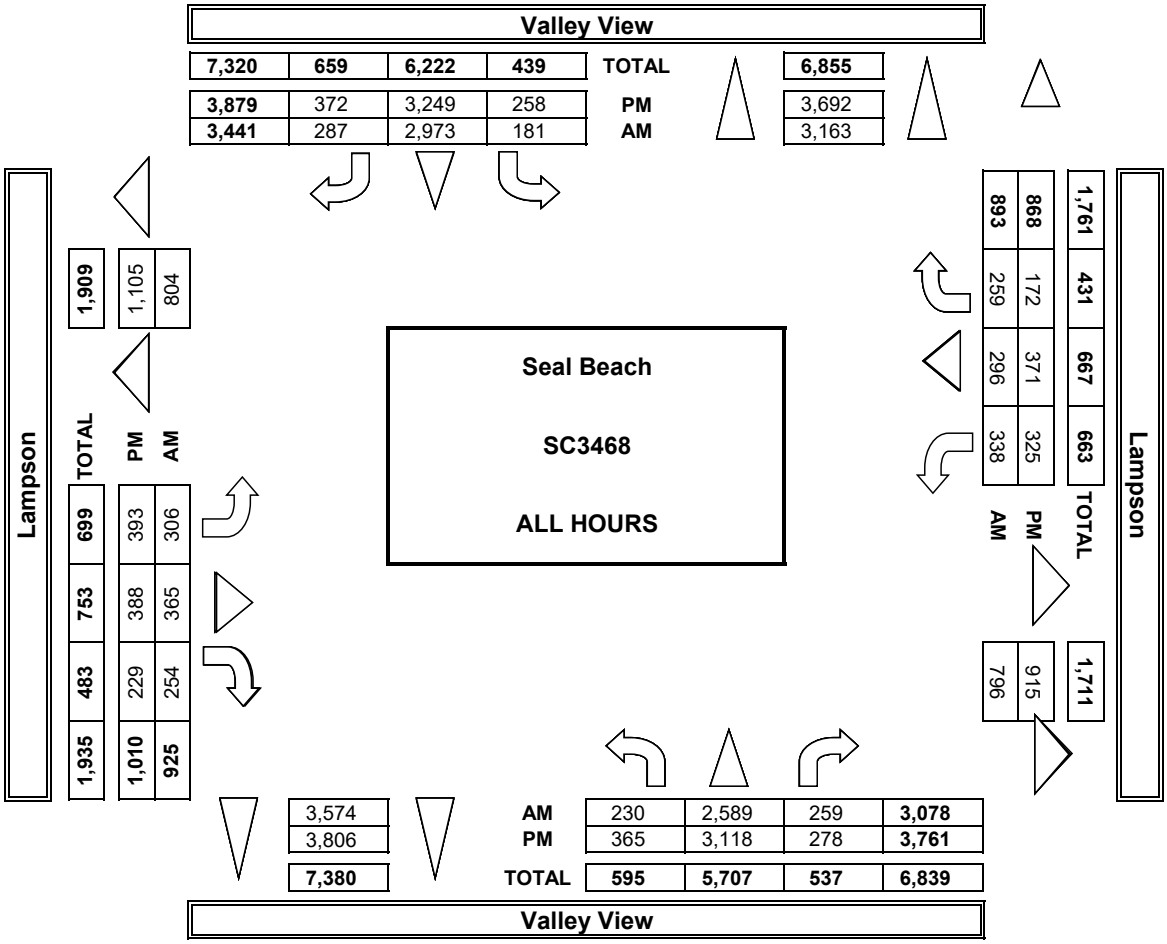
	ALL PED AND BIKE				
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
7:00 AM	0	0	0	2	2
7:15 AM	2	3	1	2	8
7:30 AM	2	1	1	7	11
7:45 AM	4	0	1	5	10
8:00 AM	1	0	0	2	3
8:15 AM	1	1	1	0	3
8:30 AM	1	2	0	1	4
8:45 AM	2	2	2	2	8
AM TOTAL	13	9	6	21	49
4:00 PM	0	0	2	3	5
4:15 PM	2	2	1	0	5
4:30 PM	2	0	2	0	4
4:45 PM	2	2	4	3	11
5:00 PM	0	0	1	0	1
5:15 PM	0	0	1	0	1
5:30 PM	0	1	0	2	3
5:45 PM	0	3	2	1	6
TOTAL	6	8	13	9	36

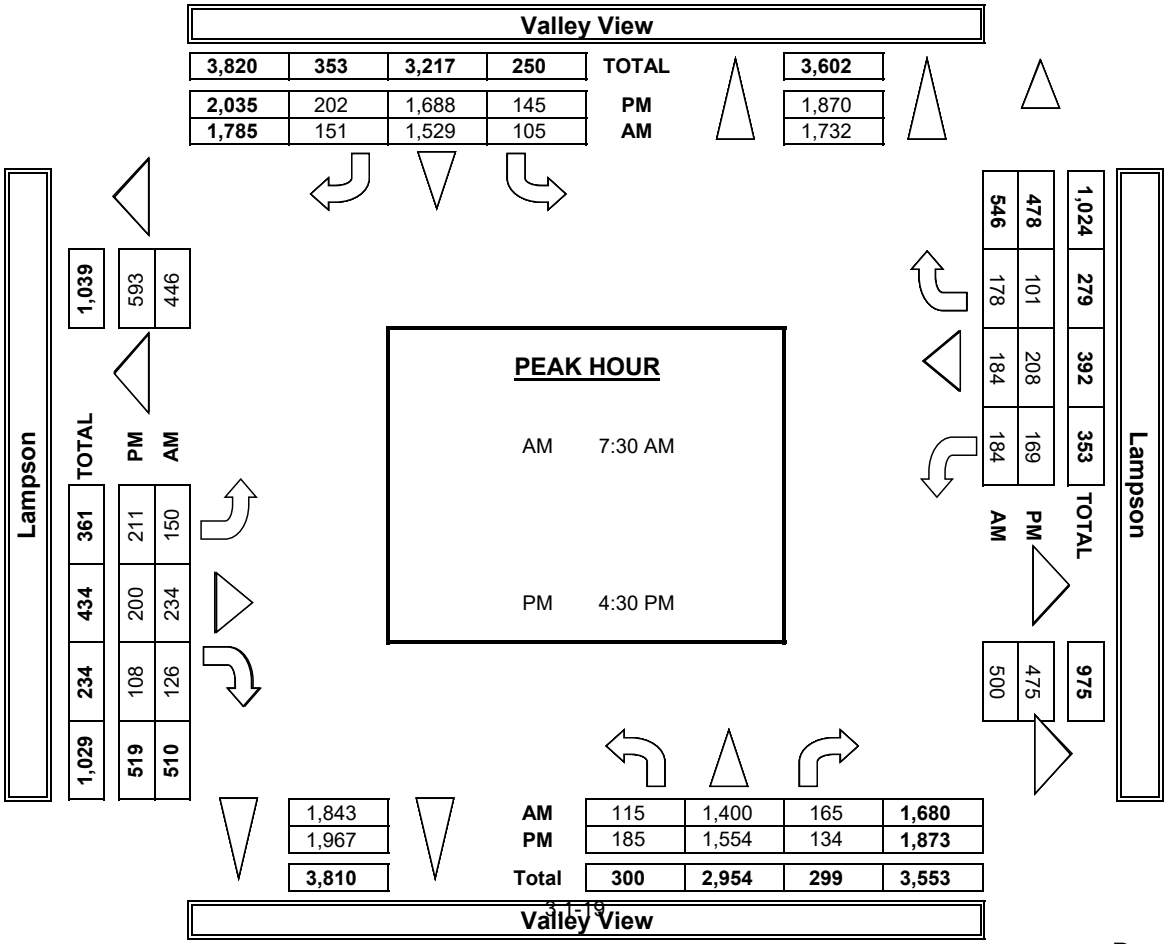
	PEDESTRIAN CROSSINGS				
	E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	2	1	0	1	4
7:30 AM	2	0	0	1	3
7:45 AM	3	0	0	3	6
8:00 AM	0	0	0	1	1
8:15 AM	1	1	1	0	3
8:30 AM	1	2	0	1	4
8:45 AM	2	2	2	1	7
AM TOTAL	6	1	1	5	28
4:00 PM	0	0	2	2	4
4:15 PM	1	2	1	0	4
4:30 PM	1	0	2	0	3
4:45 PM	2	2	2	0	6
5:00 PM	0	0	1	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	0	3	1	0	4
TOTAL	1	2	3	2	23

	BICYCLE CROSSINGS				
	ES	WS	SS	NS	TOTAL
7:00 AM	0	0	0	2	2
7:15 AM	0	2	1	1	4
7:30 AM	0	1	1	6	8
7:45 AM	1	0	1	2	4
8:00 AM	1	0	0	1	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	1	1
AM TOTAL	2	1	2	9	21
4:00 PM	0	0	0	1	1
4:15 PM	1	0	0	0	1
4:30 PM	1	0	0	0	1
4:45 PM	0	0	2	3	5
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1
5:30 PM	0	1	0	1	2
5:45 PM	0	0	1	1	2
TOTAL	1	0	0	1	13

AimTD LLC

TURNING MOVEMENT COUNTS





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A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, June 01, 2022 **CITY:** Seal Beach

JOB #: SC3468 **LOCATION:** Lampson west of Rose

AM TIME	1	2	3	4	TOTAL	PM Time	1	2	3	4	TOTAL
0:00	7	0	0	0	7	12:00	98	6	1	0	105
0:15	6	1	0	0	7	12:15	96	5	0	0	101
0:30	7	0	0	0	7	12:30	83	5	0	0	88
0:45	5	0	0	0	5	12:45	92	3	1	1	97
1:00	1	0	0	0	1	13:00	89	3	1	0	93
1:15	5	0	0	0	5	13:15	90	2	0	0	92
1:30	2	0	0	0	2	13:30	109	3	0	0	112
1:45	2	0	0	0	2	13:45	125	6	0	0	131
2:00	0	0	0	0	0	14:00	115	1	0	0	116
2:15	1	0	0	0	1	14:15	121	5	1	0	127
2:30	5	0	0	0	5	14:30	116	4	0	1	121
2:45	1	0	0	0	1	14:45	117	1	0	0	118
3:00	4	0	0	0	4	15:00	129	2	0	1	132
3:15	2	0	0	0	2	15:15	118	2	0	2	122
3:30	1	0	0	0	1	15:30	126	2	0	0	128
3:45	0	0	0	0	0	15:45	144	2	1	0	147
4:00	3	0	0	0	3	16:00	129	6	0	0	135
4:15	2	0	0	0	2	16:15	127	7	0	0	134
4:30	2	0	0	0	2	16:30	137	1	0	0	138
4:45	6	0	0	0	6	16:45	143	3	0	0	146
5:00	4	0	0	0	4	17:00	142	5	0	0	147
5:15	6	1	0	0	7	17:15	129	1	0	0	130
5:30	17	0	0	0	17	17:30	105	4	0	0	109
5:45	10	0	0	0	10	17:45	119	1	0	0	120
6:00	19	0	0	0	19	18:00	101	2	0	0	103
6:15	22	0	0	0	22	18:15	112	0	0	0	112
6:30	25	1	0	0	26	18:30	89	0	0	0	89
6:45	41	3	0	0	44	18:45	83	2	0	0	85
7:00	32	0	0	0	32	19:00	82	2	0	0	84
7:15	66	3	0	0	69	19:15	70	0	0	0	70
7:30	58	2	0	0	60	19:30	89	1	0	0	90
7:45	104	3	0	0	107	19:45	75	0	0	0	75
8:00	99	5	0	0	104	20:00	81	1	0	0	82
8:15	86	3	0	0	89	20:15	57	1	0	0	58
8:30	74	2	2	0	78	20:30	70	0	0	0	70
8:45	72	5	0	1	78	20:45	46	0	0	0	46
9:00	73	5	0	0	78	21:00	56	2	0	0	58
9:15	53	7	0	0	60	21:15	37	1	0	0	38
9:30	51	1	0	0	52	21:30	39	1	0	0	40
9:45	66	3	0	0	69	21:45	26	0	0	0	26
10:00	68	1	0	0	69	22:00	27	1	0	0	28
10:15	68	2	0	0	70	22:15	24	0	0	0	24
10:30	69	5	0	0	74	22:30	18	0	0	0	18
10:45	78	6	0	0	84	22:45	12	0	0	0	12
11:00	80	6	0	2	88	23:00	19	0	0	0	19
11:15	103	3	0	0	106	23:15	8	0	0	0	8
11:30	91	7	1	0	99	23:30	22	0	0	0	22
11:45	79	0	0	0	79	23:45	6	1	0	0	7
TOTAL	1,676	75	3	3	1,757	TOTAL	4,048	95	5	5	4,153

AM PEAK HOUR	7:45 AM
AM PEAK VOLUME	378

AM PEAK HOUR	4:15 PM
AM PEAK VOLUME	565

CLASS 1	PASSENGER VEHICLES
CLASS 2	2-AXLE TRUCKS
CLASS 3	3-AXLE TRUCKS
CLASS 4	4 OR MORE AXLE TRUCKS

	1	2	3	4	TOTAL
TOTAL: AM+PM	5,724	170	8	8	5,910
% OF TOTAL	96.9%	2.9%	0.1%	0.1%	100.0%
TOTAL: ALL	11,131	320	11	12	11,474
% OF TOTAL	97.0%	2.8%	0.1%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, June 01, 2022 **CITY:** Seal Beach
JOB #: SC3468 **LOCATION:** Lampson west of Rose

AM TIME	1	2	3	4	TOTAL	PM Time	1	2	3	4	TOTAL
0:00	5	0	0	0	5	12:00	83	0	1	0	84
0:15	6	0	0	0	6	12:15	96	2	0	0	98
0:30	2	0	0	0	2	12:30	95	4	0	0	99
0:45	2	0	0	0	2	12:45	100	0	0	0	100
1:00	3	0	0	0	3	13:00	105	1	0	1	107
1:15	2	0	0	0	2	13:15	107	1	0	0	108
1:30	3	0	0	0	3	13:30	85	4	0	0	89
1:45	1	0	0	0	1	13:45	98	1	0	0	99
2:00	0	0	0	0	0	14:00	96	3	0	0	99
2:15	0	0	0	0	0	14:15	96	1	0	0	97
2:30	5	0	0	0	5	14:30	95	6	0	0	101
2:45	1	0	0	0	1	14:45	69	2	0	0	71
3:00	3	0	0	0	3	15:00	104	2	0	0	106
3:15	1	0	0	0	1	15:15	123	0	0	0	123
3:30	3	0	0	0	3	15:30	110	1	0	0	111
3:45	0	1	0	0	1	15:45	91	0	0	0	91
4:00	4	0	0	0	4	16:00	90	3	0	0	93
4:15	3	0	0	0	3	16:15	102	3	0	0	105
4:30	5	0	0	0	5	16:30	125	1	0	0	126
4:45	10	0	0	0	10	16:45	107	4	0	0	111
5:00	3	0	0	0	3	17:00	118	4	0	0	122
5:15	14	0	0	0	14	17:15	127	3	0	0	130
5:30	20	0	0	0	20	17:30	109	1	0	0	110
5:45	21	1	0	0	22	17:45	106	2	0	0	108
6:00	22	1	0	0	23	18:00	98	0	0	0	98
6:15	35	0	1	0	36	18:15	81	0	0	0	81
6:30	39	0	0	0	39	18:30	90	0	0	0	90
6:45	52	3	0	0	55	18:45	53	0	0	0	53
7:00	80	3	0	0	83	19:00	69	0	0	0	69
7:15	104	3	0	1	108	19:15	55	0	0	0	55
7:30	146	10	0	0	156	19:30	50	1	0	0	51
7:45	135	8	0	0	143	19:45	48	0	0	0	48
8:00	92	2	0	0	94	20:00	43	0	0	0	43
8:15	88	5	0	0	93	20:15	34	0	0	0	34
8:30	93	1	0	0	94	20:30	42	0	0	0	42
8:45	106	9	0	0	115	20:45	39	0	0	0	39
9:00	110	1	0	0	111	21:00	23	1	0	0	24
9:15	108	6	0	1	115	21:15	35	0	0	0	35
9:30	69	6	0	0	75	21:30	18	0	0	0	18
9:45	73	6	0	1	80	21:45	18	0	0	0	18
10:00	73	2	1	0	76	22:00	21	1	0	0	22
10:15	91	4	0	0	95	22:15	12	0	0	0	12
10:30	81	6	0	0	87	22:30	9	0	0	0	9
10:45	93	6	0	0	99	22:45	11	0	0	0	11
11:00	71	4	0	0	75	23:00	10	0	0	0	10
11:15	76	2	0	0	78	23:15	5	0	0	0	5
11:30	65	2	0	0	67	23:30	4	0	0	0	4
11:45	79	5	0	0	84	23:45	4	1	0	0	5
TOTAL	2,098	97	2	3	2,200	TOTAL	3,309	53	1	1	3,364

AM PEAK HOUR	7:15 AM	PM PEAK HOUR	4:30 PM
AM PEAK VOLUME	501	PM PEAK VOLUME	489

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	5,407	150	3	4	5,564
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	97.2%	2.7%	0.1%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS						
CLASS 4	4 OR MORE AXLE TRUCKS						

APPENDIX 3.2: EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 1	2	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1199	266	364	1244	0	0	0	0	340	0	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1199	266	364	1244	0	0	0	0	340	0	572
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1199	266	364	1244	0	0	0	0	340	0	572
OvlAdjVol:			96									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.16	0.11	0.24	0.00	0.00	0.00	0.00	0.10	0.00	0.34
OvlAdjV/S:			0.06									
Crit Moves:		****			****							****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.397
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 2	0 1	1	0 1 1 0
Volume Module:												
Base Vol:	29	3	7	1	0	3	7	591	32	10	880	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	3	7	1	0	3	7	591	32	10	880	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	3	7	1	0	3	7	591	32	10	880	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	3	7	1	0	3	7	591	32	10	880	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	3	7	1	0	3	7	591	32	10	880	3
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	0.91	0.09	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1448	150	1700	400	0	1199	1700	3400	1700	1700	3287	11
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.17	0.02	0.01	0.27	0.28
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	204	1	3	1	0	7	18	420	79	9	730	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	204	1	3	1	0	7	18	420	79	9	730	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	204	1	3	1	0	7	18	420	79	9	730	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	1	3	1	0	7	18	420	79	9	730	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	204	1	3	1	0	7	18	420	79	9	730	6
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.98	0.94	1.00	0.97	0.94
Lanes:	1.00	0.25	0.75	0.12	0.00	0.88	1.00	1.68	0.32	1.00	1.98	0.02
Final Sat.:	1700	400	1199	200	0	1398	1700	2792	506	1700	3272	26
Capacity Analysis Module:												
Vol/Sat:	0.12	0.00	0.00	0.00	0.00	0.01	0.01	0.15	0.16	0.01	0.22	0.23
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.394
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	171	0	29	0	0	0	0	347	77	16	574	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	0	29	0	0	0	0	347	77	16	574	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	171	0	29	0	0	0	0	347	77	16	574	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	0	29	0	0	0	0	347	77	16	574	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	171	0	29	0	0	0	0	347	77	16	574	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.86	0.00	0.14	0.00	0.00	0.00	0.00	1.64	0.36	1.00	2.00	0.00
Final Sat.:	1366	0	232	0	0	0	0	2718	580	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.13	0.00	0.00	0.00	0.00	0.13	0.13	0.01	0.17	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.335
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	83	0	55	0	0	0	0	314	62	30	507	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	0	55	0	0	0	0	314	62	30	507	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	0	55	0	0	0	0	314	62	30	507	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	0	55	0	0	0	0	314	62	30	507	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	0	55	0	0	0	0	314	62	30	507	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.60	0.00	0.40	0.00	0.00	0.00	0.00	1.67	0.33	1.00	2.00	0.00
Final Sat.:	961	0	637	0	0	0	0	2771	527	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.11	0.12	0.02	0.15	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.300
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	37	0	46	0	0	0	0	336	24	25	505	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	0	46	0	0	0	0	336	24	25	505	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	0	46	0	0	0	0	336	24	25	505	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	0	46	0	0	0	0	336	24	25	505	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	0	46	0	0	0	0	336	24	25	505	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.45	0.00	0.55	0.00	0.00	0.00	0.00	1.87	0.13	1.00	2.00	0.00
Final Sat.:	712	0	886	0	0	0	0	3085	213	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.00	0.00	0.00	0.00	0.11	0.11	0.01	0.15	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.302
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	39	1	73	10	1	14	5	366	11	32	477	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	1	73	10	1	14	5	366	11	32	477	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	1	73	10	1	14	5	366	11	32	477	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1	73	10	1	14	5	366	11	32	477	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	1	73	10	1	14	5	366	11	32	477	7
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.01	0.99	0.40	0.04	0.56	1.00	1.94	0.06	1.00	1.97	0.03
Final Sat.:	1700	22	1576	639	64	895	1700	3205	93	1700	3252	46
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.02	0.02	0.00	0.11	0.12	0.02	0.15	0.15
Crit Moves:		****		****			****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	1400	165	105	1529	151	150	234	126	184	184	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	1400	165	105	1529	151	150	234	126	184	184	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	1400	165	105	1529	151	150	234	126	184	184	178
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.30	0.70	1.00	1.02	0.98
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2179	1119	1700	1726	1572
Capacity Analysis Module:												
Vol/Sat:	0.07	0.27	0.10	0.06	0.30	0.09	0.09	0.11	0.11	0.11	0.11	0.11
Crit Moves:	****				****			****			****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1508	413	447	1202	0	0	0	0	322	0	447
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1508	413	447	1202	0	0	0	0	322	0	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1508	413	447	1202	0	0	0	0	322	0	447
OvlAdjVol:			252									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.24	0.13	0.24	0.00	0.00	0.00	0.00	0.09	0.00	0.26
OvlAdjV/S:			0.15									
Crit Moves:	****			****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.371
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0 1	0 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	42	0	10	0	1	0	4	822	34	7	727	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	0	10	0	1	0	4	822	34	7	727	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	0	10	0	1	0	4	822	34	7	727	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	0	10	0	1	0	4	822	34	7	727	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	0	10	0	1	0	4	822	34	7	727	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00
Lanes:	1.00	0.00	1.00	0.00	1.00	0.00	1.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1598	0	1700	0	1700	0	1700	3400	1700	1700	3298	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.24	0.02	0.00	0.22	0.00
Crit Moves:	****				****			****			****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.443
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	124	0	10	4	3	38	26	638	116	11	568	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	0	10	4	3	38	26	638	116	11	568	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	124	0	10	4	3	38	26	638	116	11	568	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	10	4	3	38	26	638	116	11	568	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	124	0	10	4	3	38	26	638	116	11	568	3
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.98	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.09	0.07	0.84	1.00	1.69	0.31	1.00	1.99	0.01
Final Sat.:	1700	0	1598	142	107	1349	1700	2806	492	1700	3281	17
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.01	0.00	0.03	0.03	0.02	0.23	0.24	0.01	0.17	0.18
Crit Moves:	****				****				****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.366
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	70	0	18	0	0	0	0	541	111	24	512	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	0	18	0	0	0	0	541	111	24	512	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	0	18	0	0	0	0	541	111	24	512	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	0	18	0	0	0	0	541	111	24	512	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	0	18	0	0	0	0	541	111	24	512	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.80	0.00	0.20	0.00	0.00	0.00	0.00	1.66	0.34	1.00	2.00	0.00
Final Sat.:	1271	0	327	0	0	0	0	2754	544	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.06	0.00	0.00	0.00	0.00	0.20	0.20	0.01	0.15	0.00
Crit Moves:			****					****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.368
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	52	0	46	0	0	0	0	499	60	65	484	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	0	46	0	0	0	0	499	60	65	484	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	0	46	0	0	0	0	499	60	65	484	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	0	46	0	0	0	0	499	60	65	484	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	0	46	0	0	0	0	499	60	65	484	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.53	0.00	0.47	0.00	0.00	0.00	0.00	1.79	0.21	1.00	2.00	0.00
Final Sat.:	848	0	750	0	0	0	0	2955	343	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.17	0.17	0.04	0.14	0.00
Crit Moves:			****					****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.363
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	28	0	51	0	0	0	0	528	33	65	489	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	0	51	0	0	0	0	528	33	65	489	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	0	51	0	0	0	0	528	33	65	489	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	0	51	0	0	0	0	528	33	65	489	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	0	51	0	0	0	0	528	33	65	489	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.35	0.00	0.65	0.00	0.00	0.00	0.00	1.88	0.12	1.00	2.00	0.00
Final Sat.:	566	0	1032	0	0	0	0	3110	188	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.00	0.00	0.00	0.00	0.17	0.18	0.04	0.14	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.366
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	27	0	60	8	0	11	7	545	27	76	516	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	0	60	8	0	11	7	545	27	76	516	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	0	60	8	0	11	7	545	27	76	516	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	0	60	8	0	11	7	545	27	76	516	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	0	60	8	0	11	7	545	27	76	516	17
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.42	0.00	0.58	1.00	1.91	0.09	1.00	1.94	0.06
Final Sat.:	1700	0	1598	673	0	925	1700	3147	151	1700	3196	102
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.04	0.00	0.00	0.01	0.00	0.17	0.18	0.04	0.16	0.17
Crit Moves:			****	****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	185	1554	134	145	1688	202	211	200	108	169	208	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	185	1554	134	145	1688	202	211	200	108	169	208	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	185	1554	134	145	1688	202	211	200	108	169	208	101
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	0.98	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.30	0.70	1.00	1.35	0.65
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2177	1121	1700	2253	1045
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.08	0.09	0.33	0.12	0.12	0.09	0.10	0.10	0.09	0.10
Crit Moves:	****				****		****					****

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APPENDIX 4.1: POST PROCESSING WORKSHEETS

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Project:	Lampson	Job #:	14501
Scenario:	2045 Without Project	Analyst:	CS
		Date:	2/1/23

LOCATION: Seal Beach Bl. & Lampson Av.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,199	1,285	86	7%	1,508	1,525	17	1%
	Right	266	426	160	60%	413	438	25	6%
	NB Total	1,465	1,711	246	17%	1,921	1,963	42	2%
SOUTH BOUND	Left	364	689	325	89%	447	422	-25	-6%
	Through	1,244	1,289	45	4%	1,202	1,232	30	2%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	1,608	1,978	370	23%	1,649	1,654	5	0%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	340	298	-42	-12%	322	488	166	52%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	572	613	41	7%	447	595	148	33%
	WB Total	912	911	-1	0%	769	1,083	314	41%
TOTAL ENTERING VOLUME		3,985	4,600	615	15%	4,339	4,700	361	8%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,978	1,654			
North Leg	Outbound	1,898	2,120			
North Leg	**TOTAL**	**3,876**	**3,774**	**9%**	**9%**	**41,044**
South Leg	Inbound	1,711	1,963			
South Leg	Outbound	1,587	1,720			
South Leg	**TOTAL**	**3,298**	**3,683**	**9%**	**9%**	**38,796**
East Leg	Inbound	911	1,083			
East Leg	Outbound	1,115	860			
East Leg	**TOTAL**	**2,026**	**1,943**	**10%**	**10%**	**19,645**
West Leg	Inbound	0	0			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
OVERALL TOTAL		***9,200***	***9,400***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Lampson	Job #:	14501
Scenario:	2045 Without Project	Analyst:	CS
		Date:	2/1/23

LOCATION: Valley View St. & Lampson Av.
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	115	180	65	57%	185	184	-1	-1%
	Through	1,400	1,624	224	16%	1,554	1,604	50	3%
	Right	165	192	27	16%	134	177	43	32%
	NB Total	1,680	1,996	316	19%	1,873	1,965	92	5%
SOUTH BOUND	Left	105	103	-2	-2%	145	198	53	37%
	Through	1,529	1,682	153	10%	1,688	1,870	182	11%
	Right	151	199	48	32%	202	208	6	3%
	SB Total	1,785	1,984	199	11%	2,035	2,276	241	12%
EAST BOUND	Left	150	145	-5	-3%	211	260	49	23%
	Through	234	227	-7	-3%	200	315	115	58%
	Right	126	137	11	9%	108	138	30	28%
	EB Total	510	509	-1	0%	519	713	194	37%
WEST BOUND	Left	184	311	127	69%	169	182	13	8%
	Through	184	373	189	103%	208	209	1	0%
	Right	178	267	89	50%	101	105	4	4%
	WB Total	546	951	405	74%	478	496	18	4%
TOTAL ENTERING VOLUME		4,521	5,440	919	20%	4,905	5,450	545	11%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,984	2,276			
North Leg	Outbound	2,036	1,969			
North Leg	**TOTAL**	**4,020**	**4,245**	**9%**	**10%**	**44,418**
South Leg	Inbound	1,996	1,965			
South Leg	Outbound	2,130	2,190			
South Leg	**TOTAL**	**4,126**	**4,155**	**9%**	**9%**	**44,110**
East Leg	Inbound	951	496			
East Leg	Outbound	522	690			
East Leg	**TOTAL**	**1,473**	**1,186**	**12%**	**9%**	**12,685**
West Leg	Inbound	509	713			
West Leg	Outbound	752	601			
West Leg	**TOTAL**	**1,261**	**1,314**	**9%**	**10%**	**13,611**
OVERALL TOTAL		***10,880***	***10,900***	***9%***	***9%***	***114,824***

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APPENDIX 5.1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 1	2	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1298	288	394	1347	0	0	0	0	368	0	619
Added Vol:	0	47	28	41	100	0	0	0	0	32	0	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1345	316	435	1447	0	0	0	0	400	0	646
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1345	316	435	1447	0	0	0	0	400	0	646
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	316	435	1447	0	0	0	0	400	0	646
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1345	316	435	1447	0	0	0	0	400	0	646
OvlAdjVol:			116									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.19	0.13	0.28	0.00	0.00	0.00	0.00	0.12	0.00	0.38
OvlAdjV/S:			0.07									
Crit Moves:		****		****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	29	3	7	1	0	3	7	591	32	10	880	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	31	3	8	1	0	3	8	640	35	11	953	3
Added Vol:	0	0	0	5	0	31	10	58	0	0	29	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	3	8	6	0	34	18	698	35	11	982	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	3	8	6	0	34	18	698	35	11	982	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	3	8	6	0	34	18	698	35	11	982	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	3	8	6	0	34	18	698	35	11	982	5
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	0.91	0.09	1.00	0.15	0.00	0.85	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1448	150	1700	241	0	1357	1700	3400	1700	1700	3281	17
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.03	0.01	0.21	0.02	0.01	0.30	0.31
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.505
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	204	1	3	1	0	7	18	420	79	9	730	6
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	221	1	3	1	0	8	19	455	86	10	790	6
Added Vol:	0	0	0	0	0	0	0	63	0	0	30	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	1	3	1	0	8	19	518	86	10	820	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	1	3	1	0	8	19	518	86	10	820	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	1	3	1	0	8	19	518	86	10	820	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	1	3	1	0	8	19	518	86	10	820	6
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.25	0.75	0.12	0.00	0.88	1.00	1.72	0.28	1.00	1.98	0.02
Final Sat.:	1700	400	1199	200	0	1398	1700	2845	453	1700	3273	25
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.18	0.19	0.01	0.25	0.26
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	171	0	29	0	0	0	0	347	77	16	574	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	185	0	31	0	0	0	0	376	83	17	621	0
Added Vol:	0	0	6	0	0	0	0	63	0	5	30	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	0	37	0	0	0	0	439	83	22	651	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	185	0	37	0	0	0	0	439	83	22	651	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	0	37	0	0	0	0	439	83	22	651	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	185	0	37	0	0	0	0	439	83	22	651	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1329	0	269	0	0	0	0	2788	510	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.14	0.00	0.00	0.00	0.00	0.16	0.16	0.01	0.19	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.369
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	83	0	55	0	0	0	0	314	62	30	507	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	90	0	60	0	0	0	0	340	67	32	549	0
Added Vol:	0	0	6	0	0	0	0	69	0	5	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	0	66	0	0	0	0	409	67	37	584	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	0	66	0	0	0	0	409	67	37	584	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	0	66	0	0	0	0	409	67	37	584	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	0	66	0	0	0	0	409	67	37	584	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.72	0.28	1.00	2.00	0.00
Final Sat.:	924	0	674	0	0	0	0	2847	451	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.10	0.00	0.00	0.00	0.00	0.14	0.15	0.02	0.17	0.00
Crit Moves:			****					****				****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.332
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	37	0	46	0	0	0	0	336	24	25	505	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	40	0	50	0	0	0	0	364	26	27	547	0
Added Vol:	0	0	6	0	0	0	0	75	0	5	39	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	0	56	0	0	0	0	439	26	32	586	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	56	0	0	0	0	439	26	32	586	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	56	0	0	0	0	439	26	32	586	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	56	0	0	0	0	439	26	32	586	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.41	0.01	0.58	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	668	0	930	0	0	0	0	3119	179	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.14	0.15	0.02	0.17	0.00
Crit Moves:			****					****				****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.343
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	39	1	73	10	1	14	5	366	11	32	477	7
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	42	1	79	11	1	15	5	396	12	35	516	8
Added Vol:	0	0	6	2	0	0	0	80	0	5	44	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	1	85	13	1	15	5	476	12	40	560	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	1	85	13	1	15	5	476	12	40	560	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	1	85	13	1	15	5	476	12	40	560	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	1	85	13	1	15	5	476	12	40	560	10
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.01	0.99	0.44	0.04	0.52	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1700	20	1578	705	60	833	1700	3220	78	1700	3244	54
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.02	0.02	0.00	0.15	0.15	0.02	0.17	0.18
Crit Moves:		****		****			****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	124	1515	179	114	1655	163	162	253	136	199	199	193
Added Vol:	21	25	4	5	21	29	48	14	32	4	4	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	145	1540	183	119	1676	192	210	267	168	203	203	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	145	1540	183	119	1676	192	210	267	168	203	203	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	1540	183	119	1676	192	210	267	168	203	203	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	1540	183	119	1676	192	210	267	168	203	203	200
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.23	0.77	1.00	1.01	0.99
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2063	1235	1700	1714	1584
Capacity Analysis Module:												
Vol/Sat:	0.09	0.30	0.11	0.07	0.33	0.11	0.12	0.13	0.14	0.12	0.12	0.13
Crit Moves:	****			****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.896
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1632	447	484	1301	0	0	0	0	349	0	484
Added Vol:	0	89	37	35	66	0	0	0	0	29	0	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1721	484	519	1367	0	0	0	0	378	0	520
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1721	484	519	1367	0	0	0	0	378	0	520
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1721	484	519	1367	0	0	0	0	378	0	520
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1721	484	519	1367	0	0	0	0	378	0	520
OvlAdjVol:			295									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.28	0.15	0.27	0.00	0.00	0.00	0.00	0.11	0.00	0.31
OvlAdjV/S:			0.17									
Crit Moves:		****		****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.426
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	42	0	10	0	1	0	4	822	34	7	727	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	45	0	11	0	1	0	4	890	37	8	787	0
Added Vol:	0	0	0	3	0	20	33	39	0	0	46	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	0	11	3	1	20	37	929	37	8	833	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	0	11	3	1	20	37	929	37	8	833	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	0	11	3	1	20	37	929	37	8	833	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	0	11	3	1	20	37	929	37	8	833	6
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.12	0.04	0.84	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1598	0	1700	199	72	1327	1700	3400	1700	1700	3275	23
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.02	0.02	0.02	0.27	0.02	0.00	0.25	0.26
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.485
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	124	0	10	4	3	38	26	638	116	11	568	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	134	0	11	4	3	41	28	691	126	12	615	3
Added Vol:	0	0	0	0	0	0	0	42	0	0	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	0	11	4	3	41	28	733	126	12	666	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	0	11	4	3	41	28	733	126	12	666	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	0	11	4	3	41	28	733	126	12	666	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	134	0	11	4	3	41	28	733	126	12	666	3
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.98	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.09	0.07	0.84	1.00	1.71	0.29	1.00	1.99	0.01
Final Sat.:	1700	0	1598	142	107	1349	1700	2830	468	1700	3282	16
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.03	0.03	0.02	0.26	0.27	0.01	0.20	0.21
Crit Moves:	****				****				****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	70	0	18	0	0	0	0	541	111	24	512	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	76	0	19	0	0	0	0	586	120	26	554	0
Added Vol:	0	0	5	0	0	0	0	42	0	4	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	0	24	0	0	0	0	628	120	30	605	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	76	0	24	0	0	0	0	628	120	30	605	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	0	24	0	0	0	0	628	120	30	605	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	0	24	0	0	0	0	628	120	30	605	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.76	0.00	0.24	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1208	0	390	0	0	0	0	2784	514	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.06	0.00	0.00	0.00	0.00	0.23	0.23	0.02	0.18	0.00
Crit Moves:			****					****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.410
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	52	0	46	0	0	0	0	499	60	65	484	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	56	0	50	0	0	0	0	540	65	70	524	0
Added Vol:	0	0	5	0	0	0	0	47	0	4	55	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	0	55	0	0	0	0	587	65	74	579	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	0	55	0	0	0	0	587	65	74	579	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	55	0	0	0	0	587	65	74	579	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	0	55	0	0	0	0	587	65	74	579	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.51	0.00	0.49	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	810	0	788	0	0	0	0	2980	318	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.07	0.00	0.00	0.00	0.00	0.20	0.20	0.04	0.17	0.00
Crit Moves:			****					****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.407
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	28	0	51	0	0	0	0	528	33	65	489	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	30	0	55	0	0	0	0	572	36	70	529	0
Added Vol:	0	0	5	0	0	0	0	52	0	4	59	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	60	0	0	0	0	624	36	74	588	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	0	60	0	0	0	0	624	36	74	588	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	0	60	0	0	0	0	624	36	74	588	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	0	60	0	0	0	0	624	36	74	588	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.33	0.00	0.67	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	535	0	1063	0	0	0	0	3125	173	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.20	0.21	0.04	0.17	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.412
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	27	0	60	8	0	11	7	545	27	76	516	17
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	29	0	65	9	0	12	8	590	29	82	559	18
Added Vol:	0	0	5	2	0	0	0	57	0	4	63	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	0	70	11	0	12	8	647	29	86	622	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	0	70	11	0	12	8	647	29	86	622	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	0	70	11	0	12	8	647	29	86	622	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	0	70	11	0	12	8	647	29	86	622	20
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.47	0.00	0.53	1.00	1.91	0.09	1.00	1.94	0.06
Final Sat.:	1700	0	1598	755	0	843	1700	3160	138	1700	3196	102
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.04	0.01	0.00	0.01	0.00	0.20	0.21	0.05	0.19	0.20
Crit Moves:			****	****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	200	1682	145	157	1827	219	228	216	117	183	225	109
Added Vol:	33	22	5	3	17	28	33	7	29	5	12	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1704	150	160	1844	247	261	223	146	188	237	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	233	1704	150	160	1844	247	261	223	146	188	237	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1704	150	160	1844	247	261	223	146	188	237	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	233	1704	150	160	1844	247	261	223	146	188	237	115
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	0.98	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.21	0.79	1.00	1.35	0.65
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2036	1262	1700	2252	1046
Capacity Analysis Module:												
Vol/Sat:	0.14	0.33	0.09	0.09	0.36	0.15	0.15	0.11	0.12	0.11	0.11	0.11
Crit Moves:	****			****			****			****		

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APPENDIX 5.2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.882
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1298	288	394	1347	0	0	0	0	368	0	619
Added Vol:	0	47	37	46	100	0	0	0	0	57	0	42
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1345	325	440	1447	0	0	0	0	425	0	661
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1345	325	440	1447	0	0	0	0	425	0	661
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	325	440	1447	0	0	0	0	425	0	661
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1345	325	440	1447	0	0	0	0	425	0	661
OvlAdjVol:			112									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.19	0.13	0.28	0.00	0.00	0.00	0.00	0.13	0.00	0.39
OvlAdjV/S:			0.07									
Crit Moves:		****		****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.475
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	29	3	7	1	0	3	7	591	32	10	880	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	31	3	8	1	0	3	8	640	35	11	953	3
Added Vol:	0	0	0	5	0	31	10	72	0	0	69	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	3	8	6	0	34	18	712	35	11	1022	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	3	8	6	0	34	18	712	35	11	1022	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	3	8	6	0	34	18	712	35	11	1022	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	3	8	6	0	34	18	712	35	11	1022	5
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	0.91	0.09	1.00	0.15	0.00	0.85	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1448	150	1700	241	0	1357	1700	3400	1700	1700	3282	16
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.00	0.00	0.03	0.01	0.21	0.02	0.01	0.31	0.32
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.518	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	34	Level Of Service:	A	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	204	1	3	1	0	7	18	420	79	9	730	6
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	221	1	3	1	0	8	19	455	86	10	790	6
Added Vol:	0	0	0	0	0	0	0	78	0	0	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	1	3	1	0	8	19	533	86	10	860	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	1	3	1	0	8	19	533	86	10	860	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	1	3	1	0	8	19	533	86	10	860	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	1	3	1	0	8	19	533	86	10	860	6
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.25	0.75	0.12	0.00	0.88	1.00	1.72	0.28	1.00	1.99	0.01
Final Sat.:	1700	400	1199	200	0	1398	1700	2856	442	1700	3274	24
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.00	0.00	0.00	0.01	0.01	0.19	0.19	0.01	0.26	0.27
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.443
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	171	0	29	0	0	0	0	347	77	16	574	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	185	0	31	0	0	0	0	376	83	17	621	0
Added Vol:	0	0	6	0	0	0	0	78	0	5	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	0	37	0	0	0	0	454	83	22	691	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	185	0	37	0	0	0	0	454	83	22	691	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	0	37	0	0	0	0	454	83	22	691	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	185	0	37	0	0	0	0	454	83	22	691	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.69	0.31	1.00	2.00	0.00
Final Sat.:	1329	0	269	0	0	0	0	2802	496	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.14	0.00	0.00	0.00	0.00	0.16	0.17	0.01	0.20	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.381
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	83	0	55	0	0	0	0	314	62	30	507	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	90	0	60	0	0	0	0	340	67	32	549	0
Added Vol:	0	0	6	0	0	0	0	83	0	5	75	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	0	66	0	0	0	0	423	67	37	624	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	0	66	0	0	0	0	423	67	37	624	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	0	66	0	0	0	0	423	67	37	624	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	0	66	0	0	0	0	423	67	37	624	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.73	0.27	1.00	2.00	0.00
Final Sat.:	924	0	674	0	0	0	0	2860	438	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.10	0.00	0.00	0.00	0.00	0.15	0.15	0.02	0.18	0.00
Crit Moves:			****					****				****

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Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	481	651	7	0	21
Future Vol, veh/h	0	481	651	7	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	523	708	8	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	638
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	638
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	638
HCM Lane V/C Ratio	-	-	-	0.036
HCM Control Delay (s)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	465	633	6	37	25
Future Vol, veh/h	16	465	633	6	37	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	505	688	7	40	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	695	0	-	0	979	348
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	287	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	897	-	-	-	247	648
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	736	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	897	-	-	-	242	648
Mov Cap-2 Maneuver	-	-	-	-	354	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	736	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	897	-	-	-	433
HCM Lane V/C Ratio	0.019	-	-	-	0.156
HCM Control Delay (s)	9.1	-	-	-	14.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.334
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	37	0	46	0	0	0	0	336	24	25	505	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	40	0	50	0	0	0	0	364	26	27	547	0
Added Vol:	0	0	6	0	0	0	0	107	0	5	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	0	56	0	0	0	0	471	26	32	598	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	56	0	0	0	0	471	26	32	598	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	56	0	0	0	0	471	26	32	598	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	56	0	0	0	0	471	26	32	598	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.41	0.01	0.58	0.00	0.00	0.00	0.00	1.90	0.10	1.00	2.00	0.00
Final Sat.:	668	0	930	0	0	0	0	3131	167	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.16	0.02	0.18	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.343
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	39	1	73	10	1	14	5	366	11	32	477	7
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	42	1	79	11	1	15	5	396	12	35	516	8
Added Vol:	0	0	6	2	0	0	0	113	0	5	56	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	1	85	13	1	15	5	509	12	40	572	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	1	85	13	1	15	5	509	12	40	572	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	1	85	13	1	15	5	509	12	40	572	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	1	85	13	1	15	5	509	12	40	572	10
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.01	0.99	0.44	0.04	0.52	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1700	20	1578	705	60	833	1700	3225	73	1700	3245	53
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.02	0.02	0.00	0.16	0.16	0.02	0.18	0.18
Crit Moves:		****		****				****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	115	1400	165	105	1529	151	150	234	126	184	184	178
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	124	1515	179	114	1655	163	162	253	136	199	199	193
Added Vol:	26	25	4	5	21	32	55	25	47	4	8	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	150	1540	183	119	1676	195	217	278	183	203	207	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1540	183	119	1676	195	217	278	183	203	207	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1540	183	119	1676	195	217	278	183	203	207	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1540	183	119	1676	195	217	278	183	203	207	200
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	1.00	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.21	0.79	1.00	1.02	0.98
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2028	1270	1700	1729	1569
Capacity Analysis Module:												
Vol/Sat:	0.09	0.30	0.11	0.07	0.33	0.11	0.13	0.14	0.14	0.12	0.12	0.13
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.907
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	104	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 1	2	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1632	447	484	1301	0	0	0	0	349	0	484
Added Vol:	0	89	65	52	66	0	0	0	0	46	0	46
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1721	512	536	1367	0	0	0	0	395	0	530
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1721	512	536	1367	0	0	0	0	395	0	530
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1721	512	536	1367	0	0	0	0	395	0	530
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1721	512	536	1367	0	0	0	0	395	0	530
OvlAdjVol:			315									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.30	0.16	0.27	0.00	0.00	0.00	0.00	0.12	0.00	0.31
OvlAdjV/S:			0.19									
Crit Moves:		****		****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	42	0	10	0	1	0	4	822	34	7	727	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	45	0	11	0	1	0	4	890	37	8	787	0
Added Vol:	0	0	0	3	0	20	33	83	0	0	73	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	0	11	3	1	20	37	973	37	8	860	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	0	11	3	1	20	37	973	37	8	860	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	0	11	3	1	20	37	973	37	8	860	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	0	11	3	1	20	37	973	37	8	860	6
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.12	0.04	0.84	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	1598	0	1700	199	72	1327	1700	3400	1700	1700	3276	22
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.02	0.02	0.02	0.29	0.02	0.00	0.26	0.27
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	124	0	10	4	3	38	26	638	116	11	568	3
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	134	0	11	4	3	41	28	691	126	12	615	3
Added Vol:	0	0	0	0	0	0	0	87	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	0	11	4	3	41	28	778	126	12	693	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	0	11	4	3	41	28	778	126	12	693	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	0	11	4	3	41	28	778	126	12	693	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	134	0	11	4	3	41	28	778	126	12	693	3
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.09	0.07	0.84	1.00	1.72	0.28	1.00	1.99	0.01
Final Sat.:	1700	0	1598	142	107	1349	1700	2854	444	1700	3283	15
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.03	0.03	0.02	0.27	0.28	0.01	0.21	0.22
Crit Moves:	****			****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.428
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	70	0	18	0	0	0	0	541	111	24	512	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	76	0	19	0	0	0	0	586	120	26	554	0
Added Vol:	0	0	5	0	0	0	0	87	0	4	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	0	24	0	0	0	0	673	120	30	632	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	76	0	24	0	0	0	0	673	120	30	632	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	0	24	0	0	0	0	673	120	30	632	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	0	24	0	0	0	0	673	120	30	632	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.76	0.00	0.24	0.00	0.00	0.00	0.00	1.70	0.30	1.00	2.00	0.00
Final Sat.:	1208	0	390	0	0	0	0	2814	484	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.06	0.00	0.00	0.00	0.00	0.24	0.25	0.02	0.19	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	52	0	46	0	0	0	0	499	60	65	484	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	56	0	50	0	0	0	0	540	65	70	524	0
Added Vol:	0	0	5	0	0	0	0	92	0	4	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	0	55	0	0	0	0	632	65	74	606	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	0	55	0	0	0	0	632	65	74	606	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	55	0	0	0	0	632	65	74	606	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	0	55	0	0	0	0	632	65	74	606	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.51	0.00	0.49	0.00	0.00	0.00	0.00	1.81	0.19	1.00	2.00	0.00
Final Sat.:	810	0	788	0	0	0	0	3000	298	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.07	0.00	0.00	0.00	0.00	0.21	0.22	0.04	0.18	0.00
Crit Moves:			****						****	****		

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Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	709	636	23	0	14
Future Vol, veh/h	0	709	636	23	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	771	691	25	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	638
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	638
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	638
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	-	10.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	659	642	18	25	17
Future Vol, veh/h	50	659	642	18	25	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	716	698	20	27	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	718	0	-	0	1174	359
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	879	-	-	-	185	638
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	879	-	-	-	174	638
Mov Cap-2 Maneuver	-	-	-	-	302	-
Stage 1	-	-	-	-	422	-
Stage 2	-	-	-	-	598	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	879	-	-	-	384
HCM Lane V/C Ratio	0.062	-	-	-	0.119
HCM Control Delay (s)	9.4	-	-	-	15.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.407
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	28	0	51	0	0	0	0	528	33	65	489	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	30	0	55	0	0	0	0	572	36	70	529	0
Added Vol:	0	0	5	0	0	0	0	74	0	4	96	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	60	0	0	0	0	646	36	74	625	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	0	60	0	0	0	0	646	36	74	625	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	0	60	0	0	0	0	646	36	74	625	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	0	60	0	0	0	0	646	36	74	625	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.33	0.00	0.67	0.00	0.00	0.00	0.00	1.90	0.10	1.00	2.00	0.00
Final Sat.:	535	0	1063	0	0	0	0	3130	168	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.21	0.21	0.04	0.18	0.00
Crit Moves:			****					****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1	0	1 0	1 1 0
Volume Module:												
Base Vol:	27	0	60	8	0	11	7	545	27	76	516	17
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	29	0	65	9	0	12	8	590	29	82	559	18
Added Vol:	0	0	5	2	0	0	0	79	0	4	100	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	0	70	11	0	12	8	669	29	86	659	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	0	70	11	0	12	8	669	29	86	659	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	0	70	11	0	12	8	669	29	86	659	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	0	70	11	0	12	8	669	29	86	659	20
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.47	0.00	0.53	1.00	1.92	0.08	1.00	1.94	0.06
Final Sat.:	1700	0	1598	755	0	843	1700	3164	134	1700	3202	96
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.04	0.01	0.00	0.01	0.00	0.21	0.22	0.05	0.21	0.21
Crit Moves:			****	****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.828
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	185	1554	134	145	1688	202	211	200	108	169	208	101
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	200	1682	145	157	1827	219	228	216	117	183	225	109
Added Vol:	50	22	5	3	17	36	38	15	38	5	24	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	250	1704	150	160	1844	255	266	231	155	188	249	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	1704	150	160	1844	255	266	231	155	188	249	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	1704	150	160	1844	255	266	231	155	188	249	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	1704	150	160	1844	255	266	231	155	188	249	115
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	0.98	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.20	0.80	1.00	1.37	0.63
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2017	1281	1700	2287	1011
Capacity Analysis Module:												
Vol/Sat:	0.15	0.33	0.09	0.09	0.36	0.15	0.16	0.11	0.12	0.11	0.11	0.11
Crit Moves:	****			****			****			****		

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APPENDIX 5.3: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

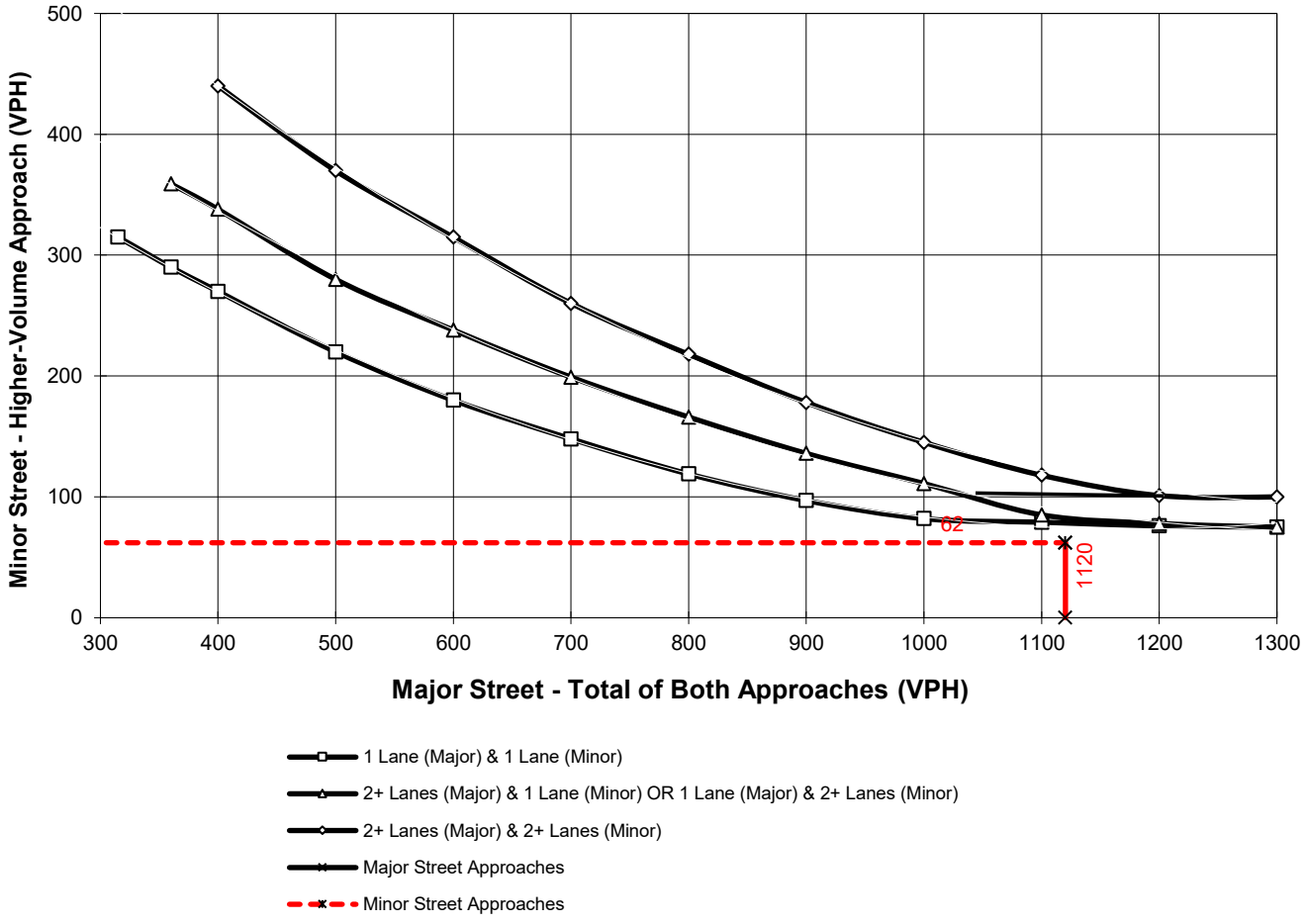
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year Cumulative (2026) Conditions - Weekday AM Peak Hour**

Major Street Name = **Lampson Av.**
Total of Both Approaches (VPH) = **1120**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 2**
High Volume Approach (VPH) = **62**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		**2026 WP**
				CALC CS	DATE	02/01/23
Jurisdiction: **City of Seal Beach/Los Alamitos**				CHK CS	DATE	02/01/23
Major Street: **Lampson Av.**				Critical Approach Speed (Major)		45 mph
Minor Street: **Driveway 2**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **14,416** vpd Minor Street Future ADT = **623** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT			
			Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied XX						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **14,416**	*1* **623**	9,600	6,720 *	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied XX						
	1	*1*	12,000	8,400	1,200	850
	2 + **14,416**	*1* **623**	14,400	10,080 *	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied XX			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more	**A** 37%	**B** 73%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 5.4: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.712
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1199	266	364	1244	0	0	0	0	340	0	572
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1298	288	394	1347	0	0	0	0	368	0	619
Added Vol:	0	47	37	46	100	0	0	0	0	57	0	42
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1345	325	440	1447	0	0	0	0	425	0	661
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1345	325	440	1447	0	0	0	0	425	0	661
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	325	440	1447	0	0	0	0	425	0	661
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1345	325	440	1447	0	0	0	0	425	0	661
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.97
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.17	0.00	1.83
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	1978	0	3020
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.19	0.13	0.28	0.00	0.00	0.00	0.00	0.21	0.00	0.22
OvlAdjV/S:			0.00									
Crit Moves:		****		****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 1	2	0 3	0 0	0	0 0	0 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1508	413	447	1202	0	0	0	0	322	0	447
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	0	1632	447	484	1301	0	0	0	0	349	0	484
Added Vol:	0	89	65	52	66	0	0	0	0	46	0	46
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1721	512	536	1367	0	0	0	0	395	0	530
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1721	512	536	1367	0	0	0	0	395	0	530
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1721	512	536	1367	0	0	0	0	395	0	530
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1721	512	536	1367	0	0	0	0	395	0	530
OvlAdjVol:			200									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.97
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.28	0.00	1.72
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	2148	0	2850
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.30	0.16	0.27	0.00	0.00	0.00	0.00	0.18	0.00	0.19
OvlAdjV/S:			0.12									
Crit Moves:		****		****								****

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APPENDIX 6.1: GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.020
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 1	2	0 3	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1479	426	689	1591	0	0	0	0	470	0	727
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1479	426	689	1591	0	0	0	0	470	0	727
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1479	426	689	1591	0	0	0	0	470	0	727
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1479	426	689	1591	0	0	0	0	470	0	727
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1479	426	689	1591	0	0	0	0	470	0	727
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1479	426	689	1591	0	0	0	0	470	0	727
OvlAdjVol:			191									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.25	0.20	0.31	0.00	0.00	0.00	0.00	0.14	0.00	0.43
OvlAdjV/S:			0.11									
Crit Moves:		****			****							****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	33	3	8	14	0	76	106	732	36	11	1032	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	3	8	14	0	76	106	732	36	11	1032	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	3	8	14	0	76	106	732	36	11	1032	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	33	3	8	14	0	76	106	732	36	11	1032	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	3	8	14	0	76	106	732	36	11	1032	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	3	8	14	0	76	106	732	36	11	1032	20
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	0.92	0.08	1.00	0.16	0.00	0.84	1.00	2.00	1.00	1.00	1.96	0.04
Final Sat.:	1465	133	1700	249	0	1349	1700	3400	1700	1700	3237	61
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.01	0.00	0.06	0.06	0.22	0.02	0.01	0.32	0.33
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	35	Level Of Service:	A	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1	0	1 0	1 1 0
Volume Module:												
Base Vol:	233	1	3	1	0	8	21	550	90	10	878	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1	3	1	0	8	21	550	90	10	878	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1	3	1	0	8	21	550	90	10	878	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	233	1	3	1	0	8	21	550	90	10	878	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1	3	1	0	8	21	550	90	10	878	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	233	1	3	1	0	8	21	550	90	10	878	7
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.25	0.75	0.11	0.00	0.89	1.00	1.72	0.28	1.00	1.98	0.02
Final Sat.:	1700	400	1199	178	0	1420	1700	2849	449	1700	3273	25
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.19	0.20	0.01	0.27	0.28
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	195	0	39	0	0	0	0	467	88	23	700	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	0	39	0	0	0	0	467	88	23	700	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	0	39	0	0	0	0	467	88	23	700	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	0	39	0	0	0	0	467	88	23	700	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	0	39	0	0	0	0	467	88	23	700	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	0	39	0	0	0	0	467	88	23	700	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1332	0	266	0	0	0	0	2791	507	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.15	0.00	0.00	0.00	0.00	0.17	0.17	0.01	0.21	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.384
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	95	0	69	0	0	0	0	434	71	39	628	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	0	69	0	0	0	0	434	71	39	628	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	0	69	0	0	0	0	434	71	39	628	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	0	69	0	0	0	0	434	71	39	628	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	0	69	0	0	0	0	434	71	39	628	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	0	69	0	0	0	0	434	71	39	628	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.72	0.28	1.00	2.00	0.00
Final Sat.:	926	0	672	0	0	0	0	2849	449	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.10	0.00	0.00	0.00	0.00	0.15	0.16	0.02	0.18	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.348
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	42	0	58	0	0	0	0	465	27	34	631	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	0	58	0	0	0	0	465	27	34	631	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	0	58	0	0	0	0	465	27	34	631	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	0	58	0	0	0	0	465	27	34	631	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	0	58	0	0	0	0	465	27	34	631	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	0	58	0	0	0	0	465	27	34	631	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.42	0.00	0.58	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	671	0	927	0	0	0	0	3123	175	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.15	0.02	0.19	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	44	1	89	13	1	16	6	505	13	41	603	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	1	89	13	1	16	6	505	13	41	603	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	1	89	13	1	16	6	505	13	41	603	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	1	89	13	1	16	6	505	13	41	603	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	1	89	13	1	16	6	505	13	41	603	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	1	89	13	1	16	6	505	13	41	603	10
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.01	0.99	0.43	0.03	0.54	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1700	18	1580	692	53	852	1700	3218	80	1700	3246	52
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.01	0.02	0.02	0.00	0.16	0.16	0.02	0.19	0.19
Crit Moves:	****			****			****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	180	1694	201	131	1844	218	234	296	189	311	373	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1694	201	131	1844	218	234	296	189	311	373	267
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	1694	201	131	1844	218	234	296	189	311	373	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	1694	201	131	1844	218	234	296	189	311	373	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1694	201	131	1844	218	234	296	189	311	373	267
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	1694	201	131	1844	218	234	296	189	311	373	267
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	0.99	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.22	0.78	1.00	1.17	0.83
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2053	1245	1700	1965	1333
Capacity Analysis Module:												
Vol/Sat:	0.11	0.33	0.12	0.08	0.36	0.13	0.14	0.14	0.15	0.18	0.19	0.20
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.005
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1893	575	595	1504	0	0	0	0	488	0	610
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1893	575	595	1504	0	0	0	0	488	0	610
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1893	575	595	1504	0	0	0	0	488	0	610
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1893	575	595	1504	0	0	0	0	488	0	610
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1893	575	595	1504	0	0	0	0	488	0	610
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1893	575	595	1504	0	0	0	0	488	0	610
OvlAdjVol:			331									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.34	0.17	0.29	0.00	0.00	0.00	0.00	0.14	0.00	0.36
OvlAdjV/S:			0.19									
Crit Moves:		****		****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	48	0	11	21	1	117	99	976	39	8	875	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	0	11	21	1	117	99	976	39	8	875	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	0	11	21	1	117	99	976	39	8	875	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	0	11	21	1	117	99	976	39	8	875	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	0	11	21	1	117	99	976	39	8	875	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	0	11	21	1	117	99	976	39	8	875	17
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.15	0.01	0.84	1.00	2.00	1.00	1.00	1.96	0.04
Final Sat.:	1598	0	1700	241	11	1345	1700	3400	1700	1700	3237	61
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.01	0.09	0.09	0.06	0.29	0.02	0.00	0.27	0.28
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	141	0	11	5	3	43	30	786	132	13	710	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	0	11	5	3	43	30	786	132	13	710	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	141	0	11	5	3	43	30	786	132	13	710	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	0	11	5	3	43	30	786	132	13	710	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	0	11	5	3	43	30	786	132	13	710	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	0	11	5	3	43	30	786	132	13	710	3
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.98	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.10	0.06	0.84	1.00	1.71	0.29	1.00	1.99	0.01
Final Sat.:	1700	0	1598	157	94	1347	1700	2838	460	1700	3285	13
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.03	0.03	0.02	0.28	0.29	0.01	0.22	0.22
Crit Moves:	****			****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.436
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	80	0	26	0	0	0	0	676	127	31	646	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	0	26	0	0	0	0	676	127	31	646	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	0	26	0	0	0	0	676	127	31	646	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	0	26	0	0	0	0	676	127	31	646	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	0	26	0	0	0	0	676	127	31	646	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	0	26	0	0	0	0	676	127	31	646	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.75	0.00	0.25	0.00	0.00	0.00	0.00	1.68	0.32	1.00	2.00	0.00
Final Sat.:	1206	0	392	0	0	0	0	2793	505	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.07	0.00	0.00	0.00	0.00	0.24	0.25	0.02	0.19	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.422
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	56	0	55	0	0	0	0	604	65	74	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	0	55	0	0	0	0	604	65	74	590	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	0	55	0	0	0	0	604	65	74	590	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	0	55	0	0	0	0	604	65	74	590	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	55	0	0	0	0	604	65	74	590	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	0	55	0	0	0	0	604	65	74	590	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.50	0.00	0.50	0.00	0.00	0.00	0.00	1.81	0.19	1.00	2.00	0.00
Final Sat.:	806	0	792	0	0	0	0	2987	311	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.07	0.00	0.00	0.00	0.00	0.20	0.21	0.04	0.17	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.427
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	32	0	63	0	0	0	0	671	38	78	627	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	0	63	0	0	0	0	671	38	78	627	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	0	63	0	0	0	0	671	38	78	627	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	0	63	0	0	0	0	671	38	78	627	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	0	63	0	0	0	0	671	38	78	627	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	0	63	0	0	0	0	671	38	78	627	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.34	0.00	0.66	0.00	0.00	0.00	0.00	1.89	0.11	1.00	2.00	0.00
Final Sat.:	538	0	1060	0	0	0	0	3127	171	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.21	0.22	0.05	0.18	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.433
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	31	0	73	11	0	13	8	695	31	91	662	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	0	73	11	0	13	8	695	31	91	662	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	0	73	11	0	13	8	695	31	91	662	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	0	73	11	0	13	8	695	31	91	662	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	0	73	11	0	13	8	695	31	91	662	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	0	73	11	0	13	8	695	31	91	662	21
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.46	0.00	0.54	1.00	1.91	0.09	1.00	1.94	0.06
Final Sat.:	1700	0	1598	732	0	866	1700	3162	136	1700	3200	98
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.01	0.00	0.02	0.00	0.22	0.23	0.05	0.21	0.21
Crit Moves:			****	****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.873
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	87	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	251	1875	177	198	2029	275	267	315	166	207	264	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	251	1875	177	198	2029	275	267	315	166	207	264	127
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	251	1875	177	198	2029	275	267	315	166	207	264	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	251	1875	177	198	2029	275	267	315	166	207	264	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	251	1875	177	198	2029	275	267	315	166	207	264	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	251	1875	177	198	2029	275	267	315	166	207	264	127
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	0.98	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.31	0.69	1.00	1.35	0.65
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2195	1103	1700	2260	1038
Capacity Analysis Module:												
Vol/Sat:	0.15	0.37	0.10	0.12	0.40	0.16	0.16	0.14	0.15	0.12	0.12	0.12
Crit Moves:	****				****		****				****	

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APPENDIX 6.2: GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.031
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1479	426	689	1591	0	0	0	0	470	0	727
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1479	426	689	1591	0	0	0	0	470	0	727
Added Vol:	0	0	9	5	0	0	0	0	0	26	0	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1479	435	694	1591	0	0	0	0	496	0	742
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1479	435	694	1591	0	0	0	0	496	0	742
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1479	435	694	1591	0	0	0	0	496	0	742
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1479	435	694	1591	0	0	0	0	496	0	742
OvlAdjVol:			187									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.26	0.20	0.31	0.00	0.00	0.00	0.00	0.15	0.00	0.44
OvlAdjV/S:			0.11									
Crit Moves:		****			****							****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.580
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	33	3	8	14	0	76	106	732	36	11	1032	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	3	8	14	0	76	106	732	36	11	1032	20
Added Vol:	0	0	0	0	0	0	0	14	0	0	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	3	8	14	0	76	106	746	36	11	1072	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	33	3	8	14	0	76	106	746	36	11	1072	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	3	8	14	0	76	106	746	36	11	1072	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	3	8	14	0	76	106	746	36	11	1072	20
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	0.92	0.08	1.00	0.16	0.00	0.84	1.00	2.00	1.00	1.00	1.96	0.04
Final Sat.:	1465	133	1700	249	0	1349	1700	3400	1700	1700	3239	59
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.01	0.00	0.06	0.06	0.22	0.02	0.01	0.33	0.34
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1	1 0	1 0	1 1 0
Volume Module:												
Base Vol:	233	1	3	1	0	8	21	550	90	10	878	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1	3	1	0	8	21	550	90	10	878	7
Added Vol:	0	0	0	0	0	0	0	14	0	0	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1	3	1	0	8	21	564	90	10	918	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	233	1	3	1	0	8	21	564	90	10	918	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1	3	1	0	8	21	564	90	10	918	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	233	1	3	1	0	8	21	564	90	10	918	7
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.25	0.75	0.11	0.00	0.89	1.00	1.72	0.28	1.00	1.98	0.02
Final Sat.:	1700	400	1199	178	0	1420	1700	2858	440	1700	3274	24
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.20	0.20	0.01	0.28	0.29
Crit Moves:	****					****	****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	195	0	39	0	0	0	0	467	88	23	700	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	0	39	0	0	0	0	467	88	23	700	0
Added Vol:	0	0	0	0	0	0	0	14	0	0	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	0	39	0	0	0	0	481	88	23	740	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	0	39	0	0	0	0	481	88	23	740	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	0	39	0	0	0	0	481	88	23	740	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	0	39	0	0	0	0	481	88	23	740	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.83	0.00	0.17	0.00	0.00	0.00	0.00	1.69	0.31	1.00	2.00	0.00
Final Sat.:	1332	0	266	0	0	0	0	2804	494	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.15	0.00	0.00	0.00	0.00	0.17	0.18	0.01	0.22	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.399
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	95	0	69	0	0	0	0	434	71	39	628	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	0	69	0	0	0	0	434	71	39	628	0
Added Vol:	0	0	0	0	0	0	0	14	0	0	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	0	69	0	0	0	0	448	71	39	668	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	0	69	0	0	0	0	448	71	39	668	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	0	69	0	0	0	0	448	71	39	668	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	0	69	0	0	0	0	448	71	39	668	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	1.73	0.27	1.00	2.00	0.00
Final Sat.:	926	0	672	0	0	0	0	2861	437	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.10	0.00	0.00	0.00	0.00	0.16	0.16	0.02	0.20	0.00
Crit Moves:			****				****				****	

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Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	506	695	7	0	18
Future Vol, veh/h	0	506	695	7	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	550	755	8	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	382
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	616
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	616
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.03
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	616
HCM Lane V/C Ratio	-	-	-	0.032
HCM Control Delay (s/veh)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	492	680	5	33	22
Future Vol, veh/h	14	492	680	5	33	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	535	739	5	36	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	745	0	-	0	1040	372
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	298	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	859	-	-	-	226	625
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	727	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	859	-	-	-	222	625
Mov Cap-2 Maneuver	-	-	-	-	334	-
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	727	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.26	0	15.25
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	859	-	-	-	411
HCM Lane V/C Ratio	0.018	-	-	-	0.146
HCM Control Delay (s/veh)	9.3	-	-	-	15.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.352
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	42	0	58	0	0	0	0	465	27	34	631	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	0	58	0	0	0	0	465	27	34	631	0
Added Vol:	0	0	0	0	0	0	0	33	0	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	0	58	0	0	0	0	498	27	34	643	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	0	58	0	0	0	0	498	27	34	643	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	0	58	0	0	0	0	498	27	34	643	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	0	58	0	0	0	0	498	27	34	643	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.42	0.00	0.58	0.00	0.00	0.00	0.00	1.90	0.10	1.00	2.00	0.00
Final Sat.:	671	0	927	0	0	0	0	3134	164	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.16	0.16	0.02	0.19	0.00
Crit Moves:			****				****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.363
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1	1 0	1 0	1 1 0
Volume Module:												
Base Vol:	44	1	89	13	1	16	6	505	13	41	603	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	1	89	13	1	16	6	505	13	41	603	10
Added Vol:	0	0	0	0	0	0	0	33	0	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	1	89	13	1	16	6	538	13	41	615	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	1	89	13	1	16	6	538	13	41	615	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	1	89	13	1	16	6	538	13	41	615	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	1	89	13	1	16	6	538	13	41	615	10
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.01	0.99	0.43	0.03	0.54	1.00	1.95	0.05	1.00	1.97	0.03
Final Sat.:	1700	18	1580	692	53	852	1700	3223	75	1700	3247	51
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.01	0.02	0.02	0.00	0.17	0.17	0.02	0.19	0.20
Crit Moves:		****			****			****				****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.868	
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	85	Level Of Service:	D	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	180	1694	201	131	1844	218	234	296	189	311	373	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1694	201	131	1844	218	234	296	189	311	373	267
Added Vol:	5	0	0	0	0	3	7	11	15	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	1694	201	131	1844	221	241	307	204	311	377	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	185	1694	201	131	1844	221	241	307	204	311	377	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	1694	201	131	1844	221	241	307	204	311	377	267
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	185	1694	201	131	1844	221	241	307	204	311	377	267
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	0.99	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.20	0.80	1.00	1.17	0.83
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2022	1276	1700	1973	1325
Capacity Analysis Module:												
Vol/Sat:	0.11	0.33	0.12	0.08	0.36	0.13	0.14	0.15	0.16	0.18	0.19	0.20
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	1.016
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 1	2	0 3	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	1893	575	595	1504	0	0	0	0	488	0	610
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1893	575	595	1504	0	0	0	0	488	0	610
Added Vol:	0	0	28	16	0	0	0	0	0	17	0	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1893	603	611	1504	0	0	0	0	505	0	620
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1893	603	611	1504	0	0	0	0	505	0	620
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1893	603	611	1504	0	0	0	0	505	0	620
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1893	603	611	1504	0	0	0	0	505	0	620
OvlAdjVol:			351									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.35	0.18	0.29	0.00	0.00	0.00	0.00	0.15	0.00	0.36
OvlAdjV/S:			0.21									
Crit Moves:		****		****								****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Old Ranch Plaza & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.561
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	48	0	11	21	1	117	99	976	39	8	875	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	0	11	21	1	117	99	976	39	8	875	17
Added Vol:	0	0	0	0	0	0	0	45	0	0	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	0	11	21	1	117	99	1021	39	8	902	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	0	11	21	1	117	99	1021	39	8	902	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	0	11	21	1	117	99	1021	39	8	902	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	0	11	21	1	117	99	1021	39	8	902	17
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	1.00	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.15	0.01	0.84	1.00	2.00	1.00	1.00	1.96	0.04
Final Sat.:	1598	0	1700	241	11	1345	1700	3400	1700	1700	3239	59
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.01	0.09	0.09	0.06	0.30	0.02	0.00	0.28	0.29
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Basswood & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	141	0	11	5	3	43	30	786	132	13	710	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	0	11	5	3	43	30	786	132	13	710	3
Added Vol:	0	0	0	0	0	0	0	45	0	0	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	141	0	11	5	3	43	30	831	132	13	737	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	0	11	5	3	43	30	831	132	13	737	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	0	11	5	3	43	30	831	132	13	737	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	0	11	5	3	43	30	831	132	13	737	3
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.10	0.06	0.84	1.00	1.73	0.27	1.00	1.99	0.01
Final Sat.:	1700	0	1598	157	94	1347	1700	2860	438	1700	3285	13
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.01	0.00	0.03	0.03	0.02	0.29	0.30	0.01	0.22	0.23
Crit Moves:	****			****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Candleberrry & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.450
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	80	0	26	0	0	0	0	676	127	31	646	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	0	26	0	0	0	0	676	127	31	646	0
Added Vol:	0	0	0	0	0	0	0	45	0	0	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	0	26	0	0	0	0	721	127	31	673	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	0	26	0	0	0	0	721	127	31	673	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	0	26	0	0	0	0	721	127	31	673	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	0	26	0	0	0	0	721	127	31	673	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.98	0.94	1.00	1.00	1.00
Lanes:	0.75	0.00	0.25	0.00	0.00	0.00	0.00	1.70	0.30	1.00	2.00	0.00
Final Sat.:	1206	0	392	0	0	0	0	2819	479	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.07	0.00	0.00	0.00	0.00	0.26	0.27	0.02	0.20	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Heather & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.429
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	56	0	55	0	0	0	0	604	65	74	590	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	0	55	0	0	0	0	604	65	74	590	0
Added Vol:	0	0	0	0	0	0	0	45	0	0	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	0	55	0	0	0	0	649	65	74	617	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	0	55	0	0	0	0	649	65	74	617	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	55	0	0	0	0	649	65	74	617	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	0	55	0	0	0	0	649	65	74	617	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.50	0.00	0.50	0.00	0.00	0.00	0.00	1.82	0.18	1.00	2.00	0.00
Final Sat.:	806	0	792	0	0	0	0	3007	291	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.07	0.00	0.00	0.00	0.00	0.22	0.22	0.04	0.18	0.00
Crit Moves:			****					****		****		

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Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	754	674	20	0	12
Future Vol, veh/h	0	754	674	20	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	820	733	22	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	377
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	620
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	620
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.93
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	620
HCM Lane V/C Ratio	-	-	-	0.021
HCM Control Delay (s/veh)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	45	709	679	16	22	15
Future Vol, veh/h	45	709	679	16	22	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	771	738	17	24	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	755	0	-	0	1230	378
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	483	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	851	-	-	-	170	620
Stage 1	-	-	-	-	429	-
Stage 2	-	-	-	-	586	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	851	-	-	-	160	620
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	586	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.57	0	15.99
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	851	-	-	-	368
HCM Lane V/C Ratio	0.057	-	-	-	0.109
HCM Control Delay (s/veh)	9.5	-	-	-	16
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Rose & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	0	0	1	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	32	0	63	0	0	0	0	671	38	78	627	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	0	63	0	0	0	0	671	38	78	627	0
Added Vol:	0	0	0	0	0	0	0	22	0	0	36	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	0	63	0	0	0	0	693	38	78	663	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	0	63	0	0	0	0	693	38	78	663	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	0	63	0	0	0	0	693	38	78	663	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	0	63	0	0	0	0	693	38	78	663	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.97	0.94	1.00	1.00	1.00
Lanes:	0.34	0.00	0.66	0.00	0.00	0.00	0.00	1.90	0.10	1.00	2.00	0.00
Final Sat.:	538	0	1060	0	0	0	0	3132	166	1700	3400	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.06	0.00	0.00	0.00	0.00	0.22	0.23	0.05	0.20	0.00
Crit Moves:			****						****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Tulip & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0	0	1! 0	0	1 0	1 1 0	1 0	1	1 0
Volume Module:												
Base Vol:	31	0	73	11	0	13	8	695	31	91	662	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	0	73	11	0	13	8	695	31	91	662	21
Added Vol:	0	0	0	0	0	0	0	22	0	0	36	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	0	73	11	0	13	8	717	31	91	698	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	0	73	11	0	13	8	717	31	91	698	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	0	73	11	0	13	8	717	31	91	698	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	0	73	11	0	13	8	717	31	91	698	21
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	0.94	0.94	0.94	0.94	0.94	1.00	0.97	0.94	1.00	0.97	0.94
Lanes:	1.00	0.00	1.00	0.46	0.00	0.54	1.00	1.92	0.08	1.00	1.94	0.06
Final Sat.:	1700	0	1598	732	0	866	1700	3166	132	1700	3205	93
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.05	0.01	0.00	0.02	0.00	0.23	0.23	0.05	0.22	0.22
Crit Moves:			****	****				****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Valley View & Lampson

Cycle (sec):	130	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	251	1875	177	198	2029	275	267	315	166	207	264	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	251	1875	177	198	2029	275	267	315	166	207	264	127
Added Vol:	16	0	0	0	0	8	5	7	10	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	267	1875	177	198	2029	283	272	322	176	207	276	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	267	1875	177	198	2029	283	272	322	176	207	276	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	267	1875	177	198	2029	283	272	322	176	207	276	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	267	1875	177	198	2029	283	272	322	176	207	276	127
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.94	1.00	0.98	0.94
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.29	0.71	1.00	1.37	0.63
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	2168	1130	1700	2291	1007
Capacity Analysis Module:												
Vol/Sat:	0.16	0.37	0.10	0.12	0.40	0.17	0.16	0.15	0.16	0.12	0.12	0.13
Crit Moves:	****				****		****					****

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APPENDIX 6.3: GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

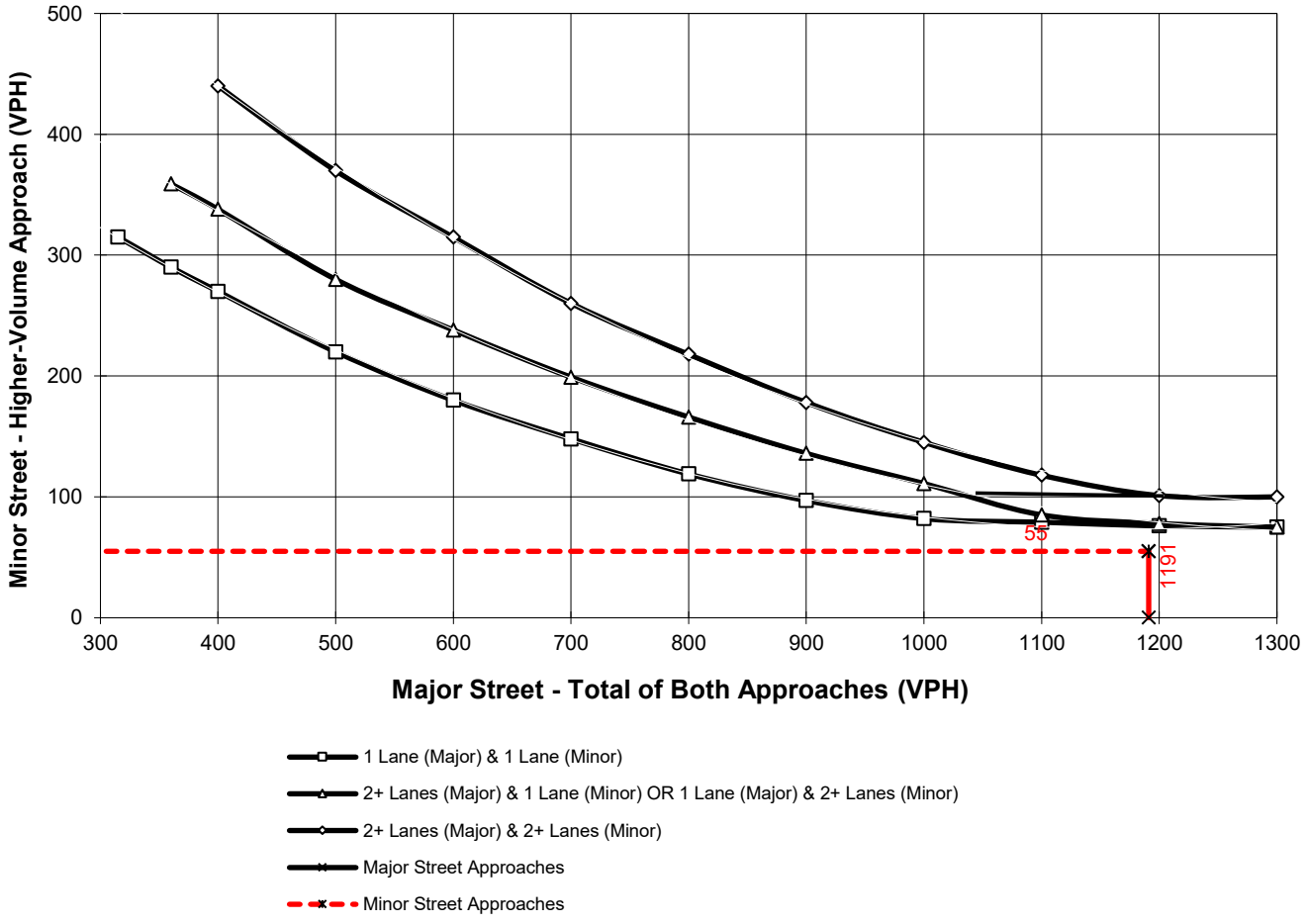
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **General Plan Buildout Conditions - Weekday AM Peak Hour**

Major Street Name = **Lampson Av.**
Total of Both Approaches (VPH) = **1191**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 2**
High Volume Approach (VPH) = **55**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		GPBO WP
				CALC CS	DATE	07/01/24
Jurisdiction: City of Seal Beach/Los Alamitos				CHK CS	DATE	07/01/24
Major Street: Lampson Av.				Critical Approach Speed (Major)		45 mph
Minor Street: Driveway 2				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **15,316** vpd Minor Street Future ADT = **578** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX / XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **15,316** / *1* **578**	9,600	6,720 *	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **15,316** / *1* **578**	14,400	10,080 *	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX				
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: 34% B: 68%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 6.4: GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.829
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1479	426	689	1591	0	0	0	0	470	0	727
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1479	426	689	1591	0	0	0	0	470	0	727
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1479	426	689	1591	0	0	0	0	470	0	727
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1479	426	689	1591	0	0	0	0	470	0	727
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1479	426	689	1591	0	0	0	0	470	0	727
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1479	426	689	1591	0	0	0	0	470	0	727
OvlAdjVol:			23									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.97
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.18	0.00	1.82
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	1984	0	3014
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.25	0.20	0.31	0.00	0.00	0.00	0.00	0.24	0.00	0.24
OvlAdjV/S:			0.01									
Crit Moves:		****			****						****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Seal Beach & Lampson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1893	575	595	1504	0	0	0	0	488	0	610
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1893	575	595	1504	0	0	0	0	488	0	610
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1893	575	595	1504	0	0	0	0	488	0	610
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1893	575	595	1504	0	0	0	0	488	0	610
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1893	575	595	1504	0	0	0	0	488	0	610
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1893	575	595	1504	0	0	0	0	488	0	610
OvlAdjVol:			203									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.98
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.33	0.00	1.67
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	2233	0	2765
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.34	0.17	0.29	0.00	0.00	0.00	0.00	0.22	0.00	0.22
OvlAdjV/S:			0.12									
Crit Moves:		****		****						****		

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APPENDIX 6.5: GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS QUEUING ANALYSIS WORKSHEETS

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1002	476	1826	526	851	1964
v/c Ratio	1.01	0.64	1.02	0.54	0.96	0.61
Control Delay (s/veh)	69.2	22.4	64.4	12.3	66.7	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.2	22.4	64.4	12.3	66.7	14.1
Queue Length 50th (ft)	~365	252	~550	181	336	308
Queue Length 95th (ft)	#409	310	#506	219	#365	295
Internal Link Dist (ft)	646		730			841
Turn Bay Length (ft)				300	375	
Base Capacity (vph)	989	751	1794	979	900	3239
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.63	1.02	0.54	0.95	0.61

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	254	527	338	695	196	1841	218	142	2004	237
v/c Ratio	1.26	0.68	1.33	0.88	1.16	0.95	0.34	1.08	1.10	0.38
Control Delay (s/veh)	182.1	39.1	201.0	50.7	167.8	47.0	14.8	157.0	88.4	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	182.1	39.1	201.0	50.7	167.8	47.0	14.8	157.0	88.4	17.4
Queue Length 50th (ft)	~211	165	~254	237	~193	533	61	~132	~691	76
Queue Length 95th (ft)	#387	227	#438	315	#356	#677	128	#276	#815	150
Internal Link Dist (ft)		1165		924		1012			1072	
Turn Bay Length (ft)	100		150		250		120	140		140
Base Capacity (vph)	201	882	255	893	169	1938	647	131	1829	622
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.60	1.33	0.78	1.16	0.95	0.34	1.08	1.10	0.38

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	773	359	1952	593	613	1551
v/c Ratio	0.86	0.55	0.92	0.56	0.92	0.47
Control Delay (s/veh)	48.1	23.5	41.7	10.0	67.1	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.1	23.5	41.7	10.0	67.1	11.2
Queue Length 50th (ft)	261	192	528	177	241	213
Queue Length 95th (ft)	338	286	#643	256	#346	247
Internal Link Dist (ft)	646		730			841
Turn Bay Length (ft)				300	375	
Base Capacity (vph)	968	662	2114	1088	690	3337
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.54	0.92	0.55	0.89	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	303	496	213	416	286	1933	182	204	2092	292
v/c Ratio	1.44	0.77	1.20	0.68	1.23	0.91	0.26	1.24	1.08	0.43
Control Delay (s/veh)	251.5	46.9	163.9	44.0	179.1	37.5	10.5	191.9	79.8	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	251.5	46.9	163.9	44.0	179.1	37.5	10.5	191.9	79.8	15.2
Queue Length 50th (ft)	~288	164	~127	136	~266	478	33	~190	~643	75
Queue Length 95th (ft)	#484	223	#308	189	#496	#713	94	#384	#870	175
Internal Link Dist (ft)		1165		924		1012			1072	
Turn Bay Length (ft)	100		150		250		120	140		140
Base Capacity (vph)	211	925	178	901	232	2127	706	165	1935	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.44	0.54	1.20	0.46	1.23	0.91	0.26	1.24	1.08	0.43

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX 6.6: GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1043	485	1826	537	857	1964
v/c Ratio	1.06	0.65	1.02	0.55	0.96	0.61
Control Delay (s/veh)	82.2	22.8	64.7	12.5	67.4	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	82.2	22.8	64.7	12.5	67.4	14.1
Queue Length 50th (ft)	~413	259	~550	187	338	308
Queue Length 95th (ft)	#445	318	#506	225	#371	295
Internal Link Dist (ft)	646		730			841
Turn Bay Length (ft)				300	375	
Base Capacity (vph)	985	751	1792	978	899	3236
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.65	1.02	0.55	0.95	0.61

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	262	556	338	700	201	1841	218	142	2004	229
v/c Ratio	1.31	0.71	1.38	0.88	1.19	0.95	0.34	1.08	1.10	0.37
Control Delay (s/veh)	198.4	39.6	222.3	50.9	178.2	47.4	14.8	157.1	89.3	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	198.4	39.6	222.3	50.9	178.2	47.4	14.8	157.1	89.3	16.9
Queue Length 50th (ft)	~226	174	~271	241	~202	536	61	~133	~695	71
Queue Length 95th (ft)	#405	239	#465	319	#368	#677	128	#276	#815	143
Internal Link Dist (ft)		1165		924		1012			1072	
Turn Bay Length (ft)	100		150		250		120	140		140
Base Capacity (vph)	200	886	245	892	169	1935	646	131	1826	620
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.63	1.38	0.78	1.19	0.95	0.34	1.08	1.10	0.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	789	371	1952	622	630	1551
v/c Ratio	0.88	0.56	0.93	0.59	0.94	0.47
Control Delay (s/veh)	49.8	23.9	42.6	10.7	70.3	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.8	23.9	42.6	10.7	70.3	11.4
Queue Length 50th (ft)	271	201	528	193	250	213
Queue Length 95th (ft)	349	300	#643	278	#361	247
Internal Link Dist (ft)	646		730			841
Turn Bay Length (ft)				300	375	
Base Capacity (vph)	957	663	2096	1080	684	3310
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.56	0.93	0.58	0.92	0.47

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	308	513	213	416	286	1933	182	204	2092	292
v/c Ratio	1.45	0.78	1.22	0.67	1.24	0.91	0.26	1.24	1.09	0.44
Control Delay (s/veh)	254.8	47.1	173.0	43.5	181.2	38.1	10.6	193.7	81.6	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	254.8	47.1	173.0	43.5	181.2	38.1	10.6	193.7	81.6	15.3
Queue Length 50th (ft)	~295	170	~133	136	~268	484	34	~191	~650	75
Queue Length 95th (ft)	#496	230	#315	189	#496	#713	94	#384	#870	175
Internal Link Dist (ft)		1165		924		1012			1072	
Turn Bay Length (ft)	100		150		250		120	140		140
Base Capacity (vph)	213	924	175	898	231	2119	703	164	1927	670
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.45	0.56	1.22	0.46	1.24	0.91	0.26	1.24	1.09	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

URBAN | CROSSROADS

4665 LAMPSON AVENUE

TRAFFIC ANALYSIS

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Reference Number	Agency	Date
14501-09A TA Report	City of Los Alamitos	September 3, 2024

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Appendix 6.1: General Plan Buildout Without Project Conditions Intersection Operations Analysis Worksheets

Appendix 6.2: General Plan Buildout With Project Conditions Intersection Operations Analysis Worksheets

Appendix 6.3: General Plan Buildout with Project Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 6.4: General Plan Buildout With Project Conditions Intersection Operations Analysis Worksheets With Improvements

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CMP	Congestion Management Program
HCM	Highway Capacity Manual
ICU	Intersection Capacity Utilization
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
OCTA	Orange County Transportation Authority
OCTAM	Orange County Transportation Analysis Model
PHF	Peak Hour Factor
Project	4665 Lampson Avenue
TA	Traffic Analysis
v/c	Volume to Capacity
vphgpl	Vehicles per Hour Green per Lane

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1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for 4665 Lampson Avenue ("Project"), which is located in the City of Los Alamitos but adjacent to the City of Seal Beach, as shown on Exhibit 1-1. The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. Although the proposed Project is located in the City of Los Alamitos, access to the site via Lampson Avenue lies within the City of Seal Beach's jurisdiction. This traffic study has been prepared in accordance with the City of Los Alamitos' requirements and the City of Seal Beach's Transportation Analysis Guidelines (June 2020, referred to as City Guidelines) as the study area intersections lie within the City of Seal Beach. (1) The Project traffic study scoping agreement is provided in Appendix 1.1 of this TA, which has been reviewed and approved by the City of Los Alamitos and City of Seal Beach.

1.1 SUMMARY OF FINDINGS

The Project is to construct the following improvements as design features in conjunction with development of the site:

- Project to implement stop controls for the southbound approach at all driveways on Lampson Avenue. Driveway 1 is proposed to be restricted to right-in/right-out access only and a median will need to be constructed to restrict the access. Access to Driveway 2 will allow for full access. For the purposes of this TA, no traffic signal has been recommended at Driveway 2 as it does not meet peak hour warrants and the intersection has been evaluated as a cross-street stop-controlled intersection.
- The Project frontage roadway of Lampson Avenue is currently constructed to its ultimate General Plan roadway classification. As such, frontage improvements will be limited to sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards. The design of Lampson Avenue should meet the City of Seal Beach's criteria.

Additional details and intersection lane geometrics are provided in Section 1.6 Recommendations of this report.

1.2 PROJECT OVERVIEW

The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). A preliminary site plan for the proposed Project is shown on Exhibit 1-2. Access to the Project site will be accommodated to Lampson Avenue via two proposed driveways. The site is currently occupied by the California Department of Fish and Wildlife building and parking lot; however, no credit has been taken for the existing use for the purposes of this traffic study in an effort to conduct a conservative analysis. The Project is anticipated to have an Opening Year of 2026.

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). (2) The Project is anticipated to generate an increase of 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147 PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 Project Trip Generation of this report.

EXHIBIT 1-1: LOCATION MAP

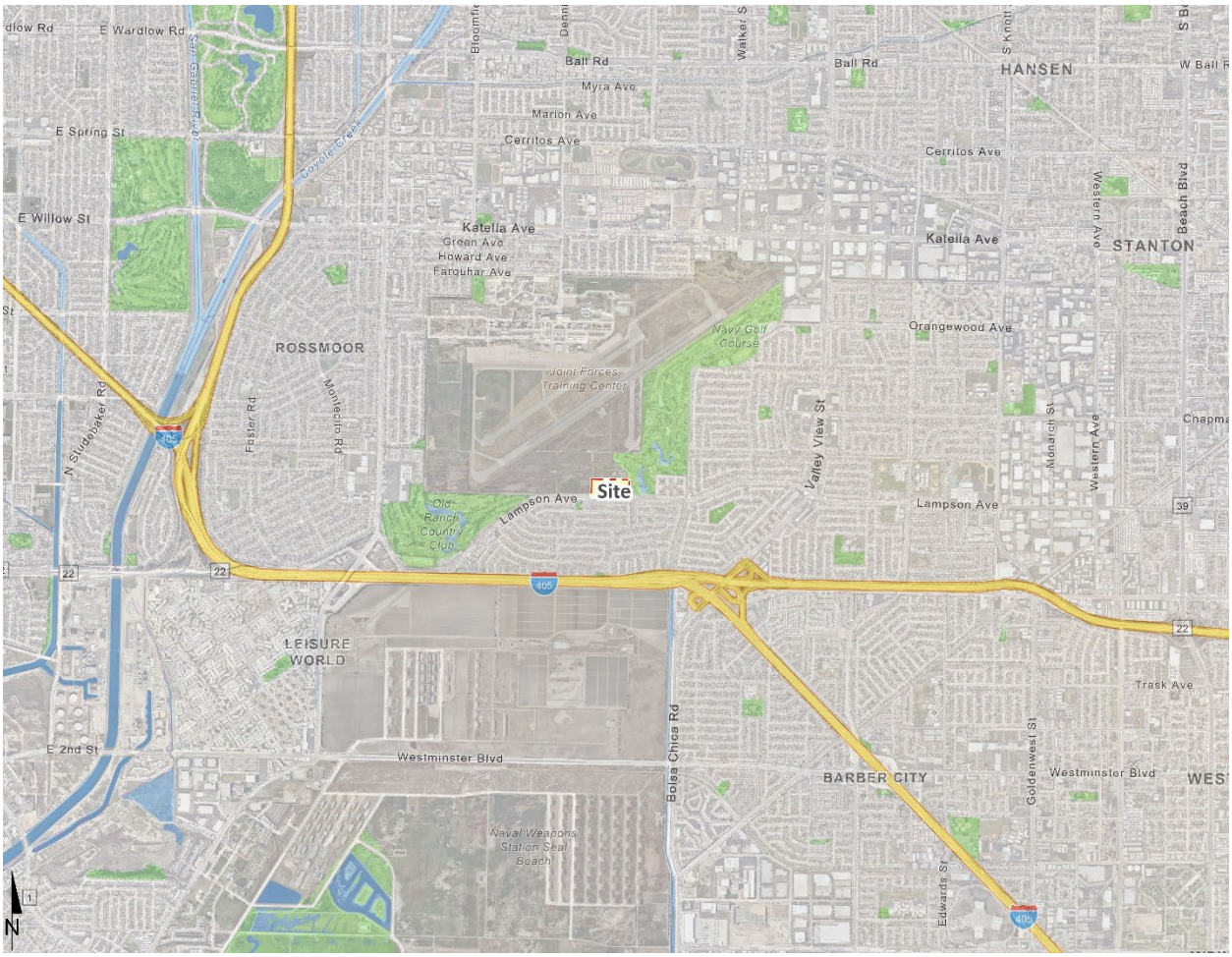


EXHIBIT 1-2: PRELIMINARY SITE PLAN



1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2022) Conditions
- Opening Year Cumulative (2026) Without Project
- Opening Year Cumulative (2026) With Buildout
- General Plan Buildout (2045) Without Project
- General Plan Buildout (2045) With Project

The General Plan Buildout volumes have been developed using the Orange County Transportation Analysis Model (OCTAM).

1.3.1 EXISTING (2022) CONDITIONS

Information for Existing (2022) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.3.2 OPENING YEAR CUMULATIVE (2026) CONDITIONS

The Opening Year Cumulative (2026) traffic conditions analyses determine the potential near-term cumulative circulation system deficiencies. The roadway network is similar to Existing conditions except for new connections to be constructed by other known cumulative projects or the Project. To account for background traffic growth, an ambient growth factor from Existing (2022) conditions of 8.24% (2 percent per year, compounded over 4 years) is included for Opening Year Cumulative (2026) traffic conditions.

Conservatively, this TA estimates the area ambient traffic growth and then adds traffic generated by other known or probable related projects. These related projects are at least in part already accounted for in the assumed ambient growth rates; and some of these related projects may not be implemented and operational within the 2026 Opening Year timeframe assumed for the Project. The resulting traffic growth utilized in the TA (ambient growth factor plus traffic generated by related projects) would therefore tend to overstate rather than understate background cumulative traffic deficiencies under 2026 conditions.

1.3.3 GENERAL PLAN BUILDOUT CONDITIONS

The General Plan Buildout traffic conditions analyses determine the potential long-range cumulative circulation system deficiencies. The roadway network is similar to Existing conditions except for new connections to be constructed by other known cumulative projects or the Project. Traffic forecasts for General Plan Buildout traffic conditions for the intersections of Seal Beach Boulevard at Lampson Avenue and Valley View Street at Lampson Avenue have been developed using OCTAM. However, all other remaining study area intersections are not reflected in the traffic model. As such, the traffic volumes at all remaining study intersections have been forecasted by applying an ambient growth factor from Existing (2022) conditions of 14% in conjunction with the traffic generated by other known or probable related projects. This growth is based on the growth observed between Existing and General Plan Buildout conditions for the two intersections that are included in the OCTAM model.

The General Plan Buildout conditions analysis will be utilized to determine if improvements needed to accommodate the long-range cumulative traffic at the target Level of Service (LOS) identified in the City of Los Alamitos (lead agency) and City of Seal Beach General Plans. (3) (4)

1.4 STUDY AREA

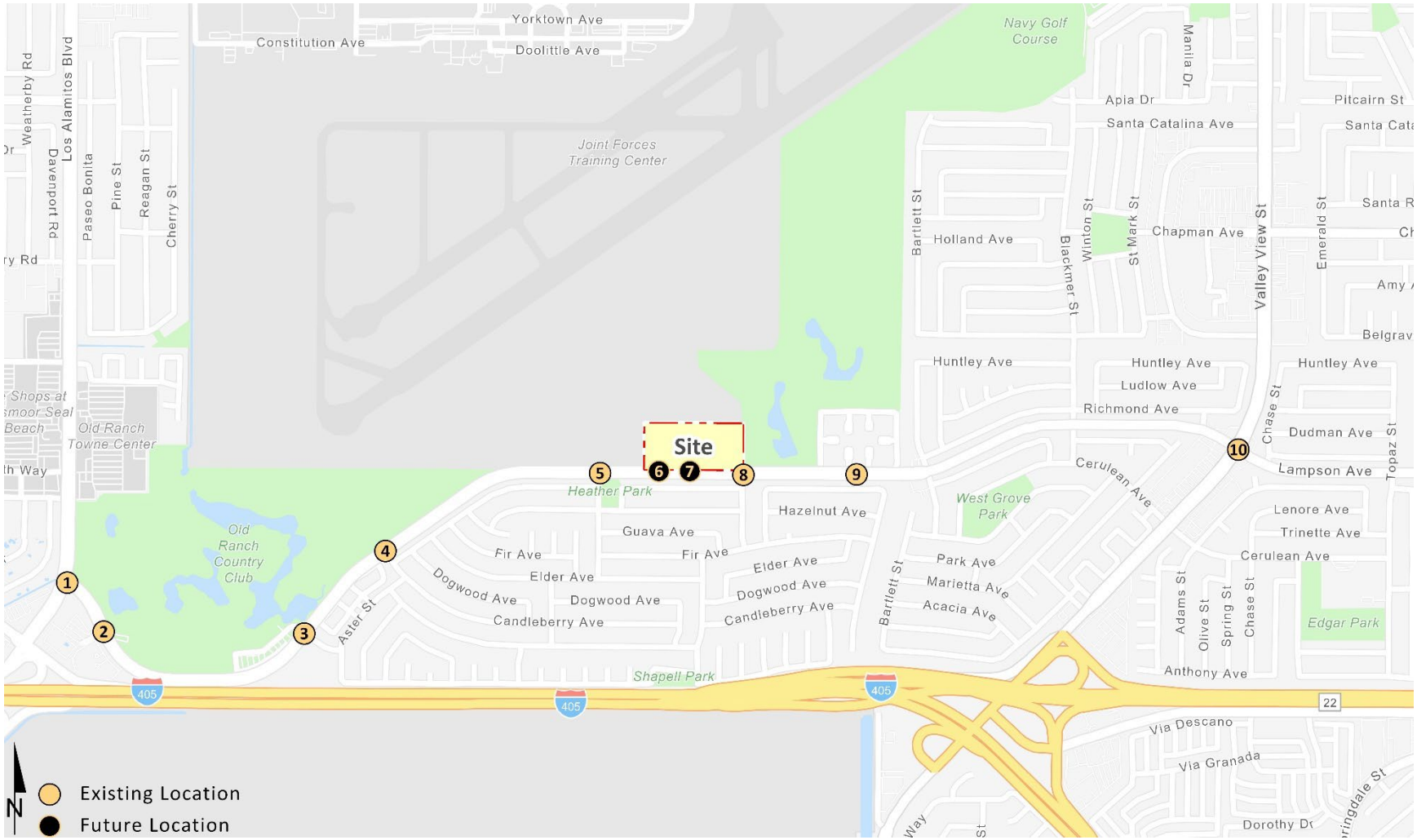
To ensure that this TA satisfies the City of Los Alamitos and City of Seal Beach's traffic study requirements, Urban Crossroads, Inc. prepared a Project traffic study scoping package for review by both agencies prior to the preparation of this report. This agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The agreement approved by both Cities is included in Appendix 1.1 of this TA.

The 10 study area intersections shown on Exhibit 1-3 and listed in Table 1-1 were selected for evaluation in this TA based on consultation with both agencies during the scoping process. The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The Orange County CMP became effective with the passage of Proposition 111 in 1990 and most recently updated in 2021. The Orange County Transportation Authority (OCTA) adopted the 2021 CMP for the County of Orange in November 2021. (5) There are no CMP intersections within the study area.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction	CMP?
1	Seal Beach Bl. & Lampson Av.	Seal Beach	No
2	Old Ranch Plaza & Lampson Av.	Seal Beach	No
3	Basswood St. & Lampson Av.	Seal Beach	No
4	Candleberry Av. & Lampson Av.	Seal Beach	No
5	Heather St. & Lampson Av.	Seal Beach/Los Alamitos	No
6	Driveway 1 & Lampson Av.	Seal Beach/Los Alamitos	No
7	Driveway 2 & Lampson Av.	Seal Beach/Los Alamitos	No
8	Rose St. & Lampson Av.	Seal Beach/Los Alamitos	No
9	Tulip St. & Lampson Av.	Seal Beach/Los Alamitos	No
10	Valley View St. & Lampson Av.	Garden Grove	No

EXHIBIT 1-3: STUDY AREA



For the purposes of this TA, a total of 9 study area roadway segments were selected for evaluation based on City of Seal Beach's Guidelines which requires analysis of any roadway segment where a project contributes one percent or more of the total traffic on the segment. Table 1-2 provides a list of study area roadway segment analysis locations.

TABLE 1-2: ROADWAY SEGMENT ANALYSIS LOCATIONS

#	Roadway	Segment Limits
1	Seal Beach Bl.	South of Lampson Av.
2	Lampson Av.	Seal Beach Bl. to Old Ranch Plaza
3	Lampson Av.	Old Ranch Plaza to Basswood St.
4	Lampson Av.	Basswood St. to Candleberry Av.
5	Lampson Av.	Candleberry Av. to Heather St.
6	Lampson Av.	Heather St. to Rose St.
7	Lampson Av.	Rose St. to Tulip St.
8	Lampson Av.	Tulip St. to Valley View St.
9	Lampson Av.	East of Valley View St.

1.5 DEFICIENCIES

This section provides a summary of deficiencies by analysis scenario. Section 2 Methodologies provides information on the methodologies used in the analysis and Section 3 Area Conditions, Section 5 Opening Year Cumulative (2026) Traffic Conditions, and Section 6 General Plan Buildout Traffic Conditions includes the detailed analyses. A summary of LOS results for all analysis scenarios are presented in Table 1-3.

1.5.1 EXISTING (2022) CONDITIONS

The study area intersections are currently operating at an acceptable LOS during the peak hours.

1.5.2 OPENING YEAR CUMULATIVE (2026) CONDITIONS

The following study area intersection is anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2026) With Project traffic conditions (see Table 1-3):

- Seal Beach Bl. & Lampson Av. (#1) – LOS E PM peak hour only

The addition of Project traffic is anticipated to increase the volume-to-capacity (v/c) ratio by more than 0.01 at the intersection of Seal Beach Boulevard and Lampson Avenue.

TABLE 1-3: SUMMARY OF LOS

#	Intersection	Existing (2022) AM	Existing (2022) PM	2026 Without Project AM	2026 Without Project PM	2026 With Project AM	2026 With Project PM	GPBO Without Project AM	GPBO Without Project PM	GPBO With Project AM	GPBO With Project PM
1	Seal Beach Bl. & Lampson Av.	A - D	A - D	A - D	A - D	A - D	E	F	F	F	F
2	Old Ranch Plaza & Lampson Av.	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D
3	Basswood St. & Lampson Av.	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D
4	Candleberry Av. & Lampson Av.	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D
5	Heather St. & Lampson Av.	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D
6	Driveway 1 & Lampson Av.	N/A	N/A	N/A	N/A	A - D	A - D	N/A	N/A	A - D	A - D
7	Driveway 2 & Lampson Av.	N/A	N/A	N/A	N/A	A - D	A - D	N/A	N/A	A - D	A - D
8	Rose St. & Lampson Av.	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D
9	Tulip St. & Lampson Av.	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D
10	Valley View St. & Lampson Av.[1]	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D	A - D

= A - D = E = F

[1] Based on HCM methodology.

1.5.3 GENERAL PLAN BUILDOUT CONDITIONS

The following study area intersection is anticipated to continue to operate at an unacceptable LOS during the peak hours under General Plan Buildout Without Project traffic conditions (see Table 1-3):

- Seal Beach Bl. & Lampson Av. (#1) – LOS F AM and PM peak hours

There are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours with the addition of Project traffic, in addition to the locations identified for General Plan Buildout Without Project traffic conditions. Similar to Opening Year Cumulative traffic conditions, the addition of Project traffic is anticipated to increase the v/c ratio by more than 0.01 at the intersection of Seal Beach Boulevard and Lampson Avenue under General Plan Buildout With Project traffic conditions.

1.6 RECOMMENDATIONS

1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

The following recommendations are based on the minimum improvements needed to accommodate site access and maintain acceptable peak hour operations for the proposed Project. The driveway intersection recommendations are shown on Exhibit 1-4 and roadway improvements are summarized below.

Driveway 1 & Lampson Avenue (#6) – Project to implement a stop control for egress traffic at Driveway 1 on Lampson Avenue. The intersection is proposed to be restricted to right-in/right-out access only. The access at this driveway should be controlled by a raised median.

Driveway 2 & Lampson Avenue (#7) – Driveway 2 is not anticipated to meet a peak hour or planning level (daily volume) based traffic signal warrant under any of the analysis scenarios. A minimum of 150-feet should be accommodated for the eastbound left turn into the Project.

The Project frontage roadway of Lampson Avenue is currently constructed to its ultimate General Plan roadway classification. As such, frontage improvements will be limited to sidewalk improvements, driveway modifications to accommodate site access, and landscaping improvements as required by City standards.

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with the identified roadway classifications and respective cross-sections in the City of Los Alamitos General Plan Circulation Element.

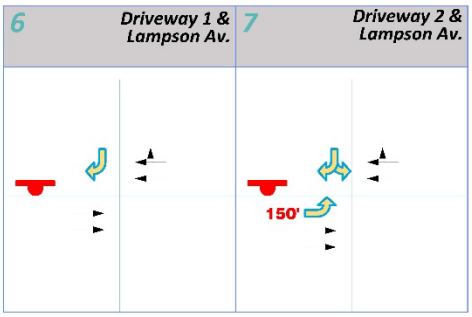
On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

1.6.2 OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the cumulative deficiency identified under Opening Year Cumulative (2026) and General Plan Buildout traffic conditions are shown in Table 1-4. The Project Applicant's responsibility for the Project's contributions towards deficient intersections is fulfilled through payment of fair share that would be assigned to construction of the identified recommended improvements.

EXHIBIT 1-4: SITE ACCESS RECOMMENDATIONS





0 = Future Intersection Analysis Location
= Stop Sign
= Existing Lane
= Lane Improvement
150' = Recommended Turn Pocket Length

TABLE 1-4: SUMMARY OF INTERSECTION IMPROVEMENTS

#	Intersection Location	Jurisdiction	Analysis Scenarios		Improvements included in Fee Program?	Mechanism for Improvement[1]	Fair Share %[2]
			2026 With Project	GPBO With Project			
1	Seal Beach Bl. & Lampson Av.	Seal Beach	Restripe the number 2 WB left as a shared left-right turn lane	Same	No	Fair Share	5.1%

[1] Identifies the Project's responsibility to construct an improvement or contribute fair share or fee payment towards the implementation of the improvements shown. If identified as a Project construct obligation, then no fair share percentage has been identified.

[2] Program improvements constructed may be eligible for fee credit, at discretion of City. See Table 7-1 for Fair Share Calculations.

1.7 QUEUING ANALYSIS

A queuing analysis has been performed for the Project driveways on Lampson Avenue under General Plan Buildout With Project traffic conditions. Both Driveway 1 and Driveway 2 on Lampson Avenue are evaluated assuming cross-street stop-controlled intersections for the purposes of the queuing assessment. The traffic modeling and signal timing optimization software package SimTraffic has been utilized to assess the queues. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. These random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each applicable turn lane. The SimTraffic simulation has been recorded 5 times, during the weekday AM and PM peak hours, and has been seeded for 15-minute periods with 60-minute recording intervals. Queuing analysis worksheets for the weekday AM and PM peak hours are provided in Appendix 1.2 of this report for General Plan Buildout With Project traffic conditions.

As shown in Table 1-5, no site adjacent queues are anticipated under General Plan Buildout traffic conditions. An eastbound left turn lane with a minimum of 150-feet of storage at Driveway 2 is anticipated to sufficiently accommodate 95th percentile peak hour queues.

TABLE 1-5: PEAK HOUR QUEUING SUMMARY FOR GENERAL PLAN BUILDOUT CONDITIONS

#	Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet) AM Peak Hour	95th Percentile Queue (Feet) PM Peak Hour	Acceptable? [1] AM	Acceptable? [1] PM
6	Driveway 1 & Lampson Av.	SBR	100	39	37	Yes	Yes
7	Driveway 2 & Lampson Av.	SBL/R	100	58	60	Yes	Yes
		EBL	150	23	42	Yes	Yes
		WBT	520	0	3	Yes	Yes

* SB = Southbound, EB = Eastbound, WB = Westbound, L = Left, T = Through, R = Right

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

1.8 PEDESTRIAN & BICYCLE FACILITIES

As noted previously, frontage improvements will include sidewalk improvements, driveway modifications to accommodate site access, and landscaping improvements as required by City standards. The proposed sidewalk along the Project's frontage on the north side of Lampson Avenue will provide connectivity with proposed sidewalks and paths internal to the Project. The Project should also maintain the existing Class II (on-street, striped) bike lanes along its frontage on Lampson Avenue.

2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with City Guidelines.

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Los Alamitos requires signalized CMP intersections to be evaluated through ICU analysis which compares the peak hour traffic volumes to intersection capacity. Lane capacities of 1,600 vehicles per hour of green time (left turn and shared lanes) and 1,700 vehicles per hour of green time (through and right turn lanes) for the ICU calculations. 0.10 has been assumed representing 10 percent for the yellow clearance/lost time and inherent vehicle delay between cycles with an assumed signal cycle of 100 seconds. The ICU LOS definitions based on volume to capacity (v/c) ratio are presented in Table 2-1. The Traffix software package has been utilized to evaluate the signalized intersections using the ICU methodology with the analysis parameters discussed above.

TABLE 2-1 INTERSECTION CAPACITY UTILIZATION (ICU) LOS DEFINITIONS

Level of Service	Critical Volume to Capacity Ratio
A	0.00 - 0.60
B	0.61 - 0.70
C	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	>1.00

Source: 2021 OCTA CMP, Figure 1 (Chapter 2)

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Los Alamitos and City of Seal Beach require the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (6) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (6) The HCM uses different procedures depending on the type of intersection control.

The traffic modeling and signal timing optimization software package Synchro (Version 11) has been utilized to analyze signalized intersections. Synchro is a microscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Equations are used to determine measures of effectiveness such as delay and queue length.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (6)

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 6th Edition

[1] If V/C is greater than 1.0 then LOS is F per HCM.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by the California Department of Transportation (Caltrans) and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans' California Manual on Uniform Traffic Control Devices (CA MUTCD), for all study area intersections. (7)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (7) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions. Rural warrants have been utilized for intersections located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour and urban warrants have been utilized for those that operate at less than 40 miles per hour. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

Traffic signal warrant analyses were performed for the future unsignalized study area intersection of Driveway 2 at Lampson Avenue during the peak weekday conditions wherein the Project is anticipated to contribute the highest trips. All existing study area intersections are currently signalized, so traffic signal warrant analysis has not been performed for Existing traffic conditions. Driveway 1 on Lampson Avenue is proposed to be restricted to right-in/right-out access only. As such, traffic signal warrant analysis has not been performed for Driveway 1 as the installation of a signal at this location is not suitable based on its access and location with respect to other existing and proposed signalized intersections. The traffic signal warrant analyses for future conditions are presented in Section 5 Opening Year Cumulative (2026) Traffic Conditions and Section 6 General Plan Buildout Traffic Conditions of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 ROADWAY SEGMENT CAPACITY ANALYSIS

Roadway segment operations have been evaluated using the City of Seal Beach's General Plan Roadway Segment capacity thresholds. These roadway capacities are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic. In other words, while using ADT for planning purposes is suitable with regards to evaluating potential volume to capacity with future forecasts, it is not suitable for operational analysis because it does not account for the factors listed previously. As such, where the ADT based roadway segment analysis indicates a potential roadway capacity deficiency (i.e., unacceptable LOS), a review of the

more detailed peak hour intersection analysis and progression analysis are undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity.

2.5 QUEUING ANALYSIS

The 95th percentile queuing of vehicles has been assessed at the intersections of Seal Beach Boulevard and Valley View Street along Lampson Avenue and all proximate freeway or state highway off-ramps to determine potential queuing deficiencies for the turning lanes. This queuing analysis has been conducted for General Plan Buildout traffic conditions only. Specifically, the queuing analysis is utilized to identify any potential queuing and "spill back" onto the adjacent arterial through lanes from the turn lanes. The traffic modeling and signal timing optimization software package SimTraffic has been utilized to assess the queues. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. These random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each applicable turn lane. A SimTraffic simulation has been recorded up to 5 times, during the weekday AM and weekday PM peak hours, and has been seeded for 15-minute periods with 60-minute recording intervals.

2.6 LEVEL OF SERIVCE (LOS) CRITERIA

The City of Los Alamitos and City of Seal Beach have established LOS D as the minimum level of service for all roadways/intersections within the City. Therefore, any intersection operating at LOS E or F will be considered deficient for the purposes of this analysis.

2.7 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies.

2.7.1 CITY OF LOS ALAMITOS & CITY OF SEAL BEACH

To determine whether the addition of project traffic at a study intersection result in a deficiency, the following thresholds of significance will be utilized to determine when an intersection requires improvements:

Existing ICU	Project Related Increase in ICU
0.00 - 0.69	0.06
0.70 - 0.79	0.04
0.80 - 0.89	0.02
0.90+	0.01

2.7.2 CITY OF GARDEN GROVE

To determine whether the addition of project traffic at a study intersection result in a deficiency, the following thresholds of significance will be utilized:

- Any signalized study intersection operating at an acceptable LOS D or better without project in which the addition of project traffic causes the intersection to degrade to LOS E or F shall identify improvements to improve the operations to LOS D or better.
- Any signalized intersection that is operating at LOS E or F without project traffic where the project increases v/c by 0.010 or more shall identify improvements to offset the increase in delay.
- An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur at unsignalized study intersections:

  a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or LOS F.

  AND

  b) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

2.8 PROJECT FAIR SHARE CALCULATION METHODOLOGY

For improvements that do not appear in a pre-existing fee program, a fair share contribution based on the Project's proportional share may be imposed in order to address the Project's share of deficiencies in lieu of construction. It should be noted that fair share calculations are for informational purposes only and the City's Traffic Engineer will determine the appropriate improvements to be implemented by a project (to be identified in the conditions of approval). The Project's fair share cost of improvements would be determined based on the following equation, which is the ratio of Project traffic to new traffic, where new traffic is total future traffic less existing baseline traffic:

Project Fair Share % = Project Traffic / (General Plan Buildout With Project Total Traffic – Existing (2022) Traffic)

The detailed Project fair share contribution calculations are presented in Section 7 Fair Share Calculations of this TA (see Table 7-1).

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3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Los Alamitos and City of Seal Beach General Plan Circulation Network, and a review of existing peak hour intersection operations analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the scoping agreement (Appendix 1.1), the study area includes a total of 10 existing and future intersections as shown previously on Exhibit 1-3. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF LOS ALAMITOS GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project site is located within the City of Los Alamitos. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways, as identified in the City of Los Alamitos General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Los Alamitos General Plan Circulation Element and below is a summary of the major study area roadways and their General Plan classifications:

- Smart Street (right-of-way is 122-146-feet, typically 6 to 8-lane divided roadways)
- Major Arterial (right-of-way is 120-feet, typically 6-lane divided roadways)
- Primary Arterial (right-of-way is 100-120-feet, typically 4-lane divided roadways)
- Secondary Arterial (right-of-way is 80-feet, typically 4-lane undivided roadways)

There are no classified City roadways within the study area.

3.3 CITY OF SEAL BEACH

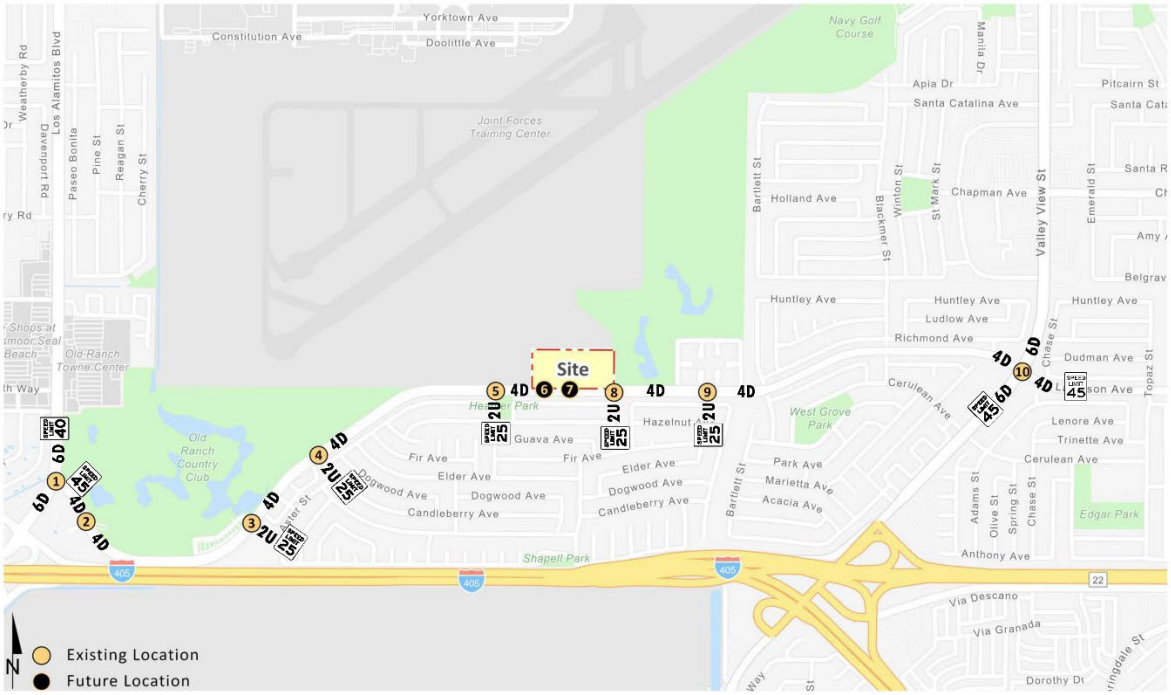
Although the Project site is located within the City of Los Alamitos, the majority of the study area lies within the City of Seal Beach. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified in the City of Seal Beach General Plan Circulation Element, are described subsequently. Exhibit 3-3 shows the City of Seal Beach General Plan Circulation Element and Below is a summary of the major study area roadways and their General Plan classifications:

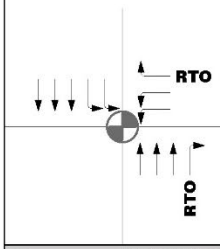
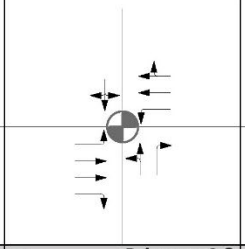
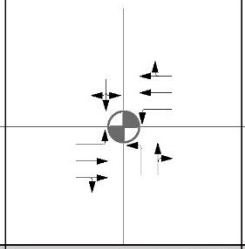
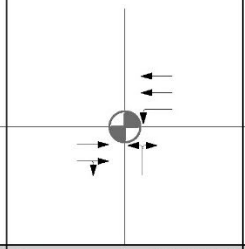
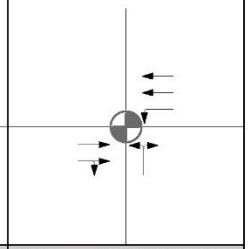
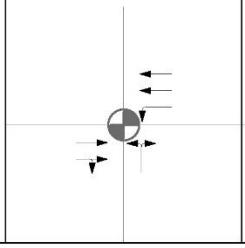
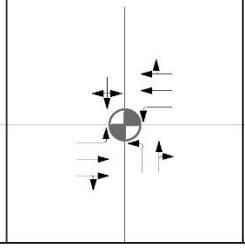
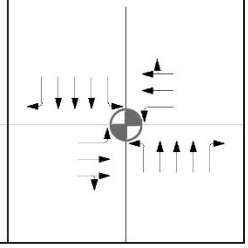
- Major Arterial (right-of-way is 120-feet, typically 6-lane divided roadways): Seal Beach Boulevard
- Primary Arterial (right-of-way is 100-feet, typically 4-lane divided roadways): None
- Secondary Arterial (right-of-way is 80-feet, typically 4-lane undivided roadways): Lampson Avenue
- Principal Roadways: Basswood Street, Candleberry Avenue, Heather Street, Rose Street, Tulip Street

3.4 BICYCLE & PEDESTRIAN FACILITIES

The City of Los Alamitos existing and planned bicycle network is shown on Exhibit 3-4 and the City of Seal Beach's is shown on Exhibit 3-5. There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. In addition, there is a Class I bike/pedestrian path on Seal Beach Boulevard north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project should maintain the existing Class II bike lane on Lampson Avenue along its frontage.

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



1 Seal Beach Bl. & Lampson Av.	2 Old Ranch Plaza & Lampson Av.	3 Basswood St. & Lampson Av.	4 Candleberry St. & Lampson Av.	5 Heather St. & Lampson Av.
				
6 Driveway 1 & Lampson Av.	**7 Driveway 2 & Lampson Av.**	**8 Rose St. & Lampson Av.**	**9 Tulip St. & Lampson Av.**	**10 Valley View St. & Lampson Av.**
Future Intersection	Future Intersection			

4 = Number of Lanes
D = Divided
U = Undivided
= Speed Limit (MPH)
= Traffic Signal
= Existing Lane
RTO = Right Turn Overlap

EXHIBIT 3-2: CITY OF LOS ALAMITOS GENERAL PLAN CIRCULATION ELEMENT

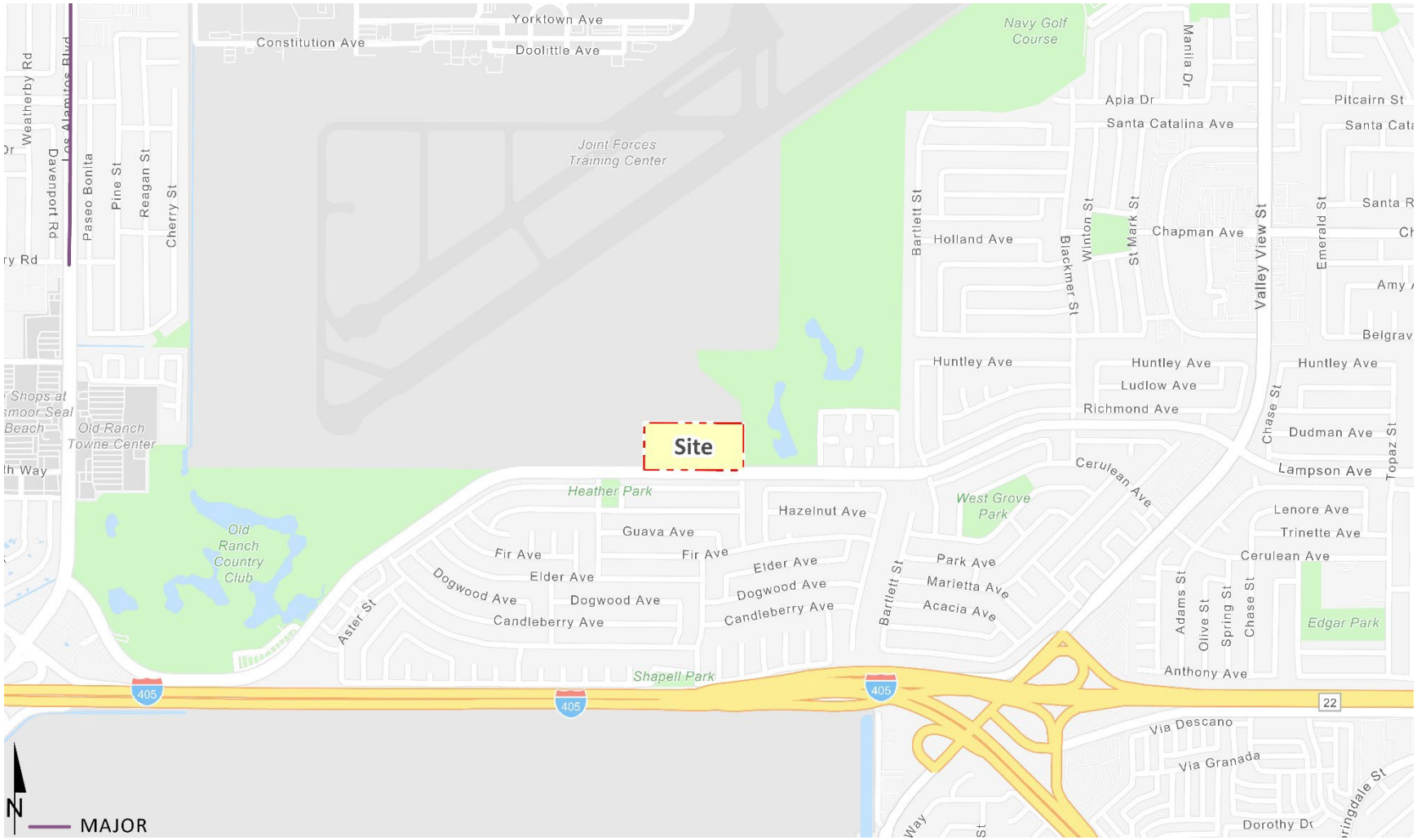


EXHIBIT 3-3: CITY OF SEAL BEACH GENERAL PLAN CIRCULATION ELEMENT

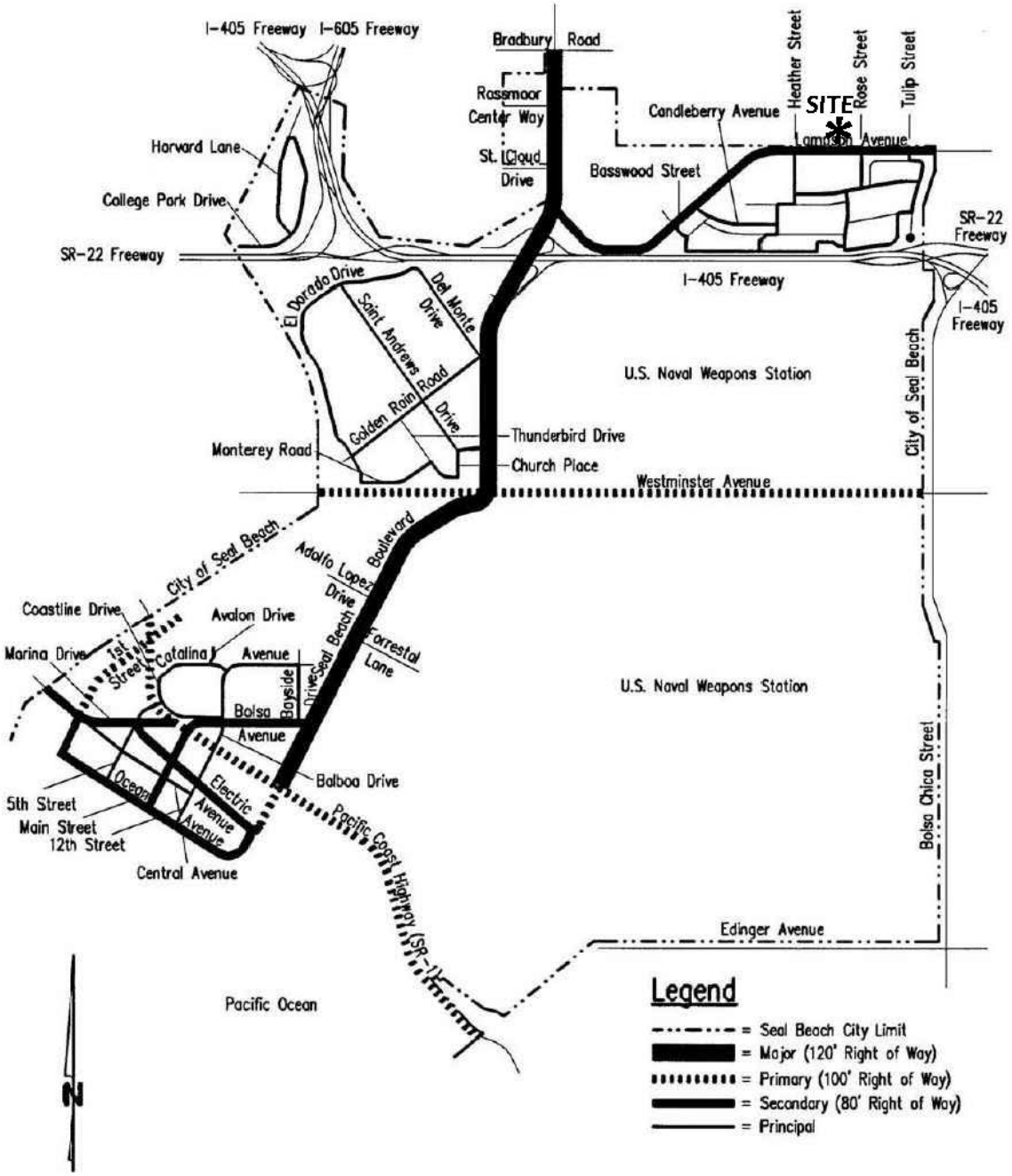


EXHIBIT 3-4: CITY OF LOS ALAMITOS EXISTING AND PLANNED BICYCLE NETWORK



EXHIBIT 3-5: CITY OF SEAL BEACH EXISITNG AND PLANNED BICYCLE NETWORK

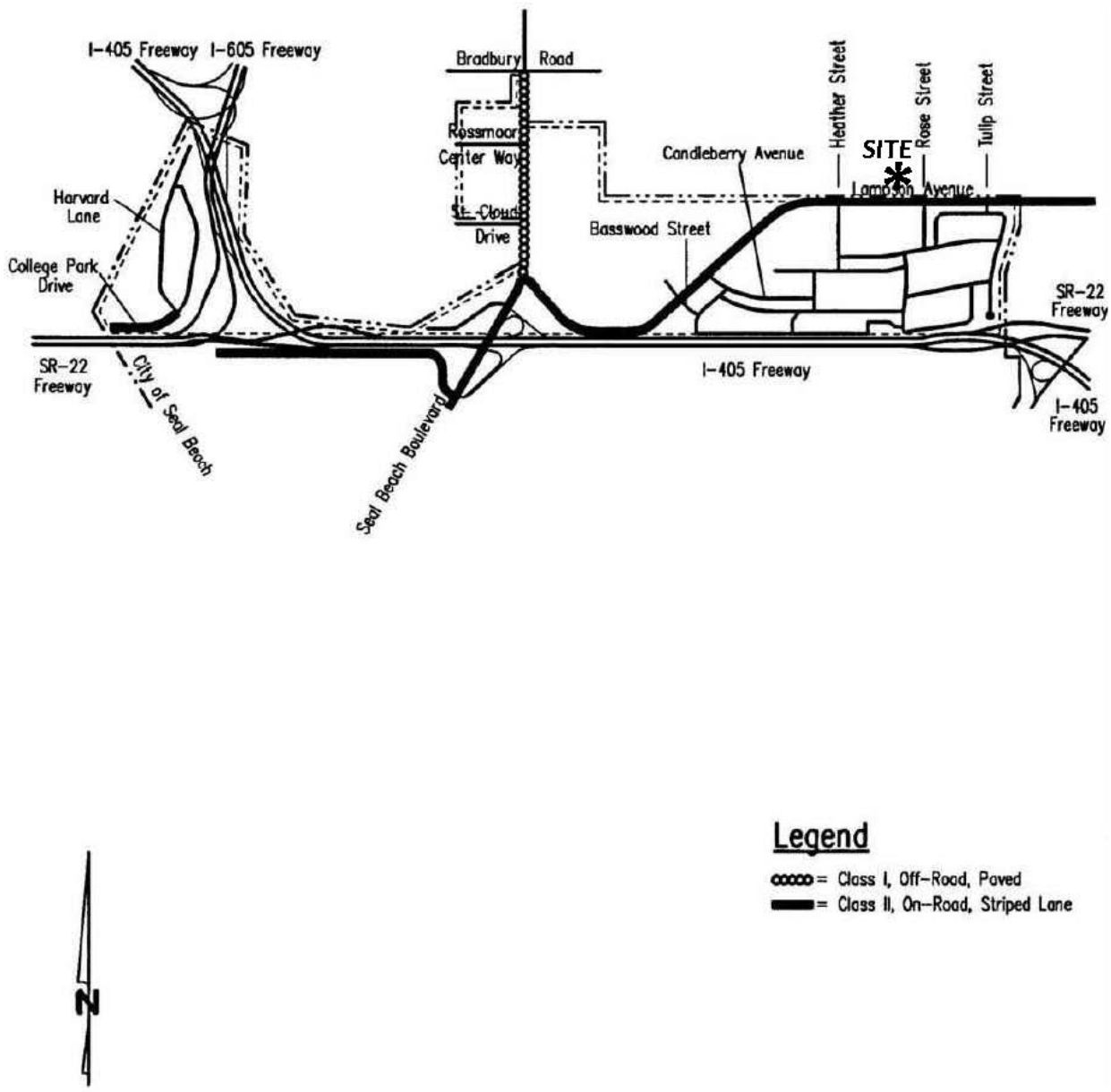


Exhibit 3-6 illustrates the existing crosswalks and existing sidewalks near the study area intersections. As shown on Exhibit 3-6, there are sidewalks provided along the frontage of the Project. The sidewalk on the north side of Lampson begins near Manley Street and continues to the east. The existing sidewalk on the south side of Lampson Avenue starts at Old Ranch Plaza and continues to the east. All signalized study area intersections accommodate at least two approaches that have crosswalks to provide connectivity to the existing sidewalks.

3.5 TRANSIT SERVICE

The study area is currently served by OCTA with bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). OCTA route 42 runs along Seal Beach Boulevard and serves Seal Beach to Orange with an existing stop provided at Lampson Avenue. Bus service frequency is approximately 20-minute intervals during the peak commute hours and 40-mintus during other times of the day during a typical weekday. OCTA Route 123 serves the City of Anaheim to City of Huntington Beach via Malvern Avenue, Valley View Street, and Bolsa Chica. There are existing stops along Valley View Street with an existing stop at Chapman Avenue. Bus service frequency is approximately 60-minute intervals on a typical weekday for OCTA Route 123. The existing bus routes and stops are illustrated on Exhibit 3-7. Transit service is reviewed and updated by OCTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. Transit routes in the area should be reviewed to consider a potential route along Lampson Avenue for service between Seal Beach Boulevard and Valley View Street.

3.6 EXISTING (2022) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in June and September 2022. The following peak hours were selected for analysis:

- AM Peak Period: 7:00-9:00 AM
- PM Peak Period: 4:00-6:00 PM

The 2022 weekday AM and PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1. Baseline volumes were adjusted to account for volume balancing between intersections so there is no unexplained loss of vehicles between intersections with no other access.

EXHIBIT 3-6: EXISTING PEDESTRIAN FACILITIES

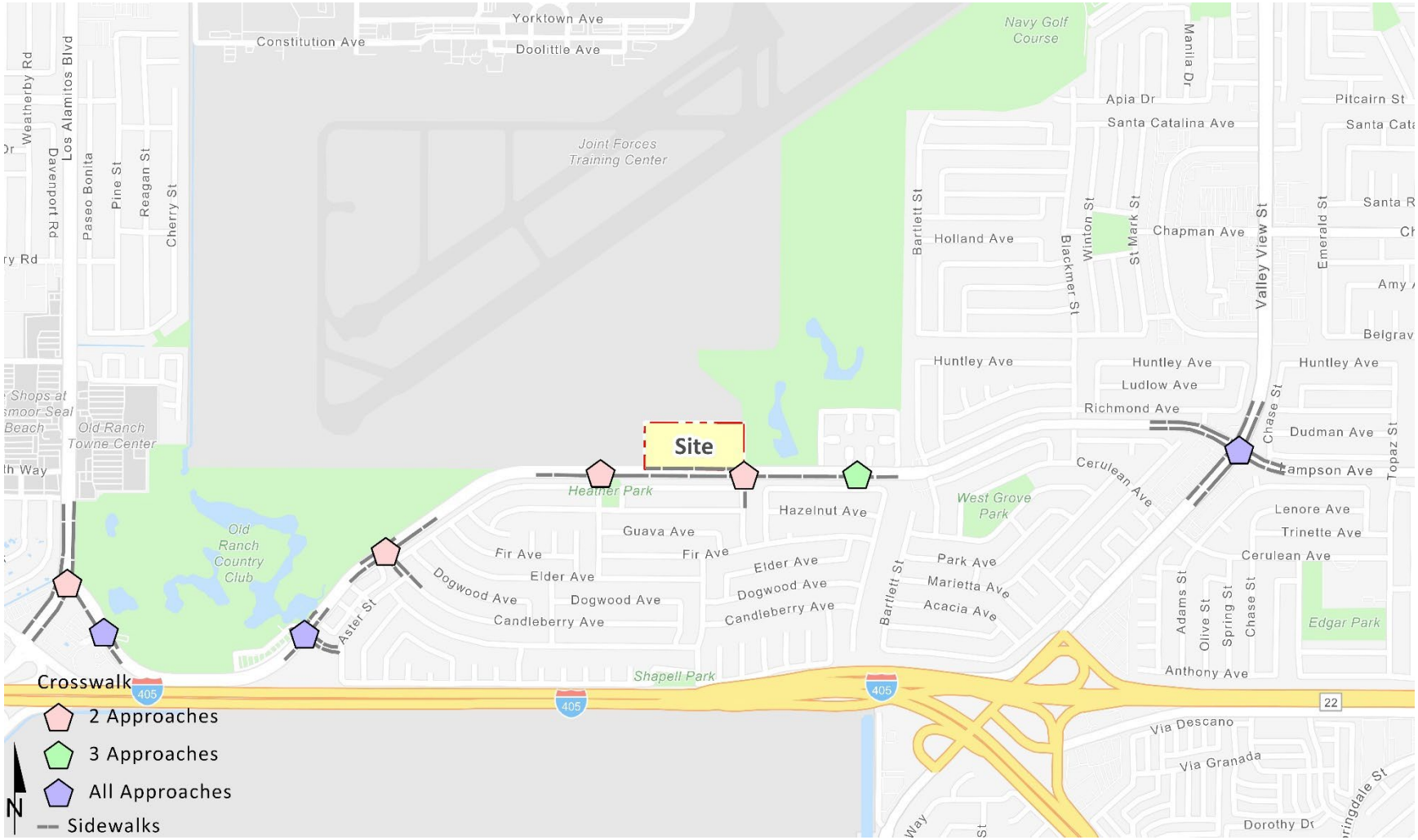
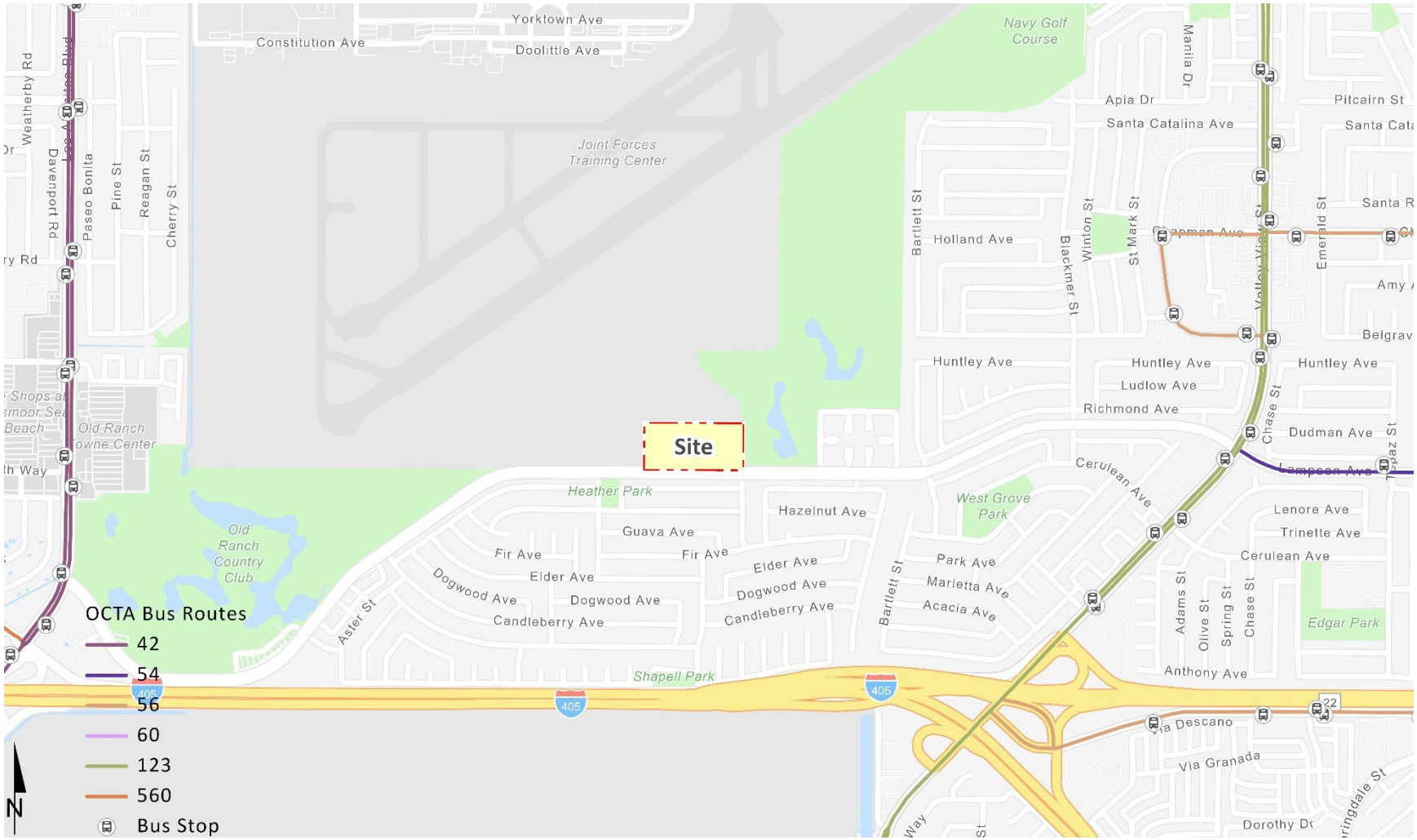


EXHIBIT 3-7: TRANSIT ROUTES



Existing weekday Average Daily Traffic (ADT) volumes are shown on Exhibit 3-8. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 10.64 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 9.40 percent. As such, the above equation utilizing a factor of 10.64 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 9.40 percent (i.e., 1/0.0940 = 10.64) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday AM and PM peak hour intersection volumes are shown on Exhibit 3-8.

3.7 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 Intersection Capacity Analysis of this report. The intersection operations analysis results are summarized in Table 3-1, which indicates that the study area intersections are currently operating at an acceptable LOS during the peak hours. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2022) CONDITIONS

#	Intersection	Traffic Control[2]	ICU (v/c)[1]		Level of Service	
			AM	PM	AM	PM
1	Seal Beach Bl. & Lampson Av.	TS	0.78	0.79	C	C
2	Old Ranch Plaza & Lampson Av.	TS	0.40	0.37	A	A
3	Basswood St. & Lampson Av.	TS	0.47	0.44	A	A
4	Candleberry Av. & Lampson Av.	TS	0.39	0.37	A	A
5	Heather St. & Lampson Av.	TS	0.34	0.37	A	A
6	Driveway 1 & Lampson Av.		Future Intersection			
7	Driveway 2 & Lampson Av.		Future Intersection			
8	Rose St. & Lampson Av.	TS	0.30	0.36	A	A
9	Tulip St. & Lampson Av.	TS	0.30	0.37	A	A
10	Valley View St. & Lampson Av.	TS	0.64	0.71	B	C

[1] ICU is reported in volume-to-capacity (v/c). ICU analysis conducted for signalized intersections only.

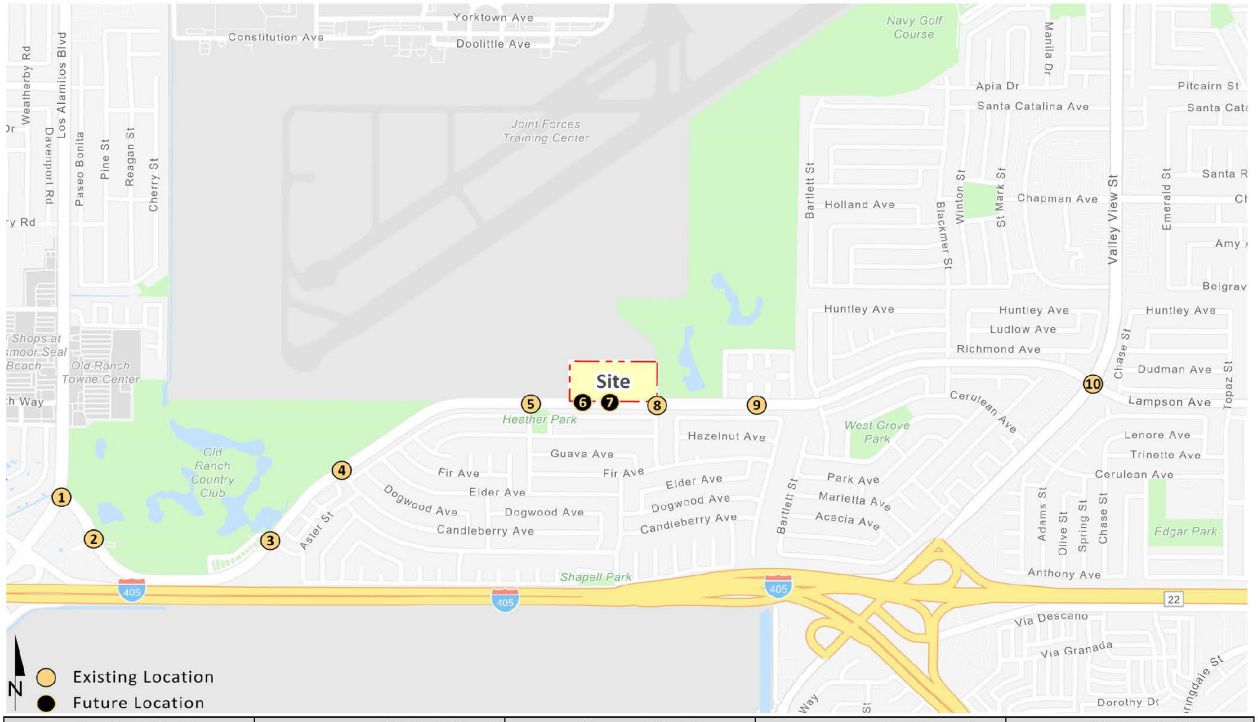
[2] TS = Traffic Signal

There are existing westbound U-turns occurring at the intersection of Heather Street and Lampson Avenue, however, the intersection operates at an acceptable LOS with the inclusion of these peak hour U-turns as shown in Table 3-1.

3.8 TRAFFIC SIGNAL WARRANTS ANALYSIS

All of the existing study area intersections are currently signalized. As such, no traffic signal warrant analysis has been conducted for Existing (2022) traffic conditions.

EXHIBIT 3-8: EXISTING (2022) TRAFFIC VOLUMES



1 Seal Beach Bl. & Lampson Av.

			17,350
38,350	1244(1202) ←	572(447) ↰	
	364(447) ↳	340(322) ↰	
		1199(1508) →	266(413) ↱
			36,650

2 Old Ranch Plaza & Lampson Av.

			16,650
Nominal	3(0) ↲	3(0) ↰	
	0(1) ←	880(727) ←	
	1(0) ↳	10(7) ↰	
	7(4) →	29(42) ↱	3(0) → 7(10) ↱
	591(822) →		
	32(34) ↳		
17,350			1,000

3 Basswood St. & Lampson Av.

			13,150
800	7(38) ↲	6(3) ↰	
	0(3) ←	730(568) ←	
	1(4) ↳	9(11) ↰	
	18(26) →	204(124) ↱	1(0) → 3(10) ↱
	420(638) →		
	79(116) ↳		
16,050			2,800

4 Candleberry Av. & Lampson Av.

			11,450
		574(512) ←	
		16(24) ↰	
	347(541) →	171(70) ↱	29(18) ↱
	77(111) ↳		
13,150			2,350

5 Heather St. & Lampson Av.

			11,650
		507(484) ←	
		30(65) ↰	
	314(499) →	83(52) ↱	55(46) ↱
	62(60) ↳		
11,650			2,350

6 Driveway 1 & Lampson Av.

			11,450
		542(517) ←	
	360(561) →		
11,450			

7 Driveway 2 & Lampson Av.

			11,450
		542(517) ←	
	360(561) →		
11,450			

8 Rose St. & Lampson Av.

			12,050
		505(489) ←	
		25(65) ↰	
	336(528) →	37(28) ↱	46(51) ↱
	24(33) ↳		
11,450			1,900

9 Tulip St. & Lampson Av.

450			13,000
	14(11) ↲	7(17) ↰	
	1(0) ←	477(516) ←	
	10(8) ↳	32(76) ↰	
	5(7) →	39(27) ↱	1(0) → 73(60) ↱
	366(545) →		
	11(27) ↳		
12,050			2,000

10 Valley View St. & Lampson Av.

41,500			10,200
	151(202) ↲	178(101) ↰	
	1529(1688) ←	184(208) ←	
	105(145) ↳	184(169) ↰	
	150(211) →	115(185) ↱	115(185) → 165(134) ↱
	234(200) →		
	126(108) ↳		
11,850			40,850

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

3.9 ROADWAY SEGMENT ANALYSIS

Table 3-2 provides a summary of the Existing (2022) conditions roadway segment capacity analysis. As shown in Table 3-2, the study area roadway segments are currently operating at an unacceptable LOS based on the daily roadway capacity thresholds and minimum LOS criteria.

TABLE 3-2: ROADWAY SEGMENT ANALYSIS FOR EXISTING (2022) CONDITIONS

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Existing 2022	Existing V/C[2]	Existing LOS[3]
1	Seal Beach Bl.	South of Lampson Av.	6D	56,300	36,668	0.651	B
2	Lampson Av.	Seal Beach Bl. to Old Ranch Plaza	4D	37,500	17,399	0.464	A
3	Lampson Av.	Old Ranch Plaza to Basswood St.	4D	37,500	16,668	0.444	A
4	Lampson Av.	Basswood St. to Candleberry Av.	4D	37,500	13,134	0.350	A
5	Lampson Av.	Candleberry Av. to Heather St.	4D	37,500	11,474	0.306	A
6	Lampson Av.	Heather St. to Rose St.	4D	37,500	11,644	0.311	A
7	Lampson Av.	Rose St. to Tulip St.	4D	37,500	12,059	0.322	A
8	Lampson Av.	Tulip St. to Valley View St.	4D	37,500	13,007	0.347	A
9	Lampson Av.	East of Valley View St.	4D	37,500	10,186	0.272	A

[1] These maximum roadway capacities are based on the City of Seal Beach's General Plan Roadway Segment Thresholds.

[2] V/C = Volume to Capacity Ratio

[3] LOS = Level of Service

4 PROJECTED FUTURE TRAFFIC

The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). Access to the Project site will be accommodated to Lampson Avenue via two proposed driveways. The site is currently occupied by the California Department of Fish and Wildlife building and parking lot; however, no credit has been taken for the existing use for the purposes of this traffic study in an effort to conduct a conservative analysis.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

4.1.1 PROPOSED PROJECT

In order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the ITE Trip Generation Manual (11th Edition, 2021) for the Single Family Detached Residential Land Use category (ITE Land Use Code 210), Multifamily (Low-Rise) Housing (ITE Land Use Code 220), and Affordable Housing (ITE Land Use Code 223) were used to calculate the Project trip generation (see Table 4-1 for rates). The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project are also shown on Table 4-1. The proposed Project is anticipated to generate 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147 PM peak hour trips.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY

		ITE LU	AM Peak Hour			PM Peak Hour			
Land Use[1]	Units[2]	Code	In	Out	Total	In	Out	Total	Daily
Single Family Detached	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily Housing (Low-Rise) (2-3 Floors)	DU	220	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Affordable Housing	DU	223	0.10	0.26	0.36	0.27	0.19	0.46	4.81

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] DU = Dwelling Units

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	55	DU	10	28	38	33	19	52	520
Multifamily Housing	114	DU	11	35	46	37	22	59	768
Affordable Housing	77	DU	8	20	28	21	15	36	370
Project Total Trips			**29**	**83**	**112**	**91**	**56**	**147**	**1,658**

[1] DU = Dwelling Units

4.1.2 PROJECT ALTERNATIVE

The proposed Project is considering an alternative that replaces the affordable housing with age-restricted housing (attached product type). The trip generation rates for the Project including the alternative attached senior housing (see Table 4-2 for rates). The trip generation summary illustrating daily, and peak hour trip generation estimates for the Project Alternative are also shown on Table 4-2. The Project Alternative is anticipated to generate 1,538 two-way trip-ends per day with 99 AM peak hour trips and 130 PM peak hour trips. As shown, the Project Alternative generates 120 fewer two-way trip-ends per day with 13 fewer AM peak hour trips and 17 fewer PM peak hour trips.

TABLE 4-2: PROJECT ALTERNATIVE TRIP GENERATION SUMMARY

		ITE LU	AM Peak Hour			PM Peak Hour			
Land Use[1]	Units[2]	Code	In	Out	Total	In	Out	Total	Daily
Single Family Detached	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily Housing (Low-Rise) (2-3 Floors)	DU	220	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Senior Housing - Attached	DU	252	0.07	0.13	0.20	0.14	0.11	0.25	3.24

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] DU = Dwelling Units

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	55	DU	10	28	38	33	19	52	520
Multifamily Housing	114	DU	11	35	46	37	22	59	768
Senior Housing Attached	77	DU	5	10	15	11	8	19	250
Project Alternative Total Trips			**26**	**73**	**99**	**81**	**49**	**130**	**1,538**
Proposed Project Total Trips			29	83	112	91	56	147	1,658
Variance (Alternative - Proposed)			**-3**	**-10**	**-13**	**-10**	**-7**	**-17**	**-120**

[1] DU = Dwelling Units

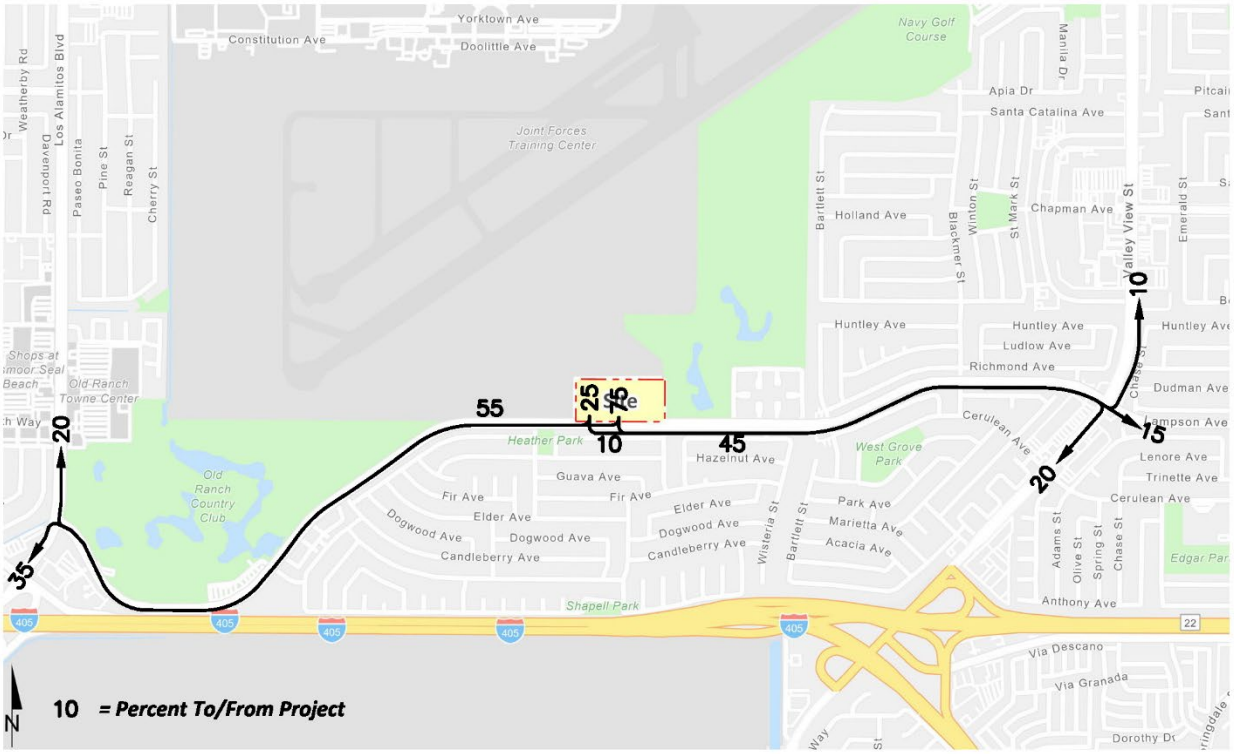
4.2 PROJECT TRIP DISTRIBUTION

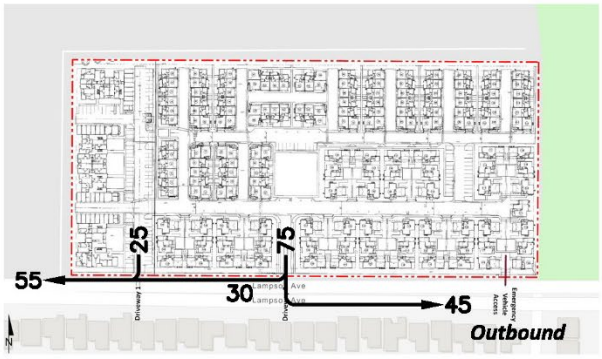
The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. Exhibit 4-1 shows the Project trip distribution patterns which was reviewed as part of the traffic study scoping process (see Appendix 1.1). Project traffic is not anticipated to utilize Heather Street for U-turns along Lampson Avenue as the multifamily component would have access to the full access driveway (Driveway 2) on Lampson Avenue for making southbound left turns.

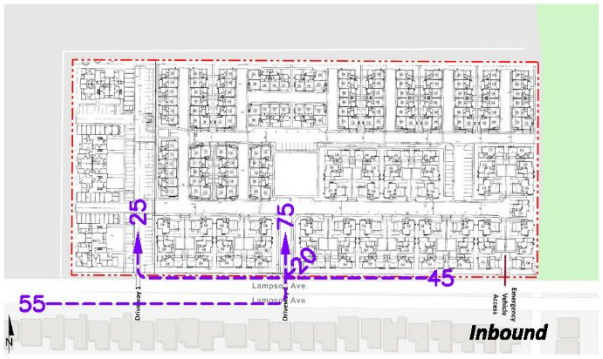
4.3 MODAL SPLIT

The potential for Project trips to be reduced by the use of public transit, walking or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes.

EXHIBIT 4-1: PROJECT TRIP DISTRIBUTION







4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project only ADT and weekday AM and PM peak hour intersection turning movement volumes are shown on Exhibit 4-2.

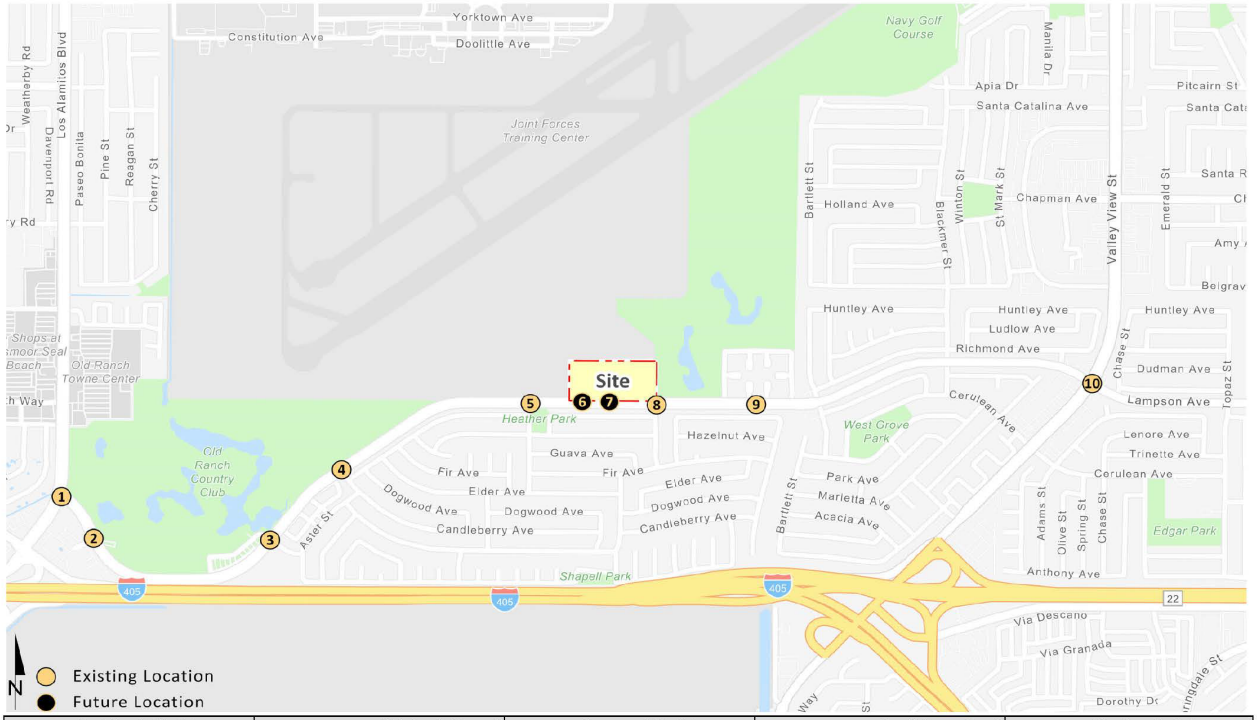
4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2.0% per year for 2026 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. The total ambient growth is 8.24% for 2026 traffic conditions (growth of 2.0 percent per year over 4 years). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. Opening Year Cumulative (2026) traffic volumes are provided in Section 6 of this report.

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list was developed for the purposes of this analysis through consultation with planning staff from the City of Los Alamitos, City of Seal Beach, and City of Garden Grove. The cumulative projects listed are those that would generate traffic and would contribute traffic to study area intersections. Exhibit 4-3 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown in Table 4-3. In an effort to conduct a conservative analysis, the cumulative projects are added in conjunction with the ambient growth identified in Section 4.5 Background Traffic. The Cumulative ADT and weekday AM and PM peak hour intersection turning movement volumes for all cumulative development projects are shown on Exhibit 4-4.

EXHIBIT 4-2: PROJECT ONLY TRAFFIC VOLUMES



1 Seal Beach Bl. & Lampson Av.	2 Old Ranch Plaza & Lampson Av.	3 Basswood St. & Lampson Av.	4 Candleberry Av. & Lampson Av.	5 Heather St. & Lampson Av.
350 / 900 6(18) ↳ ← 17(11) ← 29(20) ↱ 10(32) 600 / 900	900 ← 46(31) 16(50) → 900	900 ← 46(31) 16(50) → 900	900 ← 46(31) 16(50) → 900	900 ← 46(31) 16(50) → 900

6 Driveway 1 & Lampson Av.	7 Driveway 2 & Lampson Av.	8 Rose St. & Lampson Av.	9 Tulip St. & Lampson Av.	10 Valley View St. & Lampson Av.
400 / 900 21(14) ↳ ← 7(23) ← 25(17) 16(50) → 900	1,250 / 750 25(17) ↳ 37(25) ↳ ← 6(18) ← 7(23) 16(50) → 900	750 ← 13(41) 37(25) → 750	750 ← 13(41) 37(25) → 750	150 / 250 3(9) ↳ ← 4(14) 8(6) → 12(8) → 17(11) ↴ 6(18) ↰ 6(18) ↑ 750 / 350

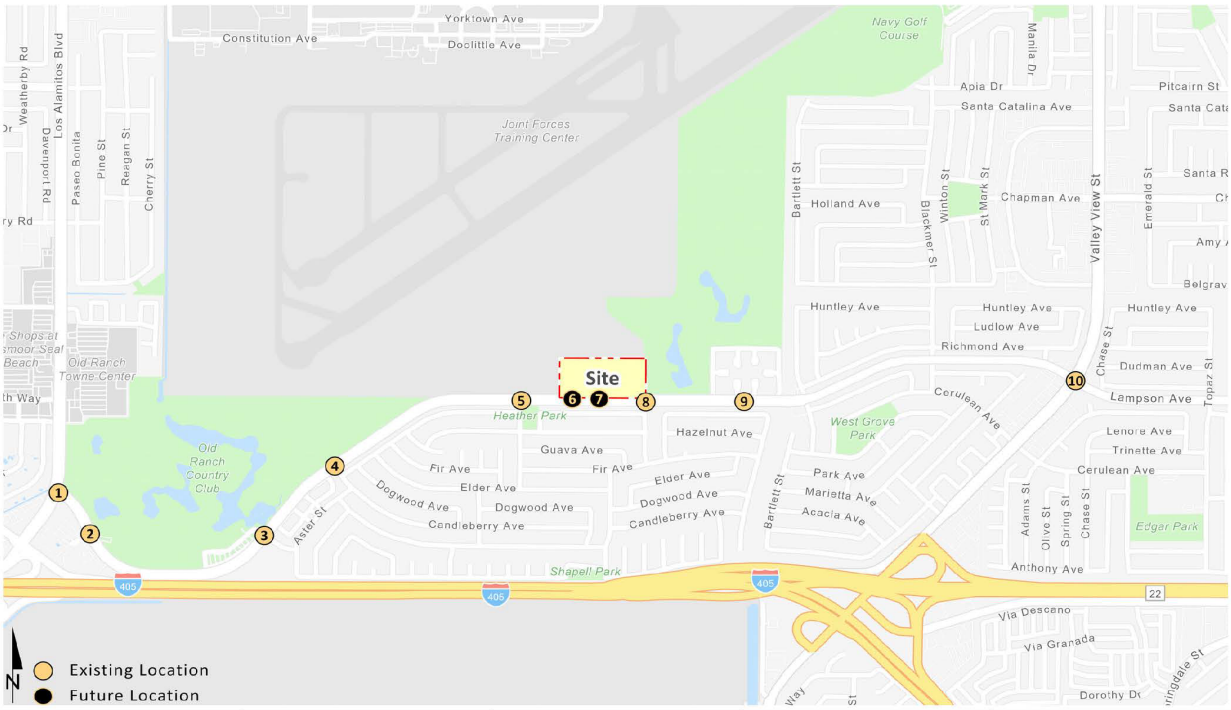
##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 4-3: CUMULATIVE DEVELOPMENT LOCATION MAP



EXHIBIT 4-4: CUMULATIVE ONLY TRAFFIC VOLUMES



1 Seal Beach Bl. & Lampson Av.	2 Old Ranch Plaza & Lampson Av.	3 Basswood St. & Lampson Av.	4 Candleberry Av. & Lampson Av.	5 Heather St. & Lampson Av.
2,600 / 1,550 / 2,550 ← 100(66) ↓ 41(35) ↰ 27(36) ← 32(29) ↑ 47(89) ↱ 28(37)	800 / 1,000 / 1,550 ↲ 31(20) ↓ 5(3) ↰ 2(6) ← 29(46) 10(33) → 58(39) →	1,000 / 1,000 / 1,000 ← 30(51) 63(42) →	1,100 / 100 / 1,000 ← 30(51) ↰ 5(4) 63(42) → ↱ 6(5)	1,150 / 100 / 1,100 ← 35(55) ↰ 5(4) 69(47) → ↱ 6(5)

6 Driveway 1 & Lampson Av.	7 Driveway 2 & Lampson Av.	8 Rose St. & Lampson Av.	9 Tulip St. & Lampson Av.	10 Valley View St. & Lampson Av.
1,150 / 1,150 / 1,150 ← 39(59) 75(52) →	1,150 / 1,150 / 1,150 ← 39(59) 75(52) →	1,250 / 100 / 1,150 ← 39(59) ↰ 5(4) 75(52) → ↱ 6(5)	Nominal / 1,350 / 100 / 1,250 ↲ 2(2) ↰ 2(2) ← 44(63) ↰ 5(4) 80(57) → ↱ 6(5)	1,150 / 400 / 950 / 1,450 ↲ 25(16) ↓ 21(17) ↓ 10(15) ↰ 21(13) ↰ 35(31) 34(26) → 19(21) → ↰ 17(22) ↑ 17(22) ↱ 8(16)

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project	Land Use	Quantity	Unit[1]
Los Alamitos				
LA1	Los Alamitos Luxury Apartments	Multifamily (Low-Rise) Housing	107	DU
LA2	Chevron Gas Station	Gas Station w/ Convenience Store	2.724	TSF
LA3	4562 Katella Avenue	Medical Office Building	5.200	TSF
LA4	Los Alamitos Medical Center (Phase 2 & 3)	Hospital Building I	92	Beds
		Hospital Building II	126	Beds
Seal Beach				
SB1	13980 Seal Beach Boulevard Project/Hydrogen Fueling Station	Hydrogen Fueling Facility	1.010	TSF
SB2	Accurate Storage	Multifamily (Mid-Rise) Housing	59	DU
SB3	Shops at Rossmoor	Multifamily (Mid-Rise) Housing	400	DU
SB4	Old Ranch Town Center	Multifamily (Mid-Rise) Housing	200	DU
SB5	Old Ranch Country Club	Multifamily (Mid-Rise) Housing	116	DU
		Senior Housing - Attached	51	DU
		Medical Office	25.340	TSF
		Hotel	150	Rooms
SB6	Leisure World	Multifamily (Mid-Rise) Housing	150	DU
SB7	Seal Beach Plaza	Multifamily (Mid-Rise) Housing	75	DU
Garden Grove				
GG1	Valley View Lanes (CUP-211-2021)	Bowling Alley	13.740	TSF
GG2	12141 Valley View Street	Restaurant	7.214	TSF
		Drive-Thru Restaurant	2.000	TSF
GG3	Marley's Preschool (CUP-212-2021)	Preschool/Day Care	84	STU
GG4	Pro Athletics (CUP-216-2022)	Athletic & Health Club/Gym	7.100	TSF

[1] DU = Dwelling Units; TSF = Thousand Square Feet; STU = Students

4.7 VOLUME DEVELOPMENT FOR GENERAL PLAN BUILDOUT CONDITIONS

Traffic projections for General Plan Buildout Without Project and With Project conditions were derived from the OCTAM Version 5.5 maintained by the OCTA. Based on the city-wide land use data and the regional socioeconomic growth projections, future trip activity is estimated and assigned to the roadway circulation system. Model output is post-processed based on established postprocessing methodologies. The post-processor applies the model's projected growth to each turning movement for both General Plan Buildout Without and With Project scenarios, forecasting a value that reflects future growth.

The traffic forecasts reflect the area-wide growth anticipated between Existing (2022) conditions and General Plan Buildout traffic conditions. In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the General Plan Buildout peak hour forecasts were refined using the model derived long range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location in June/September 2022. The OCTAM has a base (validation) year of 2016 and a horizon (future forecast) year of 2045. The difference in model volumes (2045-2016) defines the growth in traffic over the 29-year period.

The refined future peak hour approach and departure volumes obtained from the model output data are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 765), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The OCTAM uses an AM peak period-to-peak hour factor of 0.36 and a PM peak period-to-peak hour factor of 0.266. These factors represent the relationship of the highest single AM peak hour to the modeled 3-hour AM peak period (an even distribution would result in a factor of 0.33) and the highest single PM peak hour to the modeled 4-hour PM peak period (an even distribution would result in a factor of 0.25). Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent General Plan Buildout traffic conditions. In an effort to conduct a conservative analysis, reductions to traffic forecasts from either Existing traffic conditions were not assumed as part of this analysis. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the General Plan Buildout peak hour forecasts.

The future General Plan Buildout Without Project and With Project peak hour turning movements were then reviewed by Urban Crossroads, Inc. for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two adjacent driveway locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis. Post processing has been performed for the weekday AM and PM peak hours only as these are the only time periods where traffic model data was readily available. The post processed volumes for General Plan Buildout Without Project traffic conditions are provided in Appendix 4.1.

Only the intersections of Seal Beach Boulevard at Lampson Avenue and Valley View Street at Lampson Avenue are modeled in OCTAM. All other study area intersections are not reflected in the traffic model. As such, the traffic volumes at all remaining study intersections have been calculated by applying an ambient growth factor from Existing (2022) conditions of 14% in conjunction with the traffic generated by other known or probable related projects. The total growth between existing and General Plan Buildout conditions has been determined by calculating the average growth observed at the two modeled intersections.

5 OPENING YEAR CUMULATIVE (2026) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Opening Year Cumulative (2026) conditions and the resulting intersection operations and traffic signal warrant analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Cumulative conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Opening Year Cumulative conditions (e.g., intersection and roadway improvements along the cumulative development's frontages and driveways).

5.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 8.24% plus traffic from pending and approved but not yet constructed known development projects in the area. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2026) Without Project traffic conditions are shown on Exhibit 5-1.

5.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year Cumulative (2026) Without Project volumes plus Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2026) With Project traffic conditions are shown on Exhibit 5-2.

5.4 INTERSECTION OPERATIONS ANALYSIS

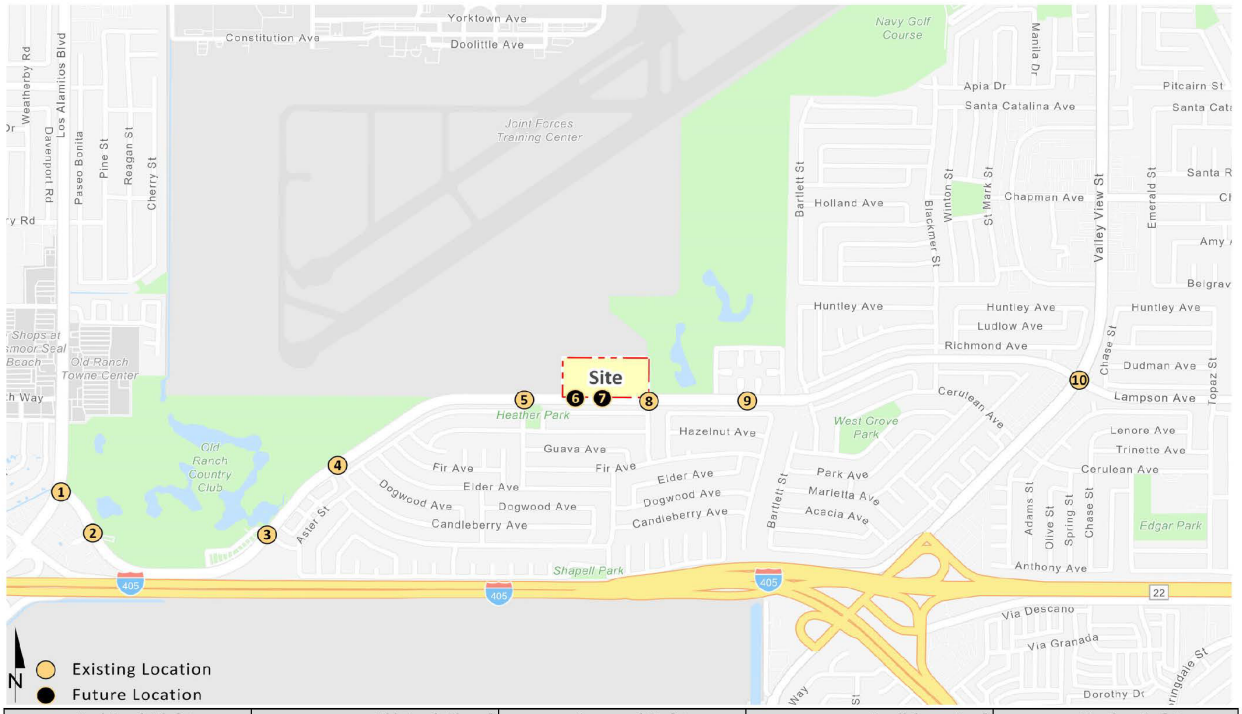
Opening Year Cumulative peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 Methodologies of this TA. The intersection analysis results are summarized in Table 5-1 for Opening Year Cumulative traffic conditions, which indicates that the study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours under Opening Year Cumulative (2026) Without Project traffic conditions.

The following study area intersection is anticipated to operate at an unacceptable LOS during the peak hours with the addition of Project traffic:

- Seal Beach Bl. & Lampson Av. (#1) – LOS E PM peak hour only

The addition of Project traffic is also anticipated to increase the v/c ratio by more than 0.01 at the intersection of Seal Beach Boulevard and Lampson Avenue. As such, improvements are provided for the deficient intersection. The intersection operations analysis worksheets for Opening Year Cumulative (2026) Without and With Project traffic conditions are included in Appendix 5.1 and Appendix 5.2 of this TA, respectively.

EXHIBIT 5-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES



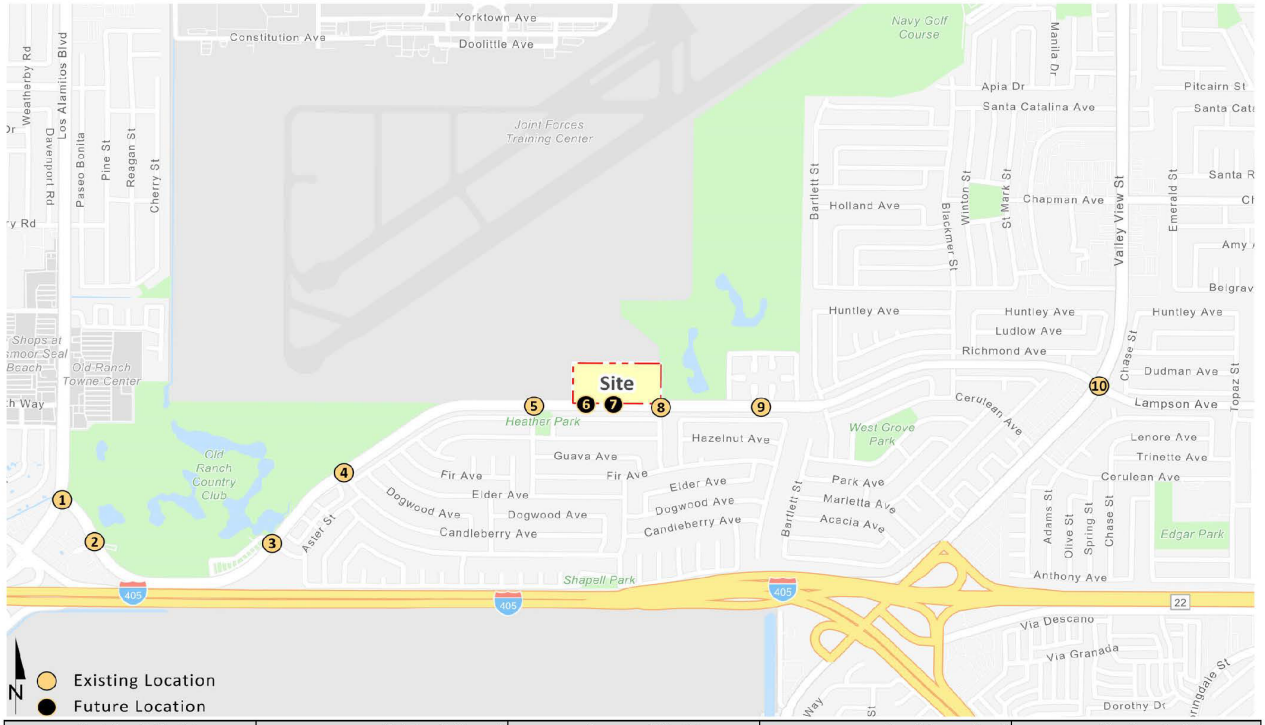
1 Seal Beach Bl. & Lampson Av.	2 Old Ranch Plaza & Lampson Av.	3 Basswood St. & Lampson Av.	4 Candleberry Av. & Lampson Av.	5 Heather St. & Lampson Av.
44,150	850	850		
1447(13367) ←	34(20) ↲	8(41) ↲		
435(519) ↳	0(1) ↓	0(3) ↓		
20,350	6(3) ↳	1(4) ↳	13,500	13,750
646(520) ↰	19,050	15,200	651(605) ←	584(579) ←
400(378) ↰	5(6) ↰	6(3) ↰	22(30) ↰	37(74) ↰
1345(1721) →	982(833) ←	820(666) ←	185(76) ↰	
316(484) ↱	11(8) ↰	10(12) ↰	37(24) ↱	
42,250	18(37) →	19(28) →	439(628) →	409(587) →
	698(929) →	518(733) →	83(120) ↴	67(65) ↴
	35(37) ↴	86(126) ↴		90(56) ↰
	31(45) ↰	221(134) ↰		66(55) ↱
	3(0) ↑	1(0) ↑		
	8(11) ↱	3(11) ↱		
	1,100	3,050	2,650	2,650
20,350	20,350	18,400	15,200	13,700

6 Driveway 1 & Lampson Av.	7 Driveway 2 & Lampson Av.	8 Rose St. & Lampson Av.	9 Tulip St. & Lampson Av.	10 Valley View St. & Lampson Av.
			550	46,100
			15(12) ↲	188(235) ↲
			1(0) ↓	1676(1844) ←
			13(11) ↳	124(172) ↳
13,600	13,600	14,300	15,450	11,400
626(619) ←	626(619) ←	586(588) ←	10(20) ↰	214(122) ↰
		32(74) ↰	560(622) ←	199(225) ←
			40(86) ↰	234(214) ↰
465(659) →	465(659) →	439(624) →	5(8) →	196(254) →
		26(36) ↴	476(647) →	253(216) →
		40(30) ↰	12(29) ↴	155(138) ↴
		56(60) ↱	42(29) ↰	141(222) ↰
			1(0) ↑	141(222) ↑
			85(70) ↱	187(161) ↱
13,600	13,600	13,600 2,100	14,300 2,250	14,300 45,150

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 5-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUMES



1 Seal Beach Bl. & Lampson Av.	2 Old Ranch Plaza & Lampson Av.	3 Basswood St. & Lampson Av.	4 Candleberry Av. & Lampson Av.	5 Heather St. & Lampson Av.
44,450 / 21,250	850 / 19,950	850 / 16,150	14,400	14,700
↓ 1447(1367) ↳ 441(537)	↲ 34(20) ↓ 0(1) ↳ 6(3)	↲ 8(41) ↓ 0(3) ↳ 1(4)		
↰ 663(531) ← 429(398)	↰ 5(6) ← 1028(864) ↰ 11(8)	↰ 6(3) ← 866(697) ↰ 10(12)	← 697(636) ↰ 22(30)	← 630(610) ↰ 37(74)
→ 1345(1721) ↱ 326(516)	18(37) → 714(979) → 35(37) ↳ ↰ 31(45) ↑ 3(0) ↱ 8(11)	19(28) → 534(783) → 86(126) ↳ ↰ 221(134) ↑ 1(0) ↱ 3(11)	455(678) → 83(120) ↳ ↰ 185(76) ↱ 37(24)	425(637) → 67(65) ↳ ↰ 90(56) ↱ 66(55)
42,850	21,250 / 1,100	19,300 / 3,050	16,150 / 2,650	14,600 / 2,650

6 Driveway 1 & Lampson Av.	7 Driveway 2 & Lampson Av.	8 Rose St. & Lampson Av.	9 Tulip St. & Lampson Av.	10 Valley View St. & Lampson Av.
400 / 14,500	1,250 / 14,350	15,050	550 / 16,200	46,300 / 11,650
↲ 21(14)	↲ 25(17) ↳ 37(25)		↲ 15(12) ↓ 1(0) ↳ 13(11)	↲ 191(244) ↓ 1676(1844) ↳ 124(172)
↰ 7(23) ← 651(636)	↰ 6(18) ← 633(642)	← 599(629) ↰ 32(74)	↰ 10(20) ← 573(663) ↰ 40(86)	↰ 214(122) ← 203(239) ↰ 234(214)
481(709) →	16(50) ↳ 465(659) →	476(649) → 26(36) ↳ ↰ 40(30) ↱ 56(60)	5(8) ↳ 513(672) → 12(29) ↳ ↰ 42(29) ↑ 1(0) ↱ 85(70)	204(260) ↳ 265(224) → 172(149) ↳ ↰ 147(240) ↑ 147(240) ↱ 187(161)
14,500	14,500	14,350 / 2,100	15,050 / 2,250	15,000 / 45,500

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

TABLE 5-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS

#	Intersection	Traffic Control[2]	2026 Without Project Delay (secs.) or ICU (v/c)[1] AM	2026 Without Project Delay (secs.) or ICU (v/c)[1] PM	2026 Without Project Level of Service AM	2026 Without Project Level of Service PM	2026 With Project Delay (secs.) or ICU (v/c)[1] AM	2026 With Project Delay (secs.) or ICU (v/c)[1] PM	2026 With Project Level of Service AM	2026 With Project Level of Service PM
1	Seal Beach Bl. & Lampson Av.	TS	0.87	0.90	D	D	0.88	**0.91**	D	**E**
2	Old Ranch Plaza & Lampson Av.	TS	0.46	0.43	A	A	0.48	0.44	A	A
3	Basswood St. & Lampson Av.	TS	0.51	0.49	A	A	0.52	0.50	A	A
4	Candleberry Av. & Lampson Av.	TS	0.43	0.41	A	A	0.44	0.43	A	A
5	Heather St. & Lampson Av.	TS	0.37	0.41	A	A	0.38	0.43	A	A
6	Driveway 1 & Lampson Av.	**CSS**	Future Intersection				10.9	10.8	B	B
7	Driveway 2 & Lampson Av.	**CSS**	Future Intersection				14.8	15.6	B	C
8	Rose St. & Lampson Av.	TS	0.33	0.41	A	A	0.33	0.41	A	A
9	Tulip St. & Lampson Av.	TS	0.34	0.41	A	A	0.34	0.42	A	A
10	Valley View St. & Lampson Av.	TS	0.72	0.81	C	D	0.73	0.83	C	D

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

ICU is reported in volume-to-capacity (v/c). ICU analysis conducted for signalized intersections only.

[2] CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

5.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

All existing study area intersections are currently signalized. As such, no traffic signal warrant analysis has been conducted for Opening Year Cumulative (2026) Without Project traffic conditions. The intersection of Driveway 2 at Lampson Avenue is not anticipated to warrant a peak hour or planning-level (ADT) based warrant under Opening Year Cumulative (2026) With Project traffic conditions. The traffic signal warrant analysis worksheets for Opening Year Cumulative (2026) With Project traffic conditions are included in Appendix 5.3 of this TA.

5.6 ROADWAY SEGMENT ANALYSIS

Table 5-2 provides a summary of the Opening Year Cumulative (2026) conditions roadway segment capacity analysis. As shown in Table 5-2, the study area roadway segments are anticipated to continue to operate at an acceptable LOS based on the daily roadway capacity thresholds and minimum LOS criteria under Opening Year Cumulative (2026) Without and With Project traffic conditions.

TABLE 5-2: ROADWAY SEGMENT ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Without Project 2026	Without Project V/C[2]	Without Project LOS[3]	With Project 2026	With Project V/C[2]	With Project LOS[3]
1	Seal Beach Bl.	South of Lampson Av.	6D	56,300	42,255	0.75	C	42,835	0.76	C
2	Lampson Av.	Seal Beach Bl. to Old Ranch Plaza	4D	37,500	20,405	0.54	A	21,317	0.57	A
3	Lampson Av.	Old Ranch Plaza to Basswood St.	4D	37,500	19,048	0.51	A	19,960	0.53	A
4	Lampson Av.	Basswood St. to Candleberry Av.	4D	37,500	15,223	0.41	A	16,135	0.43	A
5	Lampson Av.	Candleberry Av. to Heather St.	4D	37,500	13,506	0.36	A	14,418	0.38	A
6	Lampson Av.	Heather St. to Rose St.	4D	37,500	13,770	0.37	A	14,682	0.39	A
7	Lampson Av.	Rose St. to Tulip St.	4D	37,500	14,299	0.38	A	15,045	0.40	A
8	Lampson Av.	Tulip St. to Valley View St.	4D	37,500	15,437	0.41	A	16,183	0.43	A
9	Lampson Av.	East of Valley View St.	4D	37,500	11,416	0.30	A	11,664	0.31	A

[1] These maximum roadway capacities are based on the City of Seal Beach's General Plan Roadway Segment Thresholds.

[2] V/C = Volume to Capacity Ratio

[3] LOS = Level of Service

5.7 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for Opening Year Cumulative (2026) traffic conditions. Based on deficiency criteria discussed in Section 2.5 *Deficiency Criteria*, the following intersection was found to be deficient. Improvements necessary to improve the traffic deficiency back to acceptable levels are discussed below.

Seal Beach Boulevard & Lampson Avenue (#1): The intersection of Seal Beach Boulevard and Lampson Avenue is anticipated to meet the applicable deficiency criteria for LOS. As shown in Table 5-3, restriping the number two westbound left turn lane as a shared left-right turn lane would improve the intersection operations back to acceptable LOS.

The intersection operations analysis worksheets for Opening Year Cumulative (2026) With Project traffic conditions, with improvements, are included in Appendix 5.4 of this TA.

TABLE 5-3: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS WITH IMPROVEMENTS

			Intersection Approach Lanes[1]														Level of Service	
		Traffic	Northbound			Southbound			Eastbound			Westbound			ICU (v/c)[2]			
#	Intersection	Control[3]	L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Seal Beach Bl. & Lampson Av.																	
	- Without Improvements	TS	0	3	1>	2	3	0	0	0	0	2	0	1>	0.88	**0.91**	D	**E**
	- With Improvements[4]	TS	0	3	1>	2	3	0	0	0	0	**1**	**1**	1>	0.71	0.78	C	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] ICU is reported in volume-to-capacity (v/c). ICU analysis conducted for signalized intersections only.

[3] TS = Traffic Signal

[4] Improvement includes restriping the number 2 westbound left as a shared left-right turn lane.

6 GENERAL PLAN BUILDOUT TRAFFIC CONDITIONS

This section discusses the traffic forecasts for General Plan Buildout conditions and the resulting intersection operations and traffic signal warrant analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for General Plan Buildout conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for General Plan Buildout conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for General Plan Buildout conditions (e.g., intersection and roadway improvements along the cumulative development's frontages and driveways).

6.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

For the intersections of Seal Beach Boulevard at Lampson Avenue and Valley View Steet at Lampson Avenue the General Plan Buildout Without Project weekday AM and PM peak hour volumes are based on the OCTAM traffic model. For the remaining study intersections, the scenario includes Existing traffic volumes plus an ambient growth factor of 14% plus traffic from pending and approved but not yet constructed known development projects in the area (see Section 4.7 for additional discussion on volume development). The weekday ADT and weekday AM and PM peak hour volumes which can be expected for General Plan Buildout Without Project traffic conditions are shown on Exhibit 6-1.

6.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes General Plan Buildout Without Project volumes plus Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for General Plan Buildout With Project traffic conditions are shown on Exhibit 6-2.

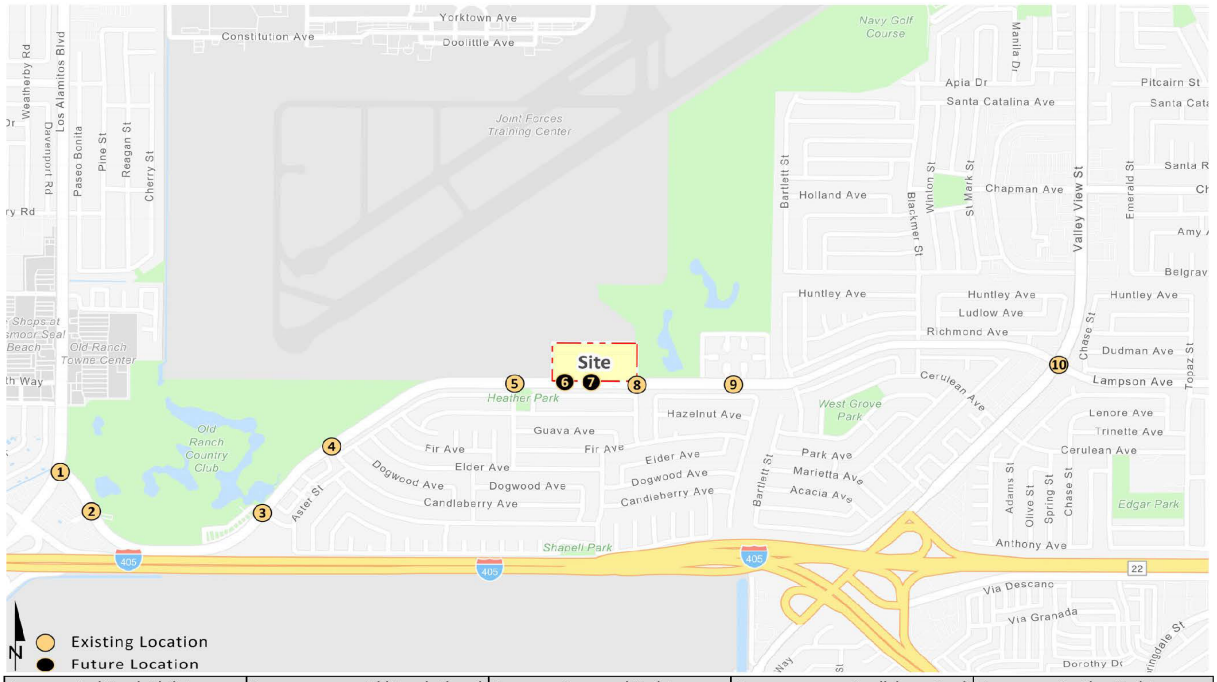
6.4 INTERSECTION OPERATIONS ANALYSIS

General Plan Buildout peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 Methodologies of this TA. The intersection analysis results are summarized in Table 6-1 for General Plan Buildout traffic conditions, which indicates that the following study area intersection is anticipated to continue to operate at an unacceptable LOS during the peak hours under General Plan Buildout Without Project traffic conditions:

- Seal Beach Bl. & Lampson Av. (#1) – LOS F AM and PM peak hours

There are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours with the addition of Project traffic, in addition to the locations identified for General Plan Buildout Without Project traffic conditions. However, the addition of Project traffic is anticipated to increase the v/c ratio by more than 0.01 at the intersection of Seal Beach Boulevard and Lampson Avenue. As such, improvements are provided for the deficient intersections.

EXHIBIT 6-1: GENERAL PLAN BUILDOUT WITHOUT PROJECT TRAFFIC VOLUMES

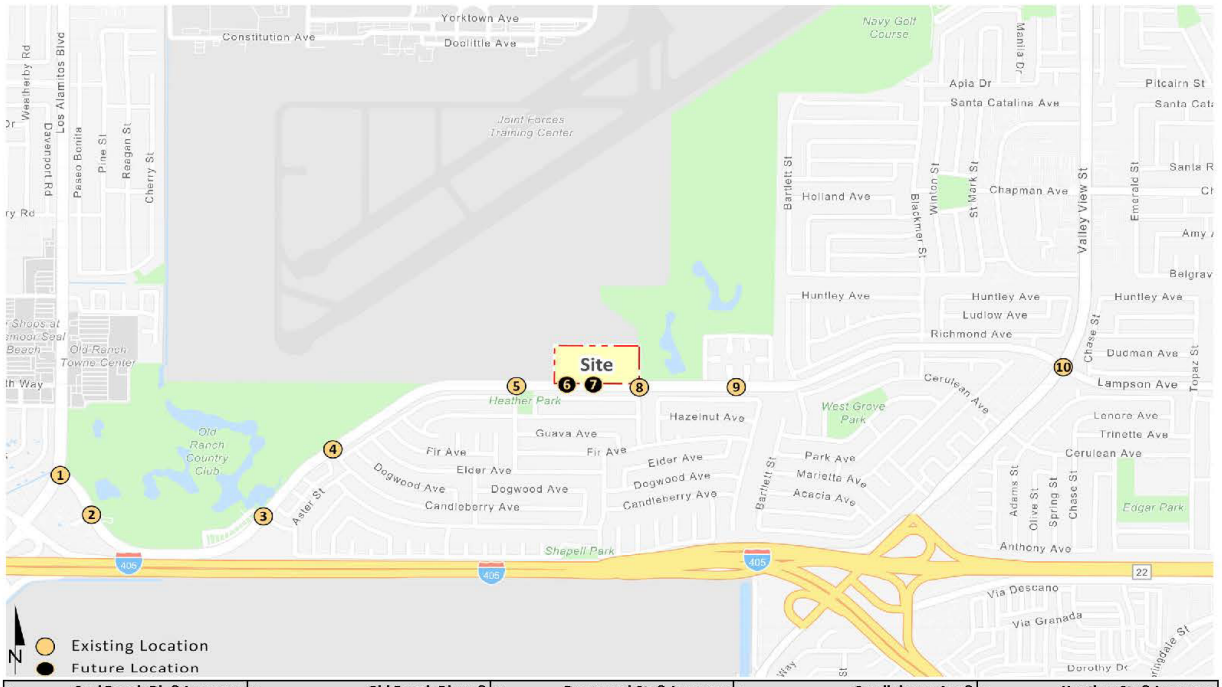


1 Seal Beach Bl. & Lampson Av.	2 Old Ranch Plaza & Lampson Av.	3 Basswood St. & Lampson Av.	4 Candleberry Av. & Lampson Av.	5 Heather St. & Lampson Av.
49,200 / 24,250	2,850 / 20,300	900 / 16,300	14,450	14,750
↓ 1591(1504) ↳ 689(595) ↰ 727(610) ← 470(488) ↱ 1479(1893) ↑ 426(575) →	↲ 76(117) ↓ 0(1) ↳ 14(21) ↰ 20(17) ← 1032(875) ↰ 11(8) ↑ 106(99) → 732(976) → 36(39) ↴ ↰ 33(48) ↑ 3(0) ↱ 8(11)	↲ 8(43) ↓ 0(3) ↳ 1(5) ↰ 7(3) ← 878(710) ↰ 10(13) → 21(30) → 550(786) → 90(132) ↴ ↰ 233(141) ↑ 1(0) ↱ 3(11)	← 700(646) ↰ 23(31) ↰ ↱ 467(676) → 88(127) ↴ 195(80) 39(26)	← 628(618) ↰ 39(78) ↰ ↱ 434(633) → 71(68) ↴ 95(59) 69(57)
47,700	23,050 / 1,150	19,650 / 3,200	16,300 / 2,800	14,650 / 2,800

6 Driveway 1 & Lampson Av.	7 Driveway 2 & Lampson Av.	8 Rose St. & Lampson Av.	9 Tulip St. & Lampson Av.	10 Valley View St. & Lampson Av.
14,550	14,550	15,300	550 / 16,500	50,850 / 12,700
← 673(659)	← 673(659)	← 631(627) ↰ 34(78) ↰ ↱	↲ 16(13) ↓ 1(0) ↳ 13(11) ↰ 10(21) ← 603(662) ↰ 41(91) ↰ ↱	↲ 218(275) ↓ 1844(2029) ↳ 131(198) ↰ 267(127) ← 373(264) ↰ 311(207) ↰ ↱
492(709) →	492(709) →	465(671) → 27(38) ↴ 42(32) 58(63)	6(8) → 505(695) → 13(31) ↴ ↰ 44(31) ↑ 1(0) ↱ 89(73)	234(267) → 296(315) → 189(166) ↴ ↰ 180(251) ↑ 180(251) ↱ 201(177)
14,550	14,550	14,550 / 2,250	15,300 / 2,400	16,050 / 49,750

##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

EXHIBIT 6-2: GENERAL PLAN BUILDOUT WITH PROJECT TRAFFIC VOLUMES



1 Seal Beach Bl. & Lampson Av.	2 Old Ranch Plaza & Lampson Av.	3 Basswood St. & Lampson Av.	4 Candleberry Av. & Lampson Av.	5 Heather St. & Lampson Av.
49,500 / 25,100 / 48,250	2,850 / 21,150 / 1,150	900 / 17,100 / 3,200	15,300 / 2,800	15,600 / 2,800
1591(1504) ↓ 694(611) ↳	76(117) ↲ 0(1) ↓ 14(21) ↳	8(43) ↲ 0(3) ↓ 1(5) ↳		
↰ 742(620) ← 496(505) ↱	↰ 20(17) ← 1072(902) ↱ 11(8)	↰ 7(3) ← 918(737) ↱ 10(13)	← 740(673) ↱ 23(31)	← 668(645) ↱ 39(78)
1479(1893) ↑ 435(603) ↱	106(99) → 746(1021) → 36(39) ↴	21(30) → 564(831) → 90(132) ↴	481(721) → 88(127) ↴	448(678) → 71(68) ↴
	↰ 33(48) ↑ 3(0) ↱ 8(11)	↰ 233(141) ↑ 1(0) ↱ 3(11)	↰ 195(80) ↱ 39(26)	↰ 95(59) ↱ 69(57)
23,900		20,450	17,100	15,500

6 Driveway 1 & Lampson Av.	7 Driveway 2 & Lampson Av.	8 Rose St. & Lampson Av.	9 Tulip St. & Lampson Av.	10 Valley View St. & Lampson Av.
400 / 15,400 / 15,400	1,150 / 15,250 / 15,400	16,000 / 2,250	550 / 17,200 / 2,400	51,000 / 12,900 / 50,100
18(12) ↲	22(15) ↲ 33(22) ↳		16(13) ↲ 1(0) ↓ 13(11) ↳	221(283) ↲ 1844(2029) ↓ 131(198) ↳
↰ 7(20) ← 695(674)	↰ 5(16) ← 680(679)	← 643(663) ↱ 34(78)	↰ 10(21) ← 615(698) ↱ 41(91)	↰ 267(127) ← 377(276) ↱ 311(207)
506(754) →	14(45) → 492(709) →	498(693) → 27(38) ↴	6(8) → 538(717) → 13(31) ↴	241(272) → 307(322) → 204(176) ↴
		↰ 42(32) ↱ 58(63)	↰ 44(31) ↑ 1(0) ↱ 89(73)	↰ 185(267) ↑ 185(267) ↱ 201(177)
15,400	15,400	15,250	16,000	16,700

##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

TABLE 6-1: INTERSECTION ANALYSIS FOR GENERAL PLAN BUILDOUT CONDITIONS

#	Intersection	Traffic Control[2]	GPBO Without Project Delay (secs.) or ICU (v/c)[1] AM	GPBO Without Project Delay (secs.) or ICU (v/c)[1] PM	GPBO Without Project Level of Service AM	GPBO Without Project Level of Service PM	GPBO With Project Delay (secs.) or ICU (v/c)[1] AM	GPBO With Project Delay (secs.) or ICU (v/c)[1] PM	GPBO With Project Level of Service AM	GPBO With Project Level of Service PM
1	Seal Beach Bl. & Lampson Av.	TS	**1.02**	**1.01**	**F**	**F**	**1.03**	**1.02**	**F**	**F**
2	Old Ranch Plaza & Lampson Av.	TS	0.57	0.55	A	A	0.58	0.56	A	A
3	Basswood St. & Lampson Av.	TS	0.53	0.51	A	A	0.54	0.52	A	A
4	Candleberry Av. & Lampson Av.	TS	0.45	0.44	A	A	0.46	0.45	A	A
5	Heather St. & Lampson Av.	TS	0.38	0.42	A	A	0.40	0.43	A	A
6	Driveway 1 & Lampson Av.	**CSS**	Future Intersection				11.0	10.9	B	B
7	Driveway 2 & Lampson Av.	**CSS**	Future Intersection				15.3	16.0	C	C
8	Rose St. & Lampson Av.	TS	0.35	0.43	A	A	0.35	0.43	A	A
9	Tulip St. & Lampson Av.	TS	0.35	0.43	A	A	0.36	0.43	A	A
10	Valley View St. & Lampson Av.	TS	0.86	0.87	D	D	0.87	0.90	D	D

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

ICU is reported in volume-to-capacity (v/c). ICU analysis conducted for signalized intersections only.

[2] CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

The intersection operations analysis worksheets for General Plan Buildout Without and With Project traffic conditions are included in Appendix 6.1 and Appendix 6.2 of this TA, respectively. The intersection of Driveway 2 and Lampson Avenue is anticipated to operate at an acceptable LOS as a cross-street stop. As such, no traffic signal is recommended at Driveway 2 and Lampson Avenue.

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

All existing study area intersections are currently signalized. As such, no traffic signal warrant analysis has been conducted for General Plan Buildout Without Project traffic conditions. The intersection of Driveway 2 at Lampson Avenue is not anticipated to warrant a peak hour or planning-level (ADT) based warrant under General Plan Buildout With Project traffic conditions. The traffic signal warrant analysis worksheets for General Plan Buildout With Project traffic conditions are included in Appendix 6.3 of this TA.

6.6 ROADWAY SEGMENT ANALYSIS

Table 6-2 provides a summary of the General Plan Buildout conditions roadway segment capacity analysis. As shown in Table 6-2, the study area roadway segments are anticipated to continue to operate at an acceptable LOS based on the daily roadway capacity thresholds and minimum LOS criteria under General Plan Buildout Without and With Project traffic conditions.

6.7 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for General Plan Buildout traffic conditions. Based on deficiency criteria discussed in Section 2.5 *Deficiency Criteria*, the following intersection was found to be deficient. Improvements necessary to improve this traffic deficiency back to acceptable levels are discussed below.

Seal Beach Boulevard & Lampson Avenue (#1): the same improvements as those identified previously for Opening Year Cumulative traffic conditions would improve the intersection operations back to acceptable LOS (see Table 6-3).

The intersection operations analysis worksheets for General Plan Buildout With Project traffic conditions, with improvements, are included in Appendix 6.4 of this TA.

TABLE 6-2: ROADWAY SEGMENT ANALYSIS FOR GENERAL PLAN BUILDOUT CONDITIONS

#	Roadway	Segment Limits	Roadway Section	LOS Capacity[1]	Without Project GPBO	Without Project V/C[2]	Without Project LOS[3]	With Project GPBO	With Project V/C[2]	With Project LOS[3]
1	Seal Beach Bl.	South of Lampson Av.	6D	56,300	47,688	0.85	D	48,268	0.86	D
2	Lampson Av.	Seal Beach Bl. to Old Ranch Plaza	4D	37,500	24,242	0.65	B	25,154	0.67	B
3	Lampson Av.	Old Ranch Plaza to Basswood St.	4D	37,500	20,306	0.54	A	21,218	0.57	A
4	Lampson Av.	Basswood St. to Candleberry Av.	4D	37,500	16,277	0.43	A	17,189	0.46	A
5	Lampson Av.	Candleberry Av. to Heather St.	4D	37,500	14,464	0.39	A	15,376	0.41	A
6	Lampson Av.	Heather St. to Rose St.	4D	37,500	14,741	0.39	A	15,653	0.42	A
7	Lampson Av.	Rose St. to Tulip St.	4D	37,500	15,294	0.41	A	16,040	0.43	A
8	Lampson Av.	Tulip St. to Valley View St.	4D	37,500	16,486	0.44	A	17,232	0.46	A
9	Lampson Av.	East of Valley View St.	4D	37,500	12,685	0.34	A	12,933	0.34	A

[1] These maximum roadway capacities are based on the City of Seal Beach's General Plan Roadway Segment Thresholds.

[2] V/C = Volume to Capacity Ratio

[3] LOS = Level of Service

TABLE 6-3: INTERSECTION ANALYSIS FOR GENERAL PLAN BUILDOUT CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	ICU (v/c)[2] AM	PM	Level of Service AM	PM
1	Seal Beach Bl. & Lampson Av.																	
	- Without Improvements	TS	0	3	1>	2	3	0	0	0	0	2	0	1>	**1.03**	**1.02**	**F**	**F**
	- With Improvements[4]	TS	0	3	1>	2	3	0	0	0	0	**1**	**1**	1>	0.83	0.87	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] ICU is reported in volume-to-capacity (v/c). ICU analysis conducted for signalized intersections only.

[3] TS = Traffic Signal

[4] Improvement includes restriping the number 2 westbound left as a shared left-right turn lane.

The peak hour queues have been assessed with the proposed improvements shown at Seal Beach Boulevard at Lampson Avenue and also at the intersection of Valley View Street with Lampson Avenue. Table 6-4 indicates there are no peak hour queuing issues with the recommendations at Seal Beach Boulevard and Lampson Avenue. Although there are queuing issues identified for the intersection of Valley View Street at Lamson Avenue, the same queuing issues are anticipated for both Without and With the Project. It should also be noted that the addition of Project traffic would not add more than one vehicle length (approximately 25-feet) to any of the turning movements with queuing issues identified. The queuing analysis worksheets for General Plan Buildout Without and With Project traffic conditions are included in Appendixes 6.5 and 6.6, respectively.

TABLE 6-4: PEAK HOUR INTERSECTION QUEUING ANALYSIS FOR GENERAL PLAN BUILDOUT CONDITIONS

#	Intersection	Movement	Available Stacking Distance (Feet)	GPBO Without Project 95th Percentile Queue (Feet) AM Peak Hour	GPBO Without Project 95th Percentile Queue (Feet) PM Peak Hour	GPBO Without Project Acceptable? [1] AM	GPBO Without Project Acceptable? [1] PM	GPBO With Project 95th Percentile Queue (Feet) AM Peak Hour	GPBO With Project 95th Percentile Queue (Feet) PM Peak Hour	GPBO With Project Acceptable? [1] AM	GPBO With Project Acceptable? [1] PM
1	Seal Beach Bl. & Lampson Av.	NBR	300	219	256	Yes	Yes	225	278	Yes	Yes
		SBL	375	365 [2]	346 [2]	Yes	Yes	371 [2]	361 [2]	Yes	Yes
		WBL	650	409 [2]	338	Yes	Yes	445	349	Yes	Yes
		WBR	650	310	286	Yes	Yes	318	300	Yes	Yes
10	Valley View St. & Lampson Av.	NBL	250	**356 [2]**	**496 [2]**	**No**	**No**	**368 [2]**	**496 [2]**	**No**	**No**
		NBR	120	128	94	Yes	Yes	128	94	Yes	Yes
		SBL	140	**276 [2]**	**384 [2]**	**No**	**No**	**276 [2]**	**384 [2]**	**No**	**No**
		SBR	140	150	**175**	Yes	**No**	143	**175**	Yes	**No**
		EBL	100	**387 [2]**	**484 [2]**	**No**	**No**	**405 [2]**	**496 [2]**	**No**	**No**
		WBL	150	**438**	**308 [2]**	**No**	**No**	**465 [2]**	**315 [2]**	**No**	**No**

* NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, L = Left, T = Through, R = Right

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

7 FAIR SHARE CALCULATIONS

Transportation improvements are funded through a combination of improvements constructed by the Project or fair share contributions. When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, have been provided in Table 7-1 for the applicable deficient study area intersections. Fair share contributions are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

TABLE 7-1: PROJECT FAIR SHARE CALCULATIONS

#	Intersection		Existing 2022	Project Only	GPBO With Project	Total New Traffic	Project % of New Traffic
1	Seal Beach Bl. & Lampson Av.						
		AM:	3,985	55	5,438	1,453	3.8%
		PM:	4,339	71	5,737	1,398	**5.1%**

BOLD = Highest fair share percentage is highlighted.

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8 REFERENCES

1. **City of Seal Beach - Public Works.** Transportation Analysis Guidelines. City of Seal Beach : s.n., June 2020.
2. **Institute of Transportation Engineers.** Trip Generation Manual. 11th Edition. 2021.
3. **City of Los Alamitos.** City of Los Alamitos General Plan. City of Los Alamitos : s.n., March 2015.
4. **City of Seal Beach.** City of Seal Beach General Plan. City of Seal Beach : s.n., December 2003.
5. **Orange County Transportation Authority.** 2021 Orange County Congestion Management Program Report. County of Orange : OCTA, November 2021.
6. **Transportation Research Board.** Highway Capacity Manual (HCM). 6th Edition. s.l. : National Academy of Sciences, 2016.
7. **Caltrans.** Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. California Manual on Uniform Traffic Control Devices (CAMUTCD). 2014.

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MEMORANDUM

URBAN CROSSROADS

DATE: September 5, 2024
TO: Nicole Morse, T&B Planning
FROM: Jose Alire/Taryn Ferguson, Urban Crossroads
JOB NO: 14501D-07 Safety Eval

4665 LAMPSON AVENUE SAFETY EVALUATION

The firm of Urban Crossroads, Inc. is pleased to submit the following Safety Evaluation for the 4665 Lampson Avenue development (**Project**), which is located in the City of Los Alamitos. The purpose of this evaluation is to determine if the Project creates any new safety issues along the public roadways or adjacent to the Project access points.

PROPOSED PROJECT

The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). A preliminary site plan for the proposed Project is shown on Exhibit 1. The Project is anticipated to have an Opening Year of 2026. Access to the Project site will be accommodated to Lampson Avenue via two proposed driveways. Driveway 1 at Lampson Avenue is currently proposed with stop control for egress traffic and right-in/right out access only. A median will be constructed to restrict access at Driveway 1. Access to Driveway 2 will allow for full access. Driveway 2 does not meet peak hour or planning level (daily volume) based traffic signal warrant under any of the analysis scenarios. Although the proposed Project is located in the City of Los Alamitos, access to the site is via intersections controlled by the City of Seal Beach.

EXHIBIT 1: PRELIMINARY SITE PLAN



SAFETY EVALUATION METHODOLOGY

The safety evaluation completed for this project included the following elements:

- Review of available collision data
- Review of potential increase presence of pedestrians and bicyclist
- Review of any proposed changes to the walking and bicycling environment and experience
- New pedestrian and bicyclist connection desires
- Multimodal conflict points, especially at intersections and project access locations
- Change in traffic mix such as an increase in bicyclists or pedestrians where features such as shoulders or sidewalks may not exist or are inconsistent with facility design (sidewalks, bike and multi-user paths, multimodal roadways, etc.)
- Increased traffic volumes
- Site access management (i.e., driveway sight distance, driveway or intersection spacing, project access queuing, multimodal conflict points, incomplete pedestrian, and bicycle connections)

COLLISION DATA

The collision data analysis is based on the collision data received from California Highway Patrols' (CHP) Statewide Integrated Traffic Records System (SWITRS). The collision data includes 5 years of collision data gathered by CHP staff and members of its Allied Agencies throughout California (including the City of Los Alamitos). The SWITRS data is provided in Attachment A. Table 1 provides a summary of the types of collisions by intersection.

TABLE 1: COLLISION SUMMARY (MARCH 2019 TO MARCH 2024)

Head-On	Sideswipe	Rear-End	Broadside	Hit-Object	Overturn	Auto-Ped	Other	Not Stated
Seal Beach Bl. & Lampson Av. (Total: 0 Collisions)								
0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Old Ranch Plaza & Lampson Av. (Total: 0 Collisions)								
0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Basswood St. & Lampson Av. (Total: 1 Collision)								
0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Candleberry Av. & Lampson Av. (Total: 1 Collision)								
0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Heather St. & Lampson Av. (Total: 0 Collisions)								
0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Rose St. & Lampson Av. (Total: 2 Collisions)								
0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Tulip St. & Lampson Av. (Total: 1 Collision)								
0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Valley View St. & Lampson Av. (Total: 14 Collisions)								
2 (14.3%)	1 (7.1%)	4 (28.6%)	5 (35.7%)	1 (7.1%)	0 (0.0%)	1 (7.1%)	0 (0.0%)	0 (0.0%)

The CHP SWITRS collision data includes the following collision types:

- Head-On
- Sideswipe
- Rear-End
- Broadside
- Hit Object
- Overturned
- Vehicle/Pedestrian
- Other
- Not Stated

The Caltrans 2021 Crash Data on California State Highways report (2021 Crash Report) provides data on crash reports collected by law enforcement agencies. Calculation rates by intersection are computed for various types of facilities and settings, and then are averaged statewide. The intersection crash rate is calculated by the following formula:

Crashes / Million Vehicle (MV) Entering the Intersection

For the purposes of this analysis, average daily traffic (ADT) will be utilized to determine the crashes / MV. Existing weekday ADT volumes from the 4665 Lampson Avenue Traffic Analysis (Urban Crossroads, July 2024) are provided in Attachment B. A summary of the crash rate comparison, by intersection, is shown in Table 2.

TABLE 2: CRASH RATE COMPARISON

Intersection	Intersection Control and Setting[1]	Average Rate[2]	Crash Rate
Seal Beach Bl. & Lampson Av.	Suburban, TS, 3-leg	0.43	0.00
Old Ranch Plaza & Lampson Av.	Suburban, TS, 4-leg	0.55	0.00
Basswood St. & Lampson Av.	Suburban, TS, 4-leg	0.55	0.04
Candleberry Av. & Lampson Av.	Suburban, TS, 3-leg	0.43	0.05
Heather St. & Lampson Av.	Suburban, TS, 3-leg	0.43	0.00
Rose St. & Lampson Av.	Suburban, TS, 3-leg	0.43	0.09
Tulip St. & Lampson Av.	Suburban, TS, 4-leg	0.55	0.04
Valley View St. & Lampson Av.	Suburban, TS, 4-leg	0.55	0.19

[1] TS = Traffic Signal

[2] Source: Intersection crash rates from the Caltrans 2021 Crash Data on California State Highways report

Basswood St. & Lampson Av. had a total of 1 reported collision in a 5-year period. The common collision included a sideswipe collision. Sideswipe collisions are commonly caused by failure to yield or impaired/distracted driving. The 5-year average rate for this intersection is calculated as followed:

(1 collision / 5 years) / (365 days/year x (29,200 ADT / 2) / 1,000,000 MV) **= 0.04 total crashes per MV**

The intersection of Basswood St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

Candleberry Av. & Lampson Av. had a total of 1 reported collision in a 5-year period. The common collision include a broadside collisions. Broadside collisions are commonly caused by failure to yield, failure to stop, or impaired/distracted driving. The 5-year average rate for this intersection is calculated as followed:

(1 collision / 5 years) / (365 days/year x (24,600 ADT / 2) / 1,000,000 MV) **= 0.05 total crashes per MV**

The intersection of Candleberry Av. & Lampson Av. has a lower crash rate than the state average for similar facilities.

Rose St. & Lampson Av. had a total of 2 reported collisions in a 5-year period. The common collisions include broadside and overturn collisions. Overturned vehicles are commonly caused by unsafe speeds, improper maneuvers, or loss of vehicle control. The 5-year average rate for this intersection is calculated as followed:

(2 collisions / 5 years) / (365 days/year x (23,500 ADT / 2) / 1,000,000 MV) **= 0.09 total crashes per MV**

The intersection of Rose St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

Tulip St. & Lampson Av. had a total of 1 reported collision in a 5-year period. The common collision include a broadside collision. The 5-year average rate for this intersection is calculated as followed:

(1 collision / 5 years) / (365 days/year x (25,050 ADT / 2) / 1,000,000 MV) **= 0.04 total crashes per MV**

The intersection of Tulip St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

Valley View St. & Lampson Av. had a total of 14 reported collisions in a 5-year period. The common collision include rear-end and broadside collisions. Rearend collisions are commonly caused by failure to yield, failure to stop, or impaired/distracted driving. The 5-year average rate for this intersection is calculated as followed:

(14 collisions / 5 years) / (365 days/year x (82,350 ADT / 2) / 1,000,000 MV) **= 0.19 total crashes per MV**

The intersection of Valley View St. & Lampson Av. has a lower crash rate than the state average for similar facilities.

The existing crash rates for the study area intersections are lower than the statewide average crash rates as determined by the 2021 Crash Report.

A Project would have the potential to create an increase in collision rate if it introduced a geometric design feature that did not meet safety standards or incompatible uses (e.g. farm

equipment). As demonstrated in the analysis below, implementation of Project improvements (within the public right-of-way) per Los Alamitos and Seal Beach standards ensures all that sight distance requirements, pedestrian crossing requirements, and street design requirements are met. Additionally, the Project vehicle mix is consistent with the adjacent land uses, including the residential neighborhood to the south. ***Therefore, it is not anticipated that the Project will result in a significant change in collision rates or result in an accident rate higher than the statewide average.***

BICYCLE & PEDESTRIAN FACILITIES

In an effort to promote alternative modes of transportation, the City of Los Alamitos and Seal Beach have several existing and planned bicycle routes. There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. In addition, there is a Class I bike/pedestrian path on Seal Beach Boulevard north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project should maintain the existing Class II bike lane on Lampson Avenue along its frontage to maintain bicycle safety. The existing sidewalks adjacent to the Project met design standards and any Americans with Disabilities Act (ADA)[3] standards at the time they were constructed. The City of Los Alamitos and Seal Beach should continue to improve pedestrian facilities to increase the desire to bike or walk and meet current standards.

The sidewalks along the Project frontage will be improved as part of the Project. Frontage improvements will include sidewalks, driveway modifications to accommodate site access, median modifications, and landscaping improvements as required by City of Los Alamitos[4] and City of Seal Beach[5] standards. The proposed sidewalk along the Project's frontage on the north side of Lampson Avenue will provide connectivity with proposed sidewalks and paths internal to the Project.

The intersections at Lampson Avenue at Heather Avenue and Lampson Avenue at Rose Avenue are currently signalized and both have pedestrian crosswalks for Lampson Avenue. The wheelchair ramp on the north side of Lampson Avenue at Heather Avenue does not meet ADA requirements, as shown in Exhibit 2. However, the wheelchair ramp on the north side of Lampson Avenue at Rose Avenue does meet ADA standard requirements.

[3] Source: ADA Standards for Accessible Design https://www.ada.gov/law-and-regs/design-standards/

[4] Source: City of Los Alamitos Public Works and Engineering Standards https://cityoflosalamitos.org/205/Public-Works-Engineering

[5] Source: City of Seal Beach Standard Plans for Streets, Sewers, Water: https://www.sealbeachca.gov/Departments/Public-Works/Administration-Engineering

EXHIBIT 2: LAMPSON AVENUE AT HEATHER AVENUE RAMP



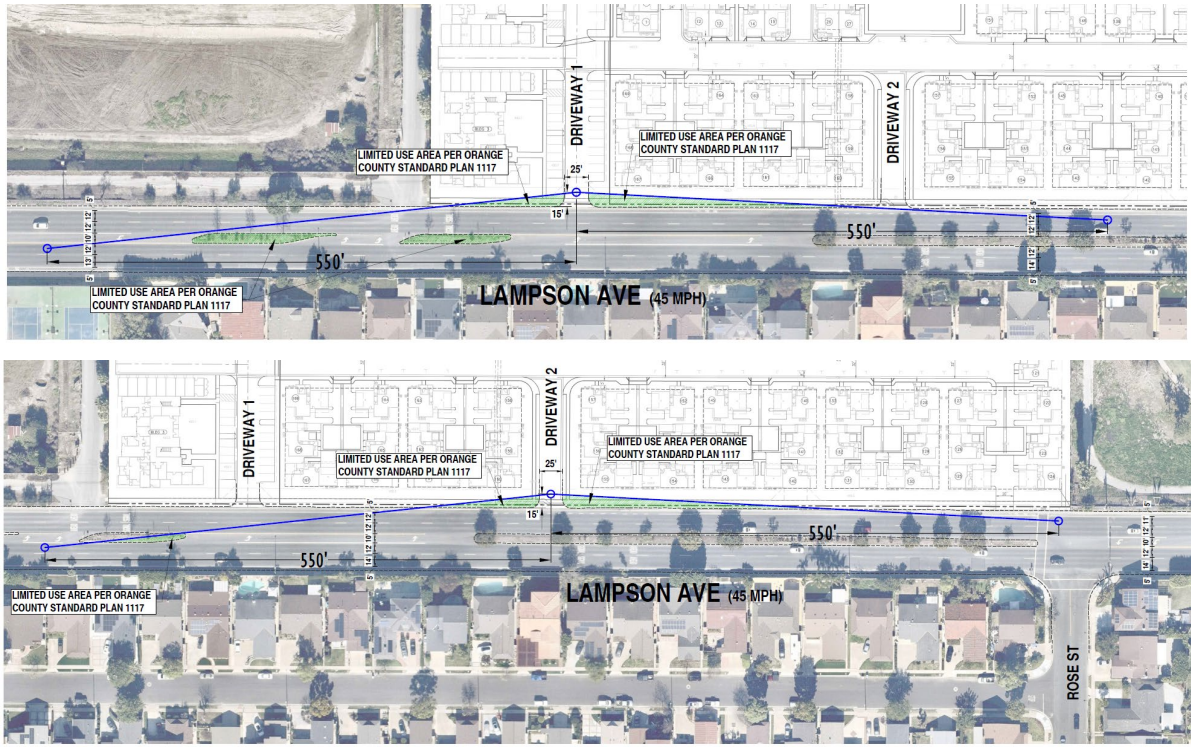
All Project driveways should be designed to meet current City standards and accommodate pedestrian crossing per current ADA standards. The Project should also maintain the existing Class II (on-street, striped) bike lanes along its frontage on Lampson Avenue. These improvements will ensure the project meets all compliance requirements.

INTERSECTION SIGHT DISTANCE

Attachment C identifies limited use areas per Orange County Standard Plan[6] 1117 – Intersection Sight Distance. The limited use areas determine the necessary sight distance to allow 7 ½ seconds for the driver on the crossroad (or left turn pocket) to safely cross the main roadway or turn left while the approach vehicle travels at the assumed design speed of the main roadway. All Project driveways should be required to meet these sight distance requirements. Exhibit 3 shows sight distance requirements for Driveways 1 and 2, as shown, the Project does not create any new sight distance issues along Lampson Avenue (A full size version is included in Attachment C, Page 2) and meets all compliance requirements.

[6] *Source: Orange County Public Works Standard Plans: https://ocpublicworks.com/ocpw/oc-public-works-standard-plans*

EXHIBIT 3: DRIVEWAYS 1 AND 2 SIGHT DISTANCE



STOPPING SIGHT DISTANCE

According to the Highway Design Manual[7] (HDM), stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways, and on 2-lane roads, when passing sight distance is not economically obtainable. Stopping sight distance is to be provided for all users, including motorists and bicyclists, at all elements of interchanges and intersections at grade, including private road connections. Lampson Avenue has a posted speed limit of 45 MPH. As stated in the HDM Table 201, a stopping sight distance of 360 feet is the standard for a design speed of 45 MPH. The Project does not introduce any new stopping sight distance issues to Lampson Avenue and meets all compliance requirements.

ON-SITE VEHICLE CIRCULATION

Attachment D identifies the on-site circulation for the site based on the plans prepared by C&V Consulting, Inc. The exhibits identify various vehicle paths (front-loading garbage trucks, fire trucks, delivery trucks, etc.) for various internal drive aisles, which allow for two-way traffic. Access to and from the site will be accommodated via driveways on Lampson Avenue. As shown in Attachment D, the vehicle turning templates show acceptable turning movements for the various vehicles and trucks anticipated to access the site.

[7] *Source: California Department of Transportation Highway Design Manual: https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm*

SITE ACCESS

The following improvements are recommended and will be constructed as part of the Project to accommodate site access.

Driveway 1 & Lampson Avenue (#6) – Project will implement a stop control for egress traffic at Driveway 1 on Lampson Avenue. The intersection is proposed to be restricted to right-in/right-out access only. The access at this driveway should be controlled by a raised median.

Driveway 2 & Lampson Avenue (#7) – Driveway 2 is not anticipated to meet a peak hour or planning level (daily volume) based traffic signal warrant under any of the analysis scenarios. The Project frontage roadway of Lampson Avenue is currently constructed to its ultimate General Plan roadway classification. As such, frontage improvements will be limited to sidewalk improvements, driveway modifications to accommodate site access, median modifications, and landscaping improvements as required per City standards. Any Project-related improvements shall meet sight distance and all requirements within the public right of way per City of Los Alamitos and Seal Beach standards. On-site traffic signing and striping should be implemented in conjunction with detailed improvement plans for the Project site.

SUMMARY OF PROJECT IMPROVEMENTS

Frontage improvements will include sidewalk improvements, driveway modifications to accommodate site access, and landscaping improvements as required by City standards. The proposed sidewalk along the Project's frontage on the north side of Lampson Avenue will provide connectivity with proposed sidewalks and paths internal to the Project. The Project will also maintain the existing Class II (on-street, striped) bike lanes along its frontage on Lampson Avenue.

The Project frontage roadway of Lampson Avenue is currently constructed to its ultimate General Plan roadway classification. As such, frontage improvements will be limited to sidewalk improvements, driveway modifications to accommodate site access, and landscaping improvements as required by City standards.

CONCLUSION

A review of available collision data indicates that the study area intersections have lower crash rates than the statewide average of intersections with similar configuration and settings. The addition of Project traffic is not anticipated to increase the crash rates by a significant margin. As discussed throughout this evaluation, the implementation of Project improvements (within the public right of way) per Los Alamitos, Seal Beach, Orange County Public Works, Highway Design Manual (HDM), and American with Disabilities Act (ADA) standards ensures all sight distance requirements, pedestrian crossing requirements, and street design requirements are met. Additionally, the Project TIA indicates the highest peak hour volume along Lampson Avenue at Driveway 2 is 561 vehicles (Refer to Exhibit 3-8 of the TIA). The highest Project peak hour volume of 50 vehicles occurs at Driveway 2 in the evening (Refer to Exhibit 4-2 of the TIA). The Project contributes 9% of the additional vehicles to the evening peak hour ([50/561]*100=9%). Therefore, the addition of Project-related traffic is not anticipated to increase the accident rate above the nationally accepted average or cause new safety deficiencies.

If you have any questions or comments, we can be reached at jalire@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.





Jose Alire, P.E.
Senior Traffic Engineer

Taryn Ferguson
Transportation Analyst

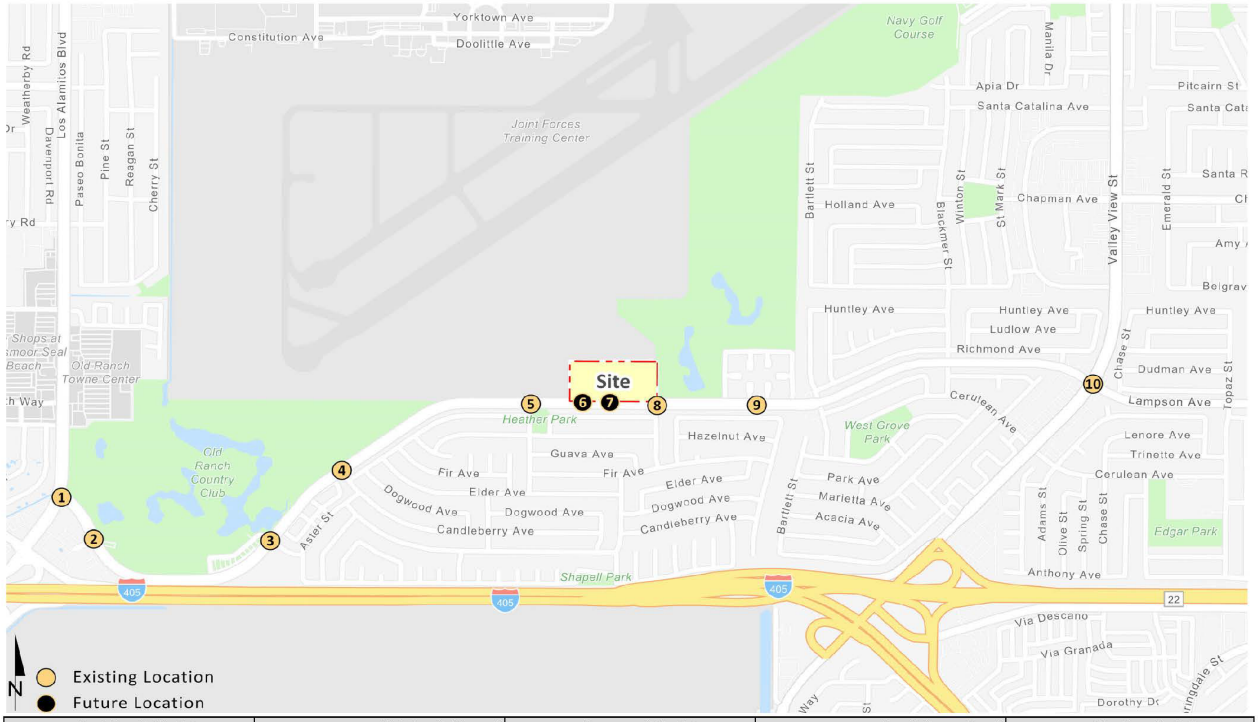
ATTACHMENT A

SWITRS DATA

CASE_ID	ACCIDENT_YEAR	COLLISION_DATE	COLLISION_TIME	DAY_OF_WEEK	PRIMARY_RD	SECONDARY_RD	DISTANCE	DIRECTION	INTERSECTION	COLLISION_SEVERITY	NUMBER_KILLED	NUMBER_INJURED	PARTY_COUNT	PCF_VIOL_CATEGORY	PCF_VIOLATION	TYPE_OF_COLLISION	PEDESTRIAN_ACCIDENT	BICYCLE_ACCIDENT	MOTORCYCLE_ACCIDENT	TRUCK_ACCIDENT	ALCOHOL_INVOLVED
8851648	2019	4/14/2019	1010	7	LAMPSON AV	BASSWOOD AV	45	E	N	3	0	1	2	8	22107	B					
9320982	2020	8/6/2020	1331	4	LAMPSON AV	CANDLEBERRY AV	0		Y	4	0	1	2	12	21453	D					
8867848	2019	5/9/2019	1533	4	LAMPSON AV	ROSE ST	0		Y	3	0	3	2	8	22107	D					
9320966	2020	6/8/2020	1823	1	LAMPSON AV	ROSE ST	284	E	N	3	0	2	1	3	22350	F					
8911200	2019	10/21/2019	1418	1	LAMPSON AV	TULIP ST	0		Y	1	1	2	3	9	21801	D			Y		
8888988	2019	6/10/2019	2319	1	VALLEY VIEW ST	LAMPSON AV	123	S	N	3	0	1	2	3	22350	B			Y		Y
8993701	2019	10/30/2019	752	3	VALLEY VIEW ST	LAMPSON AV	545	S	N	4	0	1	3	3	22350	C					
8911480	2020	4/22/2020	645	3	LAMPSON AV	VALLEY VIEW	11	E	N	1	1	0	2	0	G		Y				
9151611	2020	7/29/2020	2321	3	VALLEY VIEW ST	LAMPSON AV	504	S	N	4	0	2	2	9	21801	D					
9149013	2020	9/11/2020	454	5	VALLEY VIEW ST	LAMPSON AV	33	S	N	4	0	1	2	3	22350	C					
9166783	2020	9/22/2020	1620	2	LAMPSON AV	VALLEY VIEW	51	W	N	4	0	1	2	9	21804	D					
9188719	2020	10/27/2020	1340	2	VALLEY VIEW ST	LAMPSON AV	884	N	N	4	0	1	1	8	22107	E					
9256121	2020	10/27/2020	1859	2	VALLEY VIEW ST	LAMPSON AV	0		Y	1	1	0	2	9	21801	A			Y		Y
9262667	2021	4/5/2021	839	1	LAMPSON AV	VALLEY VIEW ST	184	W	N	4	0	3	2	9	21801	D					
9389008	2021	12/16/2021	1802	4	VALLEY VIEW ST	LAMPSON AV	510	S	N	4	0	1	2	9	21801	D					
9412890	2022	1/27/2022	718	4	VALLEY VIEW ST	LAMPSON AV	63	S	N	4	0	1	3	3	22350	C					
9410442	2022	1/31/2022	945	1	VALLEY VIEW ST	LAMPSON AV	0		Y	4	0	2	2	9	21801	A					
9603090	2023	6/16/2023	1319	5	LAMPSON AV	VALLEY VIEW ST	38	E	N	3	0	2	2	4	21703	C					
9626769	2023	9/25/2023	2038	1	VALLEY VIEW ST	LAMPSON AV	489	S	N	4	0	1	2	9	21801	D			Y		

ATTACHMENT B
EXISTING COUNT DATA

EXHIBIT 3-8: EXISTING (2022) TRAFFIC VOLUMES



1 Seal Beach Bl. & Lampson Av.				2 Old Ranch Plaza & Lampson Av.				3 Basswood St. & Lampson Av.				4 Candleberry Av. & Lampson Av.				5 Heather St. & Lampson Av.			
38,350			17,350	Nominal			16,650	800			13,150				11,450				11,650
	1244(1202) ←	364(447) ↳	↰ 572(447)		3(0) ↲	0(1) ↓	1(0) ↳		7(38) ↲	0(3) ↓	1(4) ↳		6(3) ↰						507(484) ←
			↰ 340(322)				↰ 3(0) ← 880(727)				↰ 730(568)		← 574(512)						↰ 30(65)
			→ 1199(1508)		7(4) →		↱ 10(7)		18(26) →		↱ 9(11)		↰ 16(24)						
			↱ 266(413)		591(822) →		→ 29(42)		420(638) →		→ 204(124)		↱				314(499) →		↱
36,650				1,000	32(34) ↲		3(0) → 7(10) ↱	2,800	79(116) ↲		1(0) → 3(10) ↱	2,350	347(541) → 77(111) ↲		171(70) → 29(18) ↱	2,350	62(60) ↲		83(52) → 55(46) ↱	2,350
17,350				16,050				13,150				11,650							

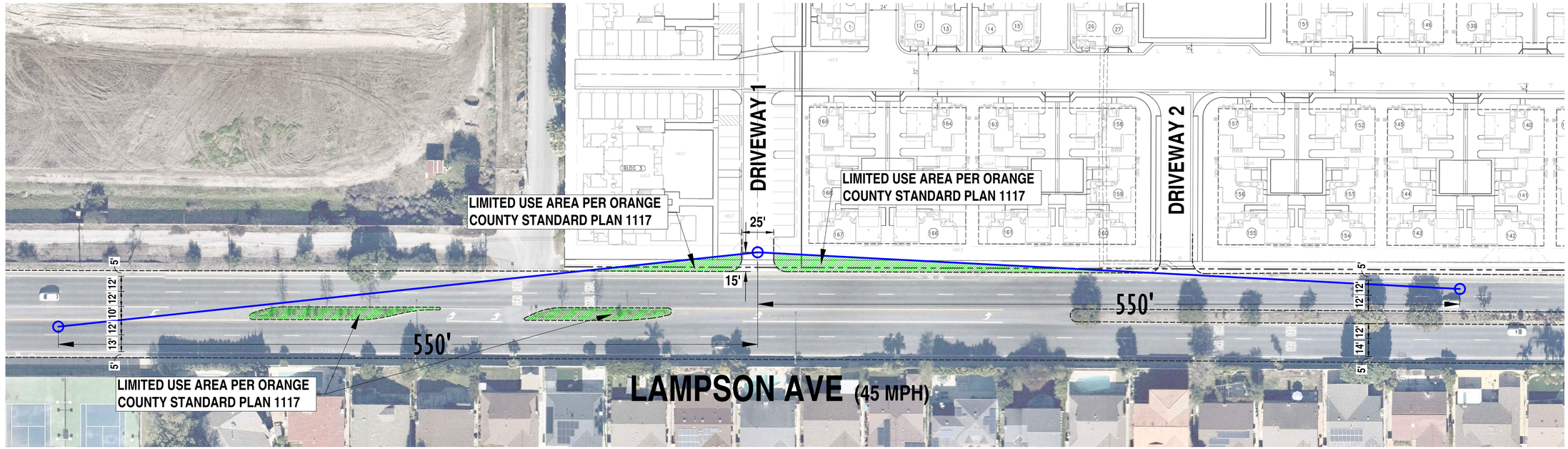
6 Driveway 1 & Lampson Av.				7 Driveway 2 & Lampson Av.				8 Rose St. & Lampson Av.				9 Tulip St. & Lampson Av.				10 Valley View St. & Lampson Av.			
			11,450				11,450				12,050	450			13,000	41,500			10,200
			← 542(517)				← 542(517)				← 505(489)		14(11)	1(0)	↰ 7(17)		151(202)	1529(1688)	← 178(101)
											↰ 25(65)		10(8)		← 477(516)		↲	↓	← 184(208)
															↰ 32(76)				↰ 184(169)
	360(561) →				360(561) →				336(528) →	37(28)	46(51)		5(7) →				150(211) →		
									24(33) ↲				366(545) →		39(27) 1(0) 73(60)		234(200) →		115(185) 115(185) 165(134)
11,450				11,450				11,450			1,900	12,050	11(27) ↲			2,000	126(108) ↲		
																	11,850		40,850

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

ATTACHMENT C

CONCEPT PLAN AND SIGHT DISTANCE EXHIBIT



N

SCALE: 1" = 40' (ON 24" x 36" SHEET)

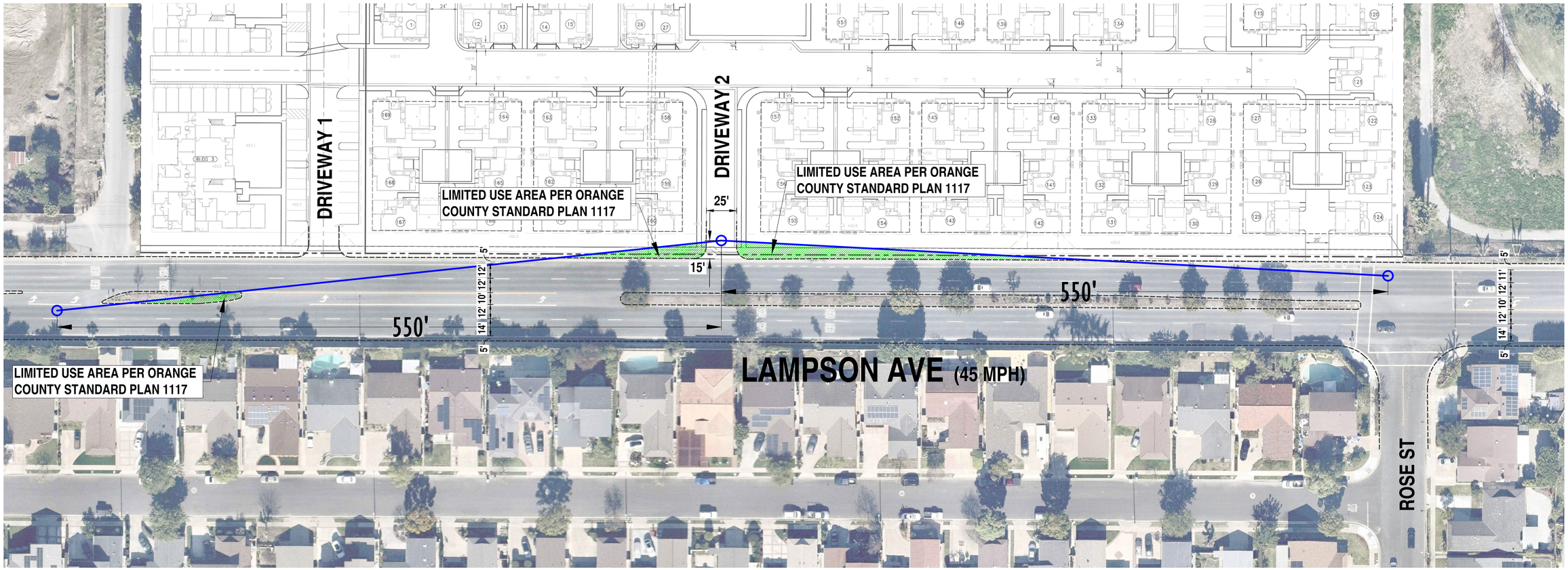
0 20 40 80 120 160

EXHIBIT 3: INTERSECTION SIGHT DISTANCE
LAMPSON AVENUE AT PROJECT DRIVEWAY 1

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N

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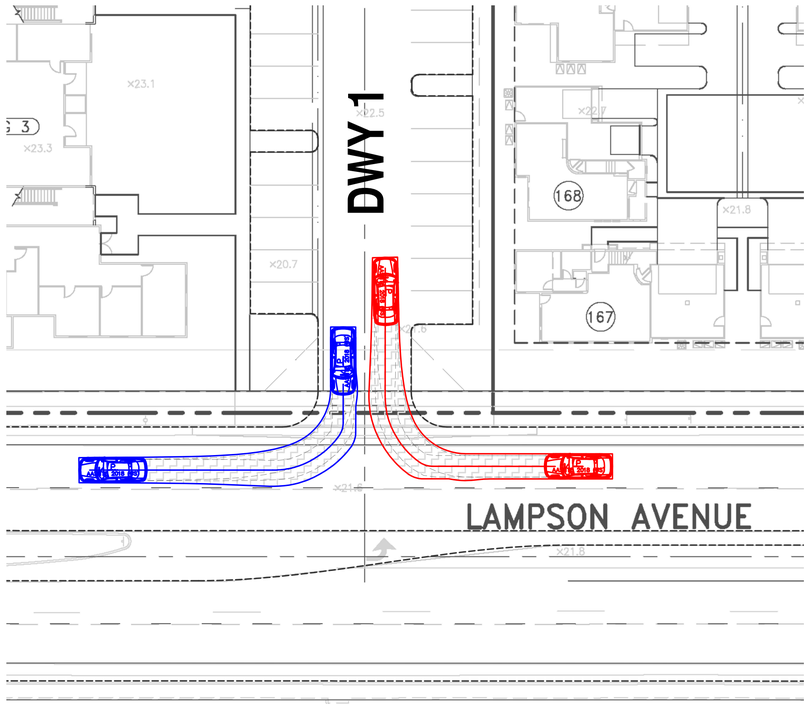
EXHIBIT 4: INTERSECTION SIGHT DISTANCE
LAMPSON AVENUE AT PROJECT DRIVEWAY 2

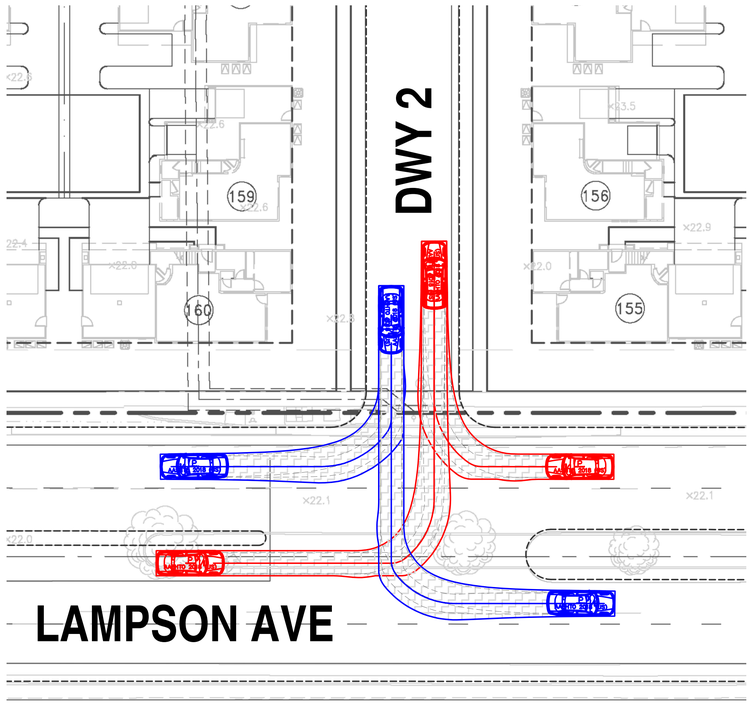
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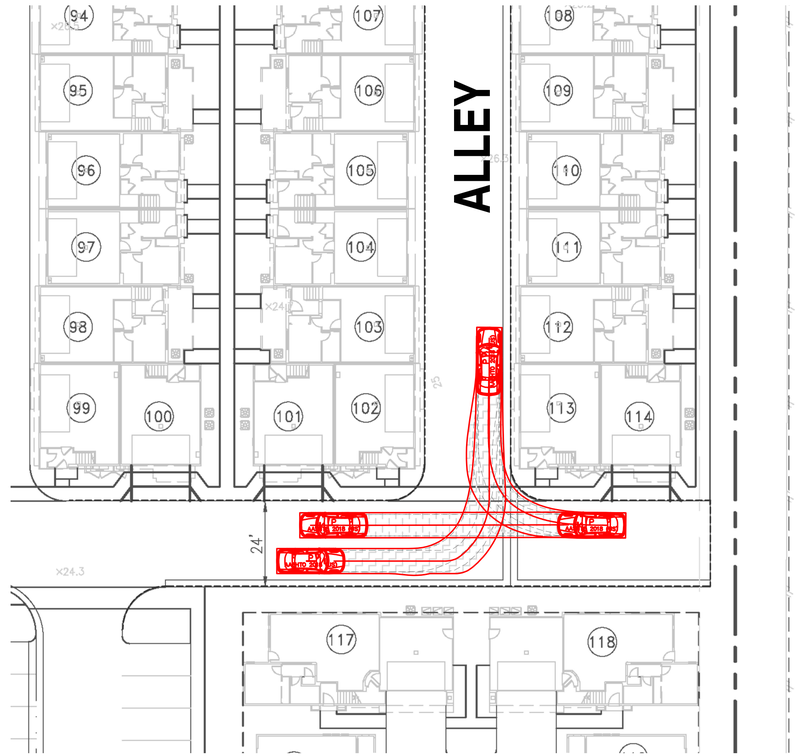
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TELEPHONE # 949-660-1994

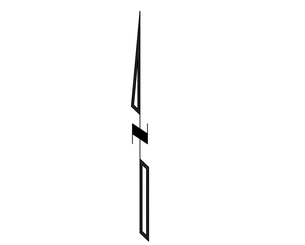
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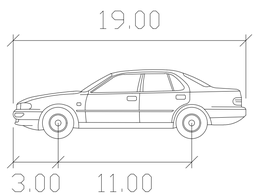
ATTACHMENT D
ON-SITE CIRCULATION EXHIBIT











P

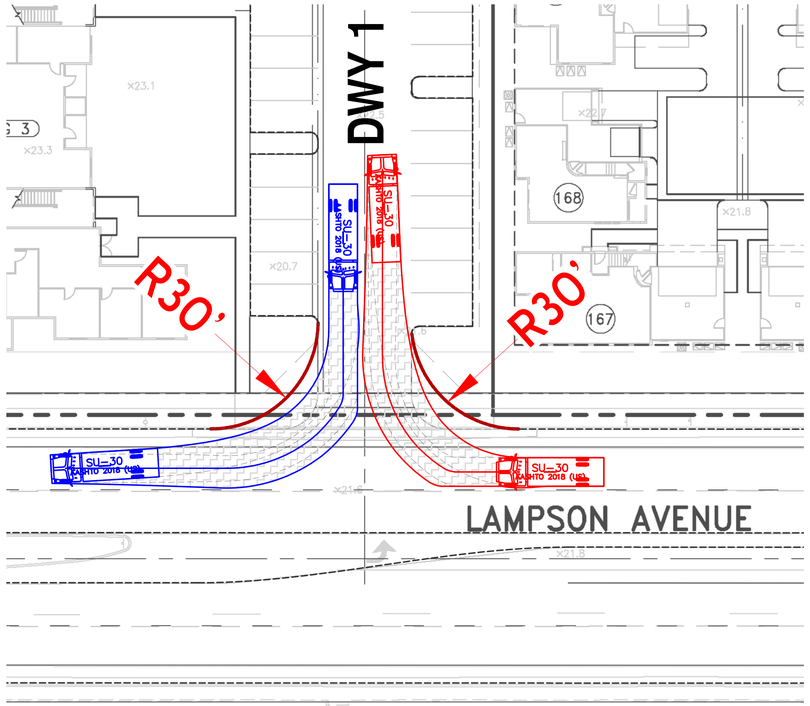
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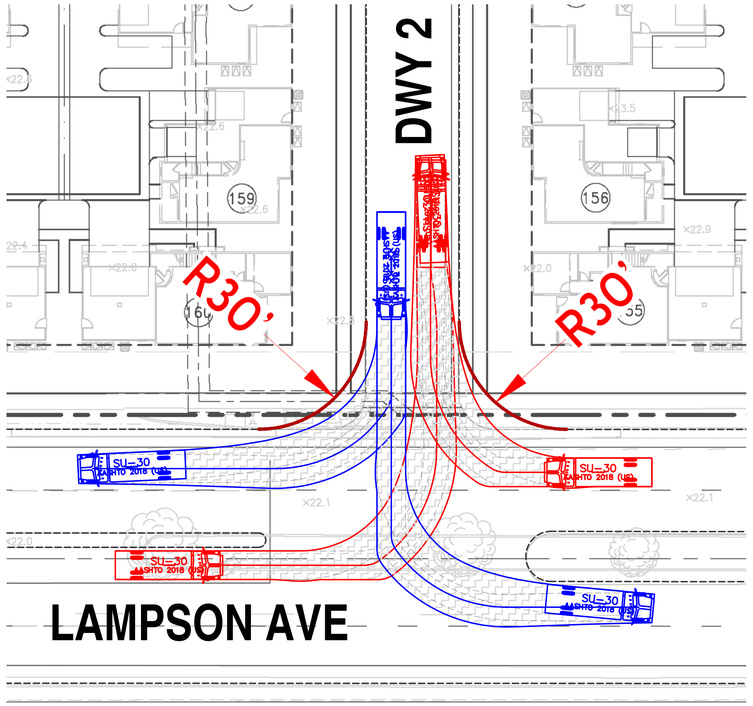
EXHIBIT 1: LAMPSON AVENUE AT PROJECT DRIVEWAYS PASSENGER CAR TURNING TEMPLATE

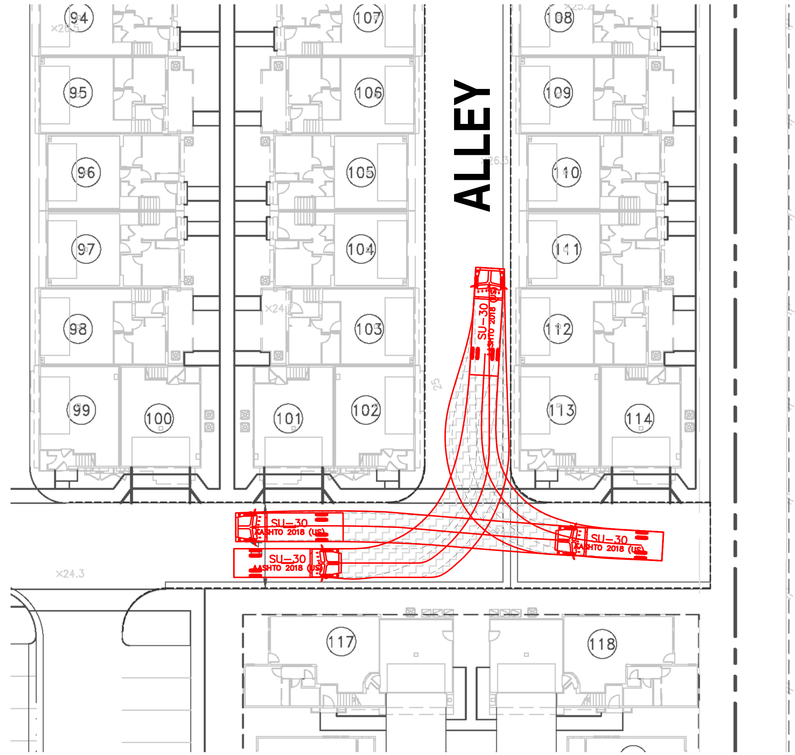
URBAN CROSSROADS

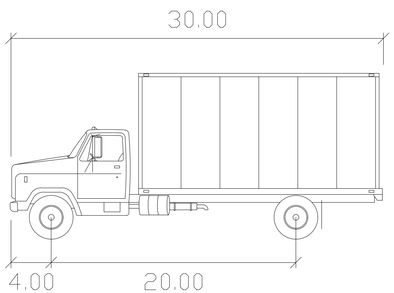
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SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	6.0
Steering Angle	: 31.8

SCALE: 1" = 20' (ON 24" x 36" SHEET)

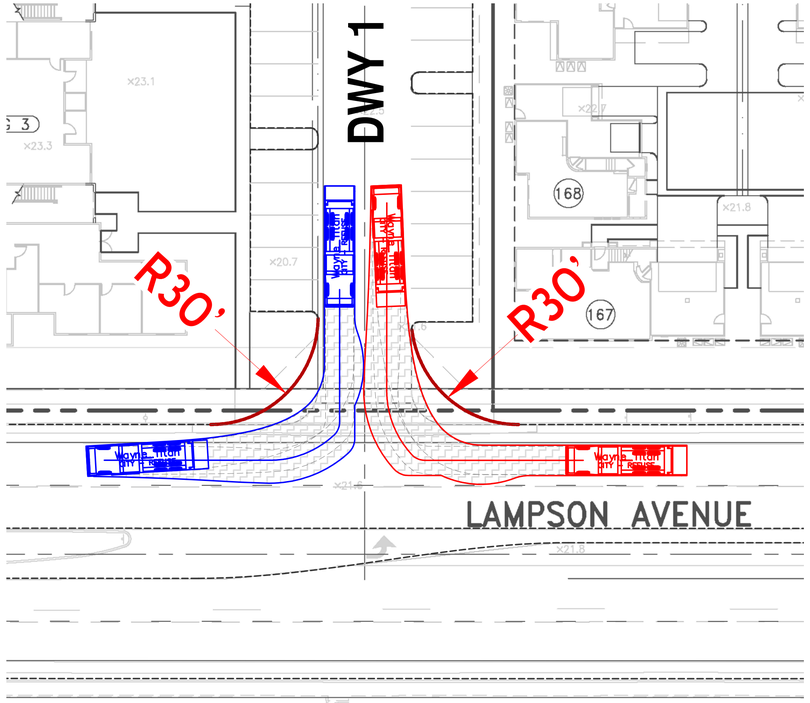
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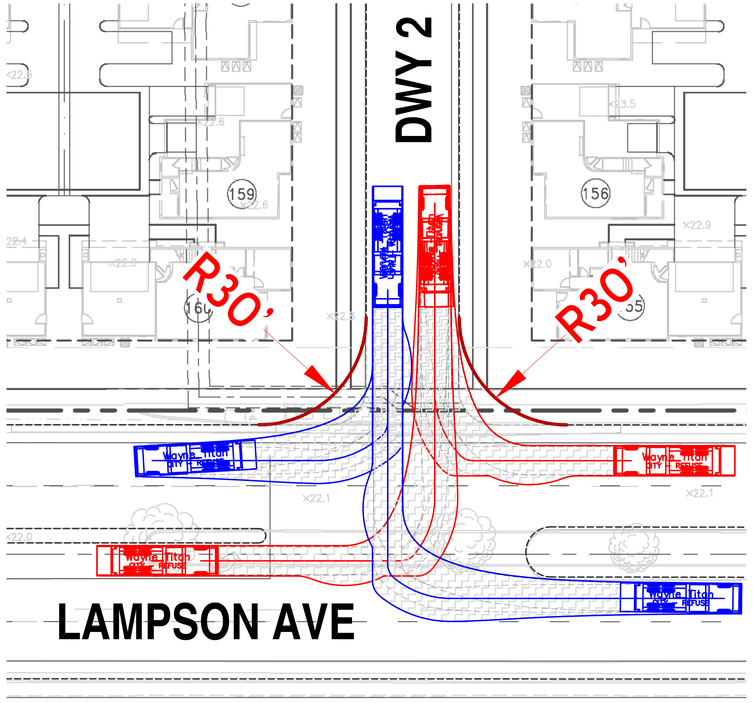
EXHIBIT 2: LAMPSON AVENUE AT PROJECT DRIVEWAYS
SU-30 TRUCK TURNING TEMPLATE

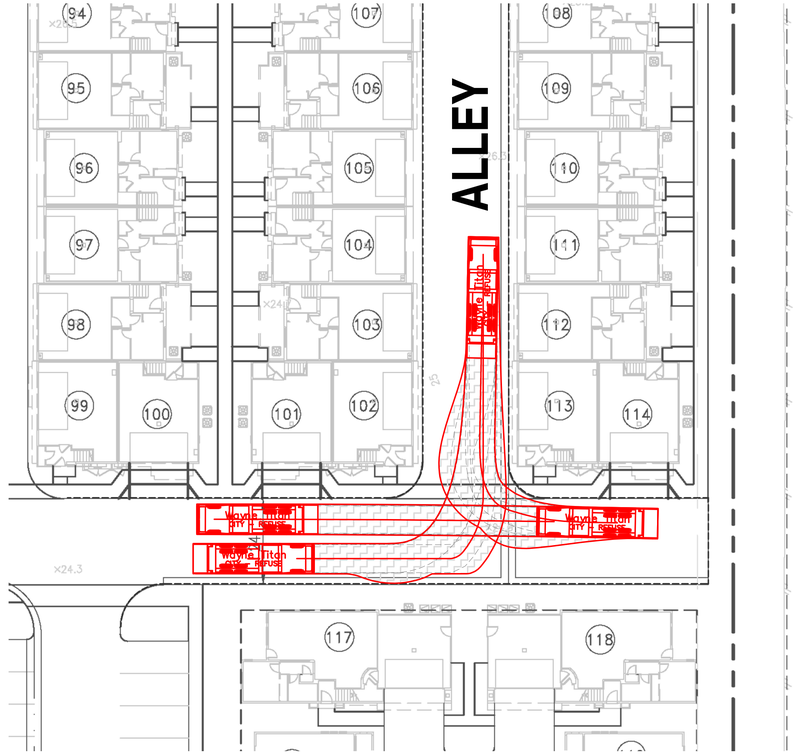
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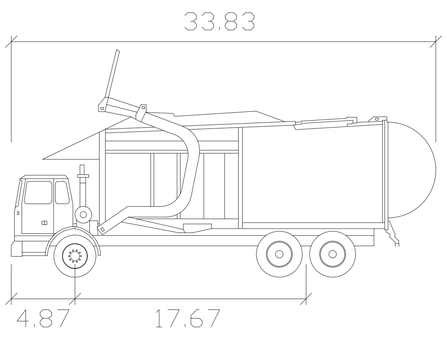
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Wayne Titan

	feet
Width	: 8.46
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

SCALE: 1" = 20' (ON 24" x 36" SHEET)

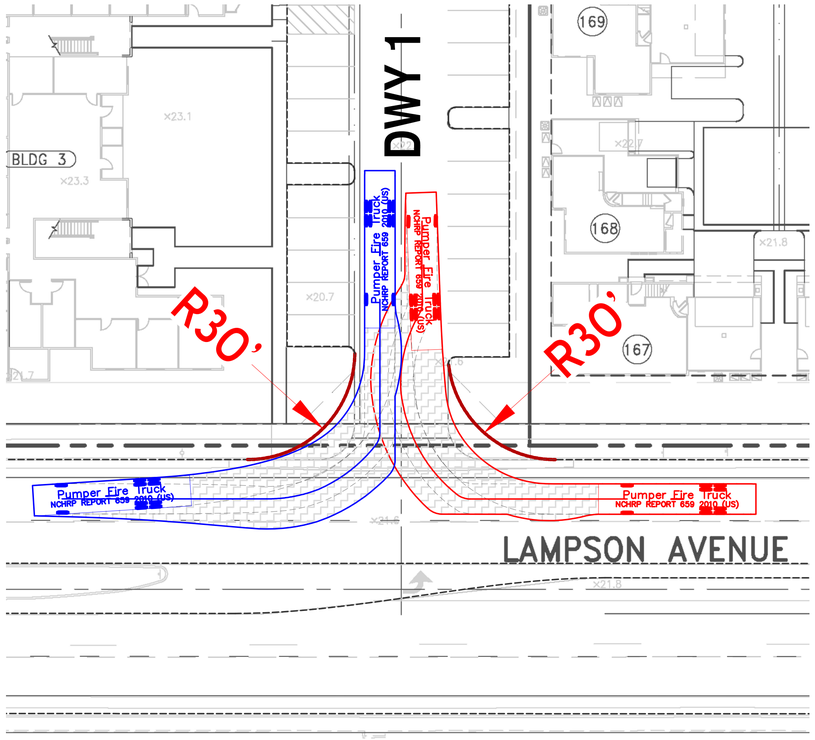
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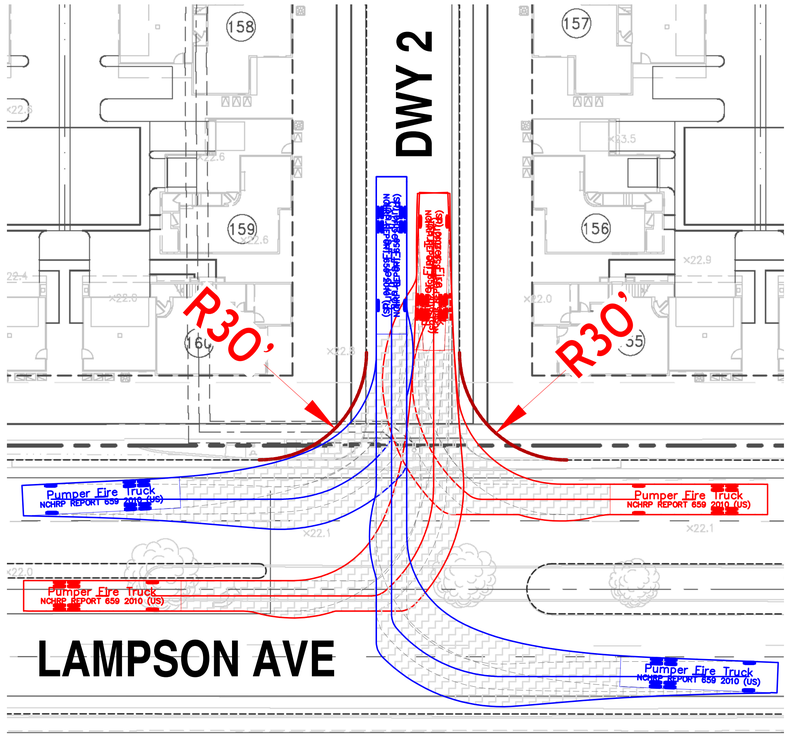
EXHIBIT 3: LAMPSON AVENUE AT PROJECT DRIVEWAYS GARBAGE TRUCK TURNING TEMPLATE

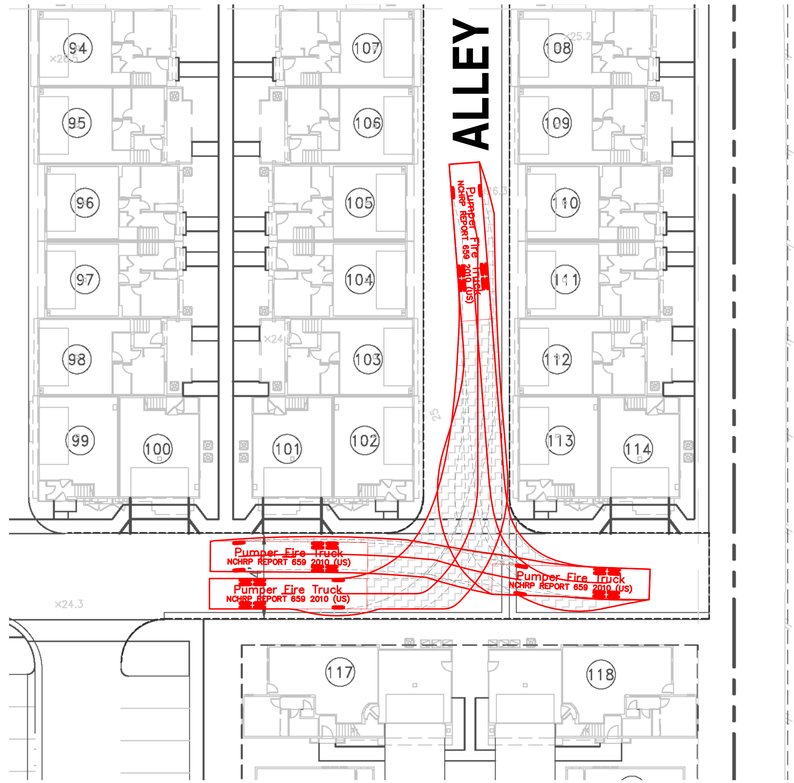
URBAN CROSSROADS

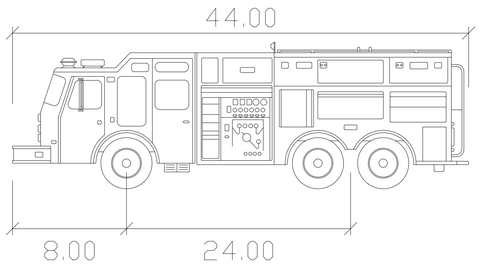
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Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

SCALE: 1" = 20' (ON 24" x 36" SHEET)

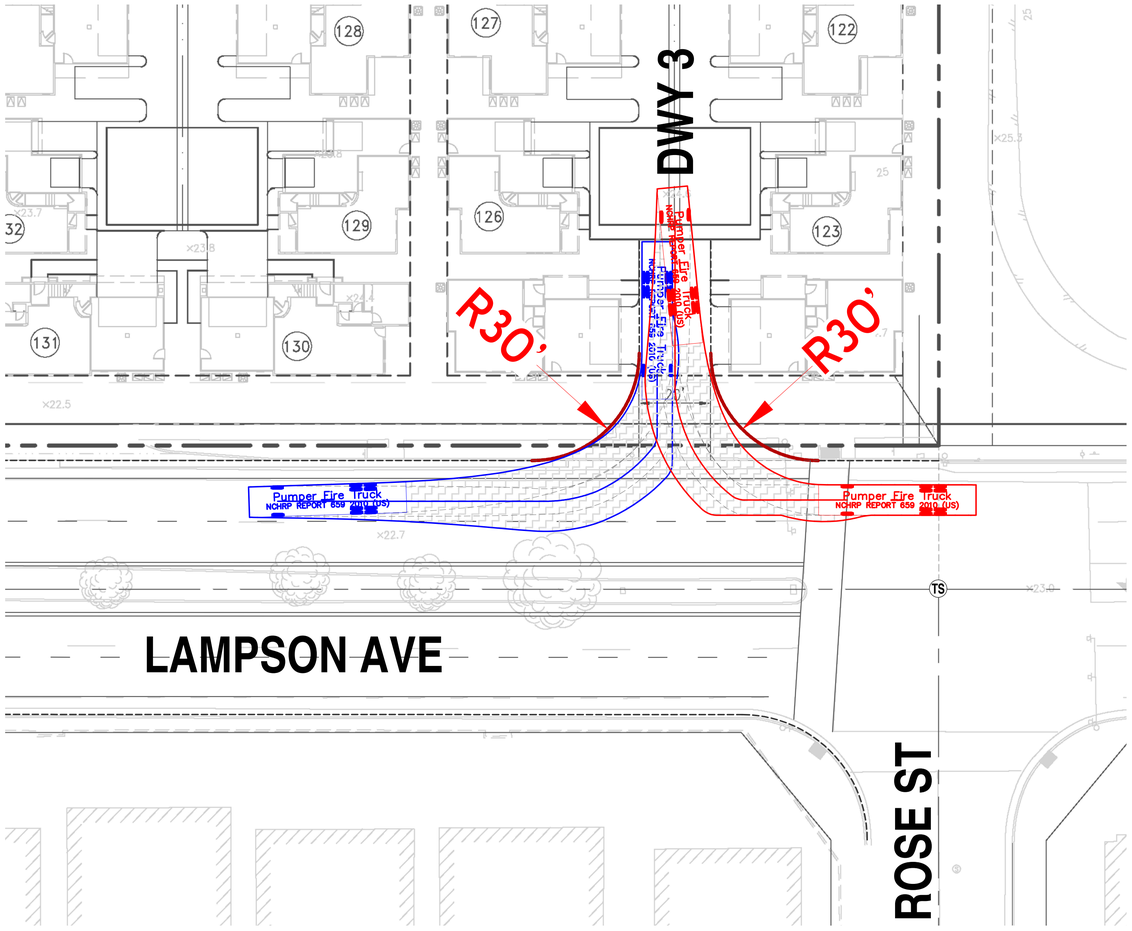
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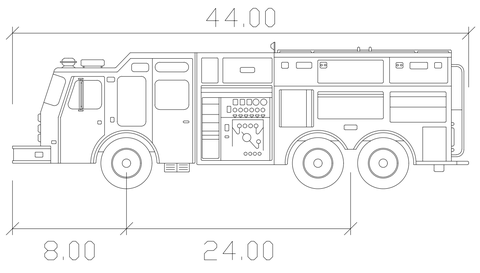
EXHIBIT 4: LAMPSON AVENUE AT PROJECT DRIVEWAYS FIRE TRUCK TURNING TEMPLATE

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14501 - ACAD\14501-TruckTurns_A.dwg - 4/10/23 - OD





Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

SCALE: 1" = 20' (ON 24" x 36" SHEET)

0 10 20 40 60 80

EXHIBIT 5: LAMPSON AVENUE AT PROJECT DRIVEWAYS
FIRE TRUCK TURNING TEMPLATE

URBAN CROSSROADS

WWW.URBANXROADS.COM
TELEPHONE # 949-660-1994

14501 - ACAD\14501-TruckTurns_A.dwg - 4/10/23 - OD



N

Architecture + Planning
17911 Von Karman Ave,
Suite 200
Irvine, CA 92614
949.851.2133
ktgy.com

MW INVESTMENT GROUP
MJW INVESTMENTS, LLC
27702 Crown Valley Parkway
Suite D-4-197
Ladera Ranch, CA 92694

LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

SCHEMATIC DESIGN

Plot Date:	01.16.24
Pre-App Submittal:	01.28.2022
1st Planning Submittal:	06.30.2022
2nd Planning Submittal:	10.10.2022
3rd Planning Submittal:	02.17.2023

0 20 40 80

SUN SHADOW STUDY
JUNE 21st, 9:00AM

A1.6



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0 20 40 80

ktgy

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SUN SHADOW STUDY
JUNE 21st, 11:00AM

A1.7



N

ktgy
Architecture + Planning
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ktgy.com

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0 20 40 80

SUN SHADOW STUDY
JUNE 21st, 3:00PM

A1.8



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ktgy
Architecture + Planning
17911 Von Karman Ave,
Suite 200
Irvine, CA 92614
949.851.2133
ktgy.com

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0 20 40 80

SUN SHADOW STUDY
DECEMBER 21st, 9:00AM

A1.9



Architecture + Planning
17911 Von Karman Ave,
Suite 200
Irvine, CA 92614
949.851.2133
ktgy.com

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LAMPSON - LOS ALAMITOS
LOS ALAMITOS, CA # 2021-0812

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0 20 40 80

SUN SHADOW STUDY
DECEMBER 21st, 11:00AM

A1.10



N

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0 20 40 80

SUN SHADOW STUDY
DECEMBER 21st, 3:00PM

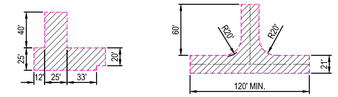
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LEGEND

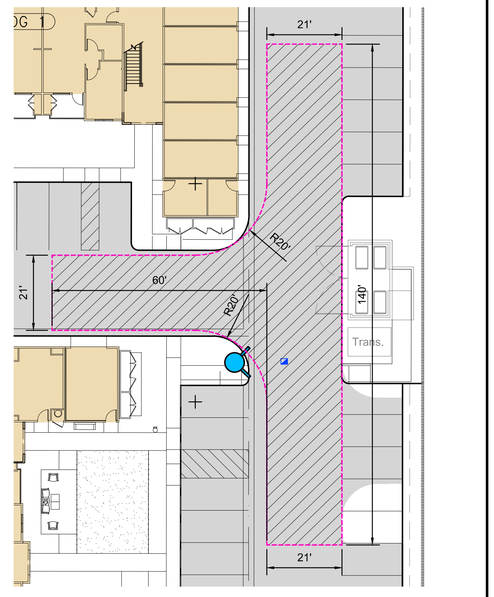
- PROPOSED FIRE HYDRANT WITH BLUE REFLECTIVE FIRE HYDRANT MARKER. MARKER SHALL BE PLACED 6" FROM CENTERLINE OF HYDRANT SIDE OF STREET.
- 150' MAXIMUM HOSE PULL DISTANCE
- 300' MAXIMUM HOSE PULL DISTANCE
- PROPOSED FIRE LANE ENTRY SIGN
- PROPOSED EMERGENCY VEHICULAR ACCESS (EVA) ENTRY SIGN
- KB — INDICATES APPROXIMATE LOCATION OF KNOX BOX WITH 3-SETS OF ENTRY DOOR/GATE KEYS.
- PAINT CURB RED WITH 'NO PARKING FIRE LANE' STENCIL AT 30' O.C. PER DETAILS HEREON AND OCFA GUIDELINE B-01
- INDICATES PROPOSED 3-STORY APARTMENT BUILDING (RESIDENTIAL AND INTERIOR COMMON USE)
- INDICATES PROPOSED 3-STORY TOWNHOME BUILDING
- INDICATES PROPOSED 3-STORY SINGLE FAMILY DWELLING UNIT
- INDICATES NOT A PART OF FIRE ACCESS
- PROPOSED PAVED ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
- R=20' / R=40' / 20' — INDICATES FIRE APPARATUS TURNING RADII: 20' WIDE PATH WITH 20' INSIDE AND 40' OUTSIDE
- PROPOSED EVA ENTRY ALL WEATHER DECORATIVE PAVING OR PAVERS THAT SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
- PROPOSED ALTERNATIVE DRIVABLE PAVERS OR PAVED SURFACE, NOT A PART OF FIRE ACCESS

OCFA TURNAROUND DETAILS
NOTE: ALL FIRE DEPARTMENT ACCESS ROADS INCLUDING STREETS NOT A PART OF FIRE ACCESS SHALL BE INSTALLED TO MEET OCFA REQUIREMENTS TO SUPPORT VEHICULAR LOADS OF 94,000 LBS.



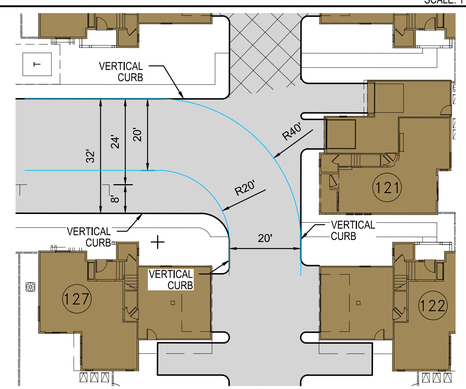
OCFA TURNAROUND ENLARGEMENT

SCALE: 1" = 20'

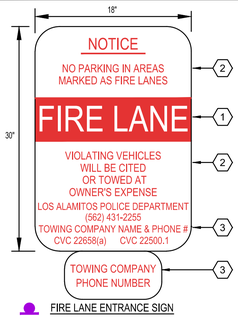


EVA DRIVE TURNING RADII ENLARGEMENT

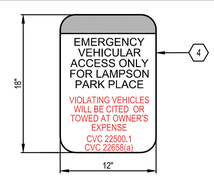
SCALE: 1" = 20'



FIRE LANE ENTRY SIGN AND EMERGENCY VEHICULAR ACCESS SIGN

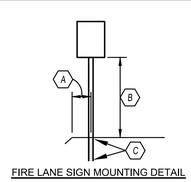


FIRE LANE ENTRANCE SIGN



EMERGENCY VEHICULAR ACCESS SIGN

1. THE WORDS "FIRE LANE" SHALL BE BOLD WHITE REFLECTIVE ON RED BACKGROUND, (2-3/4) INCHES IN HEIGHT.
2. LETTERING SHALL BE BOLD RED ON WHITE REFLECTIVE BACKGROUND, (1-3/8) INCHES IN HEIGHT.
3. LETTERING SHALL BE RED ON WHITE REFLECTIVE BACKGROUND, (1) INCHES IN HEIGHT.
4. LETTERING SHALL BE BOLD, CONDENSED WHITE REFLECTIVE LETTERING ON RED BACKGROUND, (2) INCHES IN HEIGHT.



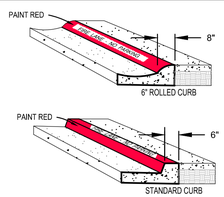
FIRE LANE SIGN MOUNTING DETAIL

- A — DEPTH OF SIGN SHALL BE 18 INCHES FROM STANDARD CURB AND 24 INCHES WITH ROLLED CURB TO CENTER OF POST.
- B — HEIGHT OF SIGN IN SIDEWALK OR PEDESTRIAN AREA SHALL BE 7'-0", AND 5'-0" IN ALL OTHER AREAS.
- C — BURY DEPTH SHALL BE A MINIMUM OF 24 INCHES AND REBAR, A CONCRETE FOOTING, OR ANOTHER METHOD TO PREVENT REMOVAL OF THE SIGN IS RECOMMENDED. FOOTINGS FOR SIGNS LOCATED IN THE PUBLIC RIGHT-OF-WAY SHALL BE PER THE LOCAL JURISDICTION'S REQUIREMENTS.

RED CURB DETAILS

PAINT CURB RED

NOTE: CURBS ALONG ACCESS LANES SHALL BE PAINTED OSHA SAFETY RED OR EQUIVALENT. "FIRE LANE NO PARKING" SHALL BE PAINTED ON TOP OF CURB IN WHITE LETTERING 3 INCHES HIGH AND SHALL BE SPACED 30'-0" ON CENTER OR PORTION THEREOF.



BUILDING INFORMATION AND DATA

BUILDING	STORIES	TOP OF HIGHEST ROOF	CONSTRUCTION TYPE	AUTOMATIC FIRE SPRINKLERS	SQUARE FOOTAGE
SINGLE FAMILY	2 & 3	36'-0" ✱	VB	NFPA 13D	2,815SF
TOWNHOUSE	3	37'-6" ✱	VB	NFPA 13D	12,091SF
MULTI-FAMILY	3	37'-0" ✱	V-A	NFPA 13	38,700SF

✱NOTE THAT BUILDING HEIGHT TO EAVE SHALL NOT EXCEED 29'-11" AT DESIGNATED GROUND LADDERING AREAS.

FIRE FLOW INFORMATION & HYDRANT SPACING REQUIREMENTS PER 2023 OCFA GUIDELINE B-01

SINGLE FAMILY
FIRE FLOW OF 500GPM /1 HOUR FOR THE LARGEST BUILDING OF 2,815 SF WITH TYPE V-B CONSTRUCTION SHALL BE PROVIDED BY THE PROPOSED WATER SYSTEM. HYDRANT SPACING REQUIREMENT IS 600' MAXIMUM BETWEEN HYDRANTS ON A THRU ROAD.

TOWNHOUSE
FIRE FLOW OF 1,500GPM / 3 HOURS FOR THE LARGEST BUILDING OF 12,091 SF WITH TYPE V-B CONSTRUCTION SHALL BE PROVIDED BY THE PROPOSED WATER SYSTEM. HYDRANT SPACING REQUIREMENT IS 500' MAXIMUM BETWEEN HYDRANTS ON A THRU ROAD.

MULTI-FAMILY
FIRE FLOW OF 1,750GPM / 3 HOURS FOR THE LARGEST BUILDING OF 38,700 SF WITH TYPE V-A CONSTRUCTION SHALL BE PROVIDED BY THE PROPOSED WATER SYSTEM. HYDRANT SPACING REQUIREMENT IS 500' MAXIMUM BETWEEN HYDRANTS ON A THRU ROAD.

PREPARED BY:
firesafe PLANNING, INC.
28506 AIROSO STREET
RANCHO MISSION VIEJO, CA 92694
OFFICE: (949) 240-5911

LAMPSON PARK PLACE - LOS ALAMITOS
PRELIMINARY FIRE ACCESS EXHIBIT

N

GRAPHIC SCALE
0 40' 80'
1 inch = 40 ft.

SHEET 1 OF 1
DATE: 06/26/2024

The use of these plans and specifications shall be restricted to the original site for which they were prepared and publication thereof is expressly limited to such use. Reproduction, publication, or re-use by any method, in whole or in part without the express consent of FIRESAFE PLANNING SOLUTIONS is prohibited.

OCFA WATER AVAILABILITY FORM

SECTION A: To be completed by customer

Project Name: Lampson Park Place OCFA SR #: ASSIGNED UPON PLAN SUBMITTAL

Project Address: 4665 Lampson Ave City: Los Alamitos

Applicant Phone #: (949)916-3800 Fax #: ( )

Area of largest building 38,700 ft^2; Construction type? (check one): [ ] IA [ ] IB [ ] IIA [ ] IIB [ ] IIIA [ ] IIIB [ ] IV [ ] VA [✔] VB

Is this building sprinklered throughout? (check one) [ ] N [✔]

SECTION B: To be completed by local water department/district

Customer to provide results to OCFA

Water Department/District: Golden State Water Company

Test location (indicate address or cross-streets & provide reference map):

Hydrant number(s) (if applicable): NA

Elevation of test hydrant: feet above sea level

Date of Test[1]: 2/22/24 Time of test[1]: hydraulic model [ ] am [ ] pm

[1] Test to be performed as close as possible to the time that the lowest flows and pressures are expected (e.g., M-F, 6:00 – 9:00 am and 5:00 - 9:00 pm)

FLOW TEST RESULTS *TEST INFORMATION IS VALID FOR 6 MONTHS FROM DATE TEST IS PERFORMED*					
Static pressure:	95	psi	**Residual pressure**:		psi
Observed flow:		gpm	**Flow calc'd at 20 psi:**	1,937	gpm

[✔] Check the box if the test information above was obtained in a manner other than an actual flow test (i.e. by computer modeling).

Based on fluctuations known to exist at the site of the test, provide estimated values for the following:			
Maximum static pressure	psi	**Minimum static pressure**	psi
Minimum residual pressure	psi	**Minimum residual flow**	gpm

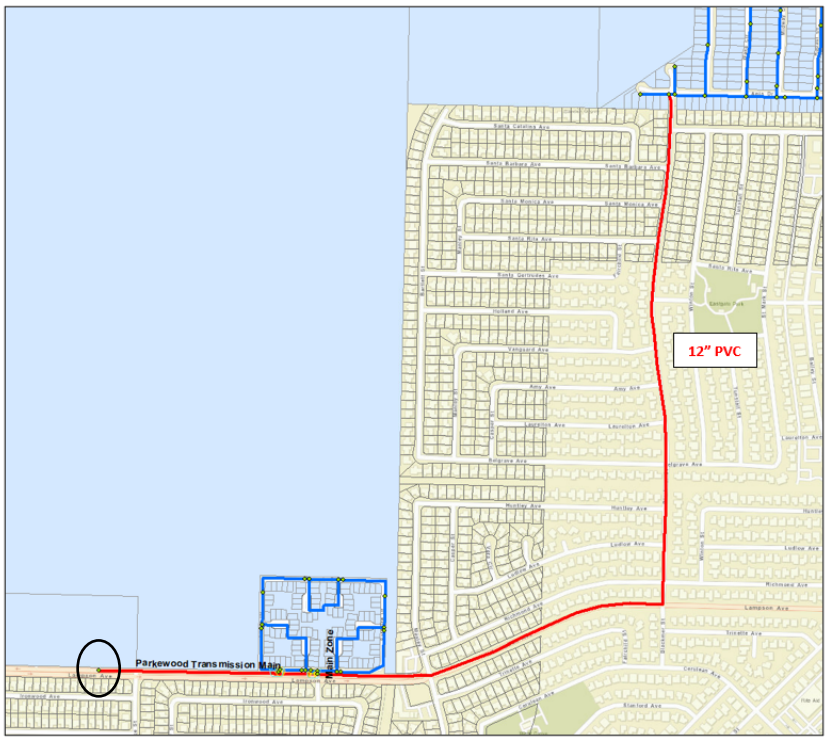
I have witnessed and/or reviewed this water flow information and by personal knowledge and/or on-site observation certify that the above information is correct.

Name: Melynda Holm Company/Agency: Golden State Water Company

Signature: Title: Operations Engineer

Date: 2/23/2024

Revised 1/7/16 ese


12" PVC
Parkewood Transmission Main
Main Zone

Golden State
Water Company
A Subsidiary of American States Water Company

July 9, 2024

Dane McDougall
C&V Consulting Inc.
9830 Irvine Center Drive
Irvine, CA 92618

Re: Will Serve Letter
4665 Lampson Avenue
Los Alamitos, California 90720

Dear Dane McDougall,

This letter is to inform you that water service is available to the above referenced address from Golden State Water Company's (GSWC) Orange County District water system. Service to the address can be provided from our existing water facilities within Lampson Avenue.

Upon completion and execution of a Water Service Agreement, that contains satisfactory financial arrangements and other provisions governing the extension of water service, Golden State Water Company (GSWC) will begin providing water service for the referenced address once all owner obligations have been satisfied. Analysis of more detailed development plans may require the owner to participate in the construction of special facilities prior to the Company providing water service.

GSWC is committed to providing water service to all customers within its service area, consistent with the company's obligations under rules, statutes and regulations of both the California Department of Public Health and the California Public Utilities Commission.

Unless modified or extended by GSWC, this Will Serve Letter shall terminate and be of no further force and effect one year from the date indicated above.

If you have any questions concerning the issues addressed in this letter, please let us know.

Sincerely,

Digitally signed by Melynda L. Holm
DN: C=US, E=mholm@gswater.com, OU=Golden State Water Company, CN=Melynda L. Holm
Date: 2024.07.10 07:41:27-07'00'

Melynda Holm
Operations Engineer
Orange County District

SOUTHERN CALIFORNIA EDISON
An *EDISON INTERNATIONAL* Company

8/19/2022

Lampson Los Al

4665 Lampson Avenue, Los Alamitos 90720

Your project is located in Southern California Edison (SCE) service territory. SCE will serve the above subject project's electrical requirements per the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs.

SCE may need to conduct utility studies, where applicable, to assess whether additions or modifications to the existing electric infrastructure are required to serve this project. Where applicable, SCE has attached Appendix (B) which not only describes the study, and permitting, but includes a Project Information Sheet that will need to be completed by you and submitted to SCE if your project is at a point where SCE has to determine the required electrical utility work. This Will-Serve letter does not imply that either: (i) these studies have been completed, or (ii) that any required California Environmental Quality Act (CEQA) analysis of project-related electric utility impacts has been conducted.

I am the SCE Design Representative currently assigned to this project. SCE or Applicant will design and construct all required electrical infrastructure to serve this project provided you enter into the applicable contractual agreements with SCE identify scope of electrical utility work required, and supply the following information:

- Site plans as required
- Required contracts and agreements (fully executed)
- Applicable fees
- Local permits
- Required easement documents

Your project will be scheduled for construction once SCE has all the necessary information for your project and you have submitted or agreed to the applicable requirements as stated above, and paid any necessary fees.

If your project will not require SCE services, please notify us so that we can update our records.

SCE appreciates your business. If you have any questions, please feel free to call me at (714) 296-7609.

Sincerely,

SCE Design Representative

Enclosure: Appendix B, where applicable

Universal Waste Systems, Inc
P O BOX 3038 • WHITTIER, CA 90605
Telephone: (800) 631-7016 • Fax (562) 205-9237

Peter Duarte
Principal Landscape Architect
23195 La Cadena Dr. Ste 103
Laguna Hills, CA 92653

Mr. Duarte,

Universal Waste Systems Inc. has reviewed the plan and is currently able to provide service as outlined for your project at Los Alamitos- Lampson Ave. It is hard to tell exact measurements from what is provided, but if they are designed for large collection trucks then we will service as outline in the proposal.

If you have any questions please let me know.

Thank you

Matt Blackburn

Matt Blackburn
Universal Waste Systems Inc.

CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
9830 Irvine Center Drive
Irvine, CA 92618
(949) 916-3800

August 23, 2024

RE: OLD RANCH COUNTRY CLUB SPECIFIC PLAN PROJECT, SEAL BEACH – SEWER DEMAND CALCULATIONS

We have been asked to evaluate sewer capacity conditions related to further refinements of the proposed Old Ranch Country Club Project located at 3901 Lampson Avenue in the City of Seal Beach in the context of the proposed 4665 Lampson Avenue Project located in the City of Los Alamitos. Additionally, this memorandum describes revisions made to the Sanitary Sewer Analysis to address comments received from the City of Seal Beach.

As background for this request, the City of Seal Beach's updated Sewer Master Plan (September 2022) identified the sewer loads for potential development areas within the City of Seal Beach. Those sewer loads are summarized in Table 1 of that Sewer Master Plan, which is shown below. The Old Ranch Country Club is listed as Site B-5, and it is identified as comprising 150 acres, five of which are indicated as "redevelopment area." Table 1 also identifies the Old Ranch Country Club development area as including 120 potential dwelling units resulting in a sewer load of 19,200 gallons per day (gpd).

Table 1
Potential Development Areas (September 2022)
Sewer Load Summary Table

Site	Development Area	Location	Area (ac)	Redeve-lopment Area (ac)	Zoning	Potential Units (du)	Density (du/ac)	Sewer Unit Flow Factor (gpd/du)	Sewer Load (gpd)	Sewer Load (mgd)	Model Manhole ID where Potential Load is Applied
B-2	Accurate Storage	Northwest of Adolfo Lopez Drive and Seal Beach Boulevard	4	1.8	RHD-20	59	33	160	9,440	0.009440	S01-135
B-3[a]	Shops at Rossmoor	Northwest of Seal Beach Boulevard and St Cloud Drive	27	10	RHD-46	400	40	-	-	-	-
B-4	Old Ranch Town Center	Southeast of Plymouth Drive and Seal Beach Boulevard	26	5	RHD-46	200	40	160	32,000	0.032000	T01-117
B-5	Old Ranch Country Club	Northeast of Seal Beach Boulevard and Lampson Avenue	150	5	RG	120		160	19,200	0.019200	B01-A06, B01-A03A
B-6[a]	Leisure World	West of Seal Beach Boulevard, between Westminster Boulevard and San Diego Freeway	533	5	RHD-PD	150	30	-	-	-	-
B-7[a]	Seal Beach Plaza	Northwest of Westminster Boulevard and Seal Beach Boulevard	7	2.5	SC	75	30	-	-	-	-
B-8[b]	Sunset Aquatic Marina	Southwest of Sunset Way and Bolsa Chica Channel	4.8	4.8	PS	144	30	160	23,040	0.023040	-
B-9	Navy Site	Northeast of Pacific Coast Highway and Seal Beach Boulevard	22		MI	150	30	160	24,000	0.024000	NAVY
B-10	Seal Beach Center	Northwest of Pacific Coast Highway and Balboa Drive	9	4	RHD-33	120	30	160	19,200	0.019200	E05-202
B-11	Main Street SP Area	Main Street between Electric Avenue and Ocean Avenue	15		MSSP	40		160	6,400	0.006400	F06-317, F07-330A, F27-379, F28-C386
B-12	99 Marina	Northeast of Marina Drive and 1st Street	4.3	4.3	OE/RHD-20	86	20	160	13,760	0.013760	C08-471
WE-1	West Ed	4665 Lampson Avenue, Los Alamitos, CA				246		160	39,360	0.039360	B15-M04
								Total	**186,400**	**0.186400**	

[a]This development area is not within the City of Seal Beach's sewer service area
[b]The sewage generated in this development area is assumed to be conveyed to Aquatic Park lift station. The lift station is not in the hydraulic model. Sewage is pumped from the lift station to the City of Huntington Beach's sewer system,

Since 2022, the proposed development of the Old Ranch Country Club Project has been further refined, and as of January 2023 now includes more than the residential component identified in Table 1 of the Sewer Master Plan. Per the Initial Study dated February 7, 2023, prepared to support the Old Ranch Country Club Specific Plan, the anticipated redevelopment area has increased from 5 acres to approximately 35 acres over the existing site, and

includes a 116-unit multi-family housing development, a 51-unit senior housing complex including an approximately 25,340 square foot medical office facility on the ground floor, a 150-key overnight accommodation, an approximately 2,650 square foot relocated maintenance facility, a parking structure, and a new clubhouse pool and associated structures (21,000 square feet) abutting the existing clubhouse.

This more refined development proposal for the Old Ranch Country Club project would result in an increase in thesewer demand. The following table and corresponding calculations have been developed to determine the anticipated increased sewer demand associated with the more current Old Ranch Country Club Project proposal. Flow factors as provided by City of Seal Beach were utilized for residential land uses and additional flow factors from the Orange County Sanitation District (OSCD) were utilized for office, hotel, and commercial/ office (medical) land uses.

Redeveloped Land	Units	Area (SF)	Area (AC)	Land Use Category	Flow Factor	Unit	Flow (GPD)
Multi-Family Housing	116	188,500	4.33	Residential High Density*	160	GDP/DU	18,560
Senior Housing Complex	51	25,340	0.58	Residential High Density*	160	GDP/DU	8,160
Medical Office	1	25,340	0.58	Office**	2,262	GPD/AC	1,316
Hotel	150	109,015	2.50	Hotel**	150	GPD/Room	22,500
Parking Structure	1	226,441	5.20	N/A	-		0
Clubhouse	1	21,000	0.48	Commercial/Office**	2,262	GPD/AC	1,090
Total	--	595,636	13.67	--	--		51,626
*Flow Factor per City of Seal Beach Sewer Master Plan 2018							
**Flow Factor per OCSD Wastewater Flow Estimates for Development Planning							

The relocated maintenance facility comprising approximately 2,650 square feet was not included in this analysis because this facility is being relocated and is not a new facility.

As shown in the Potential Development Areas (September 2022) table set forth above, the 120 dwelling units of the Old Ranch Country Club Project is anticipated to generate a sewer demand of 19,200 gpd, and as shown in the summary above, the further refined proposal for the Old Ranch Country Club Project is anticipated to generate a sewer demand of 51,626 gpd. This is an increase in total demand of approximately 32,426 gpd (0.0502 cfs).

As explained in the Draft Environmental Impact Report for the 4655 Lampson Avenue project, a Sanitary Sewer Analysis (September 2022) was prepared for the 4655 Lampson Avenue Project which evaluated proposed sewer demands anticipated by the Project and downstream segments. Sewer manhole monitoring was conducted in September 2022 to determine the actual discharge at three manholes (MH): (1) Basswood and Aster Street (Manhole A-16); (2) Candleberry Avenue and Aster Street (Manhole A-21); and (3) Elder Avenue (Manhole A-25). In response to comments received from the City of Seal Beach on the Sanitary Sewer Analysis dated September 2022, a revised Sanitary Sewer Analysis was prepared in March 2024. Sewer system model data was provided by the City of Seal Beach (AKM's City wide sewer study) utilizing an area calculation method which indicated there are 16 sewer segments shown to have a d/D level above 0.5. Because the area calculation is used to calculate flows for large areas and is not necessarily representative of actual flows, actual monitored flows were determined and evaluated. Using the actual monitored flows indicated that there are only 7 segments estimated to exceed the City's peak dry weather flows (PDWF) d/D criteria after the proposed project is implemented. The remaining capacity above a PDWF d/D of 0.50 is reserved for wet weather flows. Flows over the d/D criteria range from 0.51 to 0.55 and represent approximately 56% of the pipe's flow capacity, which is well within the capacity of the downstream sewer lines.

No additional pipe segments in the AKM study were found to be undersized. The nine (9) segments that were found to be undersized in AKM's study were determined to be acceptable after analyzing using the actual monitored flows. The d/D levels are shown to be higher because the existing segments have flat slopes, ranging from 0.16% - 0.22%. However, the pipe size can handle proposed flow levels, and sewer pipe upgrades are not required.

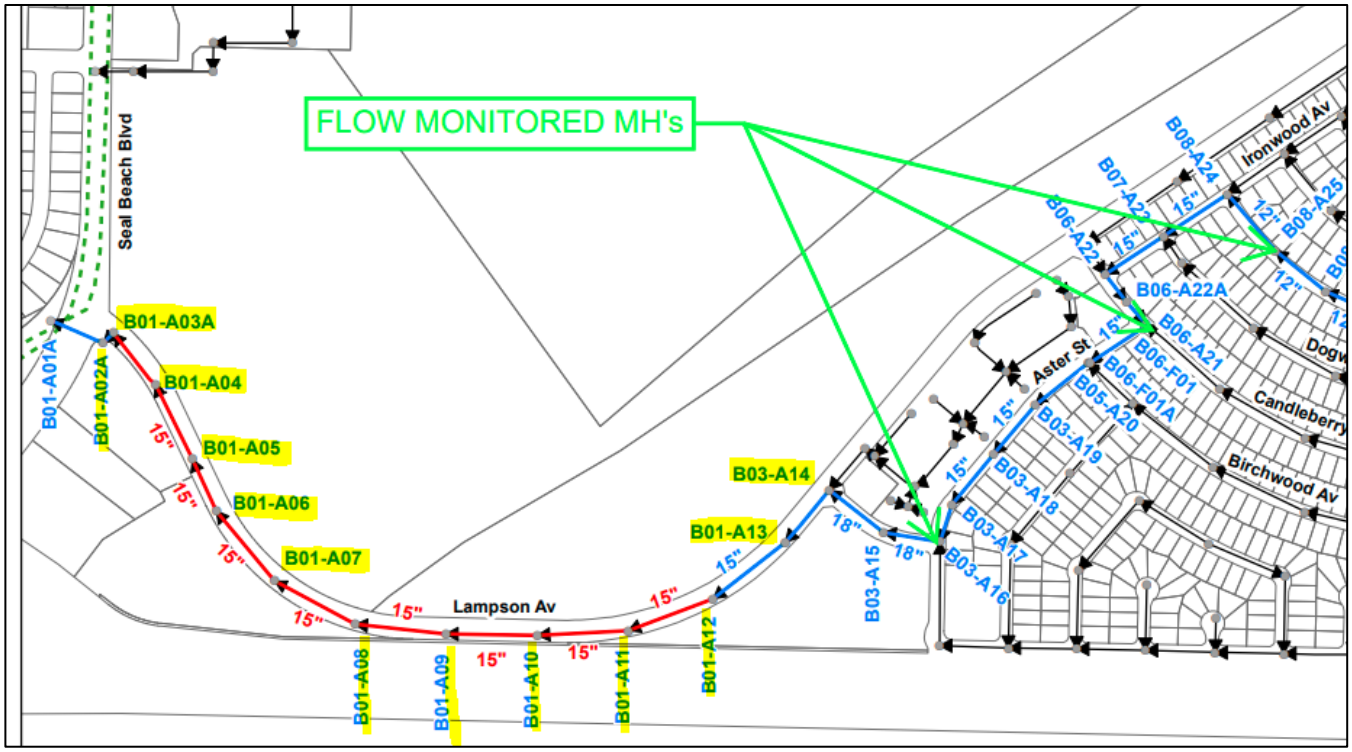
To evaluate a potential increase in the flow depth to pipe diameter ratio (d/D) based on the increase in total demand associated with the further refined Old Ranch Country Club project and after taking into consideration the amount of sewer discharge associated with the 4655 Lampson Avenue project, C&V Consulting, Inc. applied the increase in total demand from the further refined Old Ranch Country Club Project to manhole (MH) IDs B03-A14 and B01-A13 through B01-A02A, as shown below. These manholes and their associated pipeline segments are located downstream of the three manholes that were monitored for the 4655 Lampson Avenue Project and as such include the upstream sewer flows anticipated by the 4655 Lampson Avenue Project and currently existing development. The Draft Environmental Impact

Report concluded that the proposed flows from the 4655 Lampson Avenue Project, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems, and that the existing sewer system has adequate capacity for the proposed development.

Per the following table, the overall d/D is anticipated to be less than 0.5 for the identified segments with the increased demand added to the system. This means that when the sewer flows from the further refined Old Ranch Country Club Project are added to the sewer flows from the 4655 Lampson Avenue Project based on the downstream monitored manhole flows, the depth of flow to pipe diameter ratio is less than 50%. This in turn means that even with the Old Ranch Country Club Project, the sewer pipe system capacity remains capable of maintaining an adequate flow well below 50% of its flow depth capacity. As such, adequate capacity exists to serve the 4655 Lampson Avenue Project's projected demand in addition to the sewer pipe systems existing commitments, even after taking into account the Old Ranch Country Club Project. The anticipated d/D increase determined from the 4665 Lampson Avenue Project plus the Old Ranch Country Club Project is approximately 2.6-3.4%, which is considered negligible.

ID	PDWF Total Flow (cfs)	PDWF d/D	Total PDWF + Old Ranch Redevelopment Area (cfs)	Calculated Depth (ft)	Calculated PDWF d/D	d/D Percent Incease
B03-A14	0.8619	0.34	0.9121	0.5240	0.35	3.1%
B01-A13	0.8811	0.38	0.9313	0.4900	0.39	3.4%
B01-A12	0.9003	0.42	0.9505	0.5450	0.44	3.2%
B01-A11	0.9195	0.43	0.9697	0.5510	0.44	3.0%
B01-A10	0.9387	0.43	0.9889	0.5570	0.45	3.0%
B01-A09	0.9578	0.44	1.0080	0.5630	0.45	2.9%
B01-A08	0.9770	0.44	1.0272	0.5690	0.46	2.9%
B01-A07	0.9961	0.45	1.0463	0.5750	0.46	2.9%
B01-A06	1.0328	0.46	1.0830	0.5860	0.47	2.6%
B01-A05	1.0519	0.46	1.1021	0.5920	0.47	2.6%
B01-A04	1.0710	0.47	1.1212	0.5980	0.48	2.6%
B01-A03A	1.1237	0.28	1.1739	0.4240	0.28	2.2%
B01-A02A	1.1237	0.26	1.1739	0.4030	0.27	2.8%

Refer to the following exhibit identifying the location of the monitored manholes and downstream segments analyzed for the Old Ranch Country Club redevelopment area.


FLOW MONITORED MH's
Seal Beach Blvd
B01-A01A
B01-A02A
B01-A03A
B01-A04
B01-A05
B01-A06
B01-A07
B01-A08
B01-A09
B01-A10
B01-A11
B01-A12
B01-A13
B03-A14
B03-A15
B03-A16
B03-A17
B03-A18
B03-A19
B05-A20
B06-F01A
B06-F01
B06-A21
B06-A22A
B06-A23
B07-A22
B08-A24
B08-A25
Lampson Av
Aster St
Ironwood Av
Candleberry
Birchwood Av
15"
18"
12"

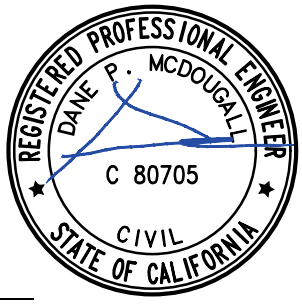
SANITARY SEWER ANALYSIS

TTM No. 22-01

Prepared for:
Lampson Park Place, LLC
27702 Crown Valley Parkway D4-197
Ladera Ranch, CA 92694

Property:
TTM No. 22-01
APN 130-012-35
4665 Lampson Ave.
Los Alamitos, California

Prepared by:
C&V Consulting, Inc.
9830 Irvine Center Drive
Irvine, CA 92618
Contact: Dane P. McDougall, P.E.
(949) 916-3800



Dane P. McDougall R.C.E. 80705

September 2022
Revised: March 2024

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Appendices

A. SEWER MONITORING STUDY TABLE & DEPTH OF FLOW CALCULATIONS

B. FLOW MONITORING DATA

C. REFERENCES

INTRODUCTION

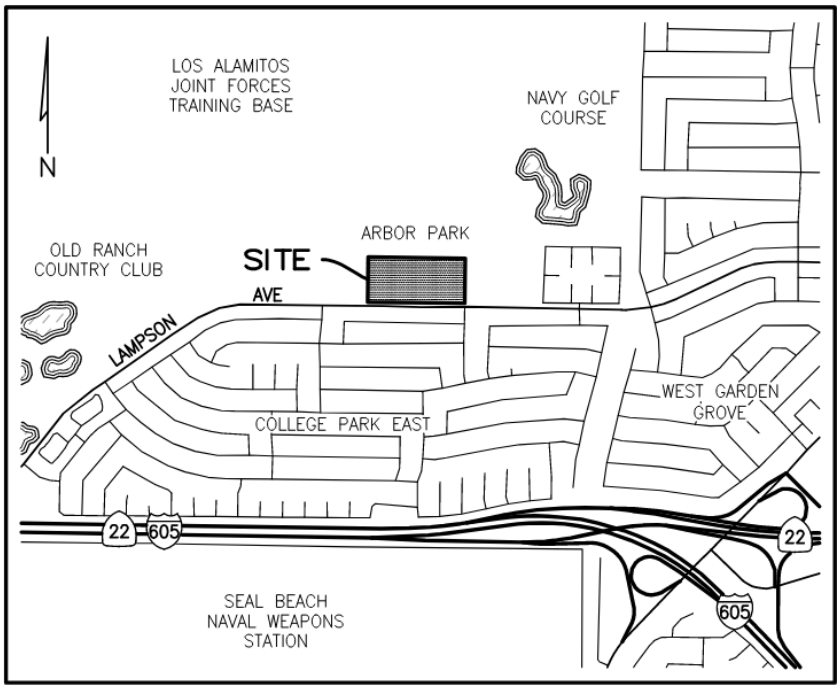
The following study has been prepared by C&V Consulting, Inc. to determine and illustrate:

- ***A.*** The capacity of the existing sewer segments from the proposed development site to the OCSD Sewer Trunk.
- ***B.*** If the existing sewer facilities will adequately service the proposed development.

Although the project site is in the City of Los Alamitos, the City of Seal Beach is providing sewer service to the proposed development which falls within the Rossmoor/Los Alamitos Area Sewer District (RLAASD). The sewer system conveys wastewater from the service area for treatment by the Orange County Sanitation District (OCSD). This study utilizes a sewer monitoring method to determine the results. The report will analyze the existing capacity and how the future flows from the proposed development will impact the sewer system and all reaches from the site point of connection to the OCSD Sewer Trunk.

SITE DESCRIPTION

The project site comprises a gross total of 12.367 acres and is located at 4665 Lampson Ave., at the northwest corner of Rose Street and Lampson Avenue, in the City of Los Alamitos, California (APN: 130-012-35). The site is bounded by Lampson Avenue to the south, Arbor Park to the north and east, and undeveloped land to the west.



PROJECT DESCRIPTION

The development proposes the construction of 246 total units (77 affordable apartment units, 55 detached SFD units, and 114 townhouse units) with private garages, private drive aisles, sidewalks, guest parking areas, and common landscaped areas.

Project Site	Size (ac)
Total Project Area (APN: 130-012-35)	12.367

METHODOLOGY/EXISTING CONDITIONS

The study will investigate the sewerage discharge route from the proposed development (TTM No. 22-01) to the OCSD Sewer Trunk. The existing sewer mains have flats slopes with most ranging with slopes of (0.1%-0.2%).

Sewer Monitoring Method

Basswood Street and Aster Street Intersection

As part of this study for the sewer monitoring analysis, the project was conditioned to flow monitor the existing conditions at northern inlet of Manhole B03-A16 of the 15" local main, located in the Basswood Street and Aster Street Intersection by ADS. The flow monitoring took place from 8/23/22 to 9/5/22.

Candleberry Avenue and Aster Street Intersection

As part of this study for the sewer monitoring analysis, the project was conditioned to flow monitor the existing conditions at northern inlet of Manhole B06-A21 of the 17.88" xx 17" (H x W) elliptical local main, located in the Candleberry Avenue and Aster Street Intersection by ADS. The flow monitoring took place from 8/23/22 to 9/5/22.

Elder Avenue

As part of this study for the sewer monitoring analysis, the project was conditioned to flow monitor the existing conditions at northern inlet of Manhole B08-A25 of the 12" local main, located in Elder Avenue by ADS. The flow monitoring took place from 8/23/22 to 9/5/22.

SEWER PIPE CAPACITY ANALYSIS

Sewer Monitoring Method

AKM provided "Table 2 Hydraulic Analysis Results For Sewers Downstream of West Ed Development" highlighting the reaches suspected to have d/D levels above 0.5.

However, the monitored manholes show a lower flow average than the table provided by AKM.

Using "Table 2 Hydraulic Analysis Results For Sewers Downstream of West Ed Development", ratios were used from the flow monitored averages to calculate the flows for all reaches upstream of the monitored manholes. For reaches downstream of the monitored manholes, the delta flow value was added to the last monitored manholes to calculate the flow for the remaining reaches.

The average dry weather flow was used to calculate the peak dry weather flows (PDWF). The PDWF was used to calculate the d/D levels for each sewer segment.

Sewer pipes were analyzed per City of Seal Beach Sewer Master Plan 2018 Table ES-1, for a maximum design depth at half-full for pipe sized at 15" or under.

The "Unit Flow Factors" Table 3-1 per the City of Seal Beach Sewer Master Plan 2018 was utilized for this method to obtain the peak flow generated from the proposed residential project site. It was determined from the architectural plans for the 246 residential unit (20.33 DU/AC) project has a proposed zoning of Adopted R-3 Ordinance. It is assumed that this zoning is equivalent to the "Residential High Density" Land Use from the "Unit Flow Factors." The project is estimated to be a total average flow output of 39,360 GPD (0.0609 cfs) of effluent.

Refer to the Sewer Monitoring Study Table in Appendix A for calculation details for all reaches.

CONCLUSION

The d/D results from this study were calculated using methods provided by ADS and Manning's equation. Based on the sewer analysis on future developed land use provided in AKM's City wide sewer study, there are 16 sewer segments shown to have a d/D level above 0.5. Then, as analyzed per actual monitored flows, there are only 7 segments estimated to exceed the City's PDWF d/D criteria after the proposed project is implemented. The remaining capacity above a PDWF d/D of 0.50 is reserved for wet weather flows. No additional pipe segments that were found in the AKM study were found to be undersized. 9 segments that were found to be undersized in AKM's study were found to be acceptable after analyzing using the monitored flows. Typically, the pipe size can handle these flow levels, however, the existing segments has flat slopes (ranging from 0.16%-0.22%) which causes the d/D levels to be higher.

Appendix A

SEWER MONITORING STUDY TABLE & DEPTH OF FLOW CALCULATIONS

AKM: TABLE 2
HYDRAULIC ANALYSIS RESULTS FOR SEWERS DOWNSTREAM OF WEST ED DEVELOPMENT

General Information						Ex. without West Ed Dev.				With West Ed Dev.			
ID	From ID	To ID	Dia-meter (in)	Length (ft)	Slope	PDWF Total Flow (cfs)	ADWF Unpeakable Flow (cfs)	ADWF Peak-able Flow (cfs)	PDWF d/D	PDWF Total Flow (cfs)	ADWF Unpeak-able Flow (cfs)	ADWF Peak-able Flow (cfs)	PDWF d/D
B15-M04	B15-M04	B15-M03	8	124	0.0280	0.0079	0.0007	0.0024	0.05	0.1003	0.0007	0.0418	0.15
B15-M03	B15-M03	B15-M02	8	335	0.0020	0.0151	0.0014	0.0048	0.11	0.1063	0.0014	0.0442	0.30
B15-M02	B15-M02	B15-M01	8	265	0.0020	0.0220	0.0021	0.0073	0.14	0.1123	0.0021	0.0466	0.31
B15-M01	B15-M01	B15-A39	8	149	0.0019	0.0287	0.0028	0.0097	0.16	0.1182	0.0028	0.0490	0.32
B15-A39	B15-A39	B15-A38	8	251	0.0016	0.2395	0.0275	0.0949	0.49	0.3192	0.0275	0.1343	0.59
B15-A38	B15-A38	B12-A37	8	220	0.0020	0.2485	0.0286	0.0988	0.47	0.3280	0.0286	0.1381	0.56
B12-A37T	B12-A37	B12-H14	8	286	0.0016	0.2552	0.0294	0.1016	0.51	0.3345	0.0294	0.1410	0.61
B12-H14	B12-H14	B12-H13	8	285	0.0020	0.2619	0.0302	0.1045	0.49	0.3410	0.0302	0.1439	0.58
B12-H13	B12-H13	B12-H12	8	285	0.0022	0.2685	0.0311	0.1074	0.48	0.3476	0.0311	0.1467	0.56
B12-H12	B12-H12	B12-H11	8	285	0.0020	0.2752	0.0319	0.1102	0.51	0.3541	0.0319	0.1496	0.59
B12-H11	B12-H11	B12-A32	8	245	0.0022	0.3076	0.0360	0.1243	0.52	0.3858	0.0360	0.1636	0.60
B12-A32	B12-A32	B08-A31	12	256	0.0018	0.5701	0.0698	0.2414	0.43	0.6447	0.0698	0.2807	0.46
B08-A31	B08-A31	B08-A30	12	290	0.0018	0.5760	0.0706	0.2440	0.43	0.6505	0.0706	0.2834	0.46
B08-A30	B08-A30	B08-A29	12	220	0.0018	0.5818	0.0714	0.2467	0.43	0.6563	0.0714	0.2861	0.46
B08-A29	B08-A29	B08-A28	12	225	0.0019	0.5877	0.0721	0.2494	0.43	0.6621	0.0721	0.2887	0.46
B08-A28	B08-A28	B08-A27	12	267	0.0019	0.5935	0.0729	0.2521	0.43	0.6679	0.0729	0.2914	0.46
B08-A27	B08-A27	B08-A26	12	234	0.0019	0.5994	0.0737	0.2547	0.43	0.6737	0.0737	0.2941	0.46
B08-A26	B08-A26	B08-A25	12	226	0.0019	0.6052	0.0744	0.2574	0.43	0.6795	0.0744	0.2968	0.46
B08-A25	B08-A25	B08-A24	12	261	0.0019	0.6111	0.0752	0.2601	0.44	0.6853	0.0752	0.2994	0.47
B08-A24	B08-A24	B07-A23	15	251	0.0014	0.8372	0.1062	0.3644	0.41	0.9095	0.1062	0.4038	0.42
B07-A23	B07-A23	B06-A22	15	257	0.0014	0.8702	0.1107	0.3799	0.41	0.9423	0.1107	0.4193	0.43
B06-A22B	B06-A22	B06-A22A	18	138	0.0009	0.8802	0.1115	0.3849	0.31	0.9522	0.1115	0.4243	0.32
B06-A22A	B06-A22A	B06-A21	18	86	0.0010	0.8802	0.1115	0.3849	0.30	0.9522	0.1115	0.4243	0.31
B06-A21	B06-A21	B06-F01	18	11	0.0018	0.9952	0.1272	0.4393	0.28	1.0665	0.1272	0.4787	0.29
B06-F01	B06-F01	B06-F01A	18	253	0.0011	0.9952	0.1272	0.4393	0.32	1.0665	0.1272	0.4787	0.33
B06-F01A	B06-F01A	B05-A20	18	7	0.0015	0.9952	0.1272	0.4393	0.29	1.0665	0.1272	0.4787	0.30
B05-A20	B05-A20	B03-A19	15	242	0.0014	1.1305	0.1468	0.5033	0.48	1.2011	0.1468	0.5427	0.50
B03-A19	B03-A19	B03-A18	15	227	0.0014	1.1345	0.1475	0.5051	0.48	1.2050	0.1475	0.5445	0.50
B03-A18	B03-A18	B03-A17	15	229	0.0014	1.1384	0.1481	0.5070	0.48	1.2089	0.1481	0.5463	0.50
B03-A17	B03-A17	B03-A16	15	134	0.0014	1.1423	0.1487	0.5088	0.48	1.2128	0.1487	0.5482	0.50
B03-A16	B03-A16	B03-A15	18	168	0.0011	1.2225	0.1603	0.5471	0.41	1.2926	0.1603	0.5865	0.42
B03-A15	B03-A15	B03-A14	18	267	0.0011	1.2264	0.1610	0.5490	0.41	1.2965	0.1610	0.5883	0.42
B03-A14	B03-A14	B01-A13	18	241	0.0011	1.2794	0.1665	0.5756	0.42	1.3492	0.1665	0.6149	0.43
B01-A13	B01-A13	B01-A12	15	325	0.0020	1.2983	0.1769	0.5804	0.47	1.3681	0.1769	0.6197	0.48
B01-A12	B01-A12	B01-A11	15	325	0.0014	1.3172	0.1874	0.5851	0.53	1.3870	0.1874	0.6245	0.54
B01-A11	B01-A11	B01-A10	15	325	0.0014	1.3362	0.1978	0.5899	0.53	1.4059	0.1978	0.6292	0.54
B01-A10	B01-A10	B01-A09	15	325	0.0014	1.3551	0.2083	0.5947	0.54	1.4247	0.2083	0.6340	0.55
B01-A09	B01-A09	B01-A08	15	325	0.0014	1.3740	0.2187	0.5994	0.54	1.4436	0.2187	0.6388	0.55
B01-A08	B01-A08	B01-A07	15	325	0.0014	1.3929	0.2292	0.6042	0.55	1.4624	0.2292	0.6435	0.56
B01-A07	B01-A07	B01-A06	15	325	0.0014	1.4118	0.2396	0.6090	0.55	1.4813	0.2396	0.6483	0.56
B01-A06	B01-A06	B01-A05	15	325	0.0014	1.4476	0.2501	0.6233	0.55	1.5170	0.2501	0.6627	0.57
B01-A05	B01-A05	B01-A04	15	300	0.0014	1.4665	0.2605	0.6281	0.56	1.5359	0.2605	0.6674	0.58
B01-A04	B01-A04	B01-A03A	15	245	0.0014	1.4854	0.2710	0.6328	0.57	1.5547	0.2710	0.6722	0.58
B01-A03A	B01-A03A	B01-A02A	18	48	0.0041	1.5372	0.2919	0.6504	0.32	1.6064	0.2919	0.6897	0.33
B01-A02A	B01-A02A	B01-A01A	18	209	0.0050	1.5372	0.2919	0.6504	0.31	1.6064	0.2919	0.6897	0.32

Sewer reaches highlighted in yellow exceed the City's depth to diameter criteria (PDWF d/D < 0.50 for 15" and smaller)
for new pipe construction when the West Ed development loads are added to the system

C&V CONSULTING INC. TABLE
FLOWS CALCULATED BASED ON THE RATIO OF FLOW FROM THE MONITORED MANHOLES AND FLOWS PROVIDED BY AKM

General Information					Ex. without West Ed Dev.					W/ West Ed Dev. (Existing Flow + Site [0.0609 cfs])				
ID	From ID	To ID	Dia-meter (ft)	Slope	PDWF Total Flow (cfs)	ADWF Unpeak able Flow (cfs)	ADWF Peak-able Flow (cfs)	Total ADWF (cfs)	PDWF d/D	PDWF Total Flow (cfs)	ADWF Unpeak able Flow (cfs)	ADWF Peak-able Flow (cfs)	Total ADWF (cfs)	PDWF d/D
B15-M04	B15-M04	B15-M03	0.67	0.0280	0.0050	0.0004	0.0015	0.0019	0.04	0.1444	0.0004	0.0624	0.0628	0.18
B15-M03	B15-M03	B15-M02	0.67	0.0020	0.0094	0.0008	0.0029	0.0037	0.09	0.1480	0.0008	0.0638	0.0646	0.22
B15-M02	B15-M02	B15-M01	0.67	0.0020	0.0137	0.0013	0.0044	0.0056	0.11	0.1515	0.0013	0.0653	0.0665	0.23
B15-M01	B15-M01	B15-A39	0.67	0.0019	0.0179	0.0017	0.0058	0.0075	0.13	0.1550	0.0017	0.0667	0.0684	0.37
B15-A39	B15-A39	B15-A38	0.67	0.0016	0.1493	0.0165	0.0571	0.0736	0.38	0.2755	0.0165	0.1180	0.1345	0.54
B15-A38	B15-A38	B12-A37	0.67	0.0020	0.1550	0.0172	0.0594	0.0766	0.36	0.2809	0.0172	0.1203	0.1375	0.51
B12-A37T	B12-A37	B12-H14	0.67	0.0016	0.1591	0.0177	0.0611	0.0788	0.39	0.2848	0.0177	0.1220	0.1397	0.55
B12-H14	B12-H14	B12-H13	0.67	0.0020	0.1633	0.0182	0.0629	0.0810	0.37	0.2888	0.0182	0.1238	0.1419	0.52
B12-H13	B12-H13	B12-H12	0.67	0.0022	0.1674	0.0187	0.0646	0.0833	0.37	0.2928	0.0187	0.1255	0.1442	0.51
B12-H12	B12-H12	B12-H11	0.67	0.0020	0.1716	0.0192	0.0663	0.0855	0.39	0.2967	0.0192	0.1272	0.1464	0.52
B12-H11	B12-H11	B12-A32	0.67	0.0022	0.1918	0.0216	0.0747	0.0964	0.40	0.3161	0.0216	0.1356	0.1573	0.53
B12-A32	B12-A32	B08-A31	1.00	0.0018	0.3554	0.0420	0.1452	0.1872	0.33	0.4746	0.0420	0.2061	0.2481	0.39
B08-A31	B08-A31	B08-A30	1.00	0.0018	0.3591	0.0425	0.1468	0.1892	0.33	0.4781	0.0425	0.2077	0.2501	0.39
B08-A30	B08-A30	B08-A29	1.00	0.0018	0.3627	0.0429	0.1484	0.1913	0.33	0.4817	0.0429	0.2093	0.2522	0.39
B08-A29	B08-A29	B08-A28	1.00	0.0019	0.3664	0.0434	0.1500	0.1934	0.33	0.4853	0.0434	0.2109	0.2543	0.38
B08-A28	B08-A28	B08-A27	1.00	0.0019	0.3700	0.0438	0.1516	0.1955	0.33	0.4888	0.0438	0.2125	0.2564	0.39
B08-A27	B08-A27	B08-A26	1.00	0.0019	0.3736	0.0443	0.1532	0.1975	0.33	0.4924	0.0443	0.2141	0.2584	0.39
B08-A26	B08-A26	B08-A25	1.00	0.0019	0.3773	0.0448	0.1548	0.1996	0.30	0.4959	0.0448	0.2157	0.2605	0.39
B08-A25	B08-A25	B08-A24	1.00	0.0019	0.4066	0.0485	0.1678	0.2163	0.35	0.5246	0.0485	0.2287	0.2772	0.40
B08-A24	B08-A24	B07-A23	1.25	0.0014	0.5569	0.0685	0.2351	0.3037	0.33	0.6722	0.0685	0.2960	0.3645	0.36
B07-A23	B07-A23	B06-A22	1.25	0.0014	0.5789	0.0714	0.2451	0.3165	0.33	0.6938	0.0714	0.3060	0.3774	0.37
B06-A22B	B06-A22	B06-A22A	1.50	0.0009	0.5855	0.0720	0.2483	0.3203	0.29	0.7003	0.0720	0.3092	0.3812	0.32
B06-A22A	B06-A22A	B06-A21	1.50	0.0010	0.5855	0.0720	0.2483	0.3203	0.26	0.7003	0.0720	0.3092	0.3812	0.31
B06-A21	B06-A21	B06-F01	1.50	0.0018	0.5948	0.0731	0.2526	0.3257	0.25	0.7095	0.0731	0.3135	0.3866	0.27
B06-F01	B06-F01	B06-F01A	1.50	0.0011	0.5948	0.0731	0.2526	0.3257	0.28	0.7095	0.0731	0.3135	0.3866	0.31
B06-F01A	B06-F01A	B05-A20	1.50	0.0015	0.5948	0.0731	0.2526	0.3257	0.26	0.7095	0.0731	0.3135	0.3866	0.28
B05-A20	B05-A20	B03-A19	1.25	0.0014	0.6052	0.0750	0.2571	0.3321	0.34	0.7198	0.0750	0.3180	0.3930	0.37
B03-A19	B03-A19	B03-A18	1.25	0.0014	0.6055	0.0751	0.2572	0.3323	0.34	0.7200	0.0751	0.3181	0.3932	0.37
B03-A18	B03-A18	B03-A17	1.25	0.0014	0.6058	0.0752	0.2573	0.3325	0.34	0.7203	0.0752	0.3182	0.3934	0.37
B03-A17	B03-A17	B03-A16	1.25	0.0014	0.6061	0.0753	0.2574	0.3327	0.23	0.7206	0.0753	0.3183	0.3936	0.37
B03-A16	B03-A16	B03-A15	1.50	0.0011	0.6900	0.0868	0.2957	0.3826	0.30	0.8033	0.0868	0.3566	0.4435	0.33
B03-A15	B03-A15	B03-A14	1.50	0.0011	0.6940	0.0875	0.2976	0.3850	0.30	0.8073	0.0875	0.3585	0.4459	0.33
B03-A14	B03-A14	B01-A13	1.50	0.0011	0.7493	0.0930	0.3242	0.4172	0.31	0.8619	0.0930	0.3851	0.4781	0.34
B01-A13	B01-A13	B01-A12	1.25	0.0020	0.7686	0.1034	0.3290	0.4324	0.39	0.8811	0.1034	0.3899	0.4933	0.38
B01-A12	B01-A12	B01-A11	1.25	0.0014	0.7879	0.1139	0.3337	0.4476	0.39	0.9003	0.1139	0.3946	0.5085	0.42
B01-A11	B01-A11	B01-A10	1.25	0.0014	0.8072	0.1243	0.3385	0.4628	0.40	0.9195	0.1243	0.3994	0.5237	0.43
B01-A10	B01-A10	B01-A09	1.25	0.0014	0.8265	0.1348	0.3433	0.4780	0.40	0.9387	0.1348	0.4042	0.5389	0.43
B01-A09	B01-A09	B01-A08	1.25	0.0014	0.8458	0.1452	0.3480	0.4932	0.41	0.9578	0.1452	0.4089	0.5541	0.44
B01-A08	B01-A08	B01-A07	1.25	0.0014	0.8651	0.1557	0.3528	0.5085	0.41	0.9770	0.1557	0.4137	0.5694	0.44
B01-A07	B01-A07	B01-A06	1.25	0.0014	0.8843	0.1661	0.3576	0.5237	0.42	0.9961	0.1661	0.4185	0.5846	0.45
B01-A06	B01-A06	B01-A05	1.25	0.0014	0.9213	0.1766	0.3719	0.5485	0.43	1.0328	0.1766	0.4328	0.6094	0.46
B01-A05	B01-A05	B01-A04	1.25	0.0014	0.9405	0.1870	0.3767	0.5637	0.43	1.0519	0.1870	0.4376	0.6246	0.46
B01-A04	B01-A04	B01-A03A	1.25	0.0014	0.9597	0.1975	0.3815	0.5789	0.44	1.0710	0.1975	0.4424	0.6398	0.47
B01-A03A	B01-A03A	B01-A02A	1.50	0.0041	1.0128	0.2184	0.3990	0.6173	0.26	1.1237	0.2184	0.4599	0.6782	0.28
B01-A02A	B01-A02A	B01-A01A	1.50	0.0050	1.0128	0.2184	0.3990	0.6173	0.25	1.1237	0.2184	0.4599	0.6782	0.26

Flow monitored MH's are highlighted green.

Flow Monitored MH's			Measured Avg MGD	Measured Avg cfs
B08-A26	B08-A26	B08-A25	0.129	0.1996
B06-A22A	B06-A22A	B06-A21	0.207	0.3203
B03-A17	B03-A17	B03-A16	0.215	0.3327

	Units (du)	Flow (gpd/du)	Total Flow	Total Flow
Site	246	160	39360	0.0609

Appendix B

FLOW MONITORING DATA

4665 Lampson Ave Sewer Study

Final Report Submitted to **SealBeach.KHR.TFM.CA22**
September 21, 2022



ADS ENVIRONMENTAL SERVICES

September 21, 2022

James H. Kawamura, P.E.
KHR Associates
17530 Von Karman Avenue – Suite 200
Irvine, CA 92614

SUBJECT: 4665 Lampson Ave Sewer Study

Dear Mr. Kawamura,

ADS is pleased to submit the report for the 4665 Lampson Ave Sewer Study completed on behalf of KHR Associates. The metering was conducted at three (3) locations. The study was conducted during the period of Tuesday, 23 August 2022 to Monday, 05 September 2022.

The report contains depth, velocity, and quantity hydrographs as well as daily long tables for the metering period. An Excel file containing depth, quantity, and velocity entities for the monitoring location in 5-minute format has been provided.

In addition, we would be happy to further explain any details about the report that may seem unclear. Should you have any questions or comments, you may contact the Project Manager, Shay Koerber at (619) 520-9168.

It has been our pleasure to be of service to you in the performance of this project. Thank you for choosing ADS products and services to meet your flow monitoring needs.

Sincerely,
ADS ENVIRONMENTAL SERVICES

Justin Hatch
Data Analyst
562-488-7346

4665 Lampson Ave Sewer Study

Prepared For:

James H. Kawamura, P.E.
KHR Associates
17530 Von Karman Avenue – Suite 200
Irvine, CA 92614

Prepared By:

ADS, LLC
15201 Springdale St
Huntington Beach, CA 92649

Scope and Methodology

Introduction

KHR Associates entered into an agreement with ADS Environmental Services to conduct flow monitoring at (3) three locations in the Seal Beach Sanitary Collection System. The study was scheduled for a period of (14) fourteen days. Once in place, the flow monitoring equipment was used to measure depth, velocity, and to quantify flows. Data obtained from the study will be used to determine existing sewer flow rates and capacity to support development of a new residential redevelopment project tributary to these locations.

Project Scope

The scope of this study involved using a flow monitor to quantify wastewater flow at the designated locations for the 14-day time period. Specifically, the study included the following key components.

- Investigate the proposed flow-monitoring sites for adequate hydraulic conditions
- Flow monitor installations
- Flow monitor confirmations and data collections
- Flow data analysis

Equipment installation was completed on August 22, 2022. The monitoring began on August 23, 2022 and was completed on September 5, 2022. Upon completion of the study, equipment was removed from the system.

Flow Monitoring Equipment



The ***ADS Trinton+*** monitor was selected for this project. This flow monitor is an area velocity flow monitor that uses both the Continuity and Manning's equations to measure flow.

The ADS Triton+ monitor consists of data acquisition sensors and a battery-powered microcomputer. The microcomputer includes a processor unit, data storage, and an on-board clock to control and synchronize the sensor recordings. The monitor was programmed to acquire and store depth of flow and velocity readings at 5-minute intervals.

The Triton+ monitor features cross-checking using multiple technologies in each sensor for continuous running of comparisons and tolerances. The Triton+ monitor can support two (2) sets of sensors. The sensor option used for this project was:

The Peak Combo Sensor installed at the bottom of the pipe includes three types of data acquisition technologies.

The ***up looking ultrasonic depth*** uses sound waves from two independent transceivers to measure the distance from the sensor upward toward the flow surface; applying the speed of sound in the water and the temperature measured by

sensor to calculate depth.

The ***pressure depth*** is calculated by using a piezo-resistive crystal to determine the difference between hydrostatic and atmospheric pressure. The pressure sensor is temperature compensated and vented to the atmosphere through a desiccant filled breather tube.

To obtain ***peak velocity*****,** the sensor sends an ultrasonic signal at an angle upward through the widest cross-section of the oncoming flow. The signal is reflected by suspended particles, air bubbles, or organic matter with a frequency shift proportional to the velocity of the reflecting objects. The reflected signal is received by the sensor and processed using digital spectrum analysis to determine the peak flow velocity.

Installation

Installation of flow monitoring equipment typically proceeds in four steps. First, the site is investigated for safety and to determine physical and hydraulic suitability for the flow monitoring equipment. Second, the equipment is physically installed at the selected location. Third, the monitor is tested to assure proper operation of the velocity and depth of flow sensors and verify that the monitor clock is operational and synchronized to the master computer clock. Fourth, the depth and velocity sensors are confirmed and line confirmations are performed.

In pipes up to 42 inches in diameter, the sensors were mounted on expandable stainless steel rings, inserted at least a foot upstream into influent pipes and tightened against the inside walls of the pipes. Influent pipe installations reduce the influences of turbulence and backwater often caused by changes in channel geometry in manholes.





Data Collection, Confirmation, and Quality Assurance

Data collection was done remotely via wireless connect on a weekly basis via ADS Field Representatives. During the monitoring period, field crews visit each monitoring location to verify proper monitor operation and document field conditions. The following quality assurance steps are taken to assure the integrity of the collected data:

Measure power supplies: monitors were powered by dry cell battery packs. Voltages were recorded and battery packs replaced, as necessary. Separate batteries provided back-up power to memory allowing primary batteries to be replaced without loss of data.

Clock synchronization: Field crews synchronized monitor clocks to master clocks.

Confirm depth and velocity readings: Field crews descended into meter manholes to manually measure depths and velocities and compare them meter readings to confirm that they agreed. They also measured silt levels, if any, in the inverts of the pipes. Silt areas were subtracted from flow areas to compute true areas of flow.

Confirm average velocities through cross-sectional velocity profiles: Since ADS velocity sensors measure peak velocity, field crews collected cross-sectional velocity profiles in order to develop a relationship between peak and average velocity in lines that meet the hydraulic criteria.

Upload and Review Data: Data collected from the monitors were uploaded and reviewed by a Data Analyst for completeness, outliers and deviations in the flow patterns, which indicate system anomalies or equipment failure.

Flow Quantification Methods

There are two main equations used to measure open channel flow: the ***Continuity Equation*** and the ***Manning Equation.*** The Continuity Equation, which is considered the most accurate, can be used if both depth of flow and velocity are available. In cases where velocity measurements are not available or not practical to obtain, the Manning Equation can be used to estimate velocity from the depth data based on certain physical characteristics of the pipe (i.e. the slope and roughness of the pipe being measured). However, the Manning equation assumes uniform, steady flow hydraulic conditions with non-varying roughness, which are typically invalid assumptions in most sanitary sewers. The Continuity Equation was used exclusively for this study.

Continuity Equation

The Continuity Equation states that the flow quantity (Q) is equal to the wetted area (A) multiplied by the average velocity (V) of the flow.

Q = A * V

This equation is applicable in a variety of conditions including backwater, surcharge, and reverse flow.

Data Analysis and Presentation

Data Analysis

A flow monitor is typically programmed to collect data at 5-minute intervals throughout the monitoring period. The monitor stores raw data consisting of (1) the ultrasonic depth, (2) the peak velocity and (3) the pressure depth. The data is imported into ADS's proprietary software and is examined by a data analyst to verify its integrity. The data analyst also reviews the daily field reports and site visit records to identify conditions that would affect the collected data.

Velocity profiles and the line confirmation data developed by the field personnel are reviewed by the data analyst to identify inconsistencies and verify data integrity. Velocity profiles are reviewed and an average to peak velocity ratio is calculated for the site. This ratio is used in converting the peak velocity measured by the sensor to the average velocity used in the Continuity equation. The data analyst selects which depth sensor entity will be used to calculate the final depth information. Silt and/or debris are often present in sewer lines. When present, silt levels are measured at each site visit. They are reviewed by the data analyst and representative silt levels established. Silt reduces the cross sectional area of the flow where as debris causes depth to become deeper and slower. Calculated flow should remain consistent in both hydraulic conditions. Debris may result in reduced line capacity.

Occasionally the velocity sensor's performance may be compromised resulting in invalid readings sporadically during the monitoring period. This is generally caused by excessive debris (silt) blocking the sensor's crystals, shallow flows (~< 1") that may drop below the top of the sensor or very clear flows lacking the particles needed to measure rate. In order to use the Continuity equation to quantify the flow during these periods, a Data Analyst and/or Engineer will use the site's historical pipe curve (depth vs. velocity) data along with valid field confirmations to reconstitute and replace the false velocity recordings with expected velocity readings for a given historical depth along the curve.

Selections for the above parameters can be constant or can change during the monitoring period. While the data analysis process is described in a linear manner, it often requires an iterative approach to accurately complete.

Data Presentation

This type of flow monitoring project generates a large volume of data. To facilitate review of the data, results have been provided in graphical and tabular formats. The flow data is presented graphically in the form of scattergraphs and hydrographs. Hydrographs are based on 5 minute averaging. Tables are provided in daily average format. These tables show the flow rate for each day, along with the daily minimum and maximums, the times they were observed, the total daily flow, and total flow for the month (or monitoring period). The following explanation of terms may aid in interpretation of the tables and hydrographs.

DFINAL - Final calculated depth measurement (in inches)

QFINAL - Final calculated flow rate (in MGD)

VFINAL - Final calculated flow velocity (in feet per second)

REPORT TOTAL - Total volume of flow recorded for the indicated time period (in MG)

Bass01

Site Commentary

SITE INFORMATION

Pipe	Round (15 in H)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Tuesday, 23 August 2022 to Monday, 05 September 2022**, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	3.48	1.45	0.215
Minimum	2.09	0.79	0.055
Maximum	4.52	1.94	0.391
Min Time	08/30/2022 05:05:00	09/03/2022 05:20:00	08/30/2022 05:15:00
Max Time	08/29/2022 21:20:00	08/29/2022 21:15:00	08/29/2022 21:15:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the five minutes average.

DATA UPTIME

Data uptime observed during **Tuesday, 23 August 2022 to Monday, 05 September 2022** is provided in the following table:

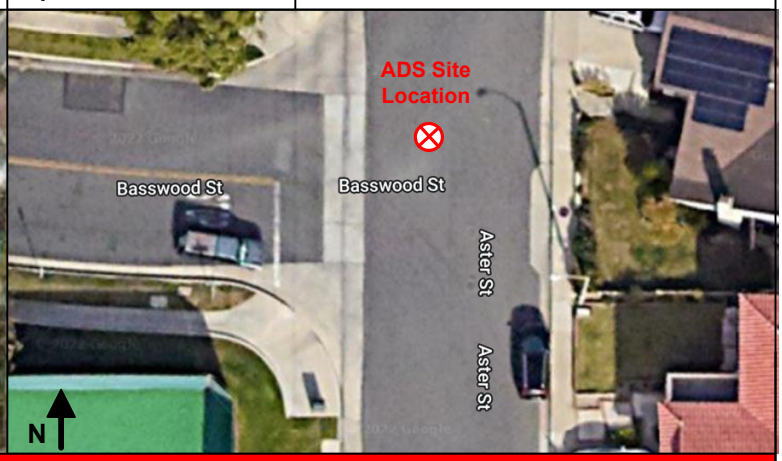
Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ADS Site Report

Quality Form

Project Name:	SealBeach.KHR.TFM.CA22	**City:** Seal Beach	**Agency:** KHR	**FM Initials:** VM	
Site Name:	Bass01	**Install Date:**	8/22/22	**Monitor Type**	Peak Doppler
Address/Location:	3580 Aster St.			**Monitor Model**	Triton +
				Data Acquisition	Manual/Wireless Collect
				Manhole ID	A-16
Access:	Drive	**Type of System:**	Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	15 "
				Pipe Width:	15 "





Investigation Information:

Date/Time of Investigation:	3/4/22 @ 8:22 AM
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not Investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.88 " +/- 0.25"
Range (Air DOF):	+/-
Peak Velocity:	1.89 fps
Silt:	0 Inches

Manhole Information:

Manhole Depth:	12'-3"
Manhole Material / Condition	Precast/Good
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Other
	[x]	[ ]	[ ]	[ ]

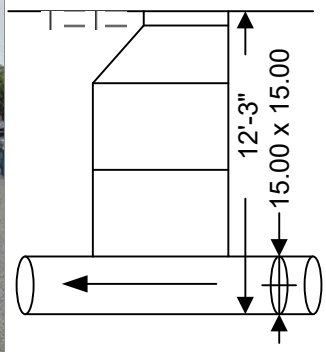
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

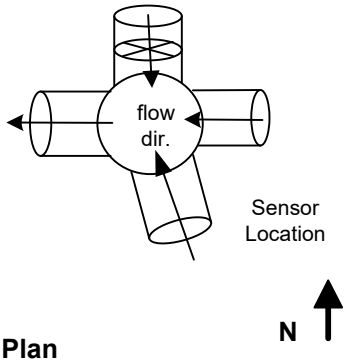
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic/Velocity/Pressure
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[x]	[ ]	
WWTP	[ ]	[x]	[ ]	
Other	[ ]	[x]	[ ]	

Additional Site Information / Comments:

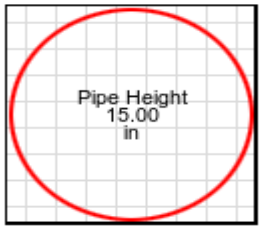
Standard Traffic Control with No Safety Concerns

Hydrograph Report

Bass01

Flow Monitor

Bass01



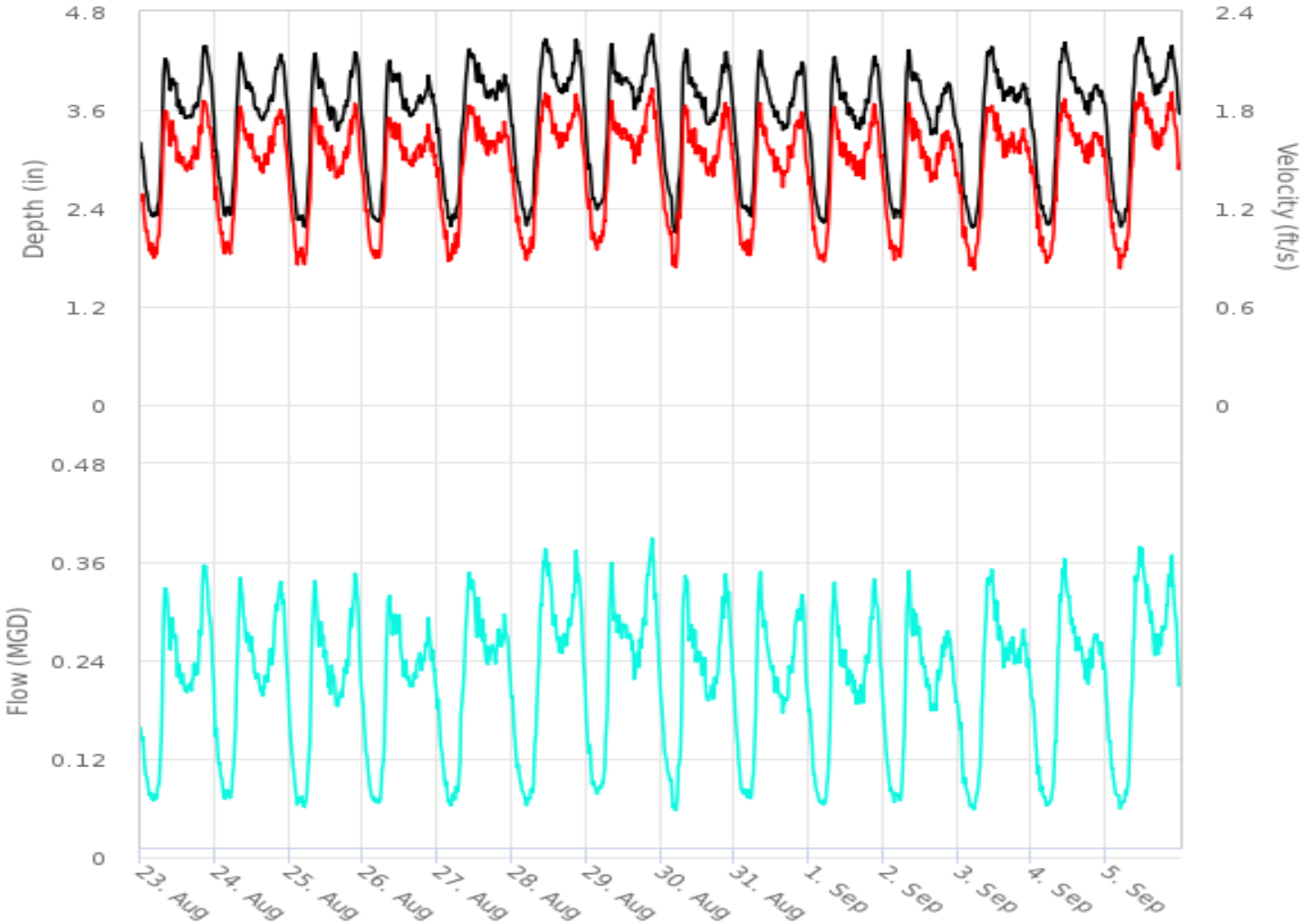
Report Period

08/23/2022
To
09/05/2022

Legend

- DFINAL
- QFINAL
- VFINAL

ADS ENVIRONMENTAL SERVICES

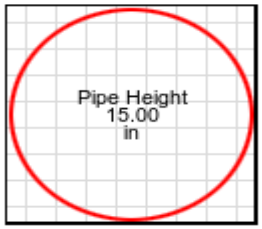


Scattergraph Report

Bass01

Flow Monitor

Bass01



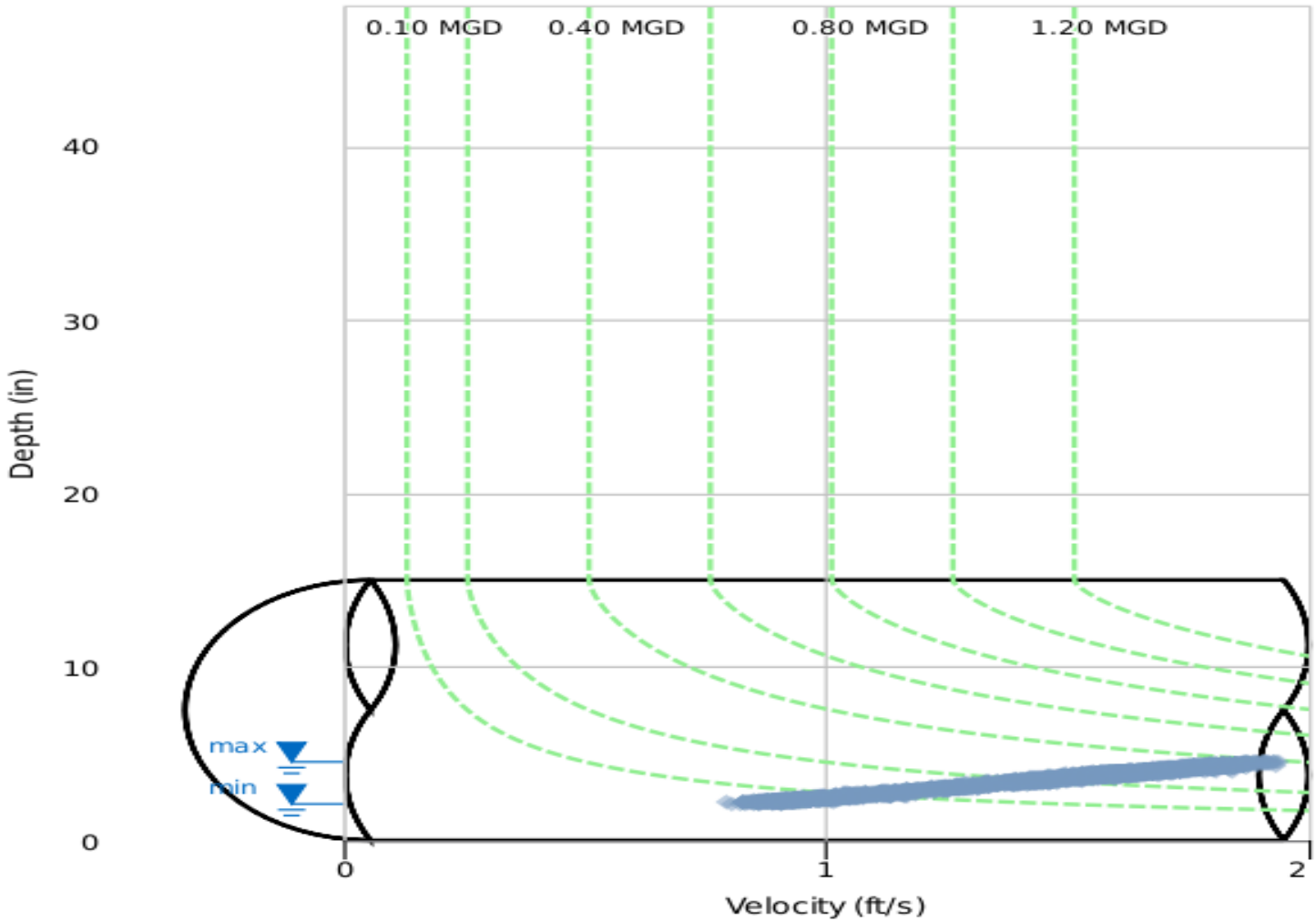
Report Period

08/23/2022
To
09/05/2022

Legend

- DFINAL - VFINAL
- Iso-Q™
- Min-Max Depth

ADS ENVIRONMENTAL SERVICES



Daily Tabular Report

08/23/2022 00:00 - 09/05/2022 23:59
Bass01Pipe: Round (15 in H), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
08/23/2022	04:20	2.28	21:05	4.38	3.47	04:20	0.88	20:10	1.88	1.45	04:20	0.067	20:30	0.361	0.212	0.212
08/24/2022	03:35	2.30	08:20	4.30	3.49	03:30	0.90	21:15	1.85	1.46	03:30	0.070	08:20	0.346	0.215	0.215
08/25/2022	05:10	2.17	21:25	4.31	3.42	02:50	0.83	21:25	1.84	1.42	05:00	0.060	21:25	0.348	0.205	0.205
08/26/2022	05:15	2.22	08:30	4.23	3.42	05:10	0.87	10:10	1.81	1.43	05:10	0.063	08:35	0.325	0.204	0.204
08/27/2022	04:25	2.17	10:10	4.37	3.48	03:40	0.86	10:55	1.85	1.45	04:20	0.062	10:15	0.350	0.216	0.216
08/28/2022	04:55	2.18	10:55	4.47	3.57	05:00	0.86	20:55	1.93	1.49	05:00	0.061	20:55	0.382	0.231	0.231
08/29/2022	03:35	2.38	21:20	4.52	3.63	03:35	0.93	21:15	1.94	1.52	03:35	0.075	21:15	0.391	0.237	0.237
08/30/2022	05:05	2.09	08:10	4.37	3.50	05:15	0.81	08:05	1.86	1.46	05:15	0.055	08:10	0.351	0.215	0.215
08/31/2022	05:15	2.30	08:25	4.37	3.44	04:05	0.88	08:25	1.86	1.43	04:05	0.070	08:25	0.356	0.207	0.207
09/01/2022	04:50	2.22	21:15	4.26	3.42	04:50	0.86	21:00	1.85	1.43	04:50	0.063	21:00	0.341	0.205	0.205
09/02/2022	05:40	2.26	08:20	4.33	3.40	03:35	0.87	08:20	1.84	1.41	03:35	0.066	08:20	0.350	0.201	0.201
09/03/2022	04:40	2.17	11:00	4.37	3.45	05:20	0.79	11:10	1.85	1.44	05:20	0.056	11:10	0.355	0.212	0.212
09/04/2022	05:25	2.19	10:45	4.44	3.46	04:55	0.86	10:35	1.89	1.45	04:55	0.063	10:35	0.371	0.213	0.213
09/05/2022	04:45	2.16	11:30	4.49	3.57	04:40	0.83	21:25	1.93	1.49	04:40	0.058	11:35	0.384	0.232	0.231

08/23/2022 00:00 - 09/05/2022 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			3.003
Average	3.48	1.45	0.215

Cand02

Site Commentary

SITE INFORMATION

Pipe	Elliptical (17.88 in H x 17 in W)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Tuesday, 23 August 2022 to Monday, 05 September 2022**, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	4.67	0.89	0.207
Minimum	3.06	0.46	0.060
Maximum	5.84	1.25	0.377
Min Time	08/30/2022 04:55:00	08/30/2022 04:25:00	08/30/2022 04:25:00
Max Time	09/05/2022 10:45:00	09/05/2022 11:25:00	09/05/2022 11:25:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the five minutes average.

DATA UPTIME

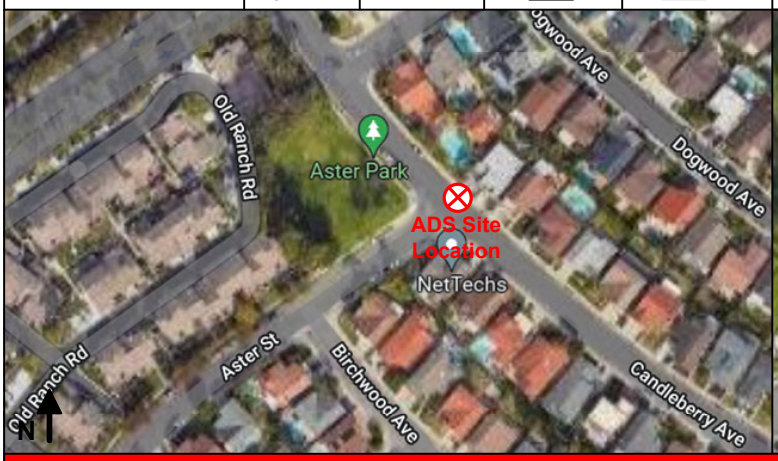
Data uptime observed during **Tuesday, 23 August 2022 to Monday, 05 September 2022** is provided in the following table:

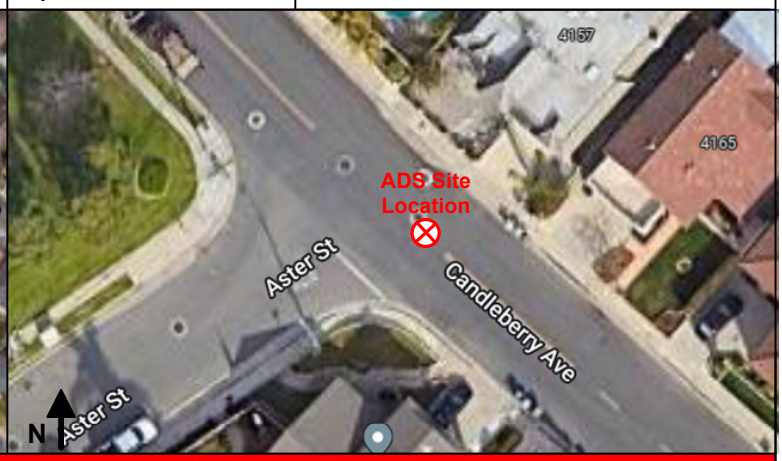
Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ADS Site Report

Quality Form

Project Name:	SealBeach.KHR.TFM.CA22	**City:** Seal Beach	**Agency:** KHR	**FM Initials:** VM	
Site Name:	Cand02	**Install Date:**	8/22/22	**Monitor Type**	Peak Doppler
Address/Location:	4156 Candleberry Ave			**Monitor Model**	Triton +
				Data Acquisition	Manual/Wireless Collect
				Manhole ID	A-21
Access:	Drive	**Type of System:**	Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	17.88 "
				Pipe Width:	17.00 "





Investigation Information:

Date/Time of Investigation:	3/4/22 @ 10:30 AM
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not Investigated
Downstream Manhole:	Not investigated
Depth of Flow:	5.00 " +/- 0.25"
Range (Air DOF):	+/-
Peak Velocity:	1.13 fps
Silt:	0 Inches

Manhole Information:

Manhole Depth:	9'-7"
Manhole Material / Condition	Precast/Good
Pipe Material / Condition:	PVC/Good

Land Use:	Residential	Commercial	Industrial	Other
	[x]	[ ]	[ ]	[ ]

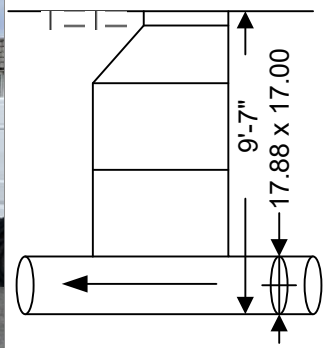
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

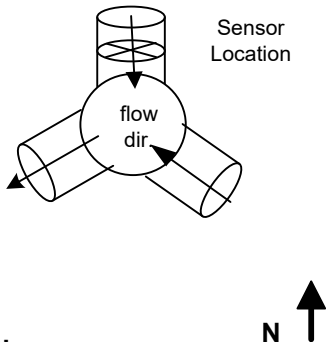
Other Information:





Cross Section





Plan

Installation Information		Backup	Yes	No	?	Distance
Installation Type:	Standard	Trunk	[ ]	[x]	[ ]	
Sensors Devices:	Ultrasonic/Velocity/Pressure	Lift / Pump Station	[ ]	[x]	[ ]	
Surcharge Height:	0	WWTP	[ ]	[x]	[ ]	
Rain Gauge Zone:		Other	[ ]	[x]	[ ]	

Additional Site Information / Comments:

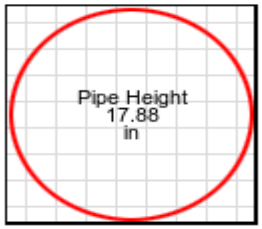
Standard Traffic Control with No Safety Concerns

Hydrograph Report

Cand02

Flow Monitor

Cand02



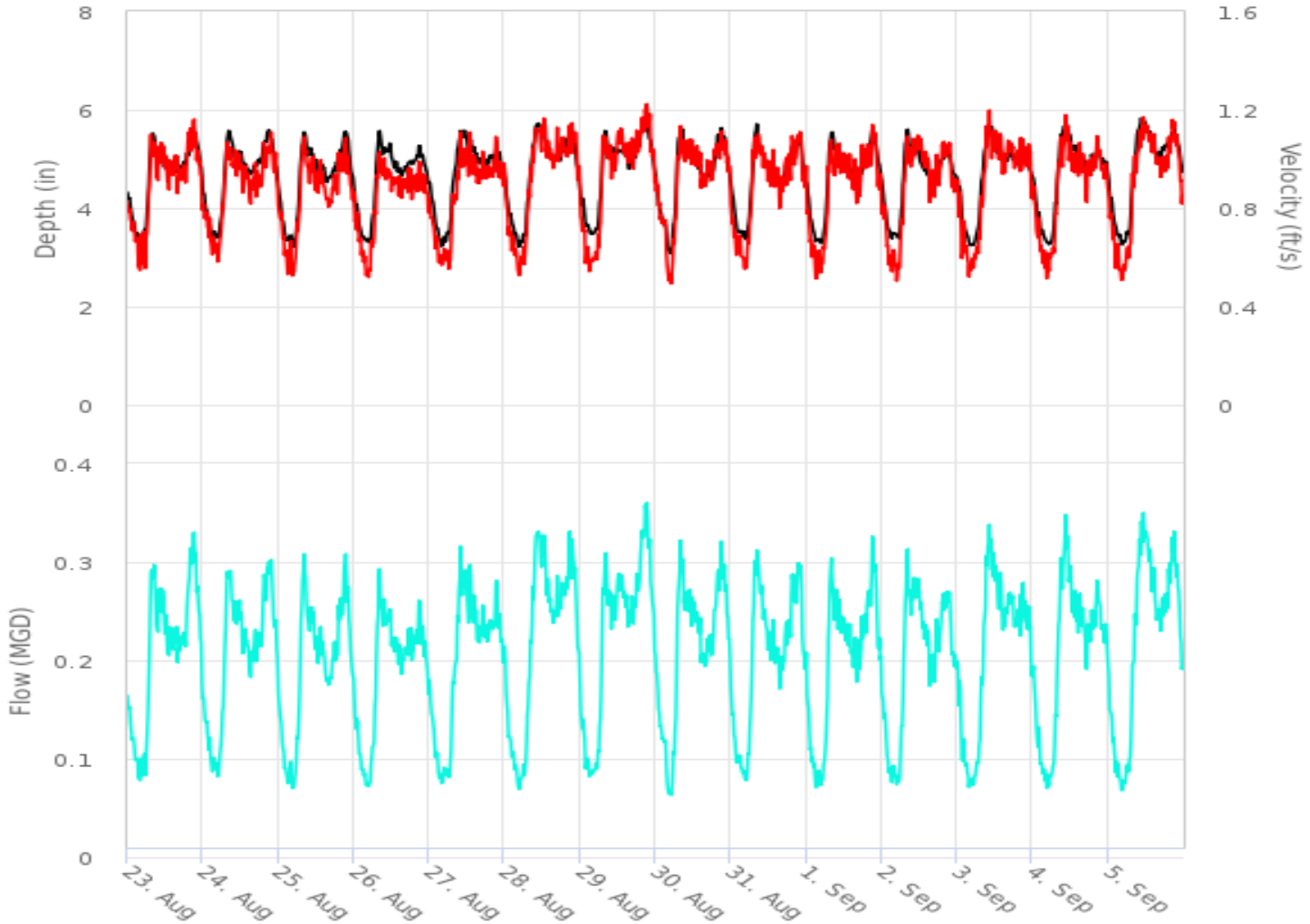
Report Period

08/23/2022
To
09/05/2022

Legend

- DFINAL
- QFINAL
- VFINAL

ADS ENVIRONMENTAL SERVICES

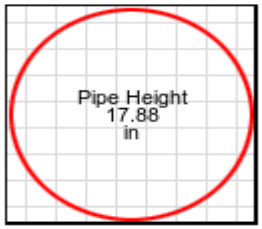


Scattergraph Report

Cand02

Flow Monitor

Cand02



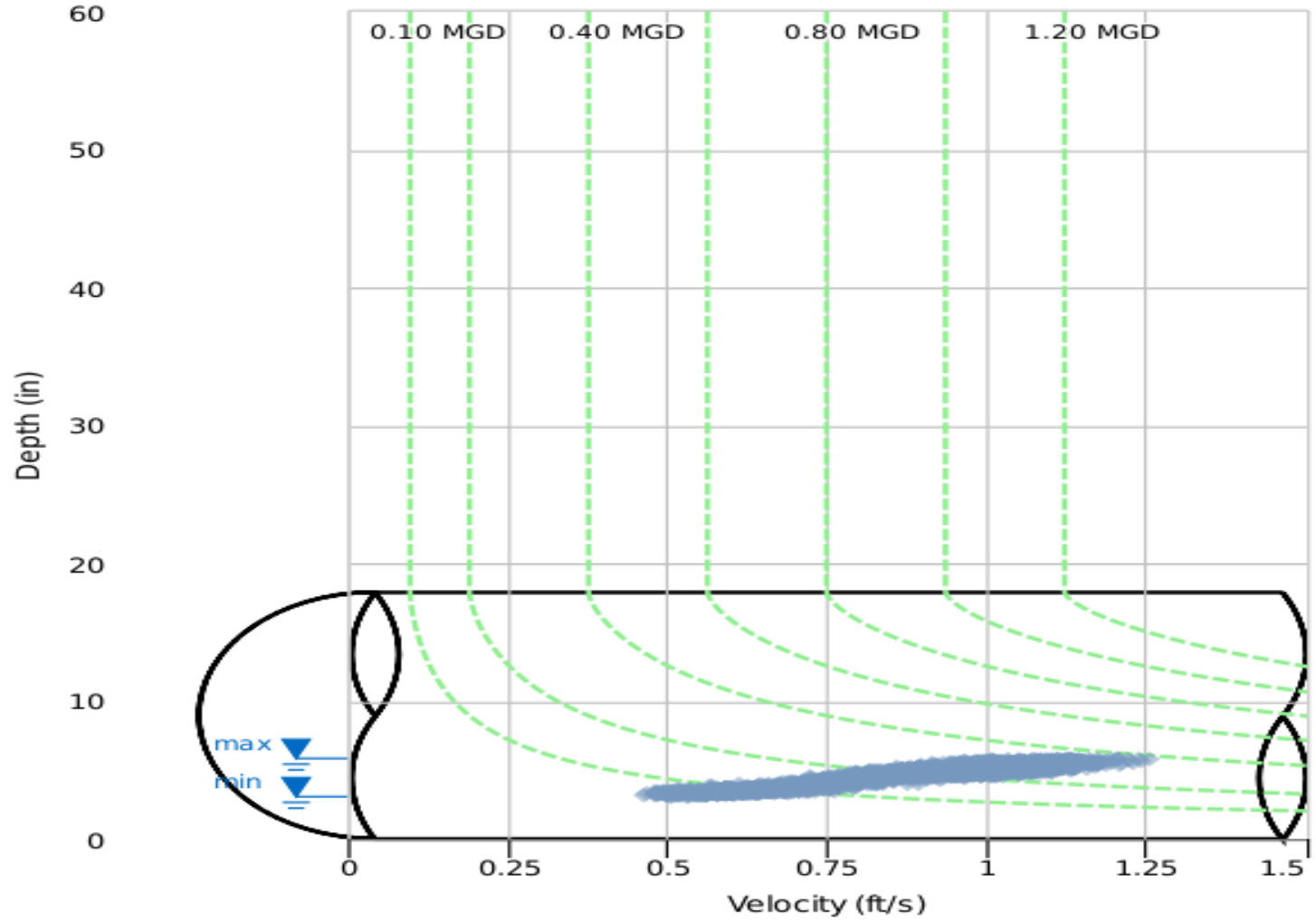
Report Period

08/23/2022
To
09/05/2022

Legend

- DFINAL - VFINAL
- Iso-Q™
- Min-Max Depth

ADS ENVIRONMENTAL SERVICES



Daily Tabular Report

08/23/2022 00:00 - 09/05/2022 23:59
Cand02Pipe: Elliptical (17.88 in H x 17 in W), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
08/23/2022	05:10	3.39	20:25	5.65	4.67	04:05	0.48	21:15	1.17	0.91	04:05	0.068	21:15	0.334	0.209	0.209
08/24/2022	04:50	3.39	21:10	5.61	4.70	04:50	0.57	21:55	1.13	0.89	04:50	0.081	20:30	0.312	0.207	0.207
08/25/2022	05:00	3.21	21:15	5.57	4.60	04:30	0.48	08:25	1.13	0.85	04:30	0.064	08:25	0.321	0.194	0.194
08/26/2022	05:05	3.31	08:25	5.61	4.60	04:15	0.48	08:25	1.07	0.84	04:15	0.066	08:25	0.307	0.189	0.189
08/27/2022	04:10	3.21	10:00	5.60	4.65	06:25	0.50	10:10	1.14	0.86	04:05	0.073	10:10	0.322	0.200	0.200
08/28/2022	04:50	3.20	10:50	5.73	4.74	04:45	0.50	12:40	1.19	0.93	04:45	0.065	10:30	0.343	0.222	0.222
08/29/2022	04:10	3.46	21:10	5.80	4.80	03:00	0.51	21:20	1.24	0.94	03:00	0.079	21:15	0.368	0.228	0.228
08/30/2022	04:55	3.06	21:00	5.63	4.67	04:25	0.46	21:05	1.15	0.92	04:25	0.060	21:05	0.332	0.212	0.212
08/31/2022	05:05	3.35	08:20	5.73	4.63	04:40	0.51	19:25	1.14	0.89	04:40	0.073	08:25	0.325	0.204	0.204
09/01/2022	04:40	3.28	21:10	5.60	4.61	03:20	0.48	21:00	1.16	0.88	03:20	0.067	21:00	0.330	0.201	0.201
09/02/2022	03:25	3.37	08:10	5.62	4.59	04:55	0.49	08:15	1.13	0.89	04:55	0.072	08:15	0.325	0.201	0.201
09/03/2022	04:30	3.23	10:55	5.67	4.65	03:50	0.49	10:20	1.23	0.90	03:50	0.066	10:20	0.346	0.210	0.210
09/04/2022	05:15	3.26	10:40	5.73	4.66	05:15	0.48	10:35	1.20	0.89	05:15	0.064	10:35	0.355	0.206	0.206
09/05/2022	04:30	3.24	10:45	5.84	4.79	04:30	0.47	11:25	1.25	0.91	04:30	0.062	11:25	0.377	0.222	0.221

08/23/2022 00:00 - 09/05/2022 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			2.904
Average	4.67	0.89	0.207

Elder03

Site Commentary

SITE INFORMATION

Pipe	Round (12 in H)
Silt	0.00 (in)

OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Tuesday, 23 August 2022 to Monday, 05 September 2022**, along with observed minimum and maximum data, are provided in the following table.

Observed Flow Conditions			
Item	**DFINAL (in)**	**VFINAL (ft/s)**	**QFINAL (MGD - Total MG)**
Average	3.59	0.96	0.129
Minimum	2.18	0.45	0.030
Maximum	4.75	1.35	0.249
Min Time	08/30/2022 04:35:00	09/03/2022 03:55:00	08/25/2022 04:40:00
Max Time	08/29/2022 20:45:00	08/29/2022 20:35:00	08/29/2022 20:50:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the five minutes average.

DATA UPTIME

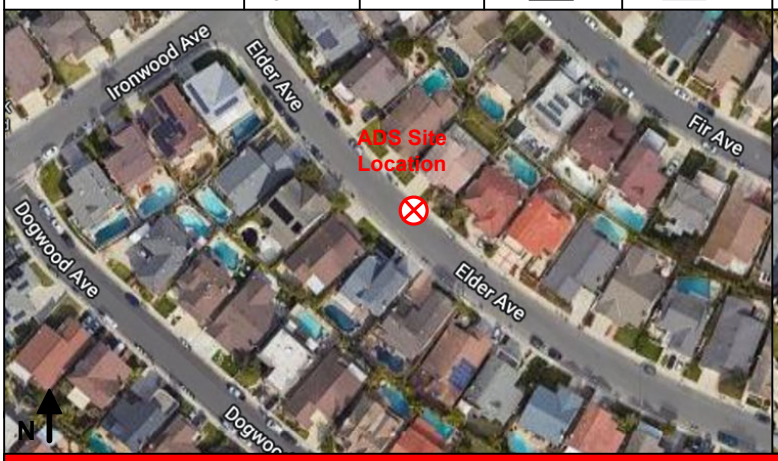
Data uptime observed during **Tuesday, 23 August 2022 to Monday, 05 September 2022** is provided in the following table:

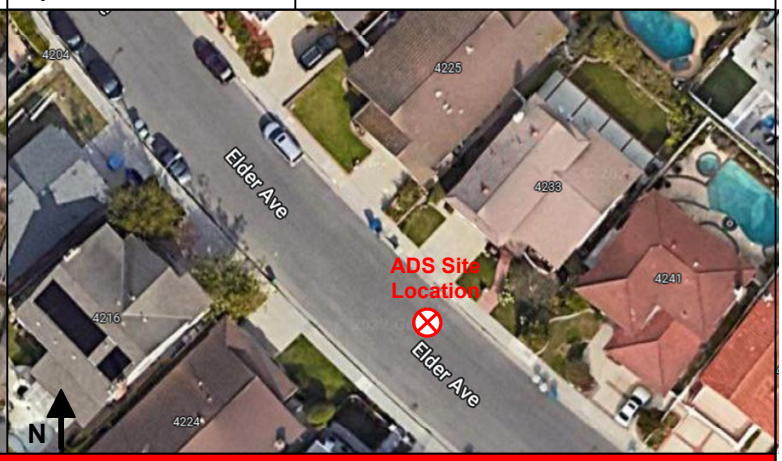
Percent Uptime	
DFINAL (in)	100
VFINAL (ft/s)	100
QFINAL (MGD - Total MG)	100

ADS Site Report

Quality Form

Project Name:	SealBeach.KHR.TFM.CA22	**City:** Seal Beach	**Agency:** KHR	**FM Initials:** VM	
Site Name:	Elder03	**Install Date:**	8/22/22	**Monitor Type**	Peak Doppler
Address/Location:	4233 Elder Ave			**Monitor Model**	Triton +
				Data Acquisition	Manual/Wireless Collect
				Manhole ID	A-25
Access:	Drive	**Type of System:**	Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	12.00 "
				Pipe Width:	12.00 "





Investigation Information:

Date/Time of Investigation:	3/4/22 @ 12:25 PM
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not Investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.88 " +/- 0.25"
Range (Air DOF):	+/-
Peak Velocity:	1.40 fps
Silt:	0 Inches

Manhole Information:

Manhole Depth:	8'-6"
Manhole Material / Condition	Precast/Good
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Other
	[x]	[ ]	[ ]	[ ]

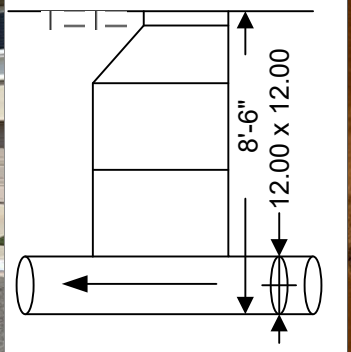
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

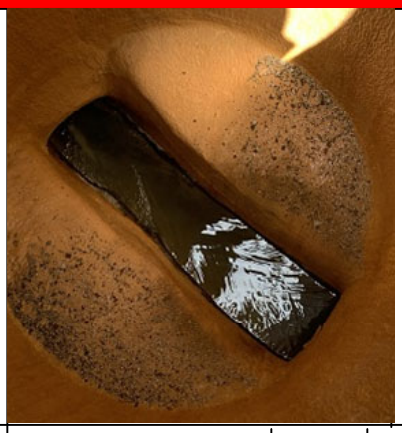
2 man crew required and one blower is to be operated at all times.

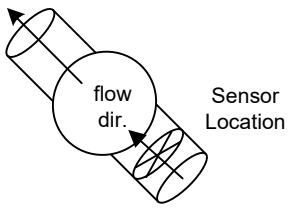
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic/Velocity/Pressure
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[x]	[ ]	
WWTP	[ ]	[x]	[ ]	
Other	[ ]	[x]	[ ]	

Additional Site Information / Comments:

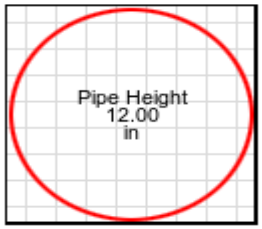
Standard Traffic Control with No Safety Concerns

Hydrograph Report

Elder03

Flow Monitor

Elder03



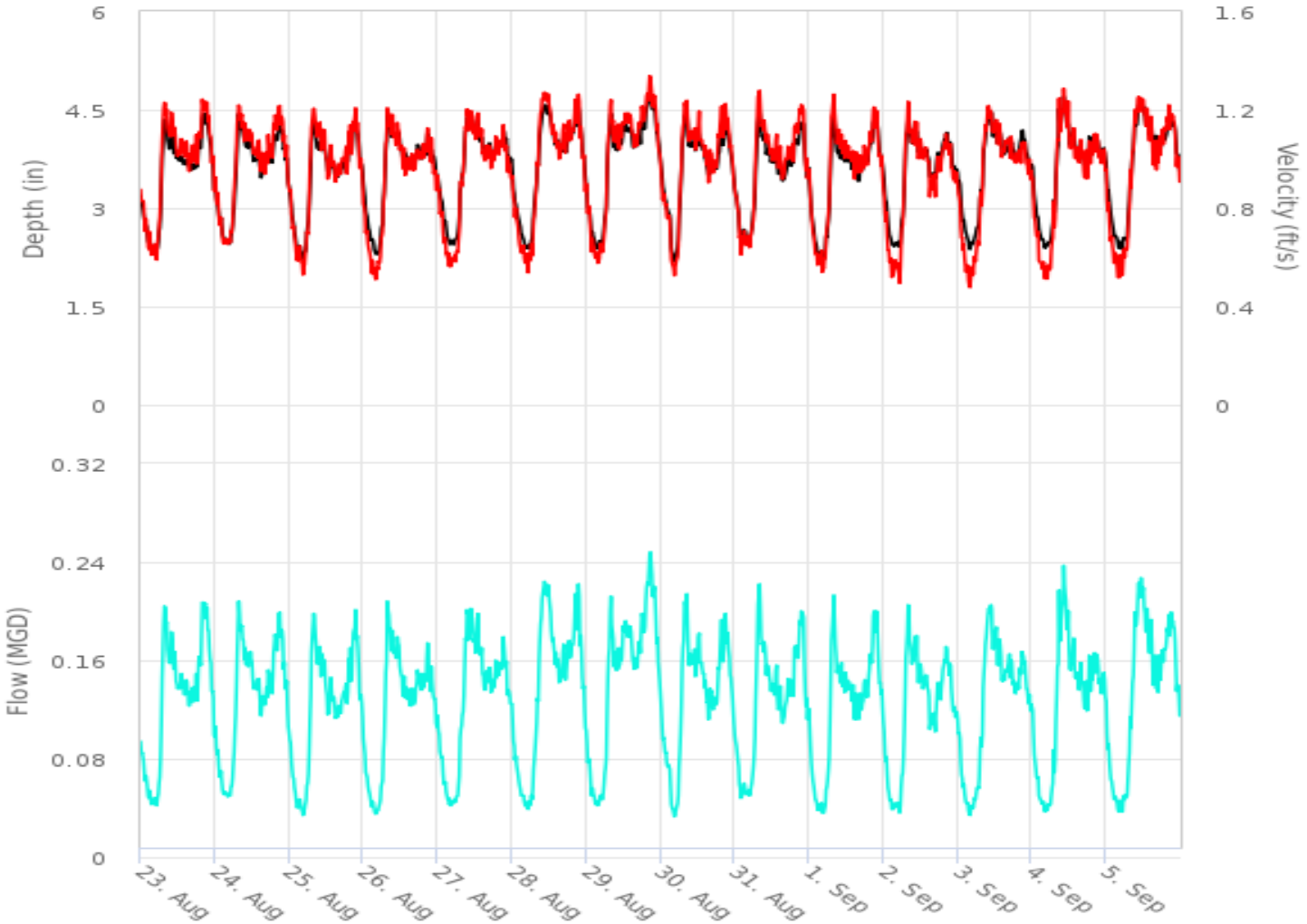
Report Period

08/23/2022
To
09/05/2022

Legend

- DFINAL
- QFINAL
- VFINAL

ADS ENVIRONMENTAL SERVICES

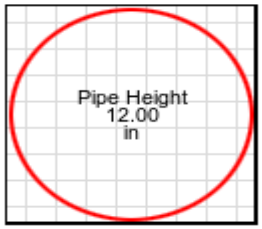


Scattergraph Report

Elder03

Flow Monitor

Elder03



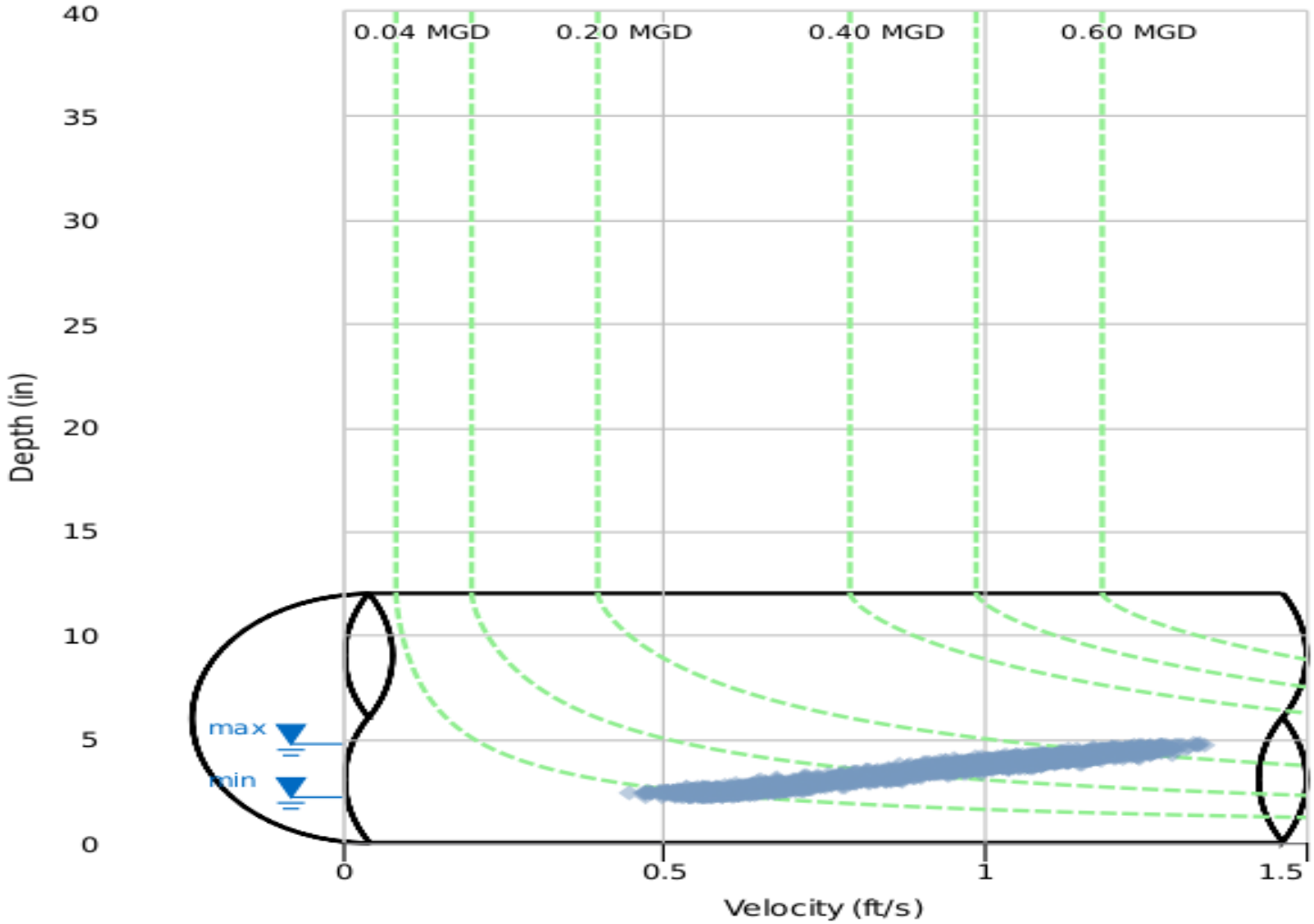
Report Period

08/23/2022
To
09/05/2022

Legend

- DFINAL - VFINAL
- Iso-Q™
- Min-Max Depth

ADS ENVIRONMENTAL SERVICES



Daily Tabular Report

08/23/2022 00:00 - 09/05/2022 23:59
Elder03Pipe: Round (12 in H), Silt0.00 in

	DFINAL (in)					VFINAL (ft/s)					QFINAL (MGD - Total MG)					
Date	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total
08/23/2022	03:55	2.34	20:55	4.45	3.54	05:25	0.57	21:00	1.27	0.98	05:25	0.040	21:00	0.216	0.129	0.129
08/24/2022	04:45	2.45	07:45	4.44	3.58	03:15	0.62	07:45	1.25	0.98	05:00	0.047	07:45	0.213	0.130	0.130
08/25/2022	04:40	2.22	21:35	4.38	3.48	04:40	0.47	21:40	1.22	0.94	04:40	0.030	21:35	0.204	0.121	0.121
08/26/2022	04:15	2.29	07:55	4.55	3.54	04:10	0.50	07:55	1.27	0.92	04:10	0.034	07:55	0.223	0.121	0.121
08/27/2022	05:15	2.43	10:40	4.44	3.61	03:55	0.51	10:00	1.23	0.94	03:55	0.039	10:00	0.209	0.127	0.127
08/28/2022	05:55	2.37	11:50	4.60	3.68	05:20	0.52	11:55	1.32	0.98	05:20	0.037	11:55	0.236	0.137	0.137
08/29/2022	03:10	2.37	20:45	4.75	3.76	03:50	0.57	20:35	1.35	1.02	03:50	0.041	20:50	0.249	0.147	0.147
08/30/2022	04:35	2.18	08:35	4.50	3.61	04:40	0.50	08:30	1.26	0.98	04:40	0.031	08:30	0.216	0.132	0.132
08/31/2022	04:55	2.50	08:05	4.50	3.55	02:10	0.60	08:05	1.30	0.97	02:10	0.046	08:05	0.225	0.127	0.127
09/01/2022	04:50	2.21	08:00	4.43	3.48	04:20	0.53	08:00	1.29	0.95	04:50	0.035	08:00	0.220	0.122	0.122
09/02/2022	05:20	2.40	08:15	4.42	3.53	02:55	0.48	08:00	1.29	0.91	05:20	0.035	08:00	0.209	0.120	0.120
09/03/2022	04:05	2.37	11:05	4.49	3.59	03:55	0.45	09:55	1.26	0.92	03:55	0.032	10:50	0.208	0.125	0.125
09/04/2022	04:25	2.39	10:20	4.73	3.60	05:00	0.48	10:20	1.31	0.93	05:00	0.035	10:20	0.243	0.126	0.126
09/05/2022	05:25	2.36	11:25	4.68	3.68	04:15	0.47	11:55	1.31	0.96	04:15	0.033	11:30	0.234	0.136	0.135

08/23/2022 00:00 - 09/05/2022 23:59

	DFINAL (in)	VFINAL (ft/s)	QFINAL (MGD - Total MG)
Total			1.801
Average	3.59	0.96	0.129

Appendix C

REFERENCES

SECTION 3
CRITERIA

3-1 GENERAL

Establishing performance standards is an important part of evaluating the existing wastewater collection system, as it forms the basis for most of the system improvement recommendations. These standards include methodology for estimating wastewater flows, and minimum design standards for the collection system pipes, pump stations and force mains.

Average dry weather wastewater flows can be reasonably estimated from land use and unit flow factors, with the results then compared to measured flows. The components used to estimate design wastewater flows include unit flow factors, peaking factors, and infiltration/inflow allowances.

Collection system design standards include minimum pipe size, minimum flow velocity, and depth of flow to pipe diameter ratio. Pump station criteria includes sizing requirements for pumps, wet wells and forcemains. It also includes provisions for redundancy, emergency storage, emergency power, and remote monitoring and control.

3-2 UNIT FLOW FACTORS

Previous Master Plan studies developed unit flow factors for the various land uses within the City's service area. These unit flow factors, shown in Table 3-1, were developed from flow monitoring data, flow records at Pump Station No. 35, water meter records, and the census data provided in the City's General Plan. The Orange County Sanitation District (OCSD) recommended wastewater flow generation factors were used for manufacturing and public recreation land uses.

For this Master Plan study, the sewage loads utilized in the hydraulic model were based on the average FY 2014-2015 pump flow data at all sewer pump stations. This data was compiled from weekly meter readings recorded by City staff.

Current sewage loads are significantly lower than the previously estimated loads developed using unit flow factors and land use information.

Table 3-1
Unit Flow Factors

Land Use Category		Unit Flow Factor	
Use	Description	gpd/Ac	gpd/du
RHD	Residential High Density	4,000	160
RMD	Residential Medium Density	3,230	190
RLD - CPE, OT	Residential Low Density - College Park East, Old Town	1,825	225
RLD - MH	Residential Low Density - Marina Hill	1,550	225
RLD - HR	Residential Low Density - Hellman Ranch	765	300
C	Commercial	2,500	
R-G	Recreation / Grass	200	
PLU/R	Public Land Use / Recreation	200	
O-E	Oil Extraction	0	
MSSP	Main Street Specific Plan	2,500	
M-1	Light Manufacturing - Pacific Gateway	3,167	

City of Seal Beach

Summary of Sewer Analysis for Potential Development Areas (September 2022)

1. Loads and Model Notes
    a. High Density Residential Unit flow Factor = 160 gpd/du
    (per City's 2018 Sewer Master Plan, Table 3-1)
    b. Potential sewage loads for each development area are shown in Table 1.
    c. Peaking Formula (per City's 2018 Sewer Master Plan, Section 3-3)

        Qpdw = 1.85 x Qadw 0.92+dry weather infiltration

        Where, Qpdw = Peak dry weather flow in cfs

        Qadw = Average dry weather flow in cfs

        Qpww =1.35 x Qpdw

        Where, Qpdw = Peak dry weather flow in cfs

        Qpww = Peak wet weather flow in cfs

    d. Depth to Diameter criteria (per City's 2018 Sewer Master Plan, Section 3-5.2)
        i. PDWF d/D < 0.50 for 15-inch and smaller pipes
        ii. PDWF d/D < 0.64 for 18-inch and larger pipes

2. Hydraulic Analysis Results
    a. Site B-2, B-4, B-5, B-9, B-10, B-11, and B-12

    The potential sewage loads, summarized in Table 1, were added to the sewer hydraulic model. The capacities of the sewers downstream of Site B-2, B-4, B-5, B-9, B-10, B-11, and B-12 were found to be sufficient to convey the anticipated peak dry weather flows.

    b. Site B-8, Sunset Aquatic Marina

    The potential sewage generated by the Sunset Aquatic Marina development (144 du) is anticipated to be conveyed to the Aquatic Park Lift Station. The Sunset Aquatic Marina is anticipated to generate an average sewage load of 24,040 gpd or 16 gpm (See Table 1).

    The existing average flow to the station is 1.6 gpm. Therefore the total flow would be 17.6 gpm. The associated peak dry weather flow and peak wet weather flow is 42 and 57 gpm, respectively using the aforementioned peaking formulas.

    The Aquatic Park Lift Station currently has two 30 gpm pumps. The City's criteria is that a pump station should consist of pumps that can handle the peak flows of the station. With the addition of the Sunset Aquatic Marina development, the current pumps would be undersized.

It is recommended that the Aquatic Park Lift Station capacity be re-evlauated when the Sunset Aquatic Marina development plans are more solidified. It is likely that the lift station will need to be upgraded or reconstructed. The lift station was on the Capital Improvement Project list (CIP 12) for replacement in the City's 2018 Sewer Master Plan at a cost of $1.4M.

c. Site WE-1, West Ed development

The West Ed development (246 du) loads were added at Manhole B15-M04 at the intersection of Lampson Avenue and Rose Street. There are sewers downstream of this location that the model predicts to flow at a PDWF d/D > 0.50 (see Table 2).

The two areas of concern are as follows:

1. 1,386 feet of 8-inch diameter pipe in Fir Avenue and Heather Street

   Existing Conditions, PDWF d/D ranges from 0.48 to 0.52

   With West Ed, PDWF d/D ranges from 0.56 to 0.61

2. 2,820 feet of 15-inch diameter pipe in Lampson Avenue

   Existing Conditions, PDWF d/D ranges from 0.53 to 0.57

   With West Ed, PDWF d/D ranges from 0.54 to 0.58

When the system was analyzed for the 2018 Sewer Master Plan project, recommendations for upsizing pipes was not made unless the PDWF d/D ratio exceeded 0.64. This was due to the fact that the sewers were already constructed and the land was assumed to be generally built out in the City.

As seen in Table 2, the d/D ratio in the 15-inch sewer in Lampson Avenue increases by 0.01 to 0.02 in each of the reaches. It is not a significant increase due to the larger pipe size. It is recommended that this pipe be flow monitored to verify the flow depths estimated in the model.

The d/D ratio in the 8-inch sewer in Fir Avenue and Rose Street increases by 0.08 to 0.10 in each of the reaches. The increase is more significant due to the smaller pipe size.

It is recommended that these pipes be flow monitored to verify the flow depths estimated in the model. If the depths are verified, it is recommended that the City require the developer to increase the 8" pipe in Fir Avenue and Rose Street to 12-inches in diameter to accommodate the anticipated sewage loads of the West Ed development.

Table 1
Potential Development Areas (September 2022)
Sewer Load Summary Table

Site	Development Area	Location	Area (ac)	Redeve-lopment Area (ac)	Zoning	Potential Units (du)	Density (du/ac)	Sewer Unit Flow Factor (gpd/du)	Sewer Load (gpd)	Sewer Load (mgd)	Model Manhole ID where Potential Load is Applied
B-2	Accurate Storage	Northwest of Adolfo Lopez Drive and Seal Beach Boulevard	4	1.8	RHD-20	59	33	160	9,440	0.009440	S01-135
B-3[a]	Shops at Rossmoor	Northwest of Seal Beach Boulevard and St Cloud Drive	27	10	RHD-46	400	40	-	-	-	-
B-4	Old Ranch Town Center	Southeast of Plymouth Drive and Seal Beach Boulevard	26	5	RHD-46	200	40	160	32,000	0.032000	T01-117
B-5	Old Ranch Country Club	Northeast of Seal Beach Boulevard and Lampson Avenue	150	5	RG	120		160	19,200	0.019200	B01-A06, B01-A03A
B-6[a]	Leisure World	West of Seal Beach Boulevard, between Westminster Boulevard and San Diego Freeway	533	5	RHD-PD	150	30	-	-	-	-
B-7[a]	Seal Beach Plaza	Northwest of Westminster Boulevard and Seal Beach Boulevard	7	2.5	SC	75	30	-	-	-	-
B-8[b]	Sunset Aquatic Marina	Southwest of Sunset Way and Bolsa Chica Channel	4.8	4.8	PS	144	30	160	23,040	0.023040	-
B-9	Navy Site	Northeast of Pacific Coast Highway and Seal Beach Boulevard	22		MI	150	30	160	24,000	0.024000	NAVY
B-10	Seal Beach Center	Northwest of Pacific Coast Highway and Balboa Drive	9	4	RHD-33	120	30	160	19,200	0.019200	E05-202
B-11	Main Street SP Area	Main Street between Electric Avenue and Ocean Avenue	15		MSSP	40		160	6,400	0.006400	F06-317, F07-330A, F27-379, F28-C386
B-12	99 Marina	Northeast of Marina Drive and 1st Street	4.3	4.3	OE/RHD-20	86	20	160	13,760	0.013760	C08-471
WE-1	West Ed	4665 Lampson Avenue, Los Alamitos, CA				246		160	39,360	0.039360	B15-M04
								Total	**186,400**	**0.186400**	

[a]This development area is not within the City of Seal Beach's sewer service area
[b]The sewage generated in this development area is assumed to be conveyed to Aquatic Park lift station. The lift station is not in the hydraulic model. Sewage is pumped from the lift station to the City of Huntington Beach's sewer system,

Table 2
Hydraulic Analysis Results for Sewers Downstream of West Ed Development

General Information						Existing without West Ed Development							With West Ed Development						
ID	From ID	To ID	Dia-meter (in)	Length (ft)	Slope	PDWF Total Flow (cfs)	ADWF Unpeak-able Flow (cfs)	ADWF Peak-able Flow (cfs)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)	Full Flow (cfs)	PDWF Total Flow (cfs)	ADWF Unpeak-able Flow (cfs)	ADWF Peak-able Flow (cfs)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)	Full Flow (cfs)
B15-M04	B15-M04	B15-M03	8	124	0.0280	0.0079	0.0007	0.0024	1.40	0.05	0.03	2.0268	0.1003	0.0007	0.0418	3.02	0.15	0.10	2.0268
B15-M03	B15-M03	B15-M02	8	335	0.0020	0.0151	0.0014	0.0048	0.68	0.11	0.08	0.5418	0.1063	0.0014	0.0442	1.21	0.30	0.20	0.5418
B15-M02	B15-M02	B15-M01	8	265	0.0020	0.0220	0.0021	0.0073	0.76	0.14	0.09	0.5418	0.1123	0.0021	0.0466	1.22	0.31	0.21	0.5418
B15-M01	B15-M01	B15-A39	8	149	0.0019	0.0287	0.0028	0.0097	0.81	0.16	0.11	0.5252	0.1182	0.0028	0.0490	1.21	0.32	0.22	0.5252
B15-A39	B15-A39	B15-A38	8	251	0.0016	0.2395	0.0275	0.0949	1.40	0.49	0.33	0.4897	0.3192	0.0275	0.1343	1.49	0.59	0.39	0.4897
B15-A38	B15-A38	B12-A37	8	220	0.0020	0.2485	0.0286	0.0988	1.53	0.47	0.31	0.5480	0.3280	0.0286	0.1381	1.64	0.56	0.37	0.5480
B12-A32	B12-A32	B08-A31	12	256	0.0018	0.5701	0.0698	0.2414	1.79	0.43	0.43	1.5143	0.6447	0.0698	0.2807	1.85	0.46	0.46	1.5143
B08-A31	B08-A31	B08-A30	12	290	0.0018	0.5760	0.0706	0.2440	1.80	0.43	0.43	1.5127	0.6505	0.0706	0.2834	1.85	0.46	0.46	1.5127
B08-A30	B08-A30	B08-A29	12	220	0.0018	0.5818	0.0714	0.2467	1.81	0.43	0.43	1.5232	0.6563	0.0714	0.2861	1.87	0.46	0.46	1.5232
B08-A29	B08-A29	B08-A28	12	225	0.0019	0.5877	0.0721	0.2494	1.83	0.43	0.43	1.5434	0.6621	0.0721	0.2887	1.89	0.46	0.46	1.5434
B08-A28	B08-A28	B08-A27	12	267	0.0019	0.5935	0.0729	0.2521	1.85	0.43	0.43	1.5604	0.6679	0.0729	0.2914	1.91	0.46	0.46	1.5604
B08-A27	B08-A27	B08-A26	12	234	0.0019	0.5994	0.0737	0.2547	1.85	0.43	0.43	1.5507	0.6737	0.0737	0.2941	1.91	0.46	0.46	1.5507
B08-A26	B08-A26	B08-A25	12	226	0.0019	0.6052	0.0744	0.2574	1.88	0.43	0.43	1.5769	0.6795	0.0744	0.2968	1.93	0.46	0.46	1.5769
B08-A25	B08-A25	B08-A24	12	261	0.0019	0.6111	0.0752	0.2601	1.85	0.44	0.44	1.5466	0.6853	0.0752	0.2994	1.91	0.47	0.47	1.5466
B08-A24	B08-A24	B07-A23	15	251	0.0014	0.8372	0.1062	0.3644	1.79	0.41	0.51	2.4191	0.9095	0.1062	0.4038	1.83	0.42	0.53	2.4191
B07-A23	B07-A23	B06-A22	15	257	0.0014	0.8702	0.1107	0.3799	1.81	0.41	0.52	2.4251	0.9423	0.1107	0.4193	1.85	0.43	0.54	2.4251
B06-A22B	B06-A22	B06-A22A	18	138	0.0009	0.8802	0.1115	0.3849	1.88	0.31	0.47	4.2009	0.9522	0.1115	0.4243	1.92	0.32	0.49	4.2009
B06-A22A	B06-A22A	B06-A21	18	86	0.0010	0.8802	0.1115	0.3849	1.95	0.30	0.45	4.4267	0.9522	0.1115	0.4243	2.00	0.31	0.47	4.4267
B06-A21	B06-A21	B06-F01	18	11	0.0018	0.9952	0.1272	0.4393	2.46	0.28	0.42	5.8383	1.0665	0.1272	0.4787	2.51	0.29	0.43	5.8383
B06-F01	B06-F01	B06-F01A	18	253	0.0011	0.9952	0.1272	0.4393	2.04	0.32	0.48	4.4773	1.0665	0.1272	0.4787	2.08	0.33	0.50	4.4773
B06-F01A	B06-F01A	B05-A20	18	7	0.0015	0.9952	0.1272	0.4393	2.32	0.29	0.44	5.3704	1.0665	0.1272	0.4787	2.37	0.30	0.45	5.3704
B05-A20	B05-A20	B03-A19	15	242	0.0014	1.1305	0.1468	0.5033	1.94	0.48	0.60	2.4287	1.2011	0.1468	0.5427	1.97	0.50	0.62	2.4287
B03-A19	B03-A19	B03-A18	15	227	0.0014	1.1345	0.1475	0.5051	1.93	0.48	0.61	2.3956	1.2050	0.1475	0.5445	1.96	0.50	0.63	2.3956
B03-A18	B03-A18	B03-A17	15	229	0.0014	1.1384	0.1481	0.5070	1.94	0.48	0.60	2.4238	1.2089	0.1481	0.5463	1.97	0.50	0.62	2.4238
B03-A17	B03-A17	B03-A16	15	134	0.0014	1.1423	0.1487	0.5088	1.95	0.48	0.60	2.4371	1.2128	0.1487	0.5482	1.98	0.50	0.62	2.4371
B03-A16	B03-A16	B03-A15	18	168	0.0011	1.2225	0.1603	0.5471	1.79	0.41	0.62	3.4516	1.2926	0.1603	0.5865	1.81	0.42	0.64	3.4516
B03-A15	B03-A15	B03-A14	18	267	0.0011	1.2264	0.1610	0.5490	1.82	0.41	0.61	3.5304	1.2965	0.1610	0.5883	1.84	0.42	0.63	3.5304
B03-A14	B03-A14	B01-A13	18	241	0.0011	1.2794	0.1665	0.5756	1.84	0.42	0.62	3.5275	1.3492	0.1665	0.6149	1.86	0.43	0.64	3.5275
B01-A13	B01-A13	B01-A12	15	325	0.0020	1.2983	0.1769	0.5804	2.31	0.47	0.58	2.9188	1.3681	0.1769	0.6197	2.34	0.48	0.60	2.9188
B01-A12	B01-A12	B01-A11	15	325	0.0014	1.3172	0.1874	0.5851	2.01	0.53	0.66	2.4101	1.3870	0.1874	0.6245	2.03	0.54	0.68	2.4101
B01-A11	B01-A11	B01-A10	15	325	0.0014	1.3362	0.1978	0.5899	2.03	0.53	0.66	2.4367	1.4059	0.1978	0.6292	2.06	0.54	0.68	2.4367
B01-A10	B01-A10	B01-A09	15	325	0.0014	1.3551	0.2083	0.5947	2.02	0.54	0.67	2.4101	1.4247	0.2083	0.6340	2.05	0.55	0.69	2.4101
B01-A09	B01-A09	B01-A08	15	325	0.0014	1.3740	0.2187	0.5994	2.05	0.54	0.67	2.4367	1.4436	0.2187	0.6388	2.07	0.55	0.69	2.4367
B01-A08	B01-A08	B01-A07	15	325	0.0014	1.3929	0.2292	0.6042	2.03	0.55	0.68	2.4101	1.4624	0.2292	0.6435	2.06	0.56	0.70	2.4101
B01-A07	B01-A07	B01-A06	15	325	0.0014	1.4118	0.2396	0.6090	2.06	0.55	0.68	2.4367	1.4813	0.2396	0.6483	2.08	0.56	0.70	2.4367
B01-A06	B01-A06	B01-A05	15	325	0.0014	1.4476	0.2501	0.6233	2.07	0.55	0.69	2.4367	1.5170	0.2501	0.6627	2.09	0.57	0.71	2.4367
B01-A05	B01-A05	B01-A04	15	300	0.0014	1.4665	0.2605	0.6281	2.07	0.56	0.70	2.4234	1.5359	0.2605	0.6674	2.09	0.58	0.72	2.4234
B01-A04	B01-A04	B01-A03A	15	245	0.0014	1.4854	0.2710	0.6328	2.07	0.57	0.71	2.4128	1.5547	0.2710	0.6722	2.09	0.58	0.73	2.4128
B01-A03A	B01-A03A	B01-A02A	18	48	0.0041	1.5372	0.2919	0.6504	3.10	0.32	0.49	6.7704	1.6064	0.2919	0.6897	3.14	0.33	0.50	6.7704
B01-A02A	B01-A02A	B01-A01A	18	209	0.0050	1.5372	0.2919	0.6504	3.33	0.31	0.46	7.4652	1.6064	0.2919	0.6897	3.37	0.32	0.47	7.4652
B12-A37T	B12-A37	B12-H14	8	286	0.0016	0.2552	0.0294	0.1016	1.42	0.51	0.34	0.4912	0.3345	0.0294	0.1410	1.51	0.61	0.40	0.4912
B12-H14	B12-H14	B12-H13	8	285	0.0020	0.2619	0.0302	0.1045	1.54	0.49	0.33	0.5418	0.3410	0.0302	0.1439	1.64	0.58	0.38	0.5418
B12-H13	B12-H13	B12-H12	8	285	0.0022	0.2685	0.0311	0.1074	1.61	0.48	0.32	0.5696	0.3476	0.0311	0.1467	1.71	0.56	0.38	0.5696
B12-H12	B12-H12	B12-H11	8	285	0.0020	0.2752	0.0319	0.1102	1.55	0.51	0.34	0.5371	0.3541	0.0319	0.1496	1.64	0.59	0.40	0.5371
B12-H11	B12-H11	B12-A32	8	245	0.0022	0.3076	0.0360	0.1243	1.67	0.52	0.35	0.5741	0.3858	0.0360	0.1636	1.76	0.60	0.40	0.5741

Sewer reaches highlighted in yellow exceed the City's depth to diameter criteria (PDWF d/D < 0.50 for 15" and smaller) for new pipe construction when the West Ed development loads are added to the system

Legend

- Manhole
- Gravity Sewer
- OCSD Sewers
- Sewer Downstream of WestEd
- Sewer PDWF d/D>0.50 Downstream of WestEd

West Ed Development Area
Proposed 246 du

FLOW MONITORED MH's

Seal Beach Blvd

Lampson Av

Ironwood Av

Hazelnut Av

Guava Av

Fir Av

Elder Av

Dogwood Av

Candleberry Av

Birchwood Av

Aster St

Heather St

Rose St

Oleander St

B01-A01A
B01-A02A
B01-A03A
B01-A04
B01-A05
B01-A06
B01-A07
B01-A08
B01-A09
B01-A10
B01-A11
B01-A12
B01-A13
B03-A14
B03-A15
B03-A16
B03-A17
B03-A18
B03-A19
B05-A20
B06-A21
B06-A22
B06-A22A
B06-F01
B06-F01A
B07-A22
B08-A24
B08-A25
B08-A26
B08-A27
B08-A28
B08-A29
B08-A30
B08-A31
B12-A32
B12-H11
B12-H12
B12-H13
B12-H14
B15-A37
B15-A38
B15-A39
B15-M01
B15-M02
B15-M03
B15-M04

		CITY OF SEAL BEACH
	DATE: September 2022	Sewer PDWF d/D>0.50 Downstream of Potential West Ed Development
		Figure 1

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: August 26, 2024

TO: Nicole Morse, Principal/Vice President, T&B Planning, Inc.

FROM: Casey Tibbet, MA, Associate/Architectural Historian

SUBJECT: Historic Research for the Property at 4665 Lampson Avenue in Los Alamitos, Orange County, California (LSA Project Number 20241902)

In June 2024, public comments were received as part of the public review process for a draft Environmental Impact Report (EIR) for a project at 4665 Lampson Avenue (Assessor's Parcel Number 130-012-35) in Los Alamitos, California. One commentor stated that she had "reason to believe" that three redwood trees located on the property are Moon Trees (Campbell 2024). Moon Trees were grown from seeds taken into space as part of the Apollo 14 moon landing mission in 1971 (see below for more detail). According to the commentor, "Fish and Game controlled where these seedlings were planted and Fish and Game was located at that building [4665 Lampson], so it is conceivable that they planted them; those trees are approximately 50+ years old which fits in with the age of those seedlings and should not be cut down" (Campbell 2024). The commentor also stated that there were originally five redwood trees, but two have died and one of the remaining three is not doing well.

In response to this comment, T&B Planning, Inc. retained LSA to conduct research to determine if the redwood trees located at the southwest corner of the property at 4665 Lampson Avenue are Moon Trees.

Background

The following history of the Moon Trees was compiled from information written by Dr. David R. Williams, Author/Curator, NASA Goddard Space Flight Center (Williams 2022, 2023 and 2024).

Copies of the original documents held at the United States Forest Service (USFS) Institute of Forest Genetics (IFG) western station in Placerville, California, reveal that the Moon Tree coast redwood (Sequoia sempervirens) seeds were collected in 1966 east of Soquel, California (near 37.00 N, 121.83 W, at an elevation of 1200 ft.) by Carl Fowler. The seeds were logged in and stored at the IFG station in Placerville, California, as Lot X. On January 15, 1971, 500 of the seeds from Lot X were sent to Dr. Charles Walkinshaw who was with the United States Department of Agriculture on special assignment with the National Aeronautics and Space Administration (NASA). Dr. Walkinshaw was also sent seeds from Douglas fir, sycamore, loblolly pine, and sweetgum trees. The seeds were packaged and carried by astronaut Stuart Roosa on the Apollo 14 moon landing flight and returned to Earth. The seeds were not taken to the moon surface, they remained in the command module.

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After their return (February 9, 1971), many of the seeds were grown in cellulose thimbles in Houston under controlled conditions supervised by Dr. Walkinshaw. On May 20, 1971, a request was made to promptly relocate the seeds to the IFG facilities in Placerville, California, and Gulfport, Mississippi since Houston did not have the necessary facilities to care for them. However, this did not occur and by July 10, 1972, the majority of the seedlings failed to survive. The remaining coast redwood and Douglas fir seeds were received by the IFG western station in Placerville on July 25, 1972. The sycamore, loblolly pine, and sweetgum seeds were sent to the IFG southern station in Mississippi.

The seeds sent to Placerville were logged as Lot AI and included 150 coast redwood seeds of which 20 successfully germinated. This is considered a normal germination rate for coast redwoods. They were transferred into containers in October 1972 at which time they ranged from 3 to 8 centimeters (approximately 1.2 to 3.1 inches) in height. In November 1972, there were 37 Douglas fir seedlings with an average height of 40.5 cm (about 16 inches). By December 1972, 16 of the redwood seedlings were still alive at an average height of 55.3 cm (approximately 22 inches). This is considered a normal mortality rate for redwoods. The redwood seedlings were numbered 1 to 16 on November 25, 1974. On January 3 and February 28, 1975, at the request of Stan Krugman, cuttings were taken and rooted, these were logged as Lot AJ. The plan was to have enough cuttings to give to the states for the bicentennial in 1976. Records indicate that 93 redwood root cuttings and 35 Douglas fir cuttings survived as of September 1976. On May 16, 1975, a letter was sent from the USFS to all state foresters advising them of the availability of the Moon Tree seedlings. Only two states (Main and Minnesota) did not request any Moon Trees (Johnson 1976).

In 1976, all but 1 of the 16 redwood seedlings from Lot AI were distributed (12 to California and 3 to Virginia). On April 2, 1976, nine redwood seedlings from Lot AI (numbers 6, 7, 9, 10, 12, 13, 14, 15, and 16), along with two root cuttings from Lot AJ, were sent to California State Forester Ron Adams to be planted at various locations in California for the bicentennial. On April 26, 1976, three redwood seedlings (numbers 4, 5, and 8) were sent to Virginia to the Chief Nurseryman at Yorktown Victory Center. On May 2, 1976, three redwood seedlings (numbers 1, 2, and 3) were released to the director of the Pacific Southwest Station in Arcata, California, for a dedication planting. [These are assumed to be the three redwoods planted next to the Theater Arts building at California State Polytechnic University, Humboldt (Cal Poly Humboldt 2009).] As of September 20, 1976, one redwood seedling (number 11) was being kept “on-hand” at the Placerville station.

An April 2, 1976, letter from the California State Forester to the USFS, listed locations for 12 of the Moon Trees. One tree was going to Capitol Park in Sacramento and 9 were going to various colleges and universities in northern California. Only two trees were slated for southern California for a “USFS-CDF [California Division of Forestry] ceremony”. The specific location for these two trees was not specified.

Aside from the 2 root cuttings given to the California State Forester, the disposition of the 93 root cuttings (Lot AJ) is unknown. However, in a 2009 article, Bob Sise, a retired forestry professor at California State Polytechnic University at Humboldt (HSU), stated that somehow “hundreds” of

moon trees ended up in the HSU greenhouse (Cal Poly Humboldt 2009). It is not clear if all of them were redwoods, but according to Sise, they are planted all over the HSU campus and are indistinguishable from "traditional redwoods and trees of other species" (Ibid.). He noted that three redwood moon trees are planted alongside the Theater Arts building and used to have a plaque identifying them as moon trees. However, students kept stealing the plaque so eventually the school gave up on it (ibid.). As previously stated, these three trees are assumed to be the three released to the director of the Pacific Southwest Station in Arcata for a dedication planting.

As noted by Mr. Sise, aside from the lack of records, a complicating factor in the identification of the redwood "moon trees" is that there is no apparent difference between the trees grown from the original seedlings (Lot AI), the root cuttings (Lot AJ), or redwoods that have not traveled into deep space.

Current Research

Methodology

To determine if the redwood trees located at the southwest corner of 4665 Lampson Avenue are or are likely to be Moon Trees, LSA conducted online searches including an extensive search of California news articles using newspapers.com. In addition, the following were contacted:

- NASA archivist, Davd Williams;
- National Forest Genetics Laboratory (Placerville, CA), Amaldo Ferreira, Jessica Wright, and Andrew Groover
- USFS staff in the Angeles, Cleveland, San Bernardino, and Six Rivers National Forests
- State Urban Forester, Walter Passmore
- California Department of Fish and Wildlife (South Coast Region), Steve Gibson
- City of Los Alamitos, Tom Oliver (Planning), Emeline Noda (Recreation and Community Services), and Ron Noda (Deputy City Manager)
- Gardens of Golden Gate Park
- Orange County Archives
- Los Alamitos Public Library
- Los Alamitos Museum, Marilynn Poe
- Santa Ana Public Library, History Room

To date, responses have not been received from: Mr. Passmore, State Urban Forester; Emeline Noda, Recreation and Community Services; Andrew Groover, National Forest Genetics Laboratory; Six Rivers National Forest staff; or the Los Alamitos Public Library, which is closed until further notice.

Results

The following summarizes the information obtained through research and from each group and individual contacted.

Newspaper Research. Extensive online searches of newspapers throughout California were conducted. A number of articles related to Moon Trees were found, but none mentioned any Moon Trees at 4665 Lampson Avenue or even in Orange County. No record was found for a joint USFS/CDF ceremony in southern California in the mid-1970s. No connection between the Moon Trees and CDFW was found. No information about the Los Alamitos bicentennial celebration was found in Google searches or a search of *The Register* for the month of July 1976.

NASA. The information provided by NASA is the most comprehensive. It clearly states that the Moon Tree project was a NASA/USFS project and that the seedlings were distributed to the California Department of Forestry. There is no mention of CDFW (or CDFG as it was previously known). Although they do not have the planting locations for the two redwood Moon Tree seedlings that were sent to southern California in 1976 or the remainder of the 93 redwood root cuttings, NASA has not located any Moon Trees from the Apollo 14 mission in Orange County, California.

National Forest Genetics Laboratory. Staff from the laboratory indicated they would look for records for the Apollo 14 seedlings, but were not optimistic about finding information beyond what NASA already provided. Ms. Wright noted she is currently working on the Artemis 1 moon tree seedlings and will make sure to keep better records. No additional information has been received from the laboratory staff.

USFS. To date, none of the USFS staff contacted in the Angeles, Cleveland, San Bernardino, and Six Rivers National Forests have found any information about the Apollo 14 Moon Trees.

State Urban Forester. Walter Passmore did not respond.

California Department of Fish and Wildlife (CDFW). According to Steve Gibson, CDFW South Coast Region, because CDFW only leased the building at 4665 Lampson Avenue in Los Alamitos, they would not have been allowed to plant any trees on the property. Mr. Gibson reported that he discussed this with several colleagues who agreed with that statement. Furthermore, although Mr. Gibson could not confirm it, research indicates that the CDFW was at that location from 2002 to 2023, which does not fit the timeframe for the Apollo 14 Moon Tree plantings.

City of Los Alamitos. Tom Oliver was asked about the CDFW lease dates, but did not have that information. Emeline Noda was suggested by Marilynn Poe (Los Alamitos Museum) as someone who might have information about the city's bicentennial celebration and whether any trees were planted. Ms. Noda responded that no redwood trees were planted as part of the city's 50th anniversary celebration. She referred LSA's inquiry to Ron Noda who replied that according to their database there are no Moon Trees in the city.

Gardens of Golden Gate Park. Ryan Guillou, Director of Collections and Conservation, responded that the gardens did have a Moon Tree, but because of lapses in record keeping he could not provide any details.

Orange County Archives. Susan Berumen, Archivist, responded that they have no information on the planting of the Moon Trees.

Los Alamitos Public Library. Automatic reply stated that the library is closed until further notice.

Los Alamitos Museum. Marilynn Poe responded that she attended the bicentennial celebration in Los Alamitos and does not remember any Moon Trees being planted. Online research revealed that Ms. Poe is a longtime Los Alamitos resident, an active community volunteer, and has also been active in local government. She was Mayor of Los Alamitos in 1999, 2003, and 2010. Ms. Poe suggested that LSA contact Emeline Noda with the City of Los Alamitos to see if she has any additional information regarding Moon Trees. As indicated above, Ms. Noda has not responded.

Santa Ana Public Library, History Room. Staff responded via voice message that the library is closed for renovations for the next two years. They suggested obtaining a library card to facilitate online research using their resources.

Conclusion

Research found no evidence that the redwood trees at 4665 Lampson Avenue are Moon Trees. Neither NASA nor the USFS has found any record of the Apollo 14 Moon Trees being planted in Orange County. CDFW was not part of the 1970s Moon Tree program and was not responsible for distributing Moon Tree seedlings. CDFW staff think it unlikely they would have been allowed to plant trees at the Lampson Avenue location since they only leased the building. Additionally, it appears the CDFW lease was several decades after the mid-1970s timeframe when the trees would most likely have been planted and therefore the commentor's speculation that "it is conceivable [CDFW] planted them" is unlikely to be accurate. Moreover, according to City records, there are no Moon Trees in Los Alamitos. In addition, none of the other sources that responded to requests for information could confirm that the redwood trees at 4665 Lampson Avenue are Moon Trees or even that any Moon Trees were planted in Orange County.

As such, based on the research conducted to date, the redwood trees located on the southwest corner of the property at 4665 Lampson Avenue in Los Alamitos, do not appear to be Moon Trees associated with the 1971 Apollo 14 moon landing mission.

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Mitigation Monitoring and Reporting Program
4665 Lampson Avenue Project

State Clearinghouse No. 2022090476

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CEQA Requirements

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document that includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a Mitigation Monitoring and Reporting Program (MMRP) for the changes to the project that it has adopted or made a condition of project approval in order to mitigate or avoid significant environmental impacts. The appropriate reporting or monitoring plan must be designed to ensure compliance during project implementation (Public Resources Code §21081.6; 14 Cal. Code Regs. §15091(d)).

The City of Los Alamitos will coordinate the monitoring of the mitigation measures and regulatory requirements with each applicable City department or division, while various City departments/divisions would be responsible for monitoring and verifying compliance of specific mitigation measures and regulatory requirements (see the beginning on page 3). Monitoring will include: 1) verification that each mitigation measure and regulatory requirement has been implemented; 2) recordation of the actions taken to implement each mitigation measure and regulatory requirement; and 3) retention of records in the project file.

Project Objectives

The objectives of the proposed 4665 Lampson Avenue (the "Project") include the following:

1. Provide residential development consistent with the City's General Plan, including the 20212029 Housing Element, to help meet the City's RHNA requirement.
2. Provide a variety of housing types and affordability (for lower income and above moderate income households) that satisfies the residential market and accommodates increased demand for housing.
3. Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.
4. Improve the City's jobs housing balance to support reduced commute distances consistent with the Southern California Association of Governments' Connect SoCal.
5. Create a residential character that provides for a high quality architectural design.

Overview of the Project

The Project Applicant, Lampson Park Place, LLC, is seeking approval of a Site Development Permit – Major, Tentative Parcel Map 2022-133 (for Finance and Conveyance Purposes), Vesting Tentative Tract Map No. 19263 (for Condominium Purposes), and an Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions to redevelop the Project site with 246 residential units (the "Project"). Refer to EIR Section 3.0, *Project Description*, of the Draft EIR for a detailed description of the Project.

Mitigation Monitoring and Reporting Plan

This MMRP delegates responsibilities for monitoring the implementation of the 4665 Lampson Avenue Project mitigation measures and applicable regulatory requirements and allows responsible City entities flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure or regulatory requirement. The timing for monitoring and reporting is described in the monitoring and reporting summary table, below. Adequate monitoring requires demonstration of monitoring procedures and implementation of mitigation measures and regulatory requirements.

Additionally, Project Design Features (PDFs) are included in the Project's MMRP to further ensure the implementation of the PDFs. "Project design features" refer to avoidance and minimization measures or environmental commitments that have been incorporated into the project design as part of the project description, and the use of these project design features is contemplated pursuant to CEQA Guidelines Sections 15064(f)(2) and 15126.4(a)(1)(A). Project design features incorporated into the project design to avoid or minimize environmental impacts should be distinguished from proposed mitigation. (CEQA Guidelines Section 15126.4(a)(1)(A)) This MMRP distinguishes between PDFs and Mitigation Measures, which are identified in CEQA Guidelines Section 15126.4(a)(1) as "feasible measures which could minimize significant adverse impacts."

In order to enhance the effectiveness of the monitoring program, the City will utilize existing systems where appropriate. These inspectors are familiar with a broad range of regulatory issues and will provide first line oversight for much of the monitoring program during construction activities.

Program Changes

If changes are required to this MMRP, they will be made in accordance with CEQA and applicable provisions of the City's Municipal Code. Such changes could include reassignment of monitoring and reporting responsibilities and/or modifications to mitigation measures that achieve the same or better end results. No change will be permitted unless the Mitigation Monitoring and Reporting Program continues to satisfy the requirements of Public Resources Code §21081.6.

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.1 Aesthetics						
Summary of Impacts						
Threshold a: Would the Project have a substantial adverse effect on a scenic vista?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold c: In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.2 Air Quality						
Summary of Impacts						
Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	PDF AQ-1 The Project will utilize Tier 4 Interim construction equipment during construction activities.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	PDF AQ-1 shall apply	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d: Would the Project result in other emissions (such as those leading to	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
odors) adversely affecting a substantial number of people?						
4.3 Biological Resources						
Summary of Impacts						
Threshold a: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	PDF B-1 Pursuant to Figure 3-18, Landscape Plan, the Project will incorporate larger sized box tree species (including the western sycamore and cottonwood trees) that foliage specialist bats prefer and will plant the trees on the fringes of the development, adjacent to open space areas. PDF B-2 Pursuant to Figure 3-18, Landscape Plan, the Project will plant approximately 441 trees onsite (excluding shrubs and ground cover), including the western sycamore (*Platanus racemosa*), paperbark melaleuca (*Melaleuca quinquenervia*), olive (*Olive sp.*), southern magnolia (*Magnolia grandiflora*), Crape myrtle (*Lagerstroemia indica*), Brisbane box *(Lophostemon confertus*), Australian willow (*Geijera parviflora*), Italian cypress (*Cupressus sempervirens*), yew pine (*Podocarpus macrophyllus*) and other species. No plants listed on the California Invasive Plant Council (Cal-IPC) Inventory species will be planted and a list of approved species to planted shall be reviewed by a qualified biologist prior to planting.	**MM 4.3-1** Vegetation clearing should be conducted outside of the nesting season (February 1 through September 15). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a pre-construction nesting bird survey within three days prior to any disturbance to the Project site. Site disturbance includes disking, demolition activities, vegetation removal and grading. If active nests are identified, the biologist shall establish appropriate avoidance buffers around the nest (based on the species detected), and the buffer areas shall be avoided until the nests are no longer occupied (through routine nest monitoring by the qualified biologist) and the juvenile birds can survive independently from their nest(s). In addition, if portions of the Project site have not been disturbed within three days after the initial nesting bird survey, additional nesting bird surveys will be conducted (within the nesting bird season, February 1 to September 15) until all portions of the Project site have been disturbed appropriately (as determined by a qualified biologist) as to not provide potential nesting habitat.	Project Applicant	City of Los Alamitos Planning Department, Project Biologist	Prior to construction activities	Less-than-Significant Impact with Mitigation Incorporated
		MM 4.3-2 If tree removal or ground disturbance occurs during the raptor nesting season (from approximately January 1 to July 31), pre-removal/disturbance surveys shall be conducted. The surveys shall include areas of suitable nesting trees within	Project Applicant	City of Los Alamitos Planning Department, Project Biologist	Prior to construction activities	

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		300-feet from the limits of disturbance (to the extent that access is available). The survey shall be conducted no more than three days prior to disturbance. Should nesting raptors be detected either onsite or offsite, work would be delayed until fledglings have left the nest and area no longer dependent on the nest at which time, work could proceed.				
		MM 4.3-3 A qualified biologist shall conduct a pre-construction bat roost survey for roosting bats no more than 14 days prior to site disturbance. The pre-construction bat roost survey will consist of a minimum of two bat surveys (conducted consecutively or as determined by the biologist). If roosting bats are detected onsite outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. This may include using mechanical equipment to gently nudge the tree trunk multiple times prior to removal or for palm trees and other species, to de-frond or de-branch the tree using a mechanical lift and gently lower the cut branches to the ground. Regardless of the method, the fallen tree and/or material will be left undisturbed overnight until at least the next morning to give roosting bats time to exit before site disturbance. If roosting bats are detected onsite during the maternity season, the Project shall avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist	Project Applicant	City of Los Alamitos Planning Department, Project Biologist	Prior to construction activities	

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		determines no maternity roosting is occurring. Once the qualified biologist approves removal of the subject roost tree(s), the same tree removal procedures as outlined above shall be implemented prior to tree removal.				
Threshold b: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold c: Would the Project have substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold d: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	N/A	MM 4.3-1 would apply.	Refer to MM 4.3-1 above.	Refer to MM 4.3-1 above.	Refer to MM 4.3-1 above.	Less-than-Significant Impact with Mitigation Incorporated
Threshold e: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold f: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
4.4 Cultural Resources						
Summary of Impacts						
Threshold a: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold b: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	N/A	**MM 4.4-1** Discovery of Inadvertent Resources. Prior to the issuance of any grading permits, the Project Applicant/Developer shall submit	Project Applicant	City of Los Alamitos Planning Department, Project Archaeologist	Prior to the issuance of grading permit and monitoring during construction.	Less-than-Significant Impact with Mitigation Incorporated

Threshold	Project Design Features (PDF)	Mitigation Measures (MMs)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
		proof that a qualified consulting archaeologist meeting the Secretary of Interior's (36 CFR 61) Professional Qualifications Standards has been retained to conduct periodic spot checks during ground disturbing activities. Spot check should occur at initial ground exposure within the project; upon a 50 percent completion milestone of ground disturbance; upon an 80 percent milestone of ground disturbance; or at any other time determined necessary by the consulting archaeologist. If any potentially historic or archaeological resources are encountered during ground-disturbing activities, the archaeologist shall halt construction work within 50 feet of the find and assess the nature of the find for importance. a) If the discovery is determined to not be important by the archaeologist (e.g. isolates and clearly non-significant deposits), work will be permitted to continue in the area. If a find is determined to be potentially important by the archaeologist, the Lead Agency shall be notified, and additional investigation would be required. Additional investigation work would include scientific recordation and, depending on the nature of the find, excavation. b) At the conclusion of ground disturbing activities, the archaeologist shall draft a report detailing the monitoring process and summarize any additional field study and analysis of resources, should any be discovered. The completed report shall be approved by the Planning				

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		Department and the Project Applicant/Developer shall provide verification that the report was submitted to the Lead Agency prior to the issuance of an occupancy permit. c) Excavated finds shall be curated at a repository determined by the archaeologist and approved by the City with verification provided to the City prior to the issuance of an occupancy permit.				
Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?	N/A	**MM 4.4-2** Discovery of Human Remains. If human burial or skeletal remains are identified during excavation or construction, work in that location shall stop immediately until the find can be properly treated. The construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 "Disturbance of Human Remains." The County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Once the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the Site of the discovery of the Native American human remains and may recommend	Project Applicant	City of Los Alamitos Planning Department, Project Archaeologist	Monitoring during grading activities	Less-than-Significant Impact with Mitigation Incorporated

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.				
4.5 Energy						
Summary of Impacts						
Threshold a: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	PDF GHG-1 The Project will include solar photovoltaic panels with the capability to generate up to 1,229,520 kWh/annually. PDF GHG-2 The Project will be 100% electric and will not include natural gas. PDF GHG-3 The Project will provide a community electric vehicle for the affordable housing component for residents to drive short distance trips to the local grocery store. PDF GHG-4 The Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	of the California Green Building Standards Code, Section A4.106.8.2.1.					
Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	PDF GHG-1 through GHG-4 shall apply.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.6 Geology and Soils						
Summary of Impacts						
Threshold a: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; strong seismic ground shaking; seismic-related ground failure, including liquefaction; landslides?	N/A	**MM 4.6-1** Prior to the issuance of grading permits or building permits, the City of Los Alamitos Public Works & Engineering Department shall verify that all of the recommendations provided in Section 4.0 of the Project's December 21, 2021 "Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California," prepared by LGC Geotechnical, Inc. and included as Technical Appendix F1 to the Project's EIR, are incorporated into the Project's grading and building plans and implemented by the construction contractors. These recommendations include but are not limited to a) Site Earthwork Considerations; b) Preliminary Foundation Recommendations; c) Site Grading Recommendations; d) Soil Bearing and Lateral Resistance Considerations; e) Lateral Earth Pressures for Retaining Walls Considerations; f) Nonstructural Concrete Flatwork Recommendations; and g) Preliminary Asphalt Concrete Pavement Design Parameters. Alternatively, the Project shall comply with the findings and	Project Applicant	City of Los Alamitos Public Works & Engineering Department	Prior to issuance of grading permits	Less-than-Significant Impact with Mitigation Incorporated

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		recommendations of any geotechnical studies that may be required in association with future grading and/or building permits.				
Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	N/A	MM 4.6-1 would apply.	Refer to MM 4.6-1 above.	Refer to MM 4.6-1 above.	Refer to MM 4.6-1 above.	Less-than-Significant Impact with Mitigation Incorporated
Threshold d: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	N/A	MM 4.6-1 would apply.	Refer to MM 4.6-1 above.	Refer to MM 4.6-1 above.	Refer to MM 4.6-1 above.	Less-than-Significant Impact with Mitigation Incorporated
Threshold e: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold f: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	N/A	**MM 4.6-2** If paleontological resources are discovered during earth disturbance activities, the discovery shall be cordoned off with a 50-foot radius buffer so as to protect the discovery from further potential damage, and an Orange County Certified Professional Paleontologist shall be consulted to assess the discovery. If the discovery is determined to be significant by the paleontologist, a monitoring and recovery plan shall be initiated, which will include notification of appropriate personnel involved and monitoring of earth disturbance activities. a) Monitoring of mass grading and excavation activities shall be	Project Applicant	City of Los Alamitos Planning Department, Project Paleontologist	Monitoring during grading activities	Less-than-Significant Impact with Mitigation Incorporated

Threshold	Project Design Features (PDF)	Mitigation Measures (MMs)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
		performed by a qualified paleontologist or paleontological monitor. Monitoring will be conducted full-time in areas of grading or excavation in undisturbed sediments of alluvial deposits. b) Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of fossils in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery. c) Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated and the fossils are removed to a safe place. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and				

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location. d) Recovered specimens will be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. e) Recovered specimens shall be identified and curated of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., OC Parks). The paleontological program should include a written repository agreement prior to the initiation of monitoring activities. Prior to curation, the lead agency (e.g., the City of Los Alamitos) will be consulted on the repository/museum to receive the fossil material. f) A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, will signify satisfactory completion of the project program to reduce impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.				

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.7 Greenhouse Gas Emissions						
Summary of Impacts						
Threshold a: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	PDF GHG-1 through GHG-4 shall apply.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	PDFs GHG-1 through GHG-4 shall apply.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.8 Hazards and Hazardous Materials						
Summary of Impacts						
Threshold a: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold d: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold e: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?	PDF N-2 shall apply	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold f: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold g: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
4.9 Hydrology and Water Quality						
Summary of Impacts						
Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?	PDF HYD-1 The Project will be built such that the finished floor elevation for the onsite buildings is set 1 foot minimum above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d: Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	PDF HYD-1 shall apply.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold e: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.10 Land Use Planning						
Summary of Impacts						
Threshold a: Would the Project physically divide an established community?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold b: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.11 Noise						
Summary of Impacts						
Threshold a: Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	PDF N-1 Prior to the issuance of occupancy permits, the Project will construct a 7-foot-high noise barrier along Lampson Avenue. The noise control barrier will be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. Since the pad elevations varies, the top of each wall and/or berm combination will be 7' above each applicable pad elevation. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. The noise barrier shall be constructed using the following materials: • Masonry block; • Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	groove wood of at least four pounds per square foot; • Material with sufficient weight per square foot capable of providing a minimum transmission loss of 20 dBA; • Earthen berm; or, • Any combination of these construction materials					
Threshold b: Would the Project generate excessive groundborne vibration or groundborne noise levels?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?	To comply with the State of California and City of Los Alamitos 45 A-weighted Decibels (dBA) Community Noise Equivalent Level (CNEL) interior noise standards for residential land use, the Project will provide the following or equivalent noise abatement measures on building plans: • Windows & Glass Doors: At a minimum the Project will provide windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 27. Additionally, all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos will be provided windows and glass doors that are well-fitted, well-weathers-tripped assemblies with minimum sound transmission class (STC) ratings of 29. • Doors (Non-Glass): All exterior doors shall be well weather-stripped and have	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	Well-sealed perimeter gaps around the doors are essential to achieve the minimum STC rating. • Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal. • Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space. • Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided in compliance with applicable State and local Building Codes (e.g. California Building Code, Chapter 3, R338.3).					

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.12 Population and Housing						
Summary of Impacts						
Threshold a: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	N/A	No mitigation is required.	N/A	N/A	N/A	No Impact
4.13 Public Services						
Summary of Impacts						
Threshold a: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: i. Fire Protection Services; ii. Police Protection Services; iii. School Services; iv. Parks; or v. Other Public Facilities	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.14 Recreation						
Summary of Impacts						
Threshold a: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.15 Transportation						
Summary of Impacts						
Threshold a: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	N/A	**MM 4.15-1** Prior to the issuance of certificate of occupancy, the Project Applicant shall provide documentation that it has implemented the CAPCOA strategies identified below. Verification that the COPCOA strategies were completed shall be verified by the City's Public Works Director. 1. Provide pedestrian and bicycle network improvements within the development connecting to existing off-site facilities, as detailed in Section 3.3.2 of this EIR. 2. Confirm with the OCTA whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards. 3. Install broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission.	Project Applicant	City of Los Alamitos Public Works Department	Prior to issuance of certificate of occupancy	Significant and Unavoidable
Threshold c: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d: Would the Project result in inadequate emergency access?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.16 Tribal Cultural Resources						
Summary of Impacts						
Threshold a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	N/A	**MM 4.16-1** Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities. 1. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. 2. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. 3. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts,	Project Applicant	City of Los Alamitos Planning Department, Native American Monitor	Prior to issuance of grading permit and monitoring during grading activities	Less-than-Significant Impact with Mitigation Incorporated

Threshold	Project Design Features (PDF)	Mitigation Measures (MMs)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
		conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe. 4. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs. 5. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate,				

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.				
		MM 4.16-2 Unanticipated Discovery of Human Remains and Associated Funerary Object. 1. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. 2. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed. 3. Human remains and grave/burial goods shall be treated alike per	Project Applicant	City of Los Alamitos Planning Department, Native American Monitor	Prior to issuance of grading permit and monitoring during grading activities	Less-than-Significant Impact with Mitigation Incorporated

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		California Public Resources Code section 5097.98(d)(1) and (2). 4. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).) 5. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. 6. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.				
		MM 4.16-3 Procedures for Burials and Funerary Remains.	Project Applicant	City of Los Alamitos Planning	Prior to issuance of grading permit and	Less-than-Significant Impact with Mitigation Incorporated

Threshold	Project Design Features (PDF)	Mitigation Measures (MMs)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
		1. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. 2. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. 3. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials. 4. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate		Department, Native American Monitor	monitoring during grading activities	

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. 5. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. 6. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. 7. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and				

THRESHOLD	PROJECT DESIGN FEATURES (PDF)	MITIGATION MEASURES (MMS)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
		shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.				
4.17 Utilities and Service Systems						
Summary of Impacts						
Threshold a: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	PDF GHG-2 shall apply.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impacts
Threshold b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impacts
Threshold c: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impacts
Threshold d: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impacts
Threshold e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	N/A	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impacts

CC RESOLUTION NO. 2024-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT, ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPTING A MITIGATION MONITORING AND REPORTING PLAN FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and,

WHEREAS, an Environmental Impact Report ("EIR") for the Project, incorporated by reference herein, has been completed in compliance with the California Environmental Quality Act ("CEQA"), the guidelines promulgated by the State Secretary for Natural Resources, and the procedures for review as set forth in the 2007 City of Los Alamitos Guidelines for Implementation of the CEQA (Local CEQA Guidelines); and,

WHEREAS, notice regarding the EIR for the Project was sent to neighboring property owners pursuant to the City's CEQA Guidelines, concerning the review period commencing April 24, 2024; and,

WHEREAS, copies of the EIR have been made available for a 45-day review period to pertinent agencies and interested members of the public, commencing on April 24, 2024; and,

WHEREAS, all written comment letters received within the 45-day public review period have been noted in the record, responded to by Staff, and none of the comments alter the conclusions in the EIR; and,

WHEREAS, changes to the EIR have been made that amplify and clarify the analysis; and,

WHEREAS, it has been determined that the proposed Project may potentially have significant effects on the environment, and revisions in the Project proposal would mitigate most of the effects to a point where clearly no significant effect would occur; and,

DRAFT

WHEREAS, potential off-site impacts related to vehicle miles travelled (VMT) result in a significant and unavoidable VMT impact on a direct and cumulatively considerable basis, and the City has prepared a Statement of Overriding Considerations to demonstrate that the Project's benefits outweigh the significant and unavoidable VMT impact identified in the EIR; and

WHEREAS, on September 25, 2024, the Planning Commission of the City of Los Alamitos held a duly noticed public hearing to review and consider the proposed Project, including the EIR and the Statement of Overriding Considerations. The Planning Commission recommended by resolution that the City Council certify the EIR, and adopt the Statement of Overriding Considerations and Mitigation Monitoring and Reporting Plan ("MMRP"); and,

WHEREAS, the City Council considered the certification of the EIR, and adoption of the Statement of Overriding Considerations and MMRP, attached hereto and incorporated by reference herein, at a duly noticed public hearing on October 21, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, DOES RESOLVE AS FOLLOWS:

SECTION 1. The City Council of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The City Council has reviewed and considered the environmental documentation as well as the conditions cited in Exhibit "A," for the Project prior to taking action. Based on the analysis contained in the EIR and the accompanying environmental information, in compliance with CEQA (Public Resources Code Section 21000, et seq., the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000, et seq.), and the City's Local CEQA Guidelines, the City Council hereby certifies the EIR and adopts the Statement of Overriding Considerations and MMRP, incorporated by reference herein. In certifying the EIR and adopting the Statement of Overriding Considerations, the City Council finds as follows:

A. The EIR was prepared in accordance with all legal requirements, including all public notice and comment period requirements.

B. The CEQA requires preparation of an environmental impact report if there is substantial evidence in light of the whole record that the Project may have a potentially significant environmental effect on the environment. An environmental impact report was prepared which demonstrates that the proposed Project will not cause any significant onsite environmental damage as this is a Project on property that already has been designated as an area for residential units and there are no

fish or wildlife habitat on site. The site was previously graded for the construction of the existing commercial building.

Regarding potential off-site impacts, Project components and mitigation measures available to reduce vehicle miles travelled (VMT) include developing pedestrian network improvements and implementing travel demand model (TDM) measures such as those listed in Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis. All feasible mitigation measures were incorporated to reduce VMT impacts per measures identified in the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook; however, even with incorporation of all feasible mitigation measures, impacts would remain significant and unavoidable.

C. The Project is consistent with the General Plan objectives, policies and programs. The proposed Project allows for the development of 246 residential units at a density of 20 dwelling units an acre which is within the General Plan multi-family residential land use designation of 20 – 25 units per acre. The proposed design and improvements of the 246 residential unit Project are consistent with the applicable General Plan goals, policies, and implementation measures.

D. The Project will not adversely affect the public health, safety and welfare. The proposed Project design and improvements will not adversely affect the public health of the citizens of the City of Los Alamitos as the Project is the type of use which is planned for in this area; the residential Project will be compatible with the single-family and multifamily residential uses in the area. The mitigation measures required by the CEQA document, along with the recommended Conditions of Approval, will ensure the safety of the inhabitants of the Project and will contribute to the health of the community as a whole.

E. The EIR identified potentially significant impacts to VMT which could result from the Project. Mitigation measures have been identified which reduce some of these impacts yet not to a level of less than significant. Even with incorporation of mitigation measures from the EIR into the conditions of Project approval, this impact is significant and unavoidable and would not be mitigated to a less than significant level. Per Public Resources Code section 21081(a)(3), specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible additional mitigation. Pursuant to the CEQA, with respect to the identified significant unavoidable environmental effects of the Project, the City Council has weighed the economic, legal, social, technological, and other benefits, including region-wide and statewide environmental benefits, of the

Project against its unavoidable significant environmental impacts in determining whether to approve the Project. The City Council finds that the benefits of the Project outweigh its unavoidable adverse environmental effects such that the adverse environmental effects may be considered "acceptable." A Statement of Overriding Considerations, incorporated by reference herein, was prepared and each of the separate benefits listed provides a separate and independent ground for the City's decision that the Project's benefits outweigh the significant and unavoidable environmental impact identified in the EIR.

F. The City has complied with the CEQA. Pursuant to the provisions of the CEQA, an EIR was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this Project. The purpose of an environmental impact report is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the environmental impact report is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice regarding the EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

G. Together, the draft Environmental Impact Report ("DEIR"), the revisions to the DEIR, the comments of persons and organizations commenting on the DEIR and a list of all such persons and organizations, the responses to the comments, and other information added by the City constitute the final Environmental Impact Report ("FEIR") on the Project.

H. No new significant information has been added to the EIR since circulation of the DEIR that would require recirculation of the EIR. Recirculation of the draft EIR is not required where the new information merely clarifies, amplifies or makes minor modifications to an adequate EIR. The information provided since the draft EIR meets those criteria. All the text revisions to the draft EIR provide clarification and additional detail. After considering all comments received on the draft EIR, the City of Los Alamitos has determined that the changes do not result in a need to recirculate the draft EIR.

I. The final EIR reflects the City of Los Alamitos' independent judgement and analysis.

SECTION 3. Based on the entire record before the City Council, including the written and oral record and the findings set forth in the Resolution, the City Council hereby certifies the Environmental Impact Report, and adopts the Statement of Overriding Considerations and Mitigation Monitoring and Reporting Plan, incorporated by reference herein, for the 4665 Lampson Project at 4665 Lampson Avenue, APN 130-012-35.

SECTION 4. The City Clerk shall forward a copy of this Resolution to the Applicant and any person requesting the same, and Staff shall file a Notice of Determination with the County Clerk.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2024.

_____
Jordan Nefulda, Mayor

ATTEST:

_____
Windmera Quintanar, City Clerk

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Windmera Quintanar, City Clerk of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council held on the 21st day of October 2024, by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Windmera Quintanar, City Clerk

DRAFT

CC RESOLUTION NO. 2024-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, APPROVING AN AFFORDABLE HOUSING UNIT APPLICATION FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS, INCLUDING 76 AFFORDABLE MULTI-FAMILY APARTMENT HOMES (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and,

WHEREAS, a completed Affordable Housing Unit Application was submitted by Lampson Park Place, LLC, on October 11, 2022, requesting approval for 246 residential units, including 76 affordable multi-family apartment homes; and,

WHEREAS, pursuant to the State's Density Bonus Law, the application also included requests for incentives, concessions and waivers for the following: reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement; and,

WHEREAS, pursuant to Government Code Section 65915, the verified application constitutes a request as required by Section 17.28.050 (Affordable Housing) of the Los Alamitos Municipal Code; and,

WHEREAS, the State Density Bonus Law codified in Government Code Section 65915 to 65918 provides a mechanism that allows housing developers to increase density on a property above the maximum allowed under a jurisdiction's General Plan or zoning and to request relief from development standards in exchange for offering to build or donate land for affordable or senior housing units. A developer who meets the requirements of the State law is entitled to receive the density bonus and other benefits (i.e., incentives, concessions, waivers, and reduction of development standards) as a matter of right; and,

WHEREAS, California Government Code Section 65589.5, also known as the Housing Accountability Act, prohibits a local agency from disapproving, or conditioning

approval in a manner that renders infeasible, a housing development Project for very low, low-, or moderate-income households or an emergency shelter unless the local agency makes specified written findings based on a preponderance of the evidence in the record; and,

WHEREAS, the receipt of a density bonus, incentive, concession, waiver, or reduction of development standards pursuant to Section 65915 shall not constitute a valid basis on which to find a proposed housing development Project inconsistent, not in compliance, or not in conformity, with an applicable plan, program, policy, ordinance, standard, requirement, or other similar provision; and,

WHEREAS, on September 25, 2024, the Planning Commission of the City of Los Alamitos held a duly noticed public hearing to review and consider the application. The Planning Commission recommended by resolution that the City Council approve the Affordable Housing Unit Application, including the requested incentives, concessions, waivers, and reductions in development standards; and,

WHEREAS, the City Council reviewed and considered the Affordable Housing Unit Application, incorporated by reference herein, at a duly noticed public hearing on October 21, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, DOES RESOLVE AS FOLLOWS:

SECTION 1. The City Council of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The City Council hereby makes the following findings or determinations made in accordance with Section 17.28.050 of the LAMC, which is which is based on all of the evidence presented, both written and oral;

The design and layout of the proposed development are consistent with the development and design standards/guidelines of the applicable zoning district: The design and layout of the 246 residential units at 4665 Lampson Avenue, as conditioned, is consistent with the development and design standards/guidelines of the Multiple Family (R-3) Residential Zoning District as well as with the requirements for residential development set forth in Section 17.34.060. The development meets, or will be conditioned to meet, all requirements. Each proposed unit and the entire Project meets the development standards for the R-3 zone including parcel area, parcel depth, maximum density, minimum dwelling area, and site coverage. Pursuant to the State's Density Bonus legislation, minor incentives, concessions, waivers, and/or reductions in development standards

have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement as described below:

Reduction in setback distance between structures. LAMC Section 17.08.030, Table 2-03 requires a 10-foot minimum distance between structures. Though most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances, the setback distance is reduced to 6 feet at certain locations within the Project site plan. Meeting the required 10-foot minimum setback distance would require a significant change to the site plan and likely result in a reduction of residential units.

Exception for building step back requirements. LAMC Section 17.08.045.A.1 requires that for buildings higher than two stories, the third story must have a minimum 5-foot step back from the story below to minimize building bulk and create façade articulation. This requirement appears to govern regardless of building location within a Project site or surrounding land uses. While the City interprets this requirement as applying only to perimeter buildings (i.e., buildings that are located along the perimeter of a Project site), given the requirement's ambiguity, the Applicant is requesting an exception from the required minimum 5-foot step back requirement for those structures identified on the site plan.

Reduction in minimum storage space. LAMC Section 17.08.030, Table 2-03, requires a minimum storage space in a garage or carport of 200 cubic feet per unit. For certain units within the Project, this storage space requirement will be difficult to satisfy because of limitations in garage and carport space. As such, the Applicant is requesting that the minimum storage space requirement be reduced to 175 cubic feet per unit for market rate units and 50 cubic feet per unit for affordable units identified on the site plan.

Reduced common area requirement. LAMC Section 17.08.030, Table 2-03 requires a minimum 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, but the Project will not be able to comply with the common area requirement. This is due to the proposed dedication or grant of an easement related to the northerly 10-foot strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of property. When this area is dedicated or granted to the City, then the Project will be unable to comply with the common area requirement because compliance with this requirement would physically preclude construction of the Project at the densities allowed and with the concessions described above. Therefore, the Applicant is requesting a reduction in the common area requirement from 200 to 150 square foot per unit.

Parking Reduction Request. The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments), which is below the City's required 679 parking spaces pursuant to LAMC Section 17.22.030, Required Parking Spaces. The State's Density Bonus Law specifies that for housing developments that qualify for a density bonus the local government shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. (Gov't Code Section 65915(p)(1).) The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project, which is significantly more than the 441 parking spaces that would be required pursuant to the State's Density Bonus Law.

SECTION 3. Prior to final map approval, the applicant shall record covenants with the County Recorder for the low and/or very low affordability requirements of said 76 units to remain affordable for a period no less than 55 years in accordance with Government Code Section 65915 and Los Alamitos Municipal Code Section 17.28.050, as described in Condition Nos. 16 - 23.

SECTION 4. Pursuant to the provisions of the California Environmental Quality Act (CEQA) an Environmental Impact Report ("EIR") was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this Project. The purpose of an EIR is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the EIR is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice regarding the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

SECTION 5. Based upon such findings and determinations, the City Council hereby approves an Affordable Housing Unit Application, including the requested incentives, concessions, waivers, and reductions in development standards, as represented by the plans and elevations incorporated by reference herein, and subject to the conditions located in Exhibit "A."

SECTION 6. The City Clerk shall forward a copy of this Resolution to the Applicant and any person requesting the same, and Staff shall file a Notice of Determination with the County Clerk.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2024.

_____
Jordan Nefulda, Mayor

ATTEST:

_____
Windmera Quintanar, City Clerk

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Windmera Quintanar, City Clerk of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council held on the 21ST day of October 2024, by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Windmera Quintanar, City Clerk

DRAFT

CC RESOLUTION NO. 2024-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, APPROVING SITE DEVELOPMENT PERMIT – MAJOR FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE, IN THE MULTI-FAMILY RESIDENTIAL (R-3) ZONING DISTRICT (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and**,**

WHEREAS, a completed application for a Site Development Permit – Major was submitted for the Project by Lampson Park Place, LLC, on November 18, 2023; and,

WHEREAS, the Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the 441 parking spaces that would be required pursuant to the State's Density Bonus Law; and,

WHEREAS, the verified application constitutes a request as required by Section 17.44.040 and Section 17.08.020 Table 2-02 (Allowed Uses and Permit Requirements for Residential Zoning Districts) of the Los Alamitos Municipal Code (LAMC); and,

WHEREAS, on September 25, 2024, the Planning Commission of the City of Los Alamitos held a duly noticed public hearing to review and consider the application. The Planning Commission recommended by resolution that the City Council approve the Site Development Permit – Major; and,

WHEREAS, the City Council reviewed and considered the Site Development Permit – Major, incorporated by reference herein, at a duly noticed public hearing on October 21, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, DOES RESOLVE AS FOLLOWS:

SECTION 1. The City Council of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The City Council hereby makes the following findings made in accordance with Section 17.44.060 of the LAMC, which is based on all of the evidence presented, both written and oral; the Staff report and final Environmental Impact Report are incorporated by reference herein:

1. *The proposed project is allowed within the subject zone:* The property is designated and zoned for this type of development. The Project site has a land use designation of Multi-Family Residential - 25 and a zoning classification of Multi-Family Residential - 25 (R-3).

2. *The proposed project complies with all of the applicable criteria identified in 17.44.030(B) (Application Processing, Filing, and Review—Generally):* The design and layout of the proposed residential units at 4665 Lampson Avenue is efficient, consistent with applicable City regulations and policies, and would not interfere with the use and enjoyment of neighboring residential developments, as the surrounding residential uses are comprised of single-family and multi-family. The location is appropriate for a 246-unit residential development that would be constructed in an architectural style that complements nearby homes. The Project will retain beautiful landscaping through the strength of a Homeowner's Association that will hire and maintain a maintenance crew. The Homeowner's Association will have regulations that are more exacting than the City' s Code concerning maintenance and parking. The location of the driveway ingress/egress access to the site would not create traffic or pedestrian hazards. The design and layout of the 246 residential units at 4665 Lampson Avenue, as conditioned, is consistent with the development and design standards/guidelines. Pursuant to the State’s Density Bonus legislation and LAMC 17.28.050, minor incentives, concessions, waivers, and/or reductions in development standards have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement.

3. *The proposed project is in keeping with the character of the neighborhood, in terms of the structure(s) general appearance:* The design of the 246 residential units would be in keeping with the neighborhood character and enhance the attractive, harmonious, and orderly development of the property. The design is in harmony with surrounding development and improves upon the City's architecture with quality detached single-family, townhome, and multi-family residential building design, extensive landscaping, and maintenance requirements.

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4. *The design of the proposed development will provide a desirable environment for its occupants and visiting public as well as its neighbors through good aesthetic use of materials, texture, and color, and will remain aesthetically appealing and retain an appropriate level of maintenance:* The design of the 246 residential units would provide a desirable environment for its occupants, visiting public, and its neighbors through good aesthetic use of materials, texture, landscaping, and color as depicted in the plan set incorporated by reference herein. Site redevelopment would continue the attractive environment that the existing property previously enjoyed for years and maintain an appropriate level of maintenance, through the implementation of a homeowners' association and the use of covenants, conditions, and restrictions.

5. *The proposed development would not be detrimental to the public health, safety, or welfare or materially injurious to the properties or improvements in the vicinity:* The 246 residential units provide for public health, safety, and welfare of the residential and business communities by providing more living options to the City rather than causing sprawl at the fringes of this metropolitan area. The buildings will meet all building code requirements. The mitigation measures identified in the Environmental Impact Report prepared for the Project would ensure the safety of the inhabitants of the Project as well as other residents of Los Alamitos. Also, the 246 residential units would not depreciate property values in the vicinity, as the area is zoned for this type of use and it will improve the aesthetics of this residential neighborhood area (formerly a commercial and now vacant property).

6. The proposed Project would assist the City of Los Alamitos in providing for the State mandated units identified in the General Plan for moderate, low and/or very low-income categories as described in the Regional Housing Needs Assessment. Remaining sites identified in the housing element are adequate to meet the requirements of Government Code Section 65583.2 and to accommodate the jurisdiction's share of the regional housing need pursuant to Section 65584.

   The City's Regional Housing Needs Allocation (RHNA) for the 6th Cycle Housing Element Update is a total of 769 units, which is comprised of 313 lower income units, 145 moderate income units, and 311 above moderate-income units. The City's Housing Element identified that the City's residential capacity is 817 total units, which exceeds the City's RHNA obligation of 769 units by 48 units. This surplus, or "buffer," of 48 units is comprised of 19 surplus lower income units, 14 moderate income units, and 15 surplus above moderate-income units.

   The Housing Sites Inventory identifies the total number of units for the proposed Project site as 246 units, and those units are projected to consist of 77 lower income units, zero moderate income units, and 169 above moderate-income units. The proposed residential Project proposes 76 lower income units, zero moderate income units, and 170 above moderate-income units

As such, approval of the Project on the site identified in the Housing Sites Inventory will result in the need for the City to deduct one lower income unit from the City's surplus "buffer" of 19 lower income units, resulting in a remaining surplus "buffer" of 18 lower income units. Accordingly, even after approval of the Project, the remaining sites identified in the City's Housing Element are adequate to meet the requirements of Section 65583.2 and to accommodate the jurisdiction's share of the regional housing need pursuant to Section 65584.

SECTION 3. Pursuant to the provisions of the California Environmental Quality Act (CEQA) an Environmental Impact Report ("EIR") was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this Project. The purpose of an EIR is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary function of the EIR is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice regarding the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

SECTION 4. Based upon such findings and determinations, the City Council hereby approves a Site Development Permit – Major, as represented by the plans and elevations incorporated by reference herein, and subject to the conditions located in Exhibit "A."

SECTION 5. The City Clerk shall forward a copy of this Resolution to the Applicant and any person requesting the same, and Staff shall file a Notice of Determination with the County Clerk.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2024.

_____
Jordan Nefulda, Mayor

ATTEST:

_____
Windmera Quintanar, City Clerk

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

DRAFT

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Windmera Quintanar, City Clerk of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council held on the 21st day of October 2024, by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Windmera Quintanar, City Clerk

DRAFT

CC RESOLUTION NO. 2024-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, APPROVING TENTATIVE PARCEL MAP 2022-133 (FOR FINANCE AND CONVEYANCE PURPOSES) AND VESTING TENTATIVE TRACT MAP NO. 19263 (FOR CONDOMINIUM PURPOSES) FOR THE 4665 LAMPSON PROJECT LOCATED AT 4665 LAMPSON AVENUE (APN 130-012-35) TO ALLOW REDEVELOPMENT OF THE PROJECT SITE WITH 246 RESIDENTIAL UNITS (APPLICANT: LAMPSON PARK PLACE, LLC)

WHEREAS, Lampson Park Place, LLC ("Applicant") proposes to demolish the existing office building and surface parking lot on the 12.3-acre property located at 4665 Lampson Avenue (APN 130-012-35) and redevelop the site with a 246-unit residential development consisting of a variety of housing product types, including 55 single-family detached homes, 114 townhomes, and 77 for-rent multi-family apartment homes comprised of 76 units restricted to lower income households and one unrestricted manager's unit (the "Project"); and,

WHEREAS, a completed application for a Tentative Parcel Map and a Vesting Tentative Tract Map was submitted by Lampson Park Place, LLC, on November 18, 2023, requesting to subdivide the Project site; and,

WHEREAS, the Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. The Project would provide 577 parking spaces (475 spaces for the single-family detached and townhomes and 102 for the apartments) exceeding the 441 parking spaces that would be required pursuant to the State's Density Bonus Law; and,

WHEREAS, the application included a tentative parcel map and a vesting tentative tract map as required by Section 16.06.030 (Tentative Parcel Maps) and Section 16.06.020 (Tentative Tract Maps) of the Los Alamitos Municipal Code (LAMC); and,

WHEREAS, the Applicant shall offer a dedication in fee or an easement to the City of a 10-foot-wide strip of land (approximately 10,000 square feet) adjacent to Arbor Park for the purpose of public ingress, egress and access by vehicles and pedestrians and the parking of vehicles; and,

WHEREAS, on September 25, 2024, the Planning Commission of the City of Los Alamitos held a duly noticed public hearing to review and consider the proposed Project, including the Tentative Parcel Map and the Vesting Tentative Tract Map. The Planning Commission recommended by resolution that the City Council approve the Tentative Parcel Map and the Vesting Tentative Tract Map; and,

WHEREAS, the City Council reviewed and considered the Tentative Parcel Map and the Vesting Tentative Tract Map, incorporated by reference herein, at a duly noticed public hearing on October 21, 2024, at which hearing it considered all the evidence presented, both written and oral; and,

WHEREAS, the Applicant, Applicant's representatives and members of the public were provided the opportunity to present written and oral testimony.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, DOES RESOLVE AS FOLLOWS:

SECTION 1. The City Council of the City of Los Alamitos, California, finds that the above recitals are true and correct and are incorporated by reference herein.

SECTION 2. The City Council hereby makes the following findings as set forth in the Subdivision Map Act as well as those required by Los Alamitos Municipal Code (LAMC) Sections 16.10.100 and 16.10.110:

1. *The proposed maps are consistent with the City' s General Plan.* The proposed maps allow for the site redevelopment with 246 residential units at a density of 20 dwelling units an acre which is within the General Plan multi-family residential land use designation of 20 – 25 units per acre. The proposed design of the Project subdivision is consistent with the applicable General Plan goals, policies, and implementation measures.

2. *The design and improvement of the proposed subdivisions is consistent with the City's General Plan.* The design and improvement of the 246-unit Project is suitable for residential development in the R-3 multifamily residential zone and the subdivisions can be developed in compliance with the General Plan.

3. *The site is physically suitable for the proposed type of development.* The site is physically suitable for a residential subdivision because the site is generally flat and will require minimal grading.

4. *The site is physically suitable for the proposed density of development.* The 12.3-acre site is capable of supporting the development of the proposed 246 residential units. The proposed Project is at 20 dwelling units per acre, within the maximum that the City's R- 3 zoning district allows at 25 dwelling units per acre under multi-family development.

5. *The requirements of the California Environmental Quality Act (CEQA) have been satisfied.* Pursuant to the provisions of the CEQA, an Environmental Impact Report ("EIR") was prepared which led to the conclusion that a Statement of Overriding Considerations be prepared for this Project. The purpose of an EIR is to identify potential effects on the environment of the Project and to indicate the manner in which those potential significant effects can be avoided or mitigated. A primary

function of the EIR is to disclose and evaluate Project impacts and inform decision makers for the Project. To meet the 45-day circulation requirement, a notice regarding the draft EIR was circulated from April 24 to June 10, 2024 (SCH#2022090476).

6. *The design of the subdivisions and proposed improvements are not likely to cause substantial environmental damage or substantial and avoidable injury to fish or wildlife in their habitat.* The proposed subdivisions will not cause any onsite environmental damage as this is an infill project on property that already has been designated as an area for residential units and there are no fish or wildlife habitat on site. The site was previously graded for construction of the existing commercial building.

7. *The design of the subdivisions and the proposed improvements are not likely to cause serious public health problems.* The proposed subdivisions design and improvements will not adversely affect the public health of the citizens of the City of Los Alamitos as the Project is the type of use which is planned for in this area; the residential Project will be compatible with the single-family and multi-family residential uses in the area. The mitigations required by the CEQA document will ensure the safety of the inhabitants of the Project and will contribute to the health of the community as a whole.

8. *The design of the subdivisions and improvements will not conflict with public access easement(s) through the property.* The design of the subdivisions and the proposed improvements will not conflict with any existing telephone, street, and/or public utility easements. There are no public access easements through the property.

9. *The design and improvements of the proposed subdivisions are suitable for the uses proposed and the subdivisions can be developed in compliance with the applicable zoning regulations.* As conditioned, the Project will comply with applicable zoning regulations. Pursuant to the State's Density Bonus legislation, minor incentives, concessions, waivers, and/or reductions in development standards have been requested for reduction in setback distance between structures, exception for building step back requirements, reduction in minimum storage space, reduced common area requirement, and reduced parking requirement.

10. *The discharge of waste into an existing community sewer system will not result in or add to a violation of existing requirements prescribed by the Regional Water Quality Control Board.* The discharge of wastewater from the subdivision into the sewer system will not result in a violation of existing requirements prescribed by the Regional Water Quality Control Board.

SECTION 3. Based upon such findings and determinations, the City Council hereby approves Tentative Parcel Map 2022-133 and Vesting Tentative Tract Map No. 19263 attached as Exhibits “B” and "C," and incorporated by reference herein, subject to the conditions located in Exhibit "A."

SECTION 4. The City Clerk shall forward a copy of this Resolution to the Applicant and any person requesting the same, and Staff shall file a Notice of Determination with the County Clerk.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2024.

_____
Jordan Nefulda, Mayor

ATTEST:

_____
Windmera Quintanar, City Clerk

APPROVED AS TO FORM:

_____
Michael S. Daudt, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Windmera Quintanar, City Clerk of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council held on the 21ST day of October 2024, by the following vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Windmera Quintanar, City Clerk

DRAFT

EXHIBIT A

4665 LAMPSON PROJECT
CONDITIONS OF APPROVAL

Site Development Permit – Major, Tentative Parcel Map No. 2022-133, Vesting Tentative Tract Map No. 19263, Affordable Housing Unit Application, and Environmental Impact Report

**The following Conditions of Approval shall be binding on and enforceable against each of the following, and whenever used herein, the term "Applicant" shall mean and refer to, each of the following: Lampson Park Place. LLC, and the future owner(s) and tenant(s) of the property, and each of their respective successors and assigns.

GENERAL

1. Approval of this application is to construct a 246 residential unit project at 4665 Lampson Avenue (APN 130-012-35) pursuant to City Council approval of a Site Development Permit – Major, Tentative Parcel Map 2022-133 (for Finance and Conveyance Purposes), Vesting Tentative Tract Map No. 19263 (for Condominium Purposes), and an Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions and a Waiver to redevelop the Project site (the "Project") noted thereon the plans incorporated by reference herein, and on file in the Development Services Department. Subsequent submittals for the Project shall be substantially consistent with such plans and in compliance with the applicable land use regulations of the Los Alamitos Municipal Code. If any changes are proposed regarding the location or alteration of the plans dated April 4, 2023, and January 16, 2024 (and as may be revised and approved by the City Council), a request for an amendment of this approval must be submitted to the Development Services Director. If the Development Services Director determines that the proposed change or changes are substantially consistent with the provisions and spirit of intent of this approval action, and that such action would have been the same with the proposed change or changes as for the proposal approved herein, the amendment may be approved by the Development Services Director without requiring a public meeting.

2. The duration of the Site Development Permit approval and the Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions shall be twenty-four (24) months from the date the site plan is approved. If construction is commenced within this twenty-four (24) month period and construction is being pursued diligently toward completion, the Site Development Permit approval and the Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions and a Waiver shall remain in full force and effect.

3. The Development Services Director may, upon receipt in writing from the Applicant before the expiration date, grant three (3) extensions of time up to twelve (12) months maximum. If an extension of time is not granted, the Site Plan Review approval shall expire, and a new application shall be made.

4. City Council approval of the Tentative Parcel Map 2022-133 and Vesting Tentative Tract Map No. 19263 shall remain valid for twenty-four (24) months. The Maps shall expire on October 21, 2026, unless the applicant requests a time extension as outlined by City standards and in

conformance with Section 16.10.130 (Period of Validity – Extensions) of the Los Alamitos Municipal Code.

5. Prior to issuance of a building permit, copies of the recorded maps shall be provided to the Development Services Department. Model homes are exempt from this condition.

6. To the fullest extent permitted by law, the Applicant shall, at its sole cost and expense, protect, defend, indemnify, and hold harmless the City, its elected and appointed officers and officials, employees, agents, departments, agencies, authorized volunteers, consultants, boards, commissions, and committees, and instrumentalities thereof ("Indemnitees"), from and against any and all claims, liabilities, losses, fines, demands, penalties, lawsuits, writs of mandamus, and any other claims or actions or proceedings of any kind whatsoever (whether legal, equitable, declaratory, administrative or adjudicatory in nature), and alternative dispute resolution procedures (including, but not limited to, arbitrations, mediations, and other such procedures), judgments, orders and decisions (collectively "Claims" and “Actions”), brought against the Indemnitees, which seek to attack, challenge, modify, set aside, void, or annul any action of or any permit or approval issued by the Indemnitees (including actions approved by the voters of the City) for, in connection with, or concerning the Project. It is expressly understood and agreed that the City shall have the right to approve, which approval will not be unreasonably withheld, the legal counsel providing the defense of the Indemnitees for the Claims and Actions, and that the Applicant shall promptly reimburse the City for all costs and expenses directly and necessarily incurred by the City in the course of the defense, including reasonable attorneys' fees. The City shall promptly notify the Applicant of any Claims and Actions brought against the Indemnitees and shall cooperate in the defense of any such Claims and Actions. If the Applicant fails to so defend the Claims and Actions, the City shall have the right but not the obligation to do so and, if it does, the Applicant shall promptly pay the City's full cost thereof.

7. The Applicant shall file an Acknowledgment of Conditions of Approval with the Development Services Department within 30 days of final approval of all resolutions. The Applicant shall be required to record the Acknowledgment of these Conditions of Approval with the Office of the Orange County Recorder and proof of such recordation shall be submitted to the Development Services Department before issuing any permits.

8. Failure to satisfy and/or comply with the conditions herein may result in a recommendation to the Planning Commission and/or City Council for revocation of this approval.

9. The Applicant shall comply with applicable City, County, and/or State regulations.

10. The Applicant shall be required to comply with the Seismic Hazards Mapping Act of 1990, including the Guidelines for Evaluating and Mitigating Seismic Hazards in California 1997.

11. In case of violation of any of the conditions of approval or applicable law, the City shall issue Applicant a Notice of Potential Violation, and if said violation is not remedied within a reasonable period of time, then the City shall issue Applicant a Notice of Correction. If subsequent violations of the conditions of approval and/or City law occurs within ninety days of any Notice of Correction, the Applicant shall be held responsible to reimburse the City for all Staff time directly attributable to enforcement of the conditions of approval, mitigation measures, and/or City law including but not limited to, revocation of the herein approvals.

The Applicant shall be responsible for implementing the mitigation measures identified in the Environmental Impact Report to the satisfaction of the City of Los Alamitos Development Services Department.

12. Project plans shall be subject to a complete code compliance review with the Development Services Department when the plans are submitted for plan check and shall comply with all applicable City of Los Alamitos ordinances, regulations, and policies prior to building permit issuance, including, but not limited to, the requirements established or authorized by Title 15, 16, and 17 of the City of Los Alamitos Municipal Code.

13. All invoices the Applicant has received from the City shall be paid to a zero balance by certificate of occupancy for any portion of the Project.

14. Prior to issuance of a certificate of occupancy for any portion of the Project, the Applicant shall offer a dedication in fee or an easement to the City of a 10-foot-wide strip of land (approximately 10,000 square feet) adjacent to Arbor Park for the purpose of public ingress, egress and access by vehicles and pedestrians and the parking of vehicles. The form of such conveyance shall be subject to approval by the City Attorney.

15. The Applicant shall notify buyers and/or renters that the Project site is within an airport influence area and may experience annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors) and provide all related disclosures as required by State law.

AFFORDABLE HOUSING/DENSITY BONUS

16. Prior to the issuance of any building permit on Parcel 2, and after recordation of the parcel map, Applicant shall convey Parcel 1 to an affordable housing provider, for the purpose of constructing and managing seventy-seven (77) multi-family units which shall be comprised of seventy-six (76) units restricted to lower income and with one unrestricted manager's unit (the "apartment complex").

17. Applicant agrees that the 76 affordable units shall be rented to lower income households as defined in Section 50079.5 of the California Health and Safety Code for a period of no less than 55 years, commencing with the issuance of certificate of occupancy for any portion of the apartment complex, at rents that do not exceed the maximum rent for 80% income level units for that size unit in Orange County as published annually by the California Tax Credit Allocation Committee ("CTCAC"). Determinations of household income levels shall be made in accordance with the regulations published from time to time by the California Department of Housing and Community Development pursuant to Health and Safety Code Section 50093.

18. The Applicant shall enter into a regulatory agreement with the City memorializing the provision of lower income housing, and the granting of the requested Density Bonus Law concessions and waivers. The regulatory agreement shall be recorded against only the parcel that will include the apartment complex (Parcel 1) in the Official Records of Orange County, California immediately after final parcel map approval and shall be binding upon all future owners and successors in interest of the apartment complex.

19. The regulatory agreement shall be prepared by the City at the Applicant's expense. Prior to the City commencing preparation of a regulatory agreement, the Applicant shall execute a

reimbursement agreement with the City in a form approved by the City Attorney and provide a deposit to the City in an amount sufficient to cover the estimated total professional fees and costs to be incurred by the City for preparation of the regulatory agreement, as determined by the City Manager in his reasonable discretion. The City Manager is authorized to execute said reimbursement agreement on behalf of the City.

20. The regulatory agreement shall remain a senior, non-subordinate covenant and as an encumbrance running with the land for the full term thereof. In no event shall the regulatory agreement be made junior or subordinate to any deed of trust or other documents providing financing for the construction or operation of the apartment complex, or any other lien or encumbrance whatsoever for the entire term of the required covenants.

21. The regulatory agreement shall include provisions addressing or requiring the following:

    a. Identification of Affordable Units. The number, affordability level, unit size mix, and location of the affordable units shall be set forth in the regulatory agreement.

    b. Timing of Construction. The regulatory agreement shall require that grading shall commence on Parcel 1 concurrently with grading on Parcel 2.

    c. Annual Tenant Income Verification, Compliance Reporting, and Certification. The regulatory agreement shall include uniform provisions requiring the Applicant to verify and certify, prior to the initial occupancy, and annually thereafter, that each tenant household occupying each affordable unit meets the applicable income and eligibility requirements established for the affordable unit.

    d. Maintenance Standards. The regulatory agreement shall contain uniform provisions governing the Applicant's maintenance obligations and the City's rights in the event the owner fails to adhere to its maintenance obligations.

    e. Compliance Report. The regulatory agreement shall contain provisions requiring the Applicant to submit an annual compliance report containing specified information to the City in a form reasonably satisfactory to the City Manager and to annually certify that the affordable units are in compliance with the requirements of the regulatory agreement.

    f. Recordkeeping Requirements. The regulatory agreement shall contain uniform provisions requiring the owner to maintain tenant leases, income certifications, and other books, documents, and records related to the rental of the affordable units and operation of the apartment complex for a period of not less than five (5) years after creation of each such record; to allow the City to inspect any such books, documents, or records and to conduct an independent audit or inspection of such records at a location that is reasonably acceptable to the City Manager upon prior written notice; and to permit the City and its authorized agents and representatives to access the property and examine the housing units and to interview owners, occupants, tenants and employees for the purpose of verifying compliance with the regulatory agreement.

    g. Marketing and Management Plan for Affordable Units. The regulatory agreement shall contain uniform provisions regarding property management and management responsibilities and shall require the Applicant to prepare and obtain the City's approval of a marketing and management plan for the apartment complex prior to the issuance of

a certificate of occupancy for any portion of the apartment complex. The marketing and management plan shall address in detail, without limitation, the following matters: (i) how the Applicant plans to market the affordable units to prospective tenant households; (ii) procedures for the selection of tenants of affordable units, including a description of how the Applicant plans to certify the eligibility of tenant households; (iii) procedures for annually verifying income and recertifying the eligibility of tenants of affordable units; (iv) the standard form(s) of rental agreement(s) the Applicant proposes to enter into with tenants of affordable units; (v) procedures for the collection of rent; (vi) procedures for eviction of tenants; (vii) procedures for ensuring that the required number and unit size mix of affordable units is maintained; (viii) procedures for complying with the Applicant's monitoring and recordkeeping obligations; (ix) the Applicant's property management duties; (x) the Applicant's plan to manage and maintain the apartment complex and the affordable units; (xi) the rules and regulations of the property and manner of enforcement; and (xii) and a program addressing security and crime prevention at the apartment complex.

h. Rental Preferences and Priority.

i. Veteran Preference. To the extent permitted by law, and provided that the prospective tenants meet standard screening standards, with respect to the rental of nineteen (19) of the units in the apartment complex, Applicant shall give a preference to households that include one or more veterans of the United States military.

ii. Local Preference. To the extent permitted by law, and provided that the prospective tenants meet standard screening standards, Applicant shall give a preference to households that include one or more persons who are currently employed in or are currently residing in the City of Los Alamitos.

22. The City Manager is authorized to approve and execute the regulatory agreement and any amendments thereto on behalf of the City. The City Manager shall have the authority to make approvals, issue interpretations, waive provisions, make and execute further agreements and/or enter into amendments to the regulatory agreement on behalf of City.

23. The Applicant shall reimburse the City for its reasonable costs to implement the Affordable Housing/Density bonus conditions of approval, and for the fees and costs charged for the services of attorneys and/or other professional third-party consultants engaged by the City to provide consultation, advice, analysis, and/or review or preparation of documents in connection with preparation of the regulatory agreement, review of the initial marketing and management plan required as part of the regulatory agreement, review of annual compliance reports submitted by Applicant pursuant to a regulatory agreement, and inspections and audits provided for in the regulatory agreement.

CONDITIONS, COVENANTS & RESTRICTIONS (CC&Rs)

24. Prior to the approval of the final map, all organizational documents for the Project, including any covenants, conditions, and restrictions (CC&Rs), shall be submitted to and approved by the Development Services Department and City Attorney's Office. Costs for such review shall be borne by the subdivider.

25. CC&Rs submitted to the City for review shall contain a table itemizing each of the requirements identified herein and the page/paragraph where they are addressed in the CC&Rs.

26. The approved CC&Rs shall be recorded with County Recorder's Office concurrent with the Final Map. A copy of the final documents shall be submitted to the Development Services Department after recordation.

27. No dwelling unit in the market-rate portion of the development shall be sold or a certificate of occupancy issued, unless a homeowners association has been legally formed with the right to assess all units which are jointly owned or benefitted to operate and maintain all other mutually available features of the development including, but not limited to, public and private open space, amenities, landscaping, private streets, and utilities.

28. The CC&Rs shall include, but are not limited to, the following provisions:

    a. The City shall be included as a party to the CC&Rs for enforcement purposes of those CC&R provisions in which the City has interest as reflected in the following provisions. However, the City shall not be obligated to enforce the CC&Rs.

    b. The requirement that association bylaws be established.

    c. Provisions for effective establishment, operation, management, use, repair, and maintenance of all common areas and facilities including open space, landscaped areas, roof decks, walls and fences, private roadways (i.e., walkways, sidewalks, paseos, driveways), lighting, and furnishings, awnings, trash enclosures, water quality management plan BMPs and private utilities, if any, shall be established in the CC&Rs.

    d. Private open space areas within the common area shall be illustrated on a "Private Open Space Exhibit" and shall be made part of the CC&Rs and shall specify those portions of the open space area that are allocated for private use. The CC&Rs shall include provisions for authorized uses and structures, access, maintenance, and restrictions in the private use areas to minimize noise and light disruptions to adjacent properties.

    e. Membership in the homeowners association shall be inseparable from ownership in individual units.

    f. Architectural controls shall be provided and may include, but not be limited to, provisions regulating architectural features, exterior finishes, roof materials, fences and walls, balconies, roof decks, accessory structures such as patios, sunshades, trellises, gazebos, awnings, exterior mechanical equipment, television and radio antenna, consistent with the Los Alamitos Municipal Code (LAMC).

    g. Maintenance standards shall be provided for applicable items listed in Section (c) above in the CC&Rs. Examples of maintenance standards are shown below.

        i. All common area landscaping and private areas visible from any public way shall be properly maintained such that they are evenly cut, evenly edged, and free of debris and weeds. All trees and shrubs shall be trimmed so they do not impede vehicular or pedestrian traffic. Trees shall be pruned so they do not intrude into neighboring properties and shall be maintained so they do not have droppings or create other nuisances to neighboring properties. All trees shall also be root pruned to eliminate exposed surface roots and damage to sidewalks, driveways, and structures.

ii. All private drives, sidewalks, and open space areas shall be maintained so that they are safe for users. Significant pavement cracks, pavement distress, excessive slab settlement, abrupt vertical variations, and debris on travel ways shall be removed or repaired promptly.

iii. Common areas shall be maintained in such a manner as to avoid the reasonable determination of a duly authorized official of the City that a public nuisance has been created by the absence of adequate maintenance such as to be detrimental to public health, safety, or general welfare.

h. Homeowners association approval of exterior improvements requiring a building permit shall be obtained prior to requesting a building permit from the City of Los Alamitos Development Services Department. All plans for exterior improvements shall conform to requirements set forth by the City and the CC&Rs.

i. A "Parking and Circulation Exhibit" shall be made part of the CC&Rs and shall be enforced by the homeowners association. In addition to the exhibit, provisions regarding parking shall be included in the CC&Rs, including the following:

    i. Residents shall not store or park any non-motorized vehicles, trailers or motorized vehicles that exceed seven (7) feet high, seven (7) feet wide, and nineteen (19) feet long in any parking space, driveway, or private street area except for the purpose of loading, unloading, making deliveries or emergency repairs except that the homeowners association may adopt rules and regulations to authorize exceptions.

    ii. Residents shall park vehicles in garage spaces. Storage of personal items may occur in the garages only to the extent that vehicles may still be parked within the required garage spaces.

    iii. The homeowners association shall be responsible for monitoring and enforcing all parking regulations on private property. The proposed CC&Rs shall include provisions requiring the association to develop and adopt an enforcement program for parking regulations within the development which may include measures for fire access and enforcement by a private security company.

j. Provisions for enforcing individual trash cart placement at designated curb areas as shown on the approved "Trash Pick-up Plan" no earlier than noon (12:00 P.M.) on the day before scheduled collections and removed within twelve (12) hours of collection.

k. Maintenance of all common areas, driveways, etc., shall be by the homeowners association.

l. Television and radio antennas shall be installed in accordance with the requirements of the LAMC.

m. All utility services serving the site shall be installed and maintained underground pursuant to LAMC 16.12.170.

n. The homeowners association shall be required to file the names, addresses, and telephone numbers of at least one (1) member of the homeowners association Board and, where applicable, a manager of the project before January 1st of each year with the Development Services Department for the purpose of contacting the association in the case of emergency or in those cases where the City has an interest in CC&R violations.

o. The homeowners association shall be responsible for establishing and following procedures for providing access to public utilities for maintenance of their facilities within the project area, subject to those agencies' approval.

p. No amendment to alter, modify, terminate, or change the homeowners association's obligation to maintain the common areas and the project perimeter wall or other CC&R provisions in which the City has an interest, as noted above, or to alter, modify, terminate, or change the City's right to enforce maintenance of the common areas and maintenance of the project perimeter wall, shall be permitted without the prior written approval of the Development Services Department.

FEES

29. In accordance with Government Code section 66477 and Chapter 16.18 of the Los Alamitos Municipal Code, the Applicant shall be required to pay **$3,333,905.00** in parkland dedication (Quimby) fees prior to the final certificate of occupancy issued for the Project.

CONSTRUCTION

30. The Applicant shall deliver a construction schedule to the adjacent properties within 300 feet of the site to properly inform them of future construction, including the name and 24-hour contact information for a project manager for noise, dust, and other complaints.

31. All demolition and construction shall be done in accordance with Los Alamitos Municipal Code Demolition Chapter 8.13.

32. The Applicant must comply with all current California Building Codes and California Residential Codes, as applicable.

33. Project plans for the condominium development shall be subject to a complete code compliance review with the Development Services Department when the condominium plans are submitted for plan check and shall comply with all applicable City of Los Alamitos ordinances, regulations, and policies prior to building permit issuance, including, but not limited to, the requirements established or authorized by Title 15, 16, and 17 of the City of Los Alamitos Municipal Code.

34. The site shall be kept reasonably clean during construction and maintained in a safe, nuisance, and hazard-free condition. Dust control measures shall be employed to include spraying water on dry soil to ensure dust does not migrate onto adjacent properties.

35. During construction the site shall be maintained and kept clear of all trash, weeds, and overgrown vegetation.

36. Prior to demolition and construction, a temporary perimeter security fence not exceeding eight feet in height shall be installed around the project site to secure the site and shield the construction areas and public views. The fencing shall include a privacy screen material or approved equivalent. The fence/screen material shall be properly maintained and be free of rips, tears, fraying, graffiti, and any other damage or vandalism.

37. The Applicant will display a sign visible to the public with a 24-hour emergency contact number for an individual, such as the construction superintendent, should any resident have any questions about the construction.

38. The Project shall comply with all requirements of Chapter 17.20, Noise, of the Los Alamitos Municipal Code.

39. Noise sources associated with construction activities shall only occur between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and on Saturdays and shall not take place at any time on Sundays or Federal holidays.

40. All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of an existing dwelling shall be equipped with properly operating and maintained mufflers.

WQMP

41. Prior to issuance of any building permits, the Applicant shall submit to the City's Water Quality Manager for review and approval a *Final* Water Quality Management Plan (WQMP). The reviewed and approved WQMP shall be recorded and a copy of the recorded WQMP shall be provided to the City's Water Quality Manager. See also Condition No. 85.

LANDSCAPE

42. A landscape Irrigation Plan prepared by a licensed landscape architect shall be submitted to the Development Services Department prior to the issuance of building permits. The Irrigation Plan shall include an irrigation system layout with the location of controllers and points of connection with data on valve sizes and gallons per minute (G.P.M.), the size and location of sleeves and all spray heads, including the location of conventional systems and drip systems; an irrigation legend with complete specifications; irrigation notes and construction details of all assemblies and components; a recommended irrigation schedule, preferably on an annual basis; and a summary block on the initial page of submitted plans that will present the above information clearly and accurately. The City reserves the right to require subsequent checks, or approval of the landscape plans prior to issuance of a grading permit. See also Condition Nos. 66 and 67.

43. Landscaping shall comply with the City's water conservation ordinances in accordance with Chapter 13.04 (Water Conservation) and Chapter 13.05 (Water Efficient Landscaping) of the Los Alamitos Municipal Code.

44. A phased landscape and irrigation plan shall be submitted for review and comply with the City's Xeriscape Ordinance (Ord. No. 563). All required landscaping and irrigation shall be installed prior to the issuance of a certificate of occupancy for each corresponding phase.

45. All trees noted on the plans shall be planted outside of the Sight Safety Triangle or else be trimmed to eight feet in height from above the adjacent top of curb.

46. All landscaping on the site, including, without limitation, trees, shrubs and other vegetation, drainage and irrigation systems, shall be permanently maintained in good, first-class condition, healthy, without deterioration, free of waste and debris, through all phases of construction and after. Dead or diseased plants shall be promptly replaced with landscaping

similar in type, size, and quality. Automatic Irrigation systems shall be properly maintained, and other reasonable and adequate landscape maintenance facilities and procedures shall be provided to fulfill the foregoing requirements.

47. The common open space area improvements shall be reviewed for consistency with the Project plans by the Development Services Department prior to issuance of building permits. The common open space area identified as the "Neighborhood Green Space" on the Site Plan included as Figure 3-4 in the Draft EIR and centrally located within the Project site shall be completed at the time that the Applicant completes no more than 50 percent of the units (123 units).

LIGHTING

48. Prior to permit issuance Applicant shall submit a lighting plan to the Development Services Department to the satisfaction of the Development Services Director.

49. The Applicant shall provide adequate exterior lighting for each residential unit that maintains performance standards as described in Chapter 8.48 *Lighting Performance Standards* in the Los Alamitos Municipal Code. All lighting structures shall be placed so as to confine direct rays to the subject property.

50. The Applicant shall provide an illuminated uniform address number installed at each unit entryway.

UTILITIES

51. The Applicant shall submit detailed plans showing the proposed location of utilities and mechanical equipment to the Development Services Department for review and approval prior to the Building and Safety Division Plan check.

52. Above ground utility equipment (e.g., electrical, telephone, and cable TV) shall be screened if located in the front yard area of each unit, within the front yard setback, common open space area, or any parking spaces or sidewalks, and shall be screened to the satisfaction of the Development Services Director.

53. All exterior mechanical equipment shall be screened from view.

54. All utility meters, when not enclosed in a cabinet, shall be screened from view from any place on or off site, by either plant materials or decorative screen, while allowing sufficient access for reading.

SIGNAGE

55. All tract name signage at entry points to the project site shall be subject to the discretion and approval of the Development Services Director.

PARKING

56. Applicant shall construct and maintain at all times a minimum of 577 parking spaces on the combined parcels and a minimum nine (9) foot by nineteen (19) foot dimension per parking space with minimum drive aisle widths of twenty-four (24) feet.

57. Wheel stops/blocks or curbs as wheel stops shall be required for all parking spaces on exterior parking spaces as shown on the Project site plans.

58. All units with a garage shall maintain within the garage the ability to park cars at all times. Garages shall not be converted to any other use.

59. There shall be no business activities or day care conducted within or from the garages.

60. Residents shall not park or store vehicles anywhere on the site except within the designated parking spaces in the garage or driveways for their unit. However, the open parking spaces, located along the private driveways, may be utilized for residents or guest for temporary parking. Any issues arising from the use, application, or restriction of such open parking spaces shall be resolved by the Homeowner's Association.

TRASH

61. Except as required for CC&Rs per Condition 28.j, Applicant shall design the refuse and recycling storage area in accordance with Section 17.16.090 of the Los Alamitos Municipal Code as applicable.

OTHER

62. Each residence shall be utilized as one (1) dwelling unit. No portion of any residence shall be utilized or rented as a separate dwelling unit.

63. The block wall on the south parcel line of the proposed Project that separates the Project from Lampson Avenue shall be 7 feet tall as measured from the exterior of the parcel and painted white.

MITIGATION MOINTORING AND REPORTING PLAN (MMRP)

Project Design Features (PDFs)

64. PDF AQ-1 - The Project will utilize Tier 4 Interim construction equipment during construction activities.

65. PDF B-1 - Pursuant to Figure 3-18, Landscape Plan, the Project will incorporate larger sized box tree species (including the western sycamore and cottonwood trees) that foliage specialist bats prefer and will plant the trees on the fringes of the development, adjacent to open space areas.

66. PDF B-2 - Pursuant to Figure 3-18, Landscape Plan, the Project will plant approximately 441 trees onsite (excluding shrubs and ground cover), including the western sycamore (Platanus racemosa), paperbark melaleuca (Melaleuca quinquenervia), olive (Olive sp.), southern

magnolia (Magnolia grandiflora), Crape myrtle (Lagerstroemia indica), Brisbane box (Lophostemon confertus), Australian willow (Geijera parviflora), Italian cypress (Cupressus sempervirens), yew pine (Podocarpus macrophyllus) and other species. No plants listed on the California Invasive Plant Council (Cal-IPC)6 Inventory species will be planted and a list of approved species to planted shall be reviewed by a qualified biologist prior to planting.

67. PDF GHG-1 - The Project will include solar photovoltaic panels with the capability to generate up to 1,229,520 kWh/annually.

68. PDF GHG-2 - The Project will be 100% electric and will not include natural gas.

69. PDF GHG-3 - The Project will provide a community electric vehicle for the affordable housing component for residents to drive short distance trips to the local grocery store.

70. PDF GHG-4 - The Project's affordable apartment parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1.

71. PDF HYD-1 - The Project will be built such that the finished floor elevation for the onsite buildings is set 1 foot minimum above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements.

72. PDF N-1 - Prior to the issuance of occupancy permits, the Project will construct a 7-foot-high noise barrier along Lampson Avenue. The noise control barrier will be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. Since the pad elevations varies, the top of each wall and/or berm combination will be 7' above each applicable pad elevation. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. The noise barrier shall be constructed using the following materials:

    - Masonry block;
    - Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of at least four pounds per square foot;
    - Material with sufficient weight per square foot capable of providing a minimum transmission loss of 20 dBA;
    - Earthen berm; or,
    - Any combination of these construction materials.

73. PDF N-2 - To comply with the State of California and City of Los Alamitos 45 A-weighted Decibels (dBA) Community Noise Equivalent Level (CNEL) interior noise standards for residential land use, the Project will provide the following or equivalent noise abatement measures on building plans:

    - Windows & Glass Doors: At a minimum the Project will provide windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 27. Additionally, all second-floor facades adjacent to Lampson

Avenue and JFTB Los Alamitos will be provided windows and glass doors that are well-fitted, well-weathers-tripped assemblies with minimum sound transmission class (STC) ratings of 29.

- Doors (Non-Glass): All exterior doors shall be well weather-stripped and have Well-sealed perimeter gaps around the doors are essential to achieve the minimum STC rating.
- Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.
- Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided in compliance with applicable State and local Building Codes (e.g. California Building Code, Chapter 3, R338.3).

Mitigation Measures (MMs)

74. MM 4.3-1 - Vegetation clearing should be conducted outside of the nesting season (February 1 through September 15). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a pre-construction nesting bird survey within three days prior to any disturbance to the Project site. Site disturbance includes disking, demolition activities, vegetation removal and grading. If active nests are identified, the biologist shall establish appropriate avoidance buffers around the nest (based on the species detected), and the buffer areas shall be avoided until the nests are no longer occupied (through routine nest monitoring by the qualified biologist) and the juvenile birds can survive independently from their nest(s). In addition, if portions of the Project site have not been disturbed within three days after the initial nesting bird survey, additional nesting bird surveys will be conducted (within the nesting bird season, February 1 to September 15) until all portions of the Project site have been disturbed appropriately (as determined by a qualified biologist) as to not provide potential nesting habitat.

75. MM 4.3-2 - If tree removal or ground disturbance occurs during the raptor nesting season (from approximately January 1 to July 31), pre-removal/disturbance surveys shall be conducted. The surveys shall include areas of suitable nesting trees within 300-feet from the limits of disturbance (to the extent that access is available). The survey shall be conducted no more than three days prior to disturbance. Should nesting raptors be detected either onsite or offsite, work would be delayed until fledglings have left the nest and area no longer dependent on the nest at which time, work could proceed.

76. MM 4.3-3 - A qualified biologist shall conduct a pre-construction bat roost survey for roosting bats no more than 14 days prior to site disturbance. The pre-construction bat roost survey will consist of a minimum of two bat surveys (conducted consecutively or as determined by the biologist). If roosting bats are detected onsite outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. This may

include using mechanical equipment to gently nudge the tree trunk multiple times prior to removal or for palm trees and other species, to de-frond or de-branch the tree using a mechanical lift and gently lower the cut branches to the ground. Regardless of the method, the fallen tree and/or material will be left undisturbed overnight until at least the next morning to give roosting bats time to exit before site disturbance.

If roosting bats are detected onsite during the maternity season, the Project shall avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. Once the qualified biologist approves removal of the subject roost tree(s), the same tree removal procedures as outlined above shall be implemented prior to tree removal.

77. MM 4.4-1 - Discovery of Inadvertent Resources. Prior to the issuance of any grading permits, the Applicant shall submit proof that a qualified consulting archaeologist meeting the Secretary of Interior's (36 CFR 61) Professional Qualifications Standards has been retained to conduct periodic spot checks during ground disturbing activities. Spot check should occur at initial ground exposure within the project; upon a 50 percent completion milestone of ground disturbance; upon an 80 percent milestone of ground disturbance; or at any other time determined necessary by the consulting archaeologist. If any potentially historic or archaeological resources are encountered during ground-disturbing activities, the archaeologist shall halt construction work within 50 feet of the find and assess the nature of the find for importance.

    a) If the discovery is determined to not be important by the archaeologist (e.g. isolates and clearly non-significant deposits), work will be permitted to continue in the area. If a find is determined to be potentially important by the archaeologist, the Lead Agency shall be notified, and additional investigation would be required. Additional investigation work would include scientific recordation and, depending on the nature of the find, excavation.

    b) At the conclusion of ground disturbing activities, the archaeologist shall draft a report detailing the monitoring process and summarize any additional field study and analysis of resources, should any be discovered. The completed report shall be approved by the Planning Department and the Applicant shall provide verification that the report was submitted to the Lead Agency prior to the issuance of an occupancy permit.

    c) Excavated finds shall be curated at a repository determined by the archaeologist and approved by the City with verification provided to the City prior to the issuance of an occupancy permit.

78. MM 4.4-2 - Discovery of Human Remains. If human burial or skeletal remains are identified during excavation or construction, work in that location shall stop immediately until the find can be properly treated. The construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 “Disturbance of Human Remains.” The County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Once the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the Site of the discovery of the Native American human remains and

may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

79. MM 4.6-1 - Prior to the issuance of grading permits or building permits, the City of Los Alamitos Public Works & Engineering Department shall verify that all of the recommendations provided in Section 4.0 of the Project's December 21, 2021 "Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California," prepared by LGC Geotechnical, Inc. and included as Technical Appendix F1 to the Project's EIR, are incorporated into the Project's grading and building plans and implemented by the construction contractors. These recommendations include but are not limited to a) Site Earthwork Considerations; b) Preliminary Foundation Recommendations; c) Site Grading Recommendations; d) Soil Bearing and Lateral Resistance Considerations; e) Lateral Earth Pressures for Retaining Walls Considerations; f) Nonstructural Concrete Flatwork Recommendations; and g) Preliminary Asphalt Concrete Pavement Design Parameters. Alternatively, the Project shall comply with the findings and recommendations of any geotechnical studies that may be required in association with future grading and/or building permits.

80. MM 4.6-2 - If paleontological resources are discovered during earth disturbance activities, the discovery shall be cordoned off with a 50-foot radius buffer so as to protect the discovery from further potential damage, and an Orange County Certified Professional Paleontologist shall be consulted to assess the discovery.

    If the discovery is determined to be significant by the paleontologist, a monitoring and recovery plan shall be initiated, which will include notification of appropriate personnel involved and monitoring of earth disturbance activities.

    a) Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist or paleontological monitor. Monitoring will be conducted full-time in areas of grading or excavation in undisturbed sediments of alluvial deposits.

    b) Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of fossils in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.

    c) Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe

place. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.

d) Recovered specimens will be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates.

e) Recovered specimens shall be identified and curated of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., OC Parks). The paleontological program should include a written repository agreement prior to the initiation of monitoring activities. Prior to curation, the lead agency (e.g., the City of Los Alamitos) will be consulted on the repository/museum to receive the fossil material.

f) A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, will signify satisfactory completion of the project program to reduce impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.

81. MM 4.15-1 - Prior to the issuance of certificate of occupancy, the project applicant shall provide documentation that it has implemented the CAPCOA strategies identified below. Verification that the CAPCOA strategies were completed shall be verified by the City's Public Works Director.

    1. Provide pedestrian and bicycle network improvements within the development connecting to existing off-site facilities, as detailed in Section 3.3.2 of this EIR.

    2. Confirm with the OCTA whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards.

    3. Install broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission.

82. MM 4.16-1 - <u>Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities</u>.

    1. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

    2. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

3. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

4. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

5. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

83. MM 4.16-2 - Unanticipated Discovery of Human Remains and Associated Funerary Object.

1. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

2. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.

3. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

4. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)

5. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

6. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

84. MM 4.16-3 - Procedures for Burials and Funerary Remains.

1. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

2. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

3. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.

4. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.

5. In the event preservation in place is not possible despite good faith efforts by the Applicant, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.

6. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

7. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed

descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

NPDES

85. Prior to the issuance of any building permits, the Applicant shall submit to the City for review and approval a *Final* Water Quality Management Plan (WQMP) that:
    - Addresses Site Design BMPs (Best Management Practices) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas.
    - Incorporates the applicable Routine Source Control BMPs as defined in the DAMP.
    - Incorporates Treatment Control BMPs as defined in the DAMP.
    - Generally describes the long-term operation and maintenance requirements for the Treatment Control BMPs.
    - Identifies the entity that will be responsible for long-term operation and maintenance of the Treatment Control BMPs.
    - Describes the mechanism for funding the long-term operation and maintenance of the Treatment Control BMPs.

86. Prior to issuance of any Grading or Building Permit and as part of the future development's compliance with the NPDES requirements the Applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Los Alamitos before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable".

87. Prior to obtaining grading permits, the Applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) for review and approval by the Building and Safety Division.

88. Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm the Grading Plan specifications stipulate, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402, requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:
    - All active portions of the construction site shall be watered twice daily to prevent excessive amounts of dust;

- On-site vehicle speed shall be limited to 15 miles per hour;
- All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized;
- Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible;
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; Track-out devices shall be used at all construction site access points; and
- All delivery truck tires shall be watered down and/or scraped down prior to departing the job site.

89. All trucks that are to haul excavated or graded material onsite shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, the Applicant shall demonstrate to the City of Los Alamitos how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F) and (e)(4).

ORANGE COUNTY FIRE AUTHORITY (OCFA)

90. PR105 - Conditional Use Permit (Conditions of Approval)

The Applicant or responsible party shall submit the plan(s) listed below to the Orange County Fire Authority for review. Approval shall be obtained on each plan before the event specified.

1. As previously requested, provide a completed Water Availability Form, signed by a representative of the local water purveyor, showing the results of a recent fire hydrant flow test (within 6 months).
2. The site plan shall meet minimum requirements per OCFA Guideline B-01.
3. As previously requested, stated per OCFA Guideline B-01 Fire department access shall be available during the entire trajectory of the project. A phasing plan may be proposed under an AM&M. The plans were reviewed based on a single owner of the property. Per our discussion, the lot will be split and divided among more than one owner. Easement Agreements shall be approved and recorded before Fire Master Approval.
4. Prior to OCFA clearance of a final map or issuance of a precise grading permit or a building permit, if a grading permit is not required:

   * fire master plan (service code PR145)

5. Prior to issuance of a building permit:

   * Architectural (service codes PR200-PR285)

   * underground piping (service code PR470-PR475)

   * fire sprinkler system (service codes PR400-PR465)

6. Prior to concealing interior construction:

   * fire alarm system (service code PR500-PR530)

Temporary/Final Occupancy Inspections:

7. Prior to issuance of a temporary or final certificate of occupancy, all OCFA inspections shall be completed to the satisfaction of the OCFA inspector and be in substantial compliance with codes and standards applicable to the project and commensurate with the type of occupancy (temporary or final) requested. Inspections shall be scheduled at least five days in advance by calling OCFA Inspection Scheduling at 714-573-6150.

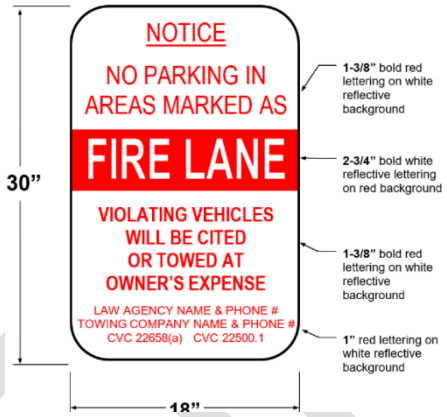
91. PR110 - Tentative Tract Map "B" and Fire Master Plan

As previously indicated, the proposed site plans do not meet minimum fire department access. Please see the redlined tentative track map for reference. These design issues will need to be resolved prior to submittal/approval of the B Map and/or f the Fire Master Plan.

a. As previously requested, fire department lanes shall be deciphered on the Track Map by shading the minimum 20' width. See redline item #1.

b. All entry signs shall be per OCFA Guideline B-0, Figure 6-Fire Lane Entrance Signs. See redline item #2.

Figure 6 – Fire Lane Entrance Signs



All portions of the buildings are within 150 feet of the public road as measured along the path of firefighter travel. All starting points for the hose pull shall be at the fire department access road. See redline item #3.

The plans have not been reviewed for Vehicular Gates. Obstructions to Emergency Vehicle Access shall meet minimum requirements per OCFA Guideline B-01Section B1. Reference redline item #4.

Required Fire Department Fire Access Road less than 36 ft. shall require signage on one or both sides of the road. See detail #6.

92. The Applicant shall enter into a Secured Fire Protection Agreement (SFPA) to provide for fair-share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. The SFPA would ensure that responses times and service ratios are met due to the implementation of the Project and no new fire station facilities would be required.

ENGINEERING / PUBLIC WORKS

93. A City public works encroachment permit shall be obtained for all work in public right-of-way before starting work. All work shall be done in accordance with APWA Standards and to the satisfaction of the City Engineer and must be completed before issuance of Certificate of Occupancy.

94. A bond or surety device shall be posted with the City in an amount and type sufficient to cover the amount of off-site and on-site work to be done, as approved by the City Engineer.

95. Pad certification by the Design Civil Engineer and Soil Engineer is required prior to the commencement of structural construction.

96. The final compaction report prepared by a qualified Soil Engineer shall be submitted to the City Engineer for review and approval before the commencement of structural construction.

97. The Applicant shall submit a Geotechnical Report for review and approval and shall prepared by a licensed Soils Engineer.

98. Prior to the issuance of any building permits, the Applicant shall provide to the City a Final Water Quality Management Plan (WQMP) that:

    - Addresses Site Design BMPs (Best Management Practices) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or “zero discharge” areas, and conserving natural areas.
    - Incorporates the applicable Routine Source Control BMPs as defined in the DAMP.
    - Incorporates Treatment Control BMPs as defined in the DAMP.
    - Generally describes the long-term operation and maintenance requirements for the Treatment Control BMPs.
    - Identifies the entity responsible for long-term operation and maintenance of the Treatment Control BMPs.
    - Describes the mechanism for funding the long-term operation and maintenance of the Treatment Control BMPs.

99. The Applicant shall submit Improvement Plans to a Registered Civil Engineer prepared for public works (off-site) and on-site improvements. Plan check fees shall be paid in advance.

100. An on-site grading and drainage plan shall be prepared and submitted to the City Engineer for approval. The plan shall be 24" x 36", with elevations to the nearest 0.01-foot, minimum scale 1" = 20'. Registered Civil Engineers shall prepare a plan. Public works improvements may be shown in this plan. Grading plan check fees must be paid in advance.

101. The Applicant shall submit a Drainage Report that shall contain Hydrologic and hydraulic calculations demonstrating adequate habitable onsite protection for the 100- year storm and street drainage assessing a 10-year return frequency storm (25-year frequency in sump

areas) prepared by a Registered Civil Engineer shall be submitted with the Grading Plan. Drainage Report shall be per the Orange County Hydrology Manual and the Orange County Local Drainage Manual as applicable.

102. Proposed Condition Drainage patterns are not to exceed the Existing Condition flow rates and must match the existing outlet locations. No net increase of flows will be allowed to enter Lampson Avenue or any other drainage conveyance without approval from the owner of the drainage facility.

103. The driveway and parking lot slope shall be a minimum slope of one 1.0% for asphalt and 0.5% for concrete.

104. Pursuant to and in accordance with Government Code Section 66020(d)(1), the Project Applicant is hereby notified as follows: The fees, dedications, reservations, and other exactions ("impositions") imposed on this development, and which are subject to notification pursuant to Government Code Section 66020(d)(1) are:

    Traffic Impact Fees: Yes, if you are increasing the total daily trips by 200 trips.

105. Provide a Traffic Impact Analysis for review and approval. Based on the review and approval of this analysis, additional conditions and/or fees may be required. Applicant is required to provide evidence to the Director of Development Services that the Applicant has conferred with the City of Seal Beach regarding the final Traffic Impact Analysis prior to issuance of grading permit.

106. All driveways, sidewalks and ADA Ramps shall meet current ADA requirements, and all offsite improvements are to be done per City Standards.

107. A new 5-foot-wide concrete sidewalk shall be installed to be contained within the entire Los Alamitos right of way.

108. A Sewer Will-Serve letter is required prior to approval of building permits. Applicant must coordinate with the City of Seal Beach and/or the Rossmoor Los Alamitos Sewer District (RLAASD) to secure a connection to the sanitary sewer system provided by either the City of Seal Beach or the Rossmoor/Los Alamitos Sewer District

109. In relation to sewer connections, preliminary plans with the proposed lateral connections must be submitted to the City of Seal Beach and/or the Rossmoor Los Alamitos Sewer District (RLAASD) to assess if plan check, inspection, and/or a sewer study is required. Approval of a sewer capacity study is required from the applicable sewer agency prior to issuance of a building permit.

110. All Project improvements (within the public right of way) shall comply with Los Alamitos and all other applicable standards to ensure all intersection sight distance, pedestrian/bike crossing facilities, and street design requirements are complied with.

111. Prior to importation onsite, the Project Applicant shall submit evidence to the Development Services Director that all imported fill materials have been tested and meet the regulatory screening levels.

DRAFT

LOS ALAMITOS UNIFIED
SCHOOL DISTRICT
IGNITING UNLIMITED POSSIBILITIES
ACADEMICS ★ ATHLETICS ★ ACTIVITIES ★ ARTS

10293 Bloomfield Street • Los Alamitos, CA 90720-2200
(562) 799-4700 • FAX (562) 799-4730

Andrew Pulver, Ed.D.
Superintendent

September 16, 2024

Tom Oliver, Associate Planner
City of Los Alamitos Planning Division
3191 Katella Avenue
Los Alamitos, CA 90720

Dear Mr. Oliver,

On behalf of the Los Alamitos Unified School District, I would like to express our sincere appreciation for the continued collaboration between the City Council, the community, and the District in planning projects that support the growth and vitality of our community. We value the coordination and thoughtful dialogue that accompany these developments, which serve to strengthen our city and community.

I am writing today to offer the Los Alamitos Unified School District's support for the 4665 Lampson Avenue residential housing development. As a district committed to providing high-quality education for all students, we recognize that housing plays a critical role in fostering a stable and engaged community. This development will offer additional residential opportunities for families, professionals, and community members, all of whom contribute to the overall well-being of our city and its schools. By increasing access to affordable, safe, and attractive housing, this project will help attract and retain the diverse population essential for sustaining our local schools and businesses.

Over 80% of families in our district have shared that the quality of our schools is a primary reason for moving into this community. We are honored to provide a world-class education to the students and families of Los Alamitos, and we take great pride in maintaining the high standards that draw families to our district. However, like many districts across the state, we have experienced an enrollment decline, with our student population decreasing by nearly 8% over the past eight years. This decline has resulted in available classroom space at each of our campuses, leaving us well-positioned to accommodate any new students from this development. We look forward to welcoming new families to our award-winning district.

The District has taken proactive steps to plan for both current and future enrollment trends. We have engaged a professional demographer to guide us in making informed decisions regarding short- and long-term planning. Based on both internal data and the demographer's projections, our district is expected to

Board of Education: Megan Cutuli • Marlys Davidson • Scott Fayette • Chris Forehan • Diana D. Hill

see further declines in enrollment over the coming years. As such, we are eager to serve new families who choose to live in this community and benefit from the exceptional educational programs we offer.

Furthermore, we are pleased to learn that the 4665 Lampson Avenue Residential Project will prioritize affordable housing for individuals who work within the City of Los Alamitos. This is especially significant for our classified staff members, who may find this development an excellent opportunity to live in the same community they serve.

In conclusion, the Los Alamitos Unified School District fully supports the approval of the 4665 Lampson Avenue Residential Project. We appreciate the opportunity to provide input throughout this process and remain available to address any questions you may have regarding the project and its potential impact on our district.

We look forward to continuing to work in partnership with the city to create a thriving community where families and students can live, learn, and thrive.

Sincerely,

Meg Cutuli
Board President, Los Alamitos Unified School District

cc. Los Alamitos City Council
Jordan Nefulda (Mayor), Shelley Hasselbrink (Mayor Pro Tem)
Tanya Doby, Emily Hibard, Trisha Murphy (Council Members)
Chet Simmons (City Manager)

Los Alamitos Planning Commission
Mary Anne Cuilty, Davis Zellmer, Gary Loe, Wendy Grose,
Joseph Hastie, Art DeBolt, Jean Legere

Tom Oliver

From: Sheena k <asheena.k@gmail.com>
Sent: Thursday, December 15, 2022 5:42 PM
To: Tom Oliver
Subject: Fwd: Lampson Project

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender asheena.k@gmail.com

---------- Forwarded message ---------
From: **Sheena k** <asheena.k@gmail.com>
Date: Wed, Dec 14, 2022, 2:58 PM
Subject: Lampson Project
To: <planningcommision@cityoflosalamitos.com>

Hello,

My name is Asheena Lee. I am a resident of Parkewood in Los Alamitos. I have a few concerns about the Lampson project.

1. Please consider the dangerous increase in Uturns. We need a no Uturn sign and added lights to prevent mortality and morbidity.

2. Please request that they add more parking. Living in Parkewood I am aware of how quickly parking spaces fill up. We already have a problem with so many parked cars on the road it is often dangerous driving and walking. There are narrow passages with two-way traffic trying to get into a small space due to so many street vehicles. This will only be amplified if the Lampson project does not have appropriate parking. Parking garages or fewer units would help with this.

3. Please consider requiring a public park. We do not have many parks here, and the park we have is in seal beach. With adding so many residents, we will need a safe place for children to play. Parks decrease crime and increase the quality of life. Please consider requiring some of the land for a park for the children.

4. Consider keeping some of the land commercial. There is not much commerce on the street here. It may be a great place to keep a few units that could be used for small restaurants such as coffee shops, bakeries, or restaurants. This would bring further revenue to the city and reinvigorate the community.

Thank you,
Asheena Lee

Tom Oliver

From: Lelisa Balderama <lelisa_b@yahoo.com>
Sent: Sunday, March 19, 2023 8:35 PM
To: Tom Oliver
Subject: housing development at Seal Beach/Lampson

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender lelisa_b@yahoo.com

Good evening,

As a 20-year resident of Rossmoor, I am concerned with the proposed housing development. My door faces Montecito Road, and I know from firsthand accounts of increased traffic on one of the main roads in Rossmoor. Not only has there been an increase in cars, but post-Covid, there has been a significant increase in electric bikes amongst the teens. And we now share the roads with them!

The housing development is sure to bring more traffic, air, and noise pollution. Increased population density is also correlated with an increase in crimes.

I greatly opposed the proposed developments.

Thank you in advance for your consideration in this matter.

Respectfully,
Lelisa Balderama

Tom Oliver

From: Enea Ostrich <ooenea@gmail.com>
Sent: Friday, November 18, 2022 11:36 AM
To: ljohnson@tbplanning.com
Cc: Tom Oliver
Subject: Lampson Park Place Comment

Dear Mr Les Johnson:

Thanks first off to you and your design team for taking the time out to show the communities the plan this past Wednesday night at Ayres Hotel.

I am a CPE resident who resides close to the project as I live in this over 1700 home tract since 1988 with my husband (who are now adults). I know the project is proposed to lay on Los Alamitos property at the old West Ed property. Anyhow since the land behind it is federal property and leased to the City of Seal Beach I think it's valid that you listen to what we have to say as well as anyone living in the city of Los Alamitos because it affects us all. It also will affect Rossmoor, Cypress, and Garden Grove.
My comments are as follows:

1. Arbor Park has always only had one way in and one way out. Looking at the map from Alan the architect it shows that there are a few open walkways right into Arbor Park. This is not allowed legally because I have told it's federal land. It is opened at the main gate near Heather St in the daytime by a Seal Beach official and at night it's always closed by a federal rep. At dusk it's always closed for the night. No one is allowed in Arbor Park per the Army Corp of Engineers I have been told.

2. The parking in Arbor Park has and always will be full as soon as there is soccer or dog park people. This clashes often and that is when there are well over 200 parking spaces that West Ed allowed people to park since a very long time ago. It was always practice to allow it because you can see clearly if you go to Arbor Park how quickly it gets filled. We need better parking at Arbor if this is truly going to be a project that helps communities get on that field at Arbor Park.

3. I think it's fine that there are two parks within the complex that helps the people who will be living there but Arbor Park is where their kids will be playing at most often because it's wide open.

4. Parking spaces that the architect showed me isn't sufficient for the project. Originally in the April 11th conceptual plan it shows 580 spaces and then in the current one they showed us it said 556 spaces. Why? These spaces are still insufficient and as we all know there will be more needed for the apartments. This was proven when there was a fight for LA Fitness to not be next to a complex in Rossmoor. Those condos were originally with one parking space but then that changed when people had two cars. Then they parked the overflow at the shopping center on the other side of the building because they had no other parking. You see what I mean by you need to think about parking within your complex better. Anyhow even if there are parking spaces added that still means there was work to be done to help Arbor Park itself.

5. Concerning the left turn lane at large, main entrance, I can't believe one believes that it's the best way to move the flow of traffic to a lane that at certain points of the day will clog up Lampson. How do you

propose the safety too for that when cars clog the left lane on Lampson? That's not the stagnant lane..it's the passing lane! Since there is no third lane on Lampson this makes it difficult to move approximately 500 cars a day into and out of that complex without causing destruction. Stop lights will also create a cluster btw. This is proven at every stop light we currently have just coming out of our over 1700 home tract.

I have indicated key parts in this letter and I know I will have more questions but for now this is it. Thanks for reading.

Sincerely,

Enea Ostrich
3621 Camelia St, Seal Beach, CA 90740

CPE resident

Tom Oliver

From: Jeff T <jefftilson.77@gmail.com>
Sent: Wednesday, December 14, 2022 10:23 AM
To: ljohnson@tbplanning.com
Cc: Tom Oliver
Subject: Lampson Park Place Project Concerns

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender jefftilson.77@gmail.com

Hi,

My wife, my 3 young kids, and myself are residents of College Park East, Seal Beach and we feel the proposed development on Lampson Ave. has some major concerns that haven't been addressed:

Lack of parking for the proposed community:

Resulting in 250-plus cars parked in our neighborhood every night:
Garage parking is used for storage and not parking
Parking at Arbor Park will be impacted (Dog park/AYSO soccer). Parking will be used by residents during the day.
Vehicles will park all around Heather Park, which will limit parking for visitors.

Impact on Heather Park:

Only 14,000 sq feet of open meeting space with no play structure
Residents will be crossing Lampson Ave. to walk to Heather Park which will be a safety hazard.
Heather park is already overused and in terrible shape.
Impact on tennis courts.

Traffic Safety on Lampson:

Lampson Ave. does not have street parking and a sidewalk on one side of the road.
Vehicles will all have to make right turns when leaving the development, significantly increasing U-turns and cut-through traffic at Heather Dr.
There have been many serious and fatal traffic collisions on Lampson, which will increase.
Limited visibility when residents exit CPE onto Lampson Ave. will cause more collisions.
Lack of visibility for vehicles approaching U-turns at intersections.
There is not enough room to make U-turns at Heather Dr. and Lampson, resulting in 3-point turns.

Other concerns:

Children's safety
Heather Park is the main pick up and drop off stop for the school buses, the increased traffic will create additional hazards when the busses are stopped with red lights flashing
Water runoff (flooding)

Lampson Ave floods easily during storms and additional housing and construction will cause additional flooding
Utilities (internet, electricity, sewer)
CPE already has spotty internet with the Military Base Interference, more users will cause more disruptions and impact service
Police Response
The planned Community is under the City of Los Alamitos, however, Seal Beach will be heavily utilized/impacted for accidents on Lampson or called for additional issues (ie parking or disturbance issues) in CPE
Density of project.
In the affordable housing: 1 bedroom can house 1-3 people
2 bedrooms can house 3-5 people
3 bedrooms can house 4-7 people

Thank you for your consideration and look forward to hearing how these issues may be resolved if the project moves forward.

Jeff Tilson
562-310-3096

Tom Oliver

From: Melendres, Maria <MMelendres@acta.org>
Sent: Thursday, November 3, 2022 3:17 PM
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject: Lampson Project Comments

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender MMelendres@acta.org

To whom it may concern,

We have been residents of College Park East since 2002. This letter is to request that you stop the Lampson Project. The project is not taking into consideration many negative environmental effects on our community.

The project will not add anything to our community but will affect the quality of life for our families. Lampson is not designed to take the proposed project. It is a small street that already causes traffic issues. We moved to CPE because of its location, which is not on a main thoroughfare. Moving forward with such a project will create noise pollution and will become unsafe for our children.

Thank you for your consideration.

Regards,

Scott & Maria Melendres
4716 Candleberry Ave
Seal Beach, CA 90740
(562) 799-9389

Tom Oliver

From: Derek Berger <dberger@crescentsolutions.net>
Sent: Thursday, November 10, 2022 2:29 PM
To: Tom Oliver
Cc: Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@Gmail.com
Subject: Lampson Project Comments

Hello everyone,
I am a resident of College Park East (CPE) at 4548 Fir Ave, Seal Beach, and I would like to write you to oppose the project for 4665 Lampson Avenue for the following reasons:

- The new project would increase traffic on Lampson to an unsafe level increasing accidents and injuries. Lampson is already one of the most dangerous streets in Seal Beach / Los Alamitos.
- Vehicles exiting the development are only able to turn right towards Seal Beach Blvd, which will greatly increase the amount of U-turns on Heather Ave. This is extremely dangerous and potentially deadly. Heather park is heavily used by children in CPE, sports teams, and is a major school bus pickup and drop off location. Traffic accidents and children/pedestrians being hit by vehicles will only increase.
- Overflow parking from the development would overflow into CPE, reducing available street parking to CPE residents.
- The construction noise and road closures are also a concern. We have already had to endure the noise pollution and increased construction traffic from the 405 freeway expansion for the last couple of years.
- The proposed project plan is over-crowded. Too many units in a small area, not enough parking in the development, and no parks or play equipment in the development.
- Arbor Park will not have enough parking spots for the hundreds of families who attend AYSO soccer at Arbor Park. AYSO region 159 is an amazing organization who has been in the community for decades and have used Arbor Park for decades as well. The reduction of parking caused by the proposed unit project would jeopardize the success of playing soccer at Arbor Park and will negatively affect the children and families of our community.

I am asking you will take into account the concerns of CPE residents and the detrimental effects this project would have on the quality of life for CPE residents, AYSO region 159, and the children, and not approve the 4665 Lampson Ave development project.
Thank you,

Derek Berger
714-931-3397 (you can call me if you want to discuss)
4548 Fir Ave, Seal Beach, CA. 90740

Tom Oliver

From: Charlotte M Blaire <cblaire@hotmail.com>
Sent: Wednesday, November 16, 2022 10:43 AM
To: Tom Oliver
Subject: Lampson Project Concerns

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender cblaire @hotmail.com

Hello, good day.

I would like to suggest building a sound wall on the Los Alamitos side of the Lampson Project to help muffle the noise which so many new residents will inevitably generate into the now peaceful neighborhood of Seal Beach College Park.

I would like to suggest not building quite as many new homes, thereby making room for a park in the new development.
It is important.

Lastly I would ask that the developers provide funding for anyone in the Seal Beach College Park area, whose backyard fence borders Lampson, so that those residents may heighten their backyard fences to the maximum height allowable at no cost to the residents themselves.
The developers should also provide funding for air purifiers for those Seal Beach residents, as the air quality will suffer greatly with the influx of so many additional vehicles.

Thank you,
C Reynolds
4681 Ironwood Avenue
Seal Beach CA 90740
(562) 230 6719

Tom Oliver

From: Teresa Werner <shellandheathersmom@yahoo.com>
Sent: Tuesday, January 3, 2023 8:22 AM
To: Tom Oliver
Subject: Re: Lampson Project Comments

Good morning. I have listened to many of the comments and agree with them. I also would like to add that the freeway at seal beach Blvd seems to be a dangerous one. I think with the 22 405 and that on off ramp we have most of the accidents of the 405. Can we really add that many more people getting on and off and rush hour. Just something to look at please. Thanks for your consideration. Teresa Werner.

Sent from my iPhone

On Nov 2, 2022, at 7:34 AM, Tom Oliver <Toliver@cityoflosalamitos.org> wrote:

Hi Teresa,

Good morning. Thanks for your response. The City will consider these issues as a part of the Environmental Impact Report.

As always, if you have any questions, please email or call me,

Tom Oliver
Associate Planner
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720
(562) 431-3538 x303
<image003.png>
<image002.png>

From: Teresa Werner <shellandheathersmom@yahoo.com>
Sent: Tuesday, November 1, 2022 12:55 PM
To: Tom Oliver <Toliver@cityoflosalamitos.org>
Cc: Shelley Hasselbrink <SHasselbrink@cityoflosalamitos.org>; Tanya Doby <TDoby@cityoflosalamitos.org>; Mark Chirco <MChirco@cityoflosalamitos.org>; Jordan Nefulda <JNefulda@cityoflosalamitos.org>; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov; ssustarsic@sealbeachca.gov; smassalavitt@sealbeachca.gov; StopLampsonProject@gmail.com
Subject: Lampson Project Comments

IRONSCALES couldn't recognize this email as this is the first time you received an email from this sender shellandheathersmom@yahoo.com

Please consider all the traffic for lampson. We are very much against a large development that this was not zoned for. Seal beach Blvd is already too crowded and this will even cause more problems. Can our schools handle all of this too? Our college park neighborhood doesn't want the traffic it will cause either! I know California is working to provide housing but this high density hurts everyone. We did not pay high housing prices to have this happen to our area. Do we have enough emergency services, parks, libraries, schools? I hope the community is more important than developers making a lot of money. Please consider all of this in your plans. Thank you. Teresa Werner 3800 wisteria street seal beach. 562 822-2012.

Sent from my iPhone

Tom Oliver

From: Dara Baddeley <baddeley1@verizon.net>
Sent: Tuesday, December 20, 2022 3:09 PM
To: Tom Oliver; Shelley Hasselbrink; Tanya Doby; Mark Chirco; Jordan Nefulda; jkalmick@sealbeachca.gov; mvaripapa@sealbeachca.gov; tmoore@sealbeachca.gov
Subject: Re: Stop Lampson Project

Dear Council Members,

I am writing you again to voice my concern for the Proposed Lampson High Density Project. As was voiced last night by multiple residents, there are serious concerns about the negative impacts this project will bring to our community.

When making your decision, please ask yourself the following... if I lived near this proposed high-density project would I want it? How would it affect my family, my safety, and my quality of life? Please put yourself in the position of the existing residents that you represent and consider a No vote on this project. Or, at the very least please reduce the size by half as it is out of character and scale with our already overpopulated community.

Sincerely,
Dara Baddeley

-----Original Message-----
From: Dara Baddeley <baddeley1@verizon.net>
To: toliver@cityoflosalamitos.org <toliver@cityoflosalamitos.org>; shasselbrink@cityoflosalamitos.org <shasselbrink@cityoflosalamitos.org>; tdoby@cityoflosalamitos.org <tdoby@cityoflosalamitos.org>; mchirco@cityoflosalamitos.org <mchirco@cityoflosalamitos.org>; jnefulda@cityoflosalamitos.org <jnefulda@cityoflosalamitos.org>; jkalmick@sealbeachca.gov <jkalmick@sealbeachca.gov>; mvaripapa@sealbeachca.gov <mvaripapa@sealbeachca.gov>; tmoore@sealbeachca.gov <tmoore@sealbeachca.gov>
Sent: Tue, Nov 1, 2022 4:19 pm
Subject: Stop Lampson Project

Dear Council Members,

I am writing to express my strong opposition to the high density housing development that is being considered to be built on Lampson. This project causes major concerns over the addition of multi-family housing leading to more people, significantly increase traffic congestion, noise, pollution, decrease in safety as well as a reduction in property values of the existing community. Heavy traffic on Lampson is already common during morning rush hour and critical times of the day; with an additional 240 plus high density housing units Lampson could not accommodate traffic from the additional cars. From discussions with my neighbors my opinion is shared by many families who live in our community of College Park East in Seal Beach. This development will negatively impact our neighborhood and quality of life. I urge you to disapprove and stop this plan from moving forward.

Sincerely,
Dara Baddeley

Address:
4149 Ironwood Ave.
Seal Beach, 90740

December 11, 2022

Los Alamitos Planning Commission

3191 Katella Avenue

Los Alamitos, CA 90720

RE: WestEd Development Project

To Whom It May Concern:

My wife and I, who live in College Park East, would like to express our great concern regarding the proposed project at 4665 Lampson Ave. (WestEd). While we support the need for increased housing, the proposed project, as we see it, will significantly increase traffic on Lampson and potentially increase the number of motor vehicle accidents.

As our home backs up to Lampson, we have witnessed numerous accidents on this street, at least three of them fatal. In addition, our block wall was breached when a car lost control sending pieces of block wall right up to the back of our house. At the time, we had small children. This has happened to numerous other residents along Lampson Ave. as well. We believe the expected increase in traffic will only increase the likelihood of additional accidents.

Furthermore, as proposed, the project does not include the ability to turn left upon exiting the proposed site. It is highly likely that many residents will attempt to make a U-turn at the intersection of Lampson and Heather where the accident rate, already high, can be expected to increase significantly.

Additionally, the project as proposed, does not include adequate parking for its residents and their guests. It is expected then that residents and guests will be forced to park somewhere in College Park East where the parking is already crowded.

We believe it is essential to address and remedy these issues so that the new housing doesn't result in increased traffic accidents on Lampson Ave. and street crowding in the adjacent community of College Park East.

Sincerely,



Aaron and Leslie Kern

4417 Ironwood Ave., Seal Beach, CA 90740

CITY OF LOS ALAMITOS

AFFORDABLE HOUSING UNIT APPLICATION

Development Services Department
3191 Katella Ave., Los Alamitos, CA 90720-5600
Phone: (562) 431-3538 Fax: (562) 493-0678

OWNER'S NAME AND ADDRESS

Name: Lampson Park Place, LLC

Address: 27702 Crown Valley Parkway, Suite D-4-197 Ladera Ranch, Ca. 92694

Telephone Number: (626) 710-6377 Email: matt@walbern.com

DEVELOPER'S NAME AND ADDRESS (IF DIFFERENT FROM OWNER)

Name: C& CDevelopment

Address: 14211 Yorba St., Ste. 200, Tustin, CA 92780

Telephone Number: 714-714-0600 Email: todd@c-cdev.com

AUTHORIZED AGENT'S NAME AND ADDRESS (IF DIFFERENT FROM ABOVE)

Name: Todd Cottle

Address: 14211 Yorba St., Ste. 200, Tustin, CA 92780

Telephone Number: 714-714-0600 Email: todd@c-cdev.com

LOCATION OF PROPERTY TO BE DEVELOPED

Street Address: 4665 Lampson Avenue, Los Alamitos, CA 90720

Assessor's Parcel Number: 130-012-35

Please attach proof of ownership that includes a legal description. Do not attach original documents. The City will not be responsible for their return.

PROJECT DESCRIPTION

Please use additional pages as needed to fully describe your project.

Parcel size:	2.2 Acres
Total number of units	77
Total number of market rate units:	1 Manager Unit
Total number of affordable units:	76

DEVELOPMENT INCENTIVES. Describe below all incentives or concessions the applicant request pursuant to California Government Code Section 65915. Attach additional pages as necessary to fully describe each incentive or concession.

1. See Attached Density Bonus Law Request

2.

3.

FINANCIAL ANALYSIS. Please attach a financial analysis for the project that includes:

a. Finance justification for each incentive or concession requested that demonstrates how it will hep make the project feasible.

b. A cost comparison of the project without the requested incentives or concessions and with them.

I hereby certify that the information provided in this application is to the best of my knowledge accurate and complete.

Signature

10/11/22
Date

Todd Cottle
Name (Please print)

DENSITY BONUS LAW REQUEST

Lampson Park Place
4665 Lampson Avenue
Los Alamitos, CA 90720

To: Ron Noda, Development Services Director, City of Los Alamitos

From: Scott Birkey, Cox, Castle & Nicholson LLP

Cc: Les Johnson, T&B Planning, Inc.

Date: March 30, 2023

We represent Lampson Park Place, LLC ("**Applicant**") in connection with its Lampson Park Place Project ("**Project**") located at 4665 Lampson Avenue in the City of Los Alamitos ("**City**") on APN 130-012-35. On behalf of the Applicant, we submit this Density Bonus Law Request pursuant to the State's Density Bonus Law (Government Code Section 65915) and the City's Municipal Code (Municipal Code Section 17.28.050).

Project Background

Currently, the Project site is designated "Community & Institutional/JFTB" as shown on the City's General Plan Land Use Map (Figure 3 at p. 33), and the site is zoned "C-F: Community Facilities" as shown on the City's most recent Zoning Map. We understand that the City intends to process a General Plan Amendment to re-designate the Project site as Limited Multi-Family Residential and a Zoning Map Amendment to rezone the Project site as Residential R-3.[1]

As described in more detail in the application package, the Applicant proposes to redevelop the Project site with a residential development consisting of a variety of different product types, including cluster homes, townhomes, and apartments. The unit mix would include cluster homes, townhomes, and 77 multi-family apartment units restricted to low income and with one unrestricted manager's unit. The overall density for the Project will be 20 dwelling units per acre, and the maximum building height will be 38 feet. The Project will provide approximately 21,000 sf of common open space, which includes a central 14,000 sf neighborhood open space area.

The Project will provide a total of 577 parking spaces consisting of 475 parking spaces for the cluster homes and townhomes, and 102 parking spaces for the affordable multifamily apartment homes. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue. Non-motorized circulation will include connectivity with existing sidewalks along Lampson Avenue, including signalized pedestrian connection to the south at Rose Street and Lampson Avenue, and pedestrian "paseo" connections with Arbor Park and the Arbor Dog Park to the north. Redevelopment of the

---

[1] This Density Bonus Law Request, and the analysis below regarding the Applicant's requested concessions and waivers, assumes that the development standards of the Residential R-3 Zone set forth in Section 17.08.030 of the City's Municipal Code will apply to the Project site.

Project site would require demolition of the existing 2-story 88,000 square foot office building located on the property.

Further details regarding the Project can be found in the accompanying Project applications materials.

Density Bonus Law Requests

Pursuant to Section 65915 of the Government Code and Section 17.28.050 of the City's Municipal Code, Applicant makes the following requests for the Project.

A. ***Increased Density Request***

Density Bonus Law Requirement

The State's Density Bonus Law specifies that for housing developments in which 24% or more of units in the development are low-income units, the local government must allow a 50% density bonus (Gov't Code Section 65915(f)(1).)

Request:

Because of the density authorized under the Density Bonus Law, and assuming the maximum density of 25 dwelling units per acre pursuant to the Residential R-3 Zone, the Project could obtain a density increase of 154 additional units for a total of 462 units on the site. However, the Applicant has determined that the Project can accommodate the proposed number of units based on the allowed density of the Residential R-3 zoning requirement. Therefore, at this time the Applicant is not requesting a density bonus.

B. ***Concession Requests***

Density Bonus Law Requirement

The State's Density Bonus Law specifies that for housing developments in which at least 24% of the total units are for lower income households, the local government must allow three incentives or concessions. (Gov't Code Section 65915(d)(2)(C).)

Request

The Applicant requests three concessions pursuant to the State's Density Bonus Law:

Concession #1: Reduction in Setback Distance Between Structures

Concession #2: Exception for Building Step Back Requirements

Concession #3: Reduction in Minimum Storage Space

Rationale

As to **Concession #1**, Section 17.08.030, Table 2-03 of the City's Municipal Code requires a 10-foot minimum distance between structures. Though most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances, at certain locations within the Project site plan, the setback distance is 6 feet. Meeting the required 10-foot minimum setback distance would require a significant change to the site plan and likely result in a reduction of residential

units. As such, the Applicant is requesting as Concession #1 that the setback requirement in certain locations identified on the site plan be reduced to 6 feet.

As to **Concession #2**, Section 17.08.045.A.1 of the City's Municipal Code requires that for buildings higher than two stories, the third story must have a minimum 5-foot step back from the story below to minimize building bulk and create façade articulation. This requirement appears to govern regardless of building location within a project site or surrounding land uses. We understand that City staff interpret this requirement as applying only to perimeter buildings, i.e., buildings that are located along the perimeter of a project site. Nonetheless, given the requirement's ambiguity, the Applicant is requesting as Concession #2 an exception from the required minimum 5-foot step back requirement for those structures identified on the site plan.

As to **Concession #3**, Section 17.08.030, Table 2-03, of the City's Municipal Code requires a minimum storage space in a garage or carport of 200 cubic feet per unit. For certain units within the Project, this storage space requirement will be difficult to satisfy because of limitations in garage and carport space. As such, the Applicant is requesting as Concession #3 that the minimum storage space requirement be reduced to 175 cubic feet per unit for market rate units and 50 cubic feet per unit for affordable units identified on the site plan.

C. Waiver Requests

Density Bonus Law Requirement

The State's Density Bonus Law specifies that an applicant may submit to a local government a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development providing the requisite amount of affordable housing at the densities or with the concessions permitted under the Density Bonus Law. A waiver request can be denied only if the waiver would (i) have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact; (ii) have an adverse impact on any real property that is listed in the California Register of Historical Resources; or (iii) be contrary to state or federal law. (Gov't Code Section 65915(e)(1).)

Request

The Applicant requests one waiver pursuant to the State's Density Bonus Law:

Waiver #1: Reduced Common Area Requirement

Rationale

Section 17.08.030, Table 2-03 of the City's Municipal Code requires a minimum 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, but the Project will not be able to comply with the common area requirement. This is because of City requests that the Applicant dedicate the northerly 10 feet strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of property. If this area is dedicated to the City, then the Project will be unable to comply with the common area requirement because compliance with this requirement would physically preclude construction of the Project at the densities allowed and with the concessions described above.

Therefore, the Applicant is requesting as a waiver a reduction in the common area requirement of150 square foot per unit.

D. *Parking Reduction Request*

Density Bonus Law Requirement

The State's Density Bonus Law specifies that for housing developments that qualify for a density bonus the local government shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. (Gov't Code Section 65915(p)(1).)

Request

The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project, which is significantly more than the number of parking spaces that would be required pursuant to the State's Density Bonus Law.

Rationale

Pursuant to the State's Density Bonus Law, the following number of parking spaces would be required for the Project:

- 36 one-bedroom units x 1.0 onsite parking spaces = 36 spaces
- 122 two- to three-bedroom units x 1.5 onsite parking spaces = 183 spaces
- 88 four-bedroom units x 2.5 onsite parking spaces = 220 spaces
- Total = 439 spaces

However, the Project proposes to provide more parking than is required by the State's Density Bonus Law. Instead of 439 parking spaces, the Project will provide a total of 577 parking spaces, which is approximately 2.35 spaces per unit, and is 138 parking spaces more than would be required for the Project.

E. *Project Confirmations*

In addition to the concession, waiver, and parking relief identified below, we wish to confirm certain understandings with the City as to the Project's compliance with other specified development standards to clarify any ambiguity and ensure a common understanding.

Height Requirements

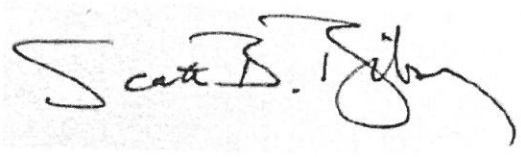
Sections 17.08.030 and 17.16.040 of the City's Municipal Code govern maximum building height, height measurement, and exceptions. Building heights for the Project are expected to exceed the Code's 35-foot maximum building height. However, this is due to the placement of HVAC equipment in the roof structure (attic space). The Applicant understands that this qualifies as an allowed projection, which can project up to 6 feet above the maximum building height pursuant to Section 17.16.040.B of the City's Municipal Code. The Applicant estimates that the maximum building height for the Project will be approximately 38 feet with the addition of this HVAC equipment in the roof structure. The Applicant

requests that the City confirms the Project's building height is consistent with the City's Code requirements and that no relief from these requirements is necessary.

* * *

Please do not hesitate to contact the Applicant or me should you have questions regarding any of the above. We look forward to working with you on the Project.

Best regards,



Scott B. Birkey
Cox Castle & Nicholson LLP

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