



APPLICATIONS:

APPEAL APPLICATION

Instructions and Checklist

Related Code Section: Refer to the City Planning case determination to identify the Zone Code section for the entitlement and the appeal procedure.

Purpose: This application is for the appeal of Department of City Planning determinations authorized by the Los Angeles Municipal Code (LAMC).

A. APPELLATE BODY/CASE INFORMATION

1. APPELLATE BODY

- ☐ Area Planning Commission ☒ City Planning Commission ☒ City Council ☐ Director of Planning
☐ Zoning Administrator

Regarding Case Number: CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPPCDPMEL-SPR-PHP

Project Address: 2102-2120 S. Pacific, 116-302 E. N. Venice Blvd, 2106 -2116 S. Canal, 319 E. S. Venice

Final Date to Appeal: 08/02/2021

2. APPELLANT

Appellant Identity:
(check all that apply)

- ☐ Representative ☐ Property Owner
☐ Applicant ☐ Operator of the Use/Site

☒ Person, other than the Applicant, Owner or Operator claiming to be aggrieved
Venice Vision

☐ Person affected by the determination made by the **Department of Building and Safety**

- ☐ Representative ☐ Owner ☐ Aggrieved Party
☐ Applicant ☐ Operator

3. APPELLANT INFORMATION

Appellant's Name: Venice Vision

Company/Organization: _____

Mailing Address: P.O. Box 525

City: Venice State: CA Zip: 90294

Telephone: (415) 640-4291 E-mail: fbv@fightbackvenice.org

a. Is the appeal being filed on your behalf or on behalf of another party, organization or company?

☒ Self ☐ Other: _____

b. Is the appeal being filed to support the original applicant's position? ☐ Yes ☒ No

4. REPRESENTATIVE/AGENT INFORMATION

Representative/Agent name (if applicable): Jamie T. Hall

Company: Channel Law Group, LLP

Mailing Address: 8383 Wilshire Blvd., Suite 750

City: Beverly Hills State: CA Zip: 90211

Telephone: (310) 982-1760 E-mail: jamie.hall@channellawgroup.com

5. JUSTIFICATION/REASON FOR APPEAL

a. Is the entire decision, or only parts of it being appealed? ☐ Entire ☒ Part

b. Are specific conditions of approval being appealed? ☐ Yes ☒ No

If Yes, list the condition number(s) here: Note: Appealing following parts of determination: SPP-CDP-MEL-SPR portion.

Attach a separate sheet providing your reasons for the appeal. Your reason must state:

- ☒ The reason for the appeal ☒ How you are aggrieved by the decision
☒ Specifically the points at issue ☒ Why you believe the decision-maker erred or abused their discretion

6. APPLICANT'S AFFIDAVIT

I certify that the statements contained in this application are complete and true:

Appellant Signature:  Date: 08/02/2021

GENERAL APPEAL FILING REQUIREMENTS

B. ALL CASES REQUIRE THE FOLLOWING ITEMS - SEE THE ADDITIONAL INSTRUCTIONS FOR SPECIFIC CASE TYPES

1. Appeal Documents

a. **Three (3) sets** - The following documents are required for each appeal filed (1 original and 2 duplicates)
Each case being appealed is required to provide three (3) sets of the listed documents.

- ☒ Appeal Application (form CP-7769)
☒ Justification/Reason for Appeal
☒ Copies of Original Determination Letter

b. Electronic Copy

- ☒ Provide an electronic copy of your appeal documents on a flash drive (planning staff will upload materials during filing and return the flash drive to you) or a CD (which will remain in the file). The following items must be saved as individual PDFs and labeled accordingly (e.g. "Appeal Form.pdf", "Justification/Reason Statement.pdf", or "Original Determination Letter.pdf" etc.). No file should exceed 9.8 MB in size.

c. Appeal Fee

- ☐ Original Applicant - A fee equal to 85% of the original application fee, provide a copy of the original application receipt(s) to calculate the fee per LAMC Section 19.01B 1.
☒ Aggrieved Party - The fee charged shall be in accordance with the LAMC Section 19.01B 1.

d. Notice Requirement

- ☐ Mailing List - All appeals require noticing per the applicable LAMC section(s). Original Applicants must provide noticing per the LAMC
☐ Mailing Fee - The appeal notice mailing fee is paid by the project applicant, payment is made to the City Planning's mailing contractor (BTC), a copy of the receipt must be submitted as proof of payment.

SPECIFIC CASE TYPES - APPEAL FILING INFORMATION

C. DENSITY BONUS / TRANSIT ORIENTED COMMUNITES (TOC)

1. Density Bonus/TOC

Appeal procedures for Density Bonus/TOC per LAMC Section 12.22.A 25 (g) f.

NOTE:

- Density Bonus/TOC cases, only the *on menu or additional incentives* items can be appealed.
- Appeals of Density Bonus/TOC cases can only be filed by adjacent owners or tenants (must have documentation), and always only appealable to the Citywide Planning Commission.
- ☐ Provide documentation to confirm adjacent owner or tenant status, i.e., a lease agreement, rent receipt, utility bill, property tax bill, ZIMAS, drivers license, bill statement etc.

D. WAIVER OF DEDICATION AND OR IMPROVEMENT

Appeal procedure for Waiver of Dedication or Improvement per LAMC Section 12.37 I.

NOTE:

- Waivers for By-Right Projects, can only be appealed by the owner.
- When a Waiver is on appeal and is part of a master land use application request or subdivider's statement for a project, the applicant may appeal pursuant to the procedures that governs the entitlement.

E. TENTATIVE TRACT/VESTING

1. Tentative Tract/Vesting - Appeal procedure for Tentative Tract / Vesting application per LAMC Section 17.54 A.

NOTE: Appeals to the City Council from a determination on a Tentative Tract (TT or VTT) by the Area or City Planning Commission must be filed within 10 days of the date of the written determination of said Commission.

- ☒ Provide a copy of the written determination letter from Commission.

F. BUILDING AND SAFETY DETERMINATION

- ☐ **1.** Appeal of the Department of Building and Safety determination, per LAMC 12.26 K 1, an appellant is considered the **Original Applicant** and must provide noticing and pay mailing fees.

a. Appeal Fee

- ☐ Original Applicant - The fee charged shall be in accordance with LAMC Section 19.01B 2, as stated in the Building and Safety determination letter, plus all surcharges. (the fee specified in Table 4-A, Section 98.0403.2 of the City of Los Angeles Building Code)

b. Notice Requirement

- ☐ Mailing Fee - The applicant must pay mailing fees to City Planning's mailing contractor (BTC) and submit a copy of receipt as proof of payment.

- ☐ **2.** Appeal of the Director of City Planning determination per LAMC Section 12.26 K 6, an applicant or any other aggrieved person may file an appeal, and is appealable to the Area Planning Commission or Citywide Planning Commission as noted in the determination.

a. Appeal Fee

- ☐ Original Applicant - The fee charged shall be in accordance with the LAMC Section 19.01 B 1 a.

b. Notice Requirement

- ☐ Mailing List - The appeal notification requirements per LAMC Section 12.26 K 7 apply.
- ☐ Mailing Fees - The appeal notice mailing fee is made to City Planning's mailing contractor (BTC), a copy of receipt must be submitted as proof of payment.

G. NUISANCE ABATEMENT

1. Nuisance Abatement - Appeal procedure for Nuisance Abatement per LAMC Section 12.27.1 C 4

NOTE:

- Nuisance Abatement is only appealable to the City Council.

a. Appeal Fee

- ☐ Aggrieved Party the fee charged shall be in accordance with the LAMC Section 19.01 B 1.

2. Plan Approval/Compliance Review

Appeal procedure for Nuisance Abatement Plan Approval/Compliance Review per LAMC Section 12.27.1 C 4.

a. Appeal Fee

- ☐ Compliance Review - The fee charged shall be in accordance with the LAMC Section 19.01 B.
- ☐ Modification - The fee shall be in accordance with the LAMC Section 19.01 B.

NOTES

A Certified Neighborhood Council (CNC) or a person identified as a member of a CNC or as representing the CNC may not file an appeal on behalf of the Neighborhood Council; persons affiliated with a CNC may only file as an individual on behalf of self.

Please note that the appellate body must act on your appeal within a time period specified in the Section(s) of the Los Angeles Municipal Code (LAMC) pertaining to the type of appeal being filed. The Department of City Planning will make its best efforts to have appeals scheduled prior to the appellate body's last day to act in order to provide due process to the appellant. If the appellate body is unable to come to a consensus or is unable to hear and consider the appeal prior to the last day to act, the appeal is automatically deemed denied, and the original decision will stand. The last day to act as defined in the LAMC may only be extended if formally agreed upon by the applicant.

| This Section for City Planning Staff Use Only | | |
|---|---------------------------------------|---|
| Base Fee: | Reviewed & Accepted by (DSC Planner): | Date: |
| Receipt No: | Deemed Complete by (Project Planner): | Date: |
| <input type="checkbox"/> Determination authority notified | | <input type="checkbox"/> Original receipt and BTC receipt (if original applicant) |

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August 2, 2021

VIA ELECTRONIC UPLOAD

City of Los Angeles
Dept. of City Planning
221 N. Figueroa St., Suite 1350
Los Angeles, CA 90012

Re: Justifications of Appeal of Reese Davidson Project (CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPPCDP- MEL-SPR-PHP; ENV-20186667-SE)

To Whom It May Concern:

This firm represents Venice Vision ("Appellant" or "Association"). The Association is an organization dedicated to the protection of both the community and the environment in Los Angeles and the Venice area. On or about May 27, 2021 the City Planning Commission ("CPC" or "Commission") issued a Letter of Determination on July 13, 2021 approving the certain entitlements¹ for the Reese Davidson Project ("Project"). This letter outlines the justifications for appeal² for the entitlements, determinations and findings that were approved or recommended for approval by the Commission.

¹ The applicant has sought the following entitlements: (1) General Plan Amendment, (2) Vesting Zone and Height District Change, (3) Specific Plan Amendment, (4) Project Permit Compliance Review, (5) Coastal Development Permit, (6) Mello Act Compliance Review, and (7) Site Plan Review. The Commission also adopted Conditions of Approval and Findings for the Project. The Commission also determined that the Project was statutorily exempt from CEQA. Appellant appeals all of the findings, determinations, recommendations, approvals and conditions adopted by the Commission. Appellant previously appealed the Vesting Tentative Tract approval for the Project.

² Association also appeals the statutory exemption for the Project pursuant to Public Resources Code Section 21151(c).² PRA section 21151(c) states as follows: "If a nonelected decisionmaking body of a local lead agency certifies an environmental impact report, approves a negative declaration or mitigated negative declaration, or determines that a project is not subject to this division, that certification, approval, or determination may be appealed to the agency's elected decisionmaking body, if any."

The Association brings this appeal because the Association and its members have a direct and substantial beneficial interest in ensuring that City complies with laws relating to environmental protection. Further, the Association and its members are adversely affected by City's failure to comply with CEQA and planning and zoning law in approving the Project. The Association and its members' safety and environmental interests are directly and adversely affected by the City's approval of the Project.

1. The City Failed to Provide a Fair Hearing At Both Advisory Agency and City Planning Commission Levels, and Violated the Brown Act At The City Planning Commission Meeting.

a. The City Denied A Fair Hearing Before By Refusing To Produce Public Records Appellant Needs To Support Its Environmental Objections To The Project

The City issued a Notice of Preparation ("NOP") for the Project under CEQA and was in the process of preparing an Environmental Impact Report ("EIR"). A detailed Initial Study was conducted which revealed the potential for significant environmental impacts to a number of environmental resources categories. Consultants were hired to conduct environmental analysis for the Project. However, the City abandoned these efforts to comply with CEQA, contending instead that the Project is statutorily exempt. As explained below, the Subdivision Map Act has its own independent requirement to analyze a project's environmental impacts. Appellant has sought the complete case file and public records (including e-mails and other correspondence) related to the abandoned EIR, but the City has refused to provide many of these documents even though they are clearly relevant to the environmental inquiry mandated by the Subdivision Map Act. As a result, the City has denied Appellant a fair hearing pursuant to CCP §1094.5 The procedural due process right to an opportunity to be heard has been interpreted to encompass not only the right to a public hearing, but also the right to a fair hearing. *Nightlife Partners, Ltd. V. City of Beverly Hills* (2003) 108 Cal.App.4th 81, 90. Fair hearing requirements include unbiased reviewers and an opportunity to review the evidence considered by the agency and to be heard.

Additionally, the City made false and misleading statements regarding submissions in support of and opposition to Project in both absolute and relative terms (even though Appellant had alerted staff to this very issue previously). The City also made false and misleading statements regarding findings by licensed architects engaged by the City to evaluate the Project under the PVP program. Both the City and developer provided false and misleading information regarding the housing mix for the Project. And both the City and the developer made false and misleading representations regarding the type and amount of parking to be provided in a parking tower under development by the Los Angeles Department of Transportation, while affirmatively denying the public an opportunity to be heard on the parking tower.

The presentation of false and misleading information to the City Planning Commission and the public resulted in Appellant be denied a fair hearing.

b. The City Planning Commission Hearing Violated the Brown Act

The City has violated the Ralph M. Brown Act on May 27, 2021 when the City Planning Commission acted on Venice Vision's Appeal. The City Planning Commissioners failed to leave

their electronic camera turned on at all times and failed to remain on camera to enable the public to observe all Commissioners receiving factual information necessary for them to make an informed decision regarding the Project. The failure of all Planning Commissioners, and at times, even a quorum of Commissioners, to simulate an in-person meeting, allow the public to observe them and objectively establish their electronic presence in the meeting, violated Government Code section 54953 as applied by the Governor's emergency orders related to COVID-19 virtual meetings. Further, it appears that certain Commissioners failed to disclose conflicts that may have made it improper for them to participate in the hearing.

2. The Project is Inconsistent with the General and Specific Plan

- a. The City's Failure To First Consider The Legislative Changes Required The Entitlements To Be Denied Advisory Agency; Conditional Approval Was Ultra Vires.

The Project Permit Compliance Review requires the City to determine that the proposed project complies with the applicable Specific Plan. Further, the Site Plan Review requires the City to determine that the project is in "substantial compliance with the purposes, intent and provisions of the General Plan, applicable community plan and any applicable specific plan." The Commission erred when it determined that consistency findings could be made for the Project.

The approvals issued for the Project state that the Open Space land use designation and zoning of OS-1XL-O do not permit the development of any kind of housing project, including a Supportive Housing project on the subject parcels of land. Thus, the City has conceded that it was required to Project Permit Compliance Review and Site Plan Review because the project's land use and proposed improvement cannot be found consistent with applicable general plan and specific plans.

The list of requested entitlements is admission of what City laws the Applicant seeks to modify to force the City's planning process to conform to the Applicant's preferences. In other words, the Applicant seeks extraordinary modifications of basic planning and zoning laws instead of proposing a development that already complies with the basic general plan and zoning requirements.

Having conceded that the project as proposed cannot be found to be consistent with applicable general plans and specific plans, the Commission approved the Project Permit Compliance Review and Site Plan Review anyway because the applicant proposed to legislative amendments to alter the General Plan, Specific Plan and Vesting Zone and Height District Changes. But the City has the process exactly backwards. The Applicant is required to first apply this large list to discretionary legislative changes to the City's fundamental plans and the City is mandated by state law to conduct a good faith public outreach and public participation in conjunction with the general plan amendment planning process. If and only if the City Council exercises its legislative powers to make all of the requested changes, taking into account the general plan amendment outreach and participation, would it be appropriate for the Applicant to seek a hearing on the Site Plan Review and Project Permit Compliance Review as proposed to be consistent with the legislative decisions made by City Council.

The City and Applicant presume that by merely asking for all of these major changes to the City General Plans and implementing Specific Plans, that the approvals of the Commission may presume the City Council will approve all the requested changes. This process improperly purports to foreclose the City Council from approving anything other than the Applicant's requested general plan and specific plan changes.

b. The City is Engaged in Spot Zoning

The Project is not consistent with the current General Plan in numerous ways. It is not consistent with the land use designation for the site as Open Space, or the Venice Community Plan, or the Venice Coastal Land Use Plan. All of these plans do not permit the Project as proposed. This designation was enacted into the Venice Community Plan Map for a reason. It preserves a vital public facility that supports local and regional recreation opportunities at the Pacific Ocean and Venice Beach. The land use designation of Open Space is one of the most restrictive land use designations in the City. The land use designation is intended to avoid the precise thing the Council Office and the Applicant propose to do: hand the beneficial use of an Open Space public facility over to a private firm. Thus, the Project proposed is fundamentally inconsistent with the General Plan land use designation, and no authority exists for the City to approve a Project Permit Compliance Review and Site Plan Review until there is a lawful general plan amendment process that would change the City's fundamental planning policies to permit this currently illegal project.

In order to force the City's fundamental planning documents to conform to the extremely inconsistent project proposed, the Applicant and Council Office propose to simply amend the City's General Plan in numerous places to simply authorize the project anyway. In essence, the Applicant and Council Office seek to authorize a spot zone where inconsistent land uses, unit density, floor area, building height and intensity, deficient parking, and substandard beach access facilities will be inflicted upon the public.

But the City of Los Angeles lacks the authority to process a single project general plan amendment. Therefore, even if the City wanted to process a single project general plan amendment, it lacks the authority to do so.

Los Angeles City Charter, Section 555 provides:

"The General Plan may be amended in its entirety, by subject elements or parts of subject elements, or by geographic areas, provided that the part or area involved has significant social, economic or physical identity." (Emphasis added.)

A City Charter permits all municipal power except those expressly limited. *Domar Electric, Inc. v. City of Los Angeles* (1994) 9 Cal.4th 161, 170. The requirement that the geographic area involved in a proposed general plan amendment be one of "significant social, economic or physical identity" is an express limitation on the City's power to initiate a general plan amendment. It is an instruction that the amendment process, while not including the entire City, must include a significant chunk of the City to avoid piecemeal planning and spot zoning. In other words, the City Charter limitation expressly prohibits that which the Applicant purports to apply for.

c. The Findings Adopted by the CPC Violate The Original Engagement Agreement With The City.

The project was authorized by the City Council on the condition that it comply with the Venice Coastal Zone Specific Plan (VCZSP). It does not. In fact, the applicant requested that the City go to the greatest length imaginable—Plan amendments to eliminate Dual Coastal Zone protected Open Space, for a non coastal-dependent, non coastal-related use. In addition, extensive other major amendments are required for all of the applicable Plans in order for the project to be in compliance with them. The VCZSP and certified Venice Land Use Plan (LUP) have never been amended since inception. There have been very, very few VCZSP exceptions approved since its inception and there have been none approved for the LUP. That is because strict compliance is necessary in order to protect the Venice Coastal Zone, and the proposed amendments are a significant violation of Chapter 3 of the Coastal Act, which requires protection of existing community character and Special Coastal Communities such as Venice.

Amending all of the Plans to make one project exempt from all of the main regulations that apply to all other projects violates the principles of the City, violates the intent of all applicable Plans, and makes a mockery of the entire land use process. Such amendments to the City's Plans are "spot zoning" and must not be allowed. A Finding that is dependent on such dramatic and damaging amendments is the same thing as a Finding that cannot be made. These extensive amendments show that the proposed project doesn't even come close to meeting the existing Plans and in fact requires them to be turned on their heads.

3. The Project is Not Consistent with Public Necessity, Convenience, General Welfare and Good Zoning Practice; The Project Does Not Conform to the California Coastal Act of 1976

The Determination Letter issued by the City indicates that the Vesting Zone Change, Height District Change and "T" and "Q" Classification Findings required the City to conclude that the "Project is "consistent with public necessity, convenience, general welfare and good zoning practice" (page F-23). The same findings are required for the proposed Specific Plan Amendment (see page F-26). The Determination Letter also notes that the City is required to coastal development findings (see page F-34). Specifically, the City must find that the development is in conformity with Chapter 3 of the California Coastal Act of 1976. As explained below, the Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

a. The Project Is Not Consistent With The General Plan Open Space And Conservation Element, Or The Venice Community Plan Open Space Provisions.

The Venice median is located on Open Space in the Dual Permit Jurisdiction Coastal Zone, just one block from the beach and the center of the Venice Boardwalk. The Venice community—including the beach, the Boardwalk, the Venice Canals, and the eclectic architectural styles of the neighborhoods—is one of the most popular visitor destinations in California with 16 million people visiting annually (See Venice Chamber of Commerce website. 2017), and thus the land use and character of the Venice community are matters of statewide significance.

A change of zoning from Open Space to a non coastal-related or non coastal-dependent zone is inconsistent with the certified Land Use Plan, which is a part of the General Plan's Venice Community Plan (VCP).

In fact, the General Plan and VCP do not even contemplate the possibility of an elimination of Open Space. The General Plan's Open Space Element, Policy 2 states "There is a deficiency of Open Space in the City," and Policy 6.1.1 requires protection of "significant remaining open spaces for resource protection and mitigation of environmental hazards, such as flooding..." Also, recent government studies have documented that Venice in particular has a significant deficit with respect to parks and other types of Open Space.

The VCP has an objective to preserve existing Open Space resources and where possible to develop new Open Space, as the purpose of Open Space is for the preservation of natural resources, managed production of resources and wildlife corridors, outdoor recreation, connecting neighborhoods and people, and the protection of life and property due to natural hazards.

The VCP states that communities must have sufficient Open Space in order to balance new urban development in the community, in order to serve the recreational, environmental, health and safety needs of the community, and to protect environmental and aesthetic resources. The VCP states that land designated as Open Space represents only 16% of the Venice Community Plan area, and includes the beach, the canals, Ballona Lagoon and the esplanades, the Venice Blvd median, and the park and that the City should preserve facilities and park space by designating City recreation and park facilities as Open Space.

The VCP directs that Open Space function in one or more of the following ways: recreational and education opportunities, scenic, cultural and historic value, public health and safety, preservation and creation of community identity, rights of way for utilities and transportation facilities, preservation of physical resources or ecologically important areas, and preservation of physical resources.

For these reasons, Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

b. The Project's Design and Improvements are Inconsistent with the Public Access Policies of the Coastal Act and Certified LUP

The Project will not maintain and even harms existing Public Access. The project does not comply with the many Public Access provisions in the certified LUP. For example, the Finding does not consider the impact of the design aspect for the beach parking to be automated, which will severely slow and even discourage beach parking at this location. The Commission failed to consider the loss of beach parking during construction. Also, Public Access for Canal boating is a key provision of the Plans and it appears from the current project plans that canal boating will be less accessible. To restrict Access in these ways, especially for the purposes of a non-coastal-dependent or non-coastal related use is unacceptable and in violation of the LUP.

In addition, regarding Public Access, the Venice Blvd median site was specifically intended and planned for the much-needed expansion of beach parking.

Venice Coastal Zone Specific Plan Ordinance Section 14. Venice Coastal Parking Impact Trust Fund (“Fund”) states: “The Fund shall be used for the purpose of accepting and retaining funds collected by the Department of Transportation pursuant to this Specific Plan for any expenditure only for parking mitigation measures in, adjacent to or serving the Beach Impact Zone. Those improvements shall include but not be limited to: Venice Blvd median public parking facility improvement, including land acquisition and construction.”

The LUP Parking Policy II.A.1. General states: “It is the policy of the City to provide increased parking opportunities for both visitors and residents of Venice, and improve summer weekend conditions with respect to Venice Beach parking and traffic control.”

The LUP Policy II.A.2. Expansion of Public Beach Parking Supply states: “The construction of new public parking facilities should be implemented, as well as maximizing the use of existing ones by restriping existing parking lots or converting them to multi-level structures where consistent with other Coastal Act policies...the established Venice Coastal Parking Impact Trust Fund, into which in-lieu parking fees shall be paid, will continue to be utilized for expenditure on improvement and development of public parking facilities that improve public access to the Venice Coastal Zone as specified in the LUP.”

The Venice Median site was also specifically intended for a park. The LUP Coastal Waterways Policy III.D.6. Venice Canals Parks states: “New parks, with parking to the rear, shall be considered on some of the City-owned lots on the canals, provided that such facilities are compatible with the existing residential use of the area.”

Coastal Act Section 30224 states: “Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land;” It is not clear from the Finding that the Advisory Agency has considered LUP Policy Coastal Waterways Policy III.D.2. Boating Use of Canals, which states: “...A public boat launch facility was built as part of the Venice Canals Rehabilitation Project at the Grand Canal and North Venice Blvd. The City shall protect the public’s ability to access the canals by boat by maintaining public access to the Grand Canal public boat launch. The facility shall provide adequate on-site public parking consistent with the sizes and types of boats to be launched and frequency of launching pursuant to the County Department of Small Craft Harbors standards.”

For these reasons, Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

c. The Site is Not Physically Suitable for the Proposed Type of Development

The location is NOT physically suitable for the proposed type of development. The design and improvement of the proposed project is dependent on a 40-lot consolidation (called “merger of 40 existing lots” in the VTT determination). However, the specific provisions in both the VCZSP and LUP indicate that lot consolidation of more than 3 lots is *not allowed* anywhere

in Venice, thus making the proposed project grossly inconsistent with the entire Venice Coastal Zone.

The City of Los Angeles, the California Coastal Commission and other authorities, including government engineers, predict that sea level rise and tsunami hazards pose significant threats to the Venice median and surrounding area, and the Venice median, along with other lower-lying areas of Venice, is projected to be underwater in less than 50 years, and in fact due to the impacts of tides on these channels and because the area is already a hazardous area due to its current potential for flooding, the Venice median area adjacent to the canals could be underwater in 20 years or less.

There is no evidence or mention of the department studies finding that all areas of the existing infrastructure are adequate to support the new development. There is only mention of the analysis of sewer capacity.

The impact on the delicate and failing Venice Canals infrastructure has not been considered. The City must consider the state of disrepair and existing leakage issues in making any findings on the impact on the surrounding infrastructure.

The proposed Plan amendments will not apply to several areas of the Plans, such as the protection of Special Coastal Communities and the protection of visual resources and thus those provisions of the Coastal Act and certified LUP must be considered with respect to whether this location is physically suitable for the proposed development.

For these reasons, Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

d. The Project Is Incompatible with the Surrounding Area

The Project is incompatible with the surrounding low-rise residential area. The Project's character, mass and scale are grossly incompatible with the surrounding area as well as with the entire Venice Coastal Zone. Notably, a 59' campanile is entirely inconsistent with the height of most adjacent buildings. The project site is not physically suitable for the proposed density of development as evidenced by FAR and height of the Project.

As the VCZSP Ordinance states, it supersedes all other LAMC regulations (whenever the VCZSP is silent, the LAMC regulations apply). In addition, in the Coastal Zone, the certified LUP takes precedence over both the uncertified VCZSP and LAMC, and thus its specific provisions requiring compatibility of new development with the surrounding neighborhood must be followed, including an analysis of the impact on character of the subdivision of lots.

Development must take into account neighborhood character and should be reflective of the development patterns that already exist, which are a part of a neighborhood's character. The Project will cause a break in the pattern of development. The LUP states, "The subdivision patterns in Venice are unique, the layout of which still reflects the original canal system and rail lines." Venice is known for its unique subdivisions and pattern of development, which makes the existing subdivision patterns a part of its character. The negative precedent of this subdivision

would significantly harm Venice's character, mass and scale.

For these reasons, Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

e. The Site is Not Suitable for the Proposed Density of Development

The location of the site is not physically suitable for the increased density proposed. The City of Los Angeles, the California Coastal Commission and other authorities, including government engineers, predict that sea level rise and tsunami hazards pose significant threats to the Venice median and surrounding area. The Venice median, along with other lower-lying areas of Venice, is projected to be underwater in less than 50 years, and in fact due to the impacts of tides on these channels and because the area is already a hazardous area due to its current potential for flooding, the Venice median area adjacent to the canals could be underwater in 20 years or less. The Venice Blvd corridor is Venice's primary rescue and emergency escape artery, especially in case of tsunami. In addition, the Coastal Commission has determined that this site is a flood hazard zone (see below).

In addition, the project site is not physically suitable for the proposed use as it contains physical hazards that render residential uses inappropriate. These include location within: a methane zone³, a liquefaction zone, and a tsunami inundation zone.⁴ The project site is also anticipated to be subject to flood risk due to sea level rise.⁵ The project site is also unsuitable due to the hazards presented by left-turn only site access/egress necessitated by the one-way street system adjacent to the project site.

For these reasons, the Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

f. The Design of the Project and Proposed Improvements are Likely to Cause Serious Public Health Problems

Construction of such a massive structure in a flood hazard and tsunami zone is likely to cause serious public health problems. The site is specifically currently designated as low or no density in consideration of these hazards. In the event of a flood or tsunami event, the open space is an area intended to accept inundation to help protect the lives and property of adjoining

³ Zimas and <https://www.geoforward.com/wp-content/uploads/Methane-Zone-Map-Los-Angeles-by-Geo-Forward-Inc.-1.pdf> See Division 71 of the Los Angeles Building Codes for mitigation and testing requirements for projects in the methane zone: https://up.codes/viewer/los_angeles/ca-building-code-2016/chapter/new_71/methane-seepage-regulations#new_91.7103 or City Ordinance No. 17590: https://ladbs.org/docs/default-source/publications/ordinances/methane-code---ordinance-no-17590.pdf?sfvrsn=d8eeb53_10

⁴ Zimas

⁵ Pacific Institute: https://pacinst.org/reports/sea_level_rise/hazmaps/Venice.pdf See also Venice Sea Level Rise Vulnerability Assessment by Moffat & Nicol (May 2018): https://planning.lacity.org/odocument/83cf6597-25f1-4fd7-8124-dcd015000d82/venice_coastal_zone_slr_vulnerability_assessment_-_nov._2018_copy.pdf

residential areas.

The Open Space and Conservation Element of the General Plan states that “As established by the State legislature, “open space” is defined at a broader level than the traditional zones that have been used by the City. It encompasses both publicly- and privately-owned properties that are unimproved and used for the preservation of natural resources, managed production of resources, outdoor recreation, and protection of life and property due to natural hazards.”

The VCP states that one of the functions of Open Space is to protect public health and safety. It also says that the VCP’s Objective 5-1 is to preserve existing open space resources and "where possible develop new Open Space."

These provisions of the General Plan and VCP are of course not proposed for amendment by the project applicant and the project must be evaluated with respect to conformance with them.

The City failed to adequately consider the fact that the Project is located in a flood hazard and tsunami inundation zone. As evidenced by recent permit decisions, the California Coastal Commission considers the area a flood hazard zone. As per the following analysis by the California Coastal Commission on the same location, if this project is located in a flood hazard zone and tsunami zone there are hazards and risks that are likely to cause serious public health problems within the life of this project.

Elimination of Open Space on the Venice median could amplify the impact of a tsunami and other flooding events on surrounding structures, including the historic Venice Canals, by impeding, deflecting or otherwise redirecting flood waters, while significantly impeding escape and evacuation.

Findings for Coastal Commission case A-5-VEN-18-0049, located on the Venice Canals north of Washington Blvd, similar to this proposed project:

“Coastal Act Section 30253, Minimization of Adverse Impacts, states, in part:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.”

On November 7, 2018, the Commission adopted a science update to its Sea Level Rise Policy Guidance. This guidance document serves as Interpretive Guidelines to help ensure that projects are designed and built in a way that minimize risks to the development associated with SLR and avoid related impacts to coastal resources. These guidelines state, “to comply with Coastal Act Section 30253 or the equivalent LCP section, projects will need to be planned, located, designed, and engineered for the changing water levels and associated impacts that might occur over the life of the development.”

The proposed development is located adjacent to the tidally influenced Venice canal system, which is mechanically controlled via a tide gate system. The communities surrounding the canals, identified as the Venice Canals in the certified LUP, are low-lying and flood prone under existing conditions. These tide gates limit the potential for flooding and regulate tidal flushing in the Ballona Lagoon, Grand Canal, and Venice Canals. Although these tide gates afford some protection of development from flooding hazards, development in this area is not immune to hazards. For example, the canal area exists at a lower elevation than the surrounding area. During a storm event, rainfall from the area drains via gravity to the canals and typically drains out to the ocean at low tide. The tide gates are typically closed prior to higher-high tide events which, when coinciding with large storm events and/or potential tide gate malfunction, can lead to stormwater accumulation in the canals and flooding. Such flooding may become more prevalent as sea levels rise.

According to the City's vulnerability assessment (May 2018), which is supported by the Our Coast Our Future model (Coastal Storm Modelling System data), the subject site is one of approximately 4,000 parcels, including the surrounding walk streets and canal bridges, which are anticipated to flood particularly from exceedance of stormwater capacity and/or tide gate malfunction with 6.6-ft. of sea level rise. Under a medium-high risk aversion scenario, a rise in sea levels of up to 6.6 feet is projected to occur between 2090 and 2100 with current development and emission patterns (this does not account for ice sheet loss), which is within the end of the anticipated 75-100 year life of the proposed development.

As explained in the State of California Sea Level Rise Guidance written by the Ocean Protection Council (OPC), the "risk aversion scenario" is a principle of SLR risk analysis that is used to account for variable risk tolerance for different types of development by establishing sea level rise probability thresholds for varying degrees of risk aversion. In this case, the risk aversion scenario recommended by both the Commission and OPC Guidance for residential projects is "medium-high," as it represents a scenario that is relatively high within the range of possible future sea level rise scenarios and is therefore appropriately precautionary. However, projecting sea level rise at any one location is not an exact science, and coastal areas are inherently unpredictable, especially when making predictions about conditions in 75-100 years. Although the current trend of sea level rise appears to be in the direction of more accelerated sea level rise, not less, the Commission cannot determine with absolute certainty that this house will be impacted by sea level rise-related hazards before the end of its economic life, although the current best available science indicates that some impacts are likely.

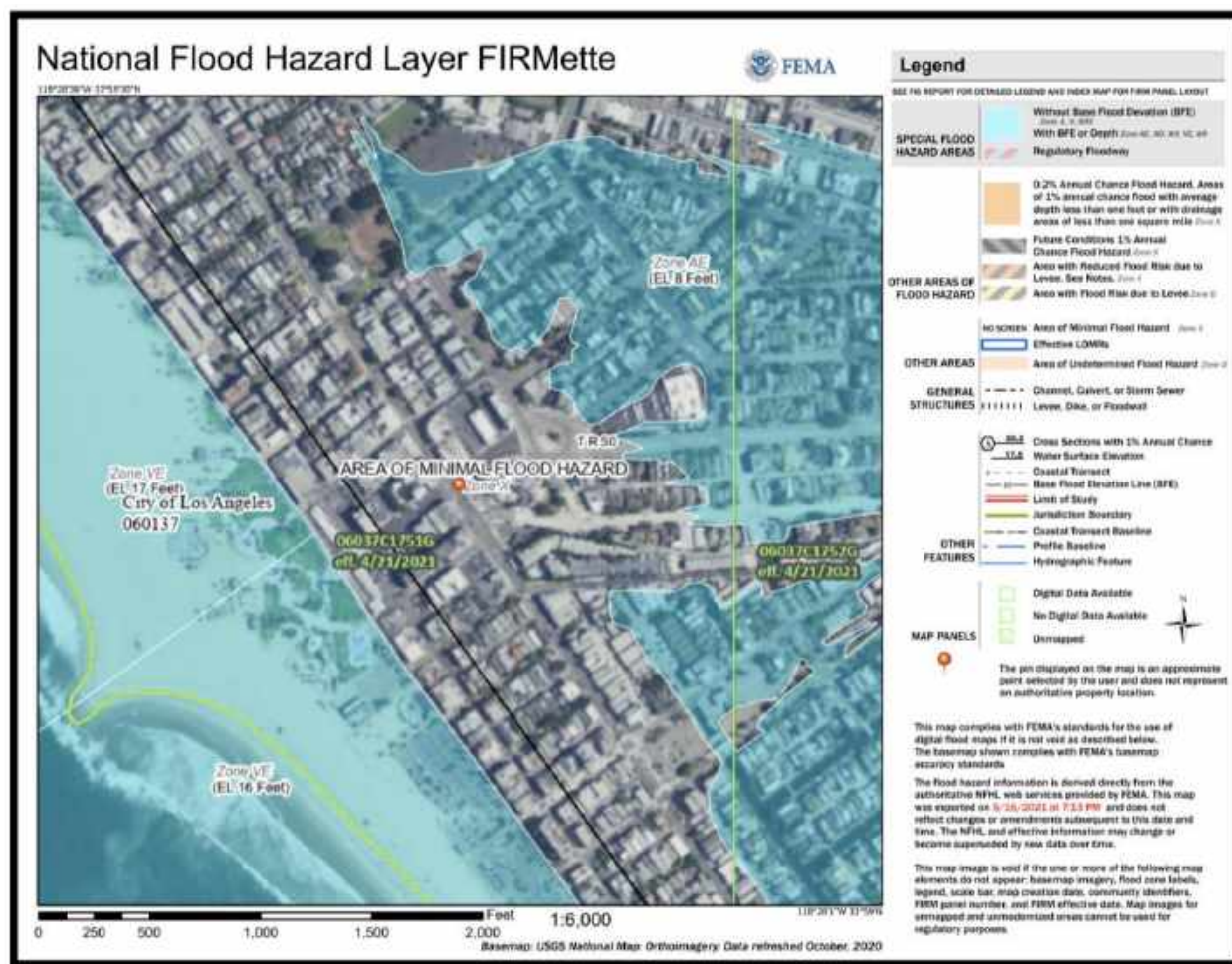
Section 30253 of the Coastal Act requires siting new development such that it minimizes risks to life and property in flood hazard areas, assures stability and structural integrity, and does not require the construction of protective devices that substantially alter natural landforms....in this case, the project site is located in a low-lying area vulnerable to flood hazards. Thus, as it relates to coastal hazards, it is appropriate to limit development and density at the project site to protect coastal resources.

Because of these reasons, the Project is likely to cause serious public health problems by exposing humans occupying the site, or off site to increased risk of death or injury from flooding and inundation risks not analyzed by the City. For these reasons, the Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

g. The City's Approvals Was Based on Erroneous, Outdated Flood Information: New FEMA Maps Showing That the Site Is in a Special Flood Hazard Area.

New FEMA flood hazard maps adopted April 21, 2021 show the building site sits squarely in a Special Flood Hazard Area designated Zone AE-EL8. See <https://pw.lacounty.gov/floodzone>.

The “AE” designation means the Project has at least a 1% chance of flooding in any given year and more than a 50% chance of flooding in the 55-year lease period for the Project. See <https://www.fema.gov/flood-maps/coastal/insurance-rate-maps>. Further, the “EL8” designation indicates a base flood elevation requirement of 8 feet. That means the first habitable floor of the project must be more than 8 feet above sea level. See <https://pocketsense.com/ae-flood-zone-5407910.html>; <https://www.fema.gov/node/404233> (defining Base Flood Elevation (“BFE”) as “[t]he elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.”



In other words, the BFE line indicates the highest predicted water level during a flood, measured by number of feet above the average high tide. In a Special Flood Hazard Area there is a 1% chance (or more) every year of flood water that equals or exceeds the BFE.

The International Building Code is now staying on top of the BFE (literally), by requiring Design Flood Elevation of +1'. Meaning, if a structure falls within a AE-EL8 zone, the number 8 indicates the BFE. With the +1' rule in effect, the bottom of the structure must be at 9' above sea level (8' + 1' = 9').

According to the applicant, the elevation of the Building Site ranges from 5.66 feet above sea level to 7.91 feet above sea level. Consequently, the first floor of the Project will have to sit at a minimum of about 1 foot to more than 3 feet above street level.

The Project developers commissioned a December 8, 2020 report by GeoSoil. Inc. purporting to address “potential costal hazards” relating to the Project. The report states that “[t]he site is not currently vulnerable to flooding” and that the “lowest finished floor (FF) elevation (not garage floor) should be 2 feet, or more, above the street flow line until reaching 11 feet NAVD88, and for street flow lines above +11 feet NAVD88 the FF elevation should be a minimum of 1 foot above the flow line.” The report also calls for waterproof retrofitting as needed in the future. This report is inaccurate and outdated, but even the Applicant’s own engineers—who directly contradict FEMA—cannot avoid acknowledging the tremendous flood risk and related costs in connection with the project, as well as acknowledging that the Project will have to be “built up” above street level to reduce flood risk. Venice homeowners have recently received government notice that they will collectively have to spend millions—and over time, potentially billions—in flood insurance to cover their beach adjacent properties.

Also, the Project application incorrectly indicates, based on outdated information, that the site is not subject to a 100-year hazard and that it “is not affected” by base flood.

Raising the first floor of the project to conform to the International Building Code will necessarily cause the project to exceed the applicable height limit. Because the project will no longer conform to the zoning and building code (because it will exceed the height limit), the City cannot make the required findings to approve the Project. The Project is not consistent with the public necessity, convenience, general welfare and good zoning practice. It is also does not confirm to the California Coastal Act of 1976.

4. Mello Act Compliance Review Was Faulty

The Determination Letter states that the Los Angeles Housing and Community Investment Department (HCIDLA) reviewed the Project for compliance with AB 2557 and the Mello Act. (page F-56). The Determination issued by HCIDLA stated that HCIDLA “reviewed data from August 2013 to August 2018” and concluded that three (3) Affordable Replacement Units needed to be replaced with one (1) unit restricted to Extremely Low-Income Household, one (1) restricted to Very Low-Income Household and one (1) restricted to Low-Income Household. *Id.* HCIDLA also concluded that one (1) market rate RSO unit was required. *However, HCIDLA did not review any data from August 2013 to August 2018.* HCIDLA’s letter states as follows: “On May 4, 2021, HCIDLA mailed a certified letter to the Property. As of May 13, 2021, HCIDLA has not received a response. Due to Owner’s inability to provide sufficient verifiable documentation, HCIDLA was unable to verify the affordability of the four (4) residential units on the Property.” The City has a duty to verify this information and has provided inadequate documentation regarding the due diligence undertaken to gather this information. Merely giving a resident nine days to respond to a certified letter is entirely inadequate – especially under the present circumstances. Moreover, the proposed “replacement”

units will be inferior to existing units on multiple objective dimensions, including size, accessibility, noise levels, safety and livability, constituting a Mello Act violation.

5. The Project is Not Eligible for an Exemption from CEQA

The proposed project includes uses that do not meet the definition of supportive housing and are thus not eligible for the Section 20180.27 exemption. These uses include:

- 2,255 square feet of retail uses,
- 810 square feet of restaurant uses with 500 square feet of outdoor Service Floor area,
- 3,155 square feet of community arts center/art studio uses (philanthropic uses).
- Parking in excess of the 61 residential spaces, including: 42 commercial spaces, 196 public spaces (replacement), 23 Beach Impact Zone (BIZ) spaces and 38 non-required spaces; and 136 bicycle parking spaces (19 short-term and 117 long-term).

Just because these uses share a site with a supportive housing function does not make them exempt from CEQA evaluation too. If they were located off-site, they would be clearly subject to CEQA review.

The City is claiming that the project is exempt under PRC Section 20180.27(b)(1) which exempts from CEQA⁶ supportive housing as follows:

(b) (1) This division does not apply to any activity approved by or carried out by the City of Los Angeles in furtherance of providing emergency shelters or supportive housing in the City of Los Angeles.

PRC Section 21080.27(a)(3) defines supportive housings for purposes of this division as follows:

(3) "Supportive housing" means supportive housing, as defined in Section 50675.14 of the Health and Safety Code, that meets the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division I of Title 7 of the Government Code or the eligibility requirements for qualified supportive housing or qualified permanent supportive housing set forth in Ordinance No. 185,489 or 185,492, and is funded, in whole or in part, by any of the following:

1. (A) The No Place Like Home Program (Part 3.9 (commencing with Section 5849.1) of Division 5 of the Welfare and Institutions Code).
2. (B) The Building Homes and Jobs Trust Fund established pursuant to Section 50470 of the Health and Safety Code.
3. (C) Measure H sales tax proceeds approved by the voters on the March 7, 2017, special election in the County of Los Angeles.

⁶ PRC § 21000 et. seq. and the CEQA Guidelines.

4. (D) General bond obligations issued pursuant to Proposition HHH, approved by the voters of the City of Los Angeles at the November 8, 2016, statewide general election.
5. (E) The City of Los Angeles Housing Impact Trust Fund.

The project applicant has indicated that project funding “has not yet been secured but will include a combination of local and state funding, as well as low income housing tax credits.”⁷ The project therefore does not currently meet the funding-based requirements for supportive housing that is eligible for a PRC Section 21080.27 exemption. The proposed project does not qualify for this exemption on the basis of the funding requirements alone.

Additionally, aspects of the Project do not meet the definition of supportive housing in Health and Safety Code Section 50675.14. Health and Safety Code Section 50675.14 defines supportive housing as follows (emphasis added):

“(a) This section shall apply only to projects funded with funds appropriated for supportive housing projects.”

(b) For purposes of this section the following terms have the following meanings:

(1) “May restrict occupancy to persons with veteran status” means that the sponsor may limit occupancy to persons meeting the criteria of paragraphs (1) and (2) of subdivision (j) with respect to either of the following:

(A) Any unit in the development that has not been previously occupied.

(B) Any unit in the development that subsequently becomes vacant, for a period of not more than 120 days following the vacancy.

(2) “Supportive housing” means housing with no limit on length of stay, that is occupied by the target population, and that is linked to onsite or offsite services that assist the supportive housing resident in retaining the housing, improving their health status, and maximizing their ability to live and, when possible, work in the community.

(3) (A) “Target population” means persons, including persons with disabilities, and families who are “homeless,” as that term is defined by Section 11302 of Title 42 of the United States Code, or who are “homeless youth,” as that term is defined by paragraph (2) of subdivision (e) of Section 12957 of the Government Code.

(B) Individuals and families currently residing in supportive housing meet the definition of “target population” if the individual or family was “homeless,” as that term is defined by Section 11302 of Title 42 of the United States Code, when approved for tenancy in the supportive housing project in which they currently reside.

⁷ Mia Lopez-Zubiri, Development Associate, Venice Community Housing (VCH), October 15, 2020.

(c) (1) The department shall ensure that at least 40 percent of the units in each development funded under the supportive housing program are targeted to one or more of the following populations:

(A) Individuals or families experiencing “chronic homelessness,” as defined by the United States Department of Housing and Urban Development’s Super Notice of Funding Availability for Continuum of Care or Collaborative Applicant Program.

(B) “Homeless youth,” as that term is defined by paragraph (2) of subdivision (e) of Section 12957 of the Government Code.

(C) Individuals exiting institutional settings, including, but not limited to, jails, hospitals, prisons, and institutes of mental disease, who were homeless when entering the institutional setting, who have a disability, and who resided in that setting for a period of not less than 15 days.

(2) The department may decrease the number of units required to meet the criteria identified in paragraph (1) if the department determines that the program is undersubscribed after issuing at least one Notice of Funding Availability.

(3) Individuals and families currently residing in supportive housing meet the qualifications under this subdivision if the individual or family met any of the criteria specified in subparagraph (A), (B), or (C) of paragraph (1) when approved for tenancy in the supportive housing project in which they currently reside.

(d) Supportive housing projects shall provide or demonstrate collaboration with programs that provide services that meet the needs of the supportive housing residents.

(e) The criteria, established by the department, for selecting supportive housing projects shall give priority to supportive housing projects that include a focus on measurable outcomes and a plan for evaluation, which evaluation shall be submitted by the borrowers, annually, to the department.

(f) The department may provide higher per-unit loan limits as reasonably necessary to provide and maintain rents that are affordable to the target population.

(g) In an evaluation or ranking of a borrower’s development and ownership experience, the department shall consider experience acquired in the prior 10 years.

(h) (1) A borrower shall, beginning the second year after supportive housing project occupancy, include the following data in their annual

report to the department. However, a borrower who submits an annual evaluation pursuant to subdivision (e) may, instead, include this information in the evaluation:

(A) The length of occupancy by each supportive housing resident for the period covered by the report and, if the resident has moved, the reason for the move and the type of housing to which the resident moved, if known.

(B) Changes in each supportive housing resident's employment status during the previous year.

(C) Changes in each supportive housing resident's source and amount of income during the previous year.

(D) The tenant's housing status prior to occupancy, including the term of the tenant's homelessness.

(2) The department shall include aggregate data with respect to the supportive housing projects described in this section in the report that it submits to the Legislature pursuant to Section 50675.12.

(i) The department shall consider, commencing in the second year of the funding, the feasibility and appropriateness of modifying its regulations to increase the use of funds by small projects. In doing this, the department shall consider its operational needs and prior history of funding supportive housing facilities.

(j) Notwithstanding any other provision of law, the sponsor of a supportive housing development may restrict occupancy to persons with veteran status if all the following conditions apply:

(1) The veterans possess significant barriers to social reintegration and employment that require specialized treatment and services that are due to a physical or mental disability, substance abuse, or the effects of long-term homelessness.

(2) The veterans are otherwise eligible to reside in an assisted unit.

(3) The sponsor also provides, or assists in providing, the specialized treatment and services." (*Amended by Stats. 2019, Ch. 507, Sec. 2. (SB 623) Effective January 1, 2020.*)

The City has failed to provide the public with the following information to document compliance with the requirements of Health and Safety Code Section 50675.14:

- That the project is funded with funds appropriated for supportive housing projects. The City needs to provide the public with a copy of the funding plan for each component of the project - the project's 2,255 square feet of retail uses; 810 square feet of restaurant uses with 500 square feet of outdoor Service Floor area; 3,155 square feet of community

arts center/art studio uses (philanthropic uses); and non-residential parking in excess of the 61 residential spaces, which should not be paid for with housing funds.

Elements of the project that are not funded with eligible housing funds and do not constitute supportive housing for the target population are separate projects that do not meet the requirements of Health and Safety Code Section 50675.14(a), are not supportive housing, and thus are not eligible for a PRC Section 20180.27 exemption.

- The City has not demonstrated to the public that the supportive housing project provides collaboration with programs that provide services that meet the needs of the supportive housing residents. The City needs to detail the supportive services that are consistent with Government Code Section 65582 that will be provided to residents and which demonstrate the housing component of the project's compliance with Health and Safety Code Section 50675.14(d). This is required by Government Code Section 65652, which specifies:

“A developer of supportive housing subject to this article shall provide the planning agency with a plan for providing supportive services, with documentation demonstrating that supportive services will be provided onsite to residents in the project, as required by Section 65651, and describing those services, which shall include all of the following:

(a) The name of the proposed entity or entities that will provide supportive services.

(b) The proposed funding source or sources for the provided onsite supportive services.

(c) Proposed staffing levels.”

(Added by Stats. 2018, Ch. 753, Sec. 3. (AB 2162) Effective January 1, 2019.)

In the absence of compliance with this requirement, no portion of the project is eligible for a Section 20180.27 exemption. This information was required to be provided to the public in advance of any hearing on the project to allow for public review and comment on eligibility for the CEQA exemption claim. In the absence of public disclosure of this information or even attachment of such essential information supporting an exemption claim, any exemption of the City asserted to date is not supported by substantial evidence.

- The City is required to specify the measurable outcomes and plan for evaluation, which evaluation shall be submitted by the borrowers, annually, to the Housing Department for review and comment by members of the public and to demonstrate the housing component of the project's compliance with Health and Safety Code Section 50675.14(e)

To be eligible for a Section 20180.27 exemption from CEQA, the project must meet the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division I of Title 7 of the Government Code or the eligibility requirements for qualified supportive housing or qualified permanent supportive housing set forth in Ordinance No. 185,489 or 185,492.

Government Code 65650 et. seq. sets out various requirements that a project must meet to be considered a “supportive housing” project. Gov. Code 65651 essentially provides a compliance checklist. As demonstrated in the following analysis, the proposed project is not a by right development, and fails to satisfy all of the requirements of Government Code Section 65651.

| THE PROJECT IS NOT IN COMPLIANCE WITH GOVERNMENT CODE SECTION 65651 | |
|--|---|
| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| (a) Supportive housing shall be a use by right in zones where multifamily and mixed uses are permitted, including nonresidential zones permitting multifamily uses, if the proposed housing development satisfies all of the following requirements: | <p>The project site is zoned OS-1XL-O and has a land use designation of Open Space. /1/</p> <p>Multifamily housing is not a permitted use within the OS zone./2/</p> <p>The project does not meet the requirements of Government Code Section 65651(a) for a use by right. Supportive housing is therefore not a use by right in this zone. The project’s compliance with (a)(1)-(6) is irrelevant given the zoning on the project site, something the applicant ignored in their analysis of compliance with Government Code Section 65651 (see /3/).</p> |
| (1) Units within the development are subject to a recorded affordability restriction for 55 years. | <p>The applicant’s attorney has represented that:</p> <p>All of the affordable units within the development will be subject to a covenant that reserves and maintains the units as restricted affordable for at least 55 years, consistent with this requirement. The covenant will be recorded after the Project closes on its construction financing, and before the certificate of occupancy is issued.” /3/</p> |
| (2) One hundred percent of the units, excluding managers’ units, within the development are restricted to lower income households and are or will be receiving public funding to ensure affordability of the housing to lower income Californians. For purposes of this paragraph, “lower income households” has the same meaning as | <p>The applicant’s attorney has represented that:</p> <p>The Project is 100-percent affordable housing and plans to provide a total of 140 residential units, which will consist of up to 136 affordable and permanent supportive housing units, along with up to four units for on-site property management staff.</p> <p>The 136 affordable units will meet the eligibility requirements for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as these units will be restricted to those whose income does not exceed the qualifying limits for low, very low, and extremely low income households. 68 of the units will be reserved for</p> |

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| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| defined in Section 50079.5 of the Health and Safety Code. | <p>formerly homeless households with an area median income (AMI) of 30 percent, while the remaining 68 affordable units will be reserved for households with an AMI of 60 percent. In the event the number of residential units change from the totals provided herein, the Project will still dedicate all of the units to lower income households, consistent with this requirement. /3/</p> <p>The applicant’s representative has failed to demonstrate that the lower income households are, or will be, receiving public funding to ensure affordability of the housing to lower income Californians. In the absence of this information, compliance with this Section (a)(2) has not been demonstrated. Specific information on project and housing funding must be made available to the public for review prior to action on the proposed project. The mere assumption that project residents will receive Section 8 rental assistance is not sufficient to establish exemption from CEQA</p> |
| (3) At least 25 percent of the units in the development or 12 units, whichever is greater, are restricted to residents in supportive housing who meet criteria of the target population. If the development consists of fewer than 12 units, then 100 percent of the units, excluding managers’ units, in the development shall be restricted to residents in supportive housing. | <p>The applicant’s attorney has represented that:</p> <p>The Project will reserve 68 of the 136 non-manager residential units (50 percent) for low-income formerly homeless households, which is above the minimum requirement of 25 percent of the total units. These formerly homeless households meet the criteria of the target population, which includes individuals and households who are homeless, or who were homeless when approved for tenancy in the supportive housing project in which they currently reside, consistent with both the California and U.S. Department of Housing and Urban Development definitions of “homeless.”¹ In the event that the number of units change from the totals provided herein, the Project will restrict at least 25 percent of the units to low-income formerly homeless households, consistent with this requirement. /3/</p> <p>These assertions are directly contradicted by information regarding the housing mix published by the City immediately following the Planning Commission hearing.</p> |
| (4) The developer | The applicant’s attorney has represented that: |

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| <p>provides the planning agency with the information required by Section 65652.</p> <p>Section 65652 states:</p> <p>A developer of supportive housing subject to this article shall provide the planning agency with a plan for providing supportive services, with documentation demonstrating that supportive services will be provided onsite to residents in the project, as required by Section 65651, and describing those services, which shall include all of the following:</p> <p>(a) The name of the proposed entity or entities that will provide supportive services.</p> <p>(b) The proposed funding source or sources for the provided onsite supportive services.</p> <p>(c) Proposed staffing levels.</p> | <p>The supportive services to be provided by the Project will satisfy the requirements of the Measure H funding program. Such supportive services will include, among others: conducting comprehensive psychosocial assessments; developing individualized case management plans; helping residents to access temporary housing, food, clothes, and other basic necessities; helping residents to obtain health, mental health, and substance abuse services, as well as medication and treatment; and helping residents to obtain income and establish healthcare benefits. These supportive services will be provided by an approved Intensive Case Management Services (“ICMS”) provider and funded with Measure H funds. The proposed staffing for the services to be provided by the Project includes four case managers, one for every 17 supportive housing units, which satisfies the Measure H requirements for staffing (i.e., a required range of one case manager for every 15 households to one case manager for every 20 households). This information will be provided to the planning agency, as required by Gov. Code Section 65651(4). /3/</p> <p>The project applicant has failed to fully provide the Plan as required by Section 65652. The name of the proposed entity or entities has not been provided. The Plan should be made available to the public prior to any action on the project. In the absence of this information, compliance with this Section (a)(4) has not been demonstrated.</p> |
| <p>(5) Nonresidential floor area shall be used for onsite supportive services in the following amounts:</p> <p>(A) For a development with 20 or fewer total units, at least 90 square feet shall be provided for onsite supportive</p> | <p>The applicant’s attorney has represented that:</p> <p>The total nonresidential floor area of the Project is estimated to be 6,905 square feet, with 685 square feet dedicated to onsite supportive services that are limited to tenant use (i.e., 9.9 percent of the total nonresidential floor area). This amount is above the 3 percent of total nonresidential floor area required under Section 65651(5). The planned 685 square feet of supportive services will be limited to tenant use, and include areas dedicated to conducting</p> |

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| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| <p>services.</p> <p>(B) For a development with more than 20 units, at least 3 percent of the total nonresidential floor area shall be provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens.</p> | <p>tenant assessments and helping tenants obtain access to other benefits and services.</p> <p>The Project also plans to include 3,155 square feet of community arts/community meeting spaces, which are anticipated to be available to both the Project’s tenants and the public. In the event any of the square footage allocations change from the calculations provided herein, the Project’s onsite supportive services will stay above the 3 percent nonresidential floor area threshold consistent with this requirement. /3/</p> <p>The applicant’s assertions are incorrect.</p> <p>First, the plans expressly provide for 104,159 sq. ft. of floor area and 64,280 sq. ft. of floor area in the form of live / work, studio, 1 bedroom and 2 bedroom units. Even assuming (which we do not concede) that all 13,640 sq. ft. of live / work units can somehow be classified as residential floor area, that leaves 39,879 sq. ft. of nonresidential floor area.</p> <p>The plans then state that there is a “Supporting Office” measuring 685 sq. ft. and that this “Supporting Office” includes “office space for tenant supportive services and on-site storage ... [i]ntended for use by internal staff and tenants only.”</p> <p>Thus, the plans make no representation whatsoever as to how much space is set aside for “onsite supportive services,” other than indicating indisputably that it will be materially less than 685 sq. ft.</p> <p>And even assuming (contrary to the plain language of the plans) that there will somehow be 685 sq. ft. for “onsite supportive services” (notwithstanding space obviously required for storage, non-supportive services and such), 685 sq. ft. does not represent 3% of nonresidential floor area ($685 / 39,879 = 1.72\%$).</p> |
| (6) The developer replaces any dwelling | The applicant’s attorney has represented that: |

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|--|---|
| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| units on the site of the supportive housing development in the manner provided in paragraph (3) of subdivision (c) of Section 65915. | <p>The Project Site is currently developed with a two-story, 1,970-square-foot residential building containing four dwelling units deemed “affordable” by the City at their current rent levels. The Project will restrict all units to low, very low, and extremely low income households, and provide at least four units of equivalent size to households in the same or lower income category as the four households currently on the Project Site. /3/</p> <p>The developer does not meet this requirement because the proposed replacement units will be demonstrably inferior to existing units in size, accessibility, noise abatement, livability and multiple other respects that are evident from the Project plans but completely unaddressed by the developers.</p> |
| (7) Units within the development, excluding managers’ units, include at least one bathroom and a kitchen or other cooking facilities, including, at minimum, a stovetop, a sink, and a refrigerator. | <p>The applicant’s attorney has represented that:</p> <p>Each unit within the Project will include at least one bathroom and a kitchen or other cooking facilities, including, at a minimum, a stovetop, a sink, and a refrigerator. /3/</p> |
| <p>Sources:</p> <p>/1/ https://www.vchcorp.org/wp-content/uploads/2020/09/RDC-Project-VTT-Map-No-82288-Shts-1-4-Stamped-by-LADBS-LADCP-As-Filed.pdf</p> <p>/2/ https://planning.lacity.org/odocument/eacdb225-a16b-4ce6-bc94-c915408c2b04/Zoning_Code_Summary.pdf</p> <p>/3/ Lathham & Watkins LLP letter dated April 21, 2020.</p> <p>/4/ Square footages are per the Architectural Plans for the project dated 01/07/20 available at: https://www.vchcorp.org/wp-content/uploads/2020/02/RDC-Entitlement-Set-R2-1-7-2020.pdf</p> <p>/5/ Per LADBS Info Bulletin DOCUMENT NO. P/BC 2002-021 : Calculating Floor Area: “When applying either Sec. 12.03 or 12.21.1 A 5, architectural projections not intended for regular use or occupancy shall not be counted as floor area. Areas under projections intended for use and occupancy shall be included as floor area in accordance with the guidelines below. For all Building Code applications, the area under architectural projections exceeding 5 feet (1524 mm) in width, as defined in Sec. 91.3204.1, shall be included in the floor area calculation.”</p> | |

Accordingly, the project is not eligible for an exemption from CEQA for three primary reasons. First, the project does not currently meet the funding requirements for a PRC Section 21080.27 CEQA exemption. Second, the proposed project includes uses that do not meet the definition of supportive housing and are thus not eligible for the Section 20180.27 exemption. In addition, the project does not fully comply with Government Code requirements for supportive

housing. The project as proposed is, therefore, not exempt from CEQA. As a result, the City cannot make the required finding pursuant to Government Code Section 66474(e). Additional detail regarding the Project's ineligibility for a PRC Section 21080.27 CEQA exemption is provided in the two letters submitted by Venice Vision to the Deputy Advisory Agency on October 21, 2020 (see Section II) and January 12, 2021 (see Sections IV, V and VI). These two letters are attached hereto as **Exhibit A** and **Exhibit B**. Appellant adopts the arguments in these letters as a further basis of the instant appeal.

a. The Project Will Result in a Number of Significant Environmental Impacts

Because an EIR for the project has not been prepared, even though the City has identified the project's potential to result in significant environmental impacts, appropriate mitigation measures to reduce impacts to a level considered less than significant have not been identified. The project will therefore result in substantial environmental damage. Appellant's counsel outlined all of the reasonably foreseeable impacts in detailed letters submitted to the Advisory Agency including, but not limited to, the letters attached hereto as **Exhibit C** and **D**. Further, additional detail regarding the Project's environmental impacts is provided in the two letters submitted by Voice of the Canals to the Deputy Advisory Agency on October 20, 2020 and January 13, 2021. Appellant adopts the arguments in these letters as a further basis of the instant appeal. These two letters are attached hereto as **Exhibit E** and **Exhibit F**. Appellant submitted two additional letters outlining the negative impacts of the Project to the City Planning Commission on or about May 17, 2021 and May 25, 2021. These two letters are attached hereto as **Exhibit G** and **Exhibit H**. Appellant adopts the arguments in these letters as a further basis of the instant appeal.

Further, because the project is immediately adjacent to the Venice Canals, which provide a natural habitat for both fish and wildlife, a conclusion cannot be made that it will not impact fish or other wildlife or their habitat. The Commission discounted the Project's impact on natural open spaces. However, the Venice Canals area is considered Open Space, as noted in the Letter of Determination and is naturally a wetland habitat. The Project adjoins and provide access to a public resource, natural habitat, Public Park or officially recognized public recreation area. According to LUP Policy Group IV. Water and Marina Resources, Environmentally Sensitive Habitat Areas (ESHA), and Hazards, "The environmentally sensitive habitat areas in the Venice Coastal Zone include...the Venice Canals north of Washington Boulevard."

In addition, as LUP Policy IV. D. 1. Venice Canals Habitat states: The Venice Canals have been identified by the Least Tern Recovery Team as a foraging habitat for the Least Tern. Development within or adjacent to the canals that might affect this foraging habitat shall not be permitted. The failure of the City to analyze this access and environmental protection issue means the City lacks substantial evidence supporting a conclusion of no impact.

In spite of the fact that the project has been erroneously exempted from CEQA, other environmental laws require consideration of the surrounding environmentally sensitive habitat areas as per the LUP.

Additionally, as detailed in this section, a screening-level Health Risk Assessment prepared by SWAPE, and included in **Exhibit C**, indicates that the project will result in an excess cancer risk to adults, children, infants, and during the 3rd trimester of pregnancy at the

MEIR located approximately 100 meters away

6. Conclusion

For the aforementioned reasons, the appeal should be granted. Please note that Appellant reserves the right to supplement the bases of this appeal. I may be contacted at 310-982-1760 or at jamie.hall@channellawgroup.com if you have any questions, comments or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Jamie T. Hall", written in a cursive style.

Jamie T. Hall

Exhibit A

Letter Submitted on October 21, 2020
by Venice Vision

VENICE VISION
P.O. Box 525
VENICE, CALIFORNIA 90294

October 21, 2020

VIA ELECTRONIC MAIL (ira.brown@lacity.org)

Deputy Advisory Agency
Department of City Planning
City of Los Angeles
200 N. Spring Street
Los Angeles, CA 90012

Re: 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 - 2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-82288; CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-6667-SE

Honorable Members of the Deputy Advisory Agency and City Hearing Officer:

We write regarding the developers' requests for an exemption from the California Environmental Quality Act ("CEQA") under A.B. 1197 and waiver of dedications and improvements for the Reese Davidson Community on the Venice Canals ("RDC") (VTT-82288; CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-6667-SE). The requested exemption and waivers are improper and should not be granted for numerous reasons.

First, developer Venice Community Housing Corporation ("VCHC")¹ has admitted that parking for the project is still in the design phase² and the City has stated that parking studies relating to the project will not be "available to the public" until 2021.³ Thus, even if plans to park the project (and to provide replacement parking and new beach impact parking) were complete (which they are not), they could not be competently evaluated at this juncture. Indeed, the City Planning Department has stated that it does not have parking studies for Venice in its possession.⁴

¹ The project has two developers: VCHC and Hollywood Community Housing Corporation ("HCHC").

² Ex. 1: Oct. 14, 2020 VCHC Zoom Presentation re: RDC.

³ Ex. 2: Oct. 13, 2020 Email Chain re: Demand for Immediate Production of Venice Coastal Zone Parking Report and C-133779 (Tierra West) Parking Study at 2.

⁴ Ex. 3: Oct. 6, 2020 Letter from B. Pachecho to C. Wrede re: Public Records Act Request for Records Regarding the Venice Coastal Zone Parking Report.

Second, no aspect of the RDC proposal can properly be approved because the RDC does not satisfy the requirements for use of the Venice Dell Pacific Site⁵ set forth by the City in relevant City Council action and in the applicable Affordable Housing Opportunities Sites (“AHOS”) Request for Qualifications and Proposals (“RFP/Q”), which expressly require that development comply in full with the Venice Coastal Zone Specific Plan, improve public access to parking and involve significant community engagement.⁶ Moreover, the RDC involves extravagant building costs⁷ that directly undercut execution of the City’s Comprehensive Homeless strategy (including, without limitation, its “Housing First” component),⁸ and violates the City’s anti-containment policy as to homeless housing, shelter and services,⁹ as well as laws prohibiting housing discrimination based on source of income and Article 34 of the California Constitution, which was enacted to protect vulnerable communities like Venice from projects, like the RDC, whose size and divergence from neighborhood norms are unfairly amplified through easy access to poorly guarded public funds and preferential treatment in the approval process. Furthermore, allowing the RDC to move forward—despite the dizzying array of entitlements and amendments to the Venice Coastal Zone Specific Plan the developers are seeking and without legally required dedications and improvements¹⁰—would violate the equal protection rights of private landowners, including landowners in the area who have recently been barred, through extraordinary action on the City’s part, from moving forward with far more compliant projects and even “by right” development.¹¹ And frankly, it is offensive—if not downright corrupt—that the City of Los Angeles embarked on a campaign of stripping communities of longstanding protections with respect to parking, density and environmental review only after securing billions in taxpayer dollars and tagging some of the best public land in the city for supportive housing projects. When voters approved Prop HHH and Prop H, they rightly expected 10,000 units of

⁵ The terms “Venice Dell Pacific Site” and “LADOT Lot 731” both refer to the proposed building site for the RDC, comprising 40 lots totaling 2.65 acres in the Venice Canals Subarea and North Venice Subarea of the Venice Coastal Zone on wetlands with a high-water table straddling the Grand Canal in a flood, tsunami, sea-level-rise and methane zone. Both the Venice Canals Subarea and North Venice Subarea are in the Dual Jurisdiction Zone where development must be approved by both the City of Los Angeles and the California Coastal Commission. The designation “LADOT Lot 731” is used primarily in discussion relating to parking, whereas the term “Venice Dell Pacific Site” is used in more generalized contexts.

⁶ See, e.g., Ex. 4: City of Los Angeles Request for Qualifications/Proposals for the Affordable Housing Opportunity Sites Issued by Office of the City Administrative Officer, Submission Deadline: September 15, 2016 at 4:00 p.m. at 37 of 61; Ex. 5, May, 11 2016, Los Angeles City Council Transportation Committee Report Relative to Request for Proposals (RFP) for Lot No. 731; Ex. 6, April 13, 2016, Los Angeles City Council Transportation Motion Presented by Mike Bonin.

⁷ Ex. 7, July 24, 2019, VCHC Board of Directors, Executive Committee Package, at pdf file pages 19 through 22 of 42; Ex. 8, Aug. 19, 2019 RDC Financial Feasibility Schedules.

⁸ Ex. 9, City of Los Angeles, Comprehensive Homeless Strategy.

⁹ Ex. 10, Mar. 15, 2016, Official Action of the Los Angeles City Council to Formally Reverse Policy of Containment, 16-0046.

¹⁰ Ex. 11, Jan. 7, 2020 RDC Architectural Plans; Ex. 12, RDC Application, Background and Entitlements.

¹¹ See, e.g., Ex. 13, 1915 S. Ocean Front Walk Amended Petition; Ex. 14, 12444 Venice Boulevard Case Materials; Ex. 15, Venice Place Project Case Materials.

supportive housing developed in accordance with the laws and standards in effect in 2016 at a cost of roughly \$120,000 per unit. That reasonable expectation should be honored. Had voters foreseen the lawless boondoggle that has come to pass, Prop HHH, Prop H and such would never have been approved in the first place.

Third, the RDC does not qualify for an exemption from CEQA under A.B. 1197 because the developers have not shown that it satisfies requirements with respect to funding sources or requirements under Section 65650 *et seq.* of the California Government Code with respect to zoning, the percentage of floor area used for supportive services, provisions for the delivery of supportive services, and composition of the resident population.¹² Moreover, the East Parking Tower—which will be developed, owned and operated by the City of the Los Angeles and consist solely of public parking¹³—plainly comprises a separate project that is subject to a complete environmental review under CEQA in its own right, regardless of whether a CEQA exemption somehow applies to some aspect of the RDC.

Fourth, the waivers of dedications and improvements the developers are seeking cannot be approved because the only justification for them is to allow for the overdevelopment of the Venice Dell Pacific Site (which the RFP/Q expressly states need not be developed in its entirety),¹⁴ and they would result in grossly substandard sidewalks and corner cuts, creating obvious safety risks, violating City mobility policy, impeding multi-modal transportation, and depriving residents and tourists alike of pleasant, safe, social sidewalk experiences of the sort called for in universally accepted mobility standards and best practices.¹⁵ The Venice Dell Pacific Site sits squarely on a Transit Enhanced Network, Bicycle Enhanced Network and Neighborhood Enhanced Network in a Pedestrian Enhanced District under the City's Mobility Plan 2035.¹⁶ The applicable standards with respect to sidewalk width and street width—and all necessary dedications and improvements—must be enforced strictly and unsparingly for the benefit of the Venice community and the millions of visitors Venice receives each year.¹⁷

¹² Ex. 12

¹³ Ex. 1; Ex. 11; Ex. 12.

¹⁴ Ex. 4, pdf file page 37 of 61; Ex. 12, RDC Application, Background and Entitlements.

¹⁵ See Ex. 16, City of Los Angeles Complete Streets Design Guide; Ex. 17, Mobility Plan 2035; Ex. 18, Coastal Transportation Corridor Specific Plan (also available at <https://planning.lacity.org/plans-policies/overlays/coastal-transportation-corridor>); Ex. 19, June 2013, Conducting Bicycle and Pedestrian Counts; Ex. 20, Department of Public Works, Bureau of Engineering, Standard Street Dimensions, Standards S-470-1, October 2015; Ex. 21, November 2008, City of Los Angeles Department of City Planning, Walkability Checklist, Guidance for Entitlement Review; Ex. 22, July 2012, Westside Mobility Plan, Venice In-Lieu Parking Fee Study Final Report.

¹⁶ Ex. 17.

¹⁷ Ex. 88, Los Angeles Parks Website: Venice Beach

<https://www.laparks.org/venice#:~:text=The%20Boardwalk%2C%20also%20known%20as,region%27s%20most%20popular%20tourist%20attractions> (“Venice Beach is the busiest facility operated by the Department of Recreation and Parks. This iconic site attracts visitors from all over the world and it is estimated that approximately 28,000 to 30,000 people visit the Venice Beach Boardwalk and adjacent

We address each of these topics in more detail below, but at the outset, we also want to state that proceedings relating to approval of the RDC are premature and unlawfully deprive Venice residents of their notice and hearing due process rights in connection with the RDC. One of the major issues the City will have to address in connection with the RDC, for example, is Venice's notorious parking deficit,¹⁸ yet, as noted above, the City has admitted it will not make the parking study that it commissioned for the RDC available to the public until 2021 and has refused (on the grounds of "deliberative process privilege") to produce other parking studies relating to the RDC and Venice as a whole.¹⁹ Further, the Planning Department has stated that it is not in possession of any parking studies relating to the RDC or Venice; the information regarding parking in the current set of plans for the RDC is inaccurate, since 196 spaces of beach replacement parking is required (not 188 spaces as the RDC plans incorrectly indicate);²⁰ and the developers admit the City is still figuring out design, financing and project management for the West Parking Tower.

Similarly, the City and developers issued an Initial Study for an Environmental Impact Report ("EIR") for the RDC in 2019 identifying numerous environmental issues requiring investigation and mitigation, and spent a year working on the EIR, after repeatedly promising to conduct an exhaustive environmental review in connection with the RDC. The City has refused, however, to make materials relating to the RDC EIR available to the public,²¹ even though the

Recreation and Parks property on a daily basis. The Boardwalk, also known as Ocean Front Walk, is the second most-visited destination in Southern California, with an average of over ten (10) million visitors per year. It is known as one of the region's most popular tourist attractions.") ;see also <https://www.travelandleisure.com/trip-ideas/beach-vacations/americas-most-crowded-beaches?slide=2125462#2125462> ("But it's California, famous for surfing culture, that claims the questionable honor of America's No. 1 most crowded beach: Venice Beach, to be precise, which swarms with 16 million sunbathers, fortune-tellers, street performers, and people-watchers.")

¹⁸ See, e.g., Ex. 23, Nov 12, 2014, City Council Planning & Land Use Management Motion ("Venice faces continued development pressures and one of the ways the pressure is felt most acutely is through projects that worsen the area's already chronic parking shortage. The amount of parking is simply not keeping pace with the number of people who visit, live, or work in Venice."); Ex. 24, Venice Traffic and Parking Study; Ex. 25, Feb. 26, 2019, Venice Neighborhood Council, Community Impact Statement re: Parking Shortage, Council File 19-0072; Ex. 26, Oct. 18, 2019, Venice Neighborhood Council ("VNC"), Community Impact Statement re: Lot No. 731, Council File 19-0072; Ex. 27, Proposed Venice Coastal Interim Control Ordinance; Ex. 28, VNC Motion re: Scope of RDC EIR; Ex. 29, Venice Neighborhood Council, Parking and Transportation Committee Presentation; Ex. 30, January 21, 2019, Fight Back, Venice! Letter re: Reese Davidson Community, ENV-2018-6667-EIR.

¹⁹ Ex. 2; Ex. 31 Oct. 14, 2020 Letter from Chen to Wrede re; Parking Study; see also, Ex. 32, Jan. 22, 2019 City Council, Transportation Committee Motion for Parking Studies, City Council File No. 19-0072; Ex. 33, Feb. 25, 2019 City Council, Transportation Committee Report on Parking Studies, City Council File No. 19-0072; Ex. 34, Documents from Los Angeles City Council File 19-0072.

²⁰ Ex. 35, VTT-82288 Planning Department Staff Report, Oct. 20, 2020 Hearing Date at 2, 3, 22 and 24; Ex. 2.

²¹ Ex. 36, Aug. 25, 2020 Ltr. Pacheco to Wrede re: Public Records Act Request for Records Regarding the Draft Environmental Impact Report for the Reese Davidson Community Project (CPC-2018-7344 & ENV-2018-6667).

developers selectively released a traffic study for the RDC (obviously conducted before still pending plans for RDC and beach parking were complete)²² and also have plans for the selective release of a putative sea-level rise study at some unspecified point *after* the DAA's October 22, 2020 hearing.²³ Findings of fact regarding environmental impacts are required for VTT approval, and the RDC would be a multi-level, 2.65-acre development on wetlands feeding directly into the Santa Monica Bay with a high water table in a historic district, tsunami zone, flood zone, sea-level-rise zone and methane zone directly on Grand Canal and just a block off one of the most iconic and popular beaches in the world.²⁴ A VTT determination, thus, cannot properly be made without the EIR-related materials that the developers and the City are currently withholding from Venice residents and, for that matter, additional environmental review on a panoply of topics ranging from crime and water pollution to emergency preparedness, the amplification of flooding effects and impacts on wetland habitats (to name but a few).²⁵

Further to that point, it has also been inordinately difficult to get information regarding the RDC from the developers themselves. VCHC has repeatedly promised, for example, to push timely updates regarding the RDC out to the Venice community, but it was only through the persistent sleuthing of concerned Venice residents that updated project plans showing new project features—like the RDC's popcorn stucco (which was originally depicted as a smooth finish) and extensive roof decks with permanent decorative canopies—came to light. Similarly, timely notice was not provided as to the (manifestly invalid) traffic study the developers supposedly completed in December 2019. And the one and only presentation VCHC made to the general public regarding the RDC prior to the Zoom meeting VCHC held on October 14, 2020 to build support heading into the City approval process took place more than three years ago in March 2017—back when no drawings or details of consequence were available and VCHC as still claiming that the project would cost a mere \$340,000 per unit (which is less than half the current projected per unit construction costs, before overages and such).²⁶ Other putative informational sessions were held on an invitation only basis and limited to supporters of the project. One Venice resident—a sexagenarian approaching septuagenarian status—said he thought that given the pandemic and everything at stake, a complete set of documents regarding the project should have been made readily available to all Venice residents at the Venice Library, which, as it happens, is just a few blocks from the proposed building site. Any fair-minded person authentically concerned about fairness, transparency and core due process principles of notice and hearing would plainly agree.

²² Ex. 48.

²³ Ex. 1.

²⁴ See <https://www.fightbackvenice.org/venice-canals-monster/>.

²⁵ A separate comment letter addressing environmental issues in detail has been filed on behalf of Venice Vision in connection with the October 22, 2020 DAA hearing by Venice Vision's counsel, Channel Law Group. That letter is incorporated by reference in its entirety here.

²⁶ Ex. 37, Mar. 9, 2017 VCHC RDC Presentation.

Finally, Venice residents have a due process right to a meaningful forum in which to be heard on a project of this magnitude. Remote web-based forums obviously impede discourse, reduce participation and insulate officials from public passion, while improperly—and unlawfully—burdening (and, in many cases, precluding) the participation of elderly and/or less affluent members of the community to the advantage of well-financed and professionally organized developers. Given its massive size, extremely prominent location and incredibly oppressive features, the RDC could well define Venice for decades to come—if not for all time. Out of respect for Venice’s glorious heritage and the due process rights of its rank and file residents, the October 22, 2020 hearing date should be vacated and all proceedings relating to approval of the RDC should be postponed until in-person hearings—and true due process—are again possible.

We now address, in greater detail, reasons why no action should be taken on the RDC as proposed at this juncture and why the A.B. 1197 CEQA exemption and the waivers of dedications and improvements that VCHC and HCHC are seeking should be denied.

I. No Action Should Be Taken Regarding the RDC at This Juncture

No action should be taken on the RDC at this juncture because parking plans and relevant parking studies are not complete; the DAA lacks—and the City has wrongfully withheld—environmental information relating to Grand Canal and other aspects of the Venice Dell Pacific Site; the exorbitant project costs will indefensibly squander public treasure while undercutting the City’s Comprehensive Homeless Strategy (including, without limitation the “Housing First” component); the RDC does not comply with AHOS requirements for use of the Venice Dell Pacific Site; and approval of the project as proposed would violate the City’s anti-containmentment policy, Article 34 of the California Constitution and law prohibiting housing discrimination based on source of income,²⁷ as well as the equal protection rights of private landowners.

A. Parking Plans and Relevant Parking Studies Are Not Complete

VCHC’s executive director, Becky Dennison, stated during a meeting of the Venice Neighborhood Council (“VNC”) Land Use and Planning Commission (“LUPC”) on October 6, 2020 and during VCHC’s October 14, 2020 Zoom presentation on the RDC that the City has yet to determine whether 188 or 196 replacement beach parking spaces are required in connection with the elimination of existing beach parking and LADOT Lot 731.²⁸ She also stated that the City is still in the process of designing replacement and beach parking for the project and, more specifically, still attempting to determine whether—and to what extent—automated lift (i.e., “robotic”) parking should be utilized.²⁹ Similarly, email correspondence and other relevant materials that members of the Venice community have secured through public records requests

²⁷ Ex. 39, Cal. Gov. Code § 12921; Ex. 40, Cal. Civ. Code § 51 (“Unruh Act”); Ex. 41, Cal. Gov. Code. § 12955; Ex. 42, S.B. 329.

²⁸ Ex. 1.

²⁹ Ex. 1.

show that project management and financing for RDC parking is still up in the air.³⁰ At one point, for example, the developers and the City apparently expected to get funding the City's general fund, but it now appears that a public-private "P3" partnership of some sort may be required, although no final determinations as to participants in or the architecture of such an arrangement have yet been made.

Moreover, Councilmember Mike Bonin brought a City Council motion regarding LADOT Lot 731 on January 22, 2019.³¹ That motion states that the lot "is heavily utilized by the public to access recreational opportunities at Venice Beach"—in addition to stating that use of the "property must strike the right balance between affordable housing and other public benefits, including coastal access"—and directed the Department of Transportation to:

- Study the need for additional public parking at the Venice lot, including seasonal demand and potential additional revenue;
- Evaluate the relative costs and benefits of a structured and/or automated parking facility to replace and/or increase the number of public parking spaces;
- Prepare the specifications and/or requirements for an automated or partially automated parking facility, if feasible and cost-effective;
- Forecast the availability of Special Parking Revenue Fund (SPRF) and/or other appropriate funding sources for a new public parking structure;
- Evaluate the relative risks and benefits of different project delivery methods, including a public-private partnership for design and construction; and
- Study alternatives for relocating the parking and/or offsetting the parking revenue lost during construction.

Jeff Oviedo Associates was engaged to study automated parking at LADOT Lot No. 731 but the study was apparently discontinued due to lack of funding.³² Tierra West was retained to study parking demand in Venice, possible parking solutions for the RDC and related topics, but the City has stated that, due to the complexity of the issues, that study will not be complete until 2021. And the Venice Coastal Zone Parking Study, which commenced back in 2018, is still not finished. The City released a draft of the Venice Coastal Zone Parking Study to VCHC, who in turned shared it with the Coastal Commission,³³ but the City has otherwise refused to make a draft of the Venice Coastal Zone Parking Study public. Further, the City Planning Department has stated that it does not have parking studies relating to Venice or the RDC in its possession.

Section 30252 of the California Coastal Act expressly requires that "[t]he location and amount of new development should maintain and enhance public access to the coast by...

³⁰ Ex.43, Public Records re: Parking.

³¹ Ex. 32.

³² Ex. 43, Public Records re: Parking.

³³ Ex. 44, June 6, 20-19 Email from Miller to Dennison re: Parking Lot Info/Data.

providing adequate parking facilities or providing substitute means of serving the development with public transportation,” and the Venice Land Use Plan contains similar provisions.

Moreover, the significant—and increasingly severe—shortage of parking in Venice has been officially recognized on numerous occasions, and a traffic and parking study prepared for the Department of City Planning in 1990 found that, even 20 years ago, utilization of parking at LADOT Lot 731 and on surrounding streets was over 100% on weekends, “due to illegally parked vehicles parking in aisles and unmarked spaces” in the parking lot, and that high demand for parking “contribute[d] to congested traffic conditions and poor traffic circulation.”³⁴

The Venice Neighborhood Council (“VNC”) passed a motion calling for a 600-space open-air parking structure with open space at LADOT Lot 731, as well as a motion that reads as follows:

1. The VNC has previously passed a motion indicating its preference that Lot 731 be used for public parking with a multiple story structure east of the Venice Grand Canal and creating an open space park to the west. A traffic congestion consideration that would allow westbound vehicles to cross through the median to eastbound Venice Blvd. was also recommended.
2. The Venice community west of California Route #1 (Lincoln Blvd) is considered a California Coastal Zone and in June 2001 the City-prepared Venice Coastal Zone Land Use Plan was adopted and certified by the California Coastal Commission and one of the referenced documents within this plan was a Traffic and Parking Plan prepared by Kaku Associates from the Los Angeles City Planning Department that describes a deficit of parking in the North Venice area of over 1200 cars due to the fact that many of the existing buildings were historic and constructed before parking was considered a requirement.
3. In 2012, the City of Los Angeles prepared as part of the Westside Mobility Plan an In-Lieu Fee Report. This report addresses the shortfall of public parking in the Venice region and further documents that, should public parking structures be constructed, the fees the City has been collecting since the Venice Parking Trust Fund (described in the 1988 Venice ICO) was established could be used to offset the construction costs. Furthermore, this report identifies the City properties where such parking structures could be constructed and

³⁴ Ex. 24 at 33.

parking opportunities be expanded. The report was prepared by CDM Smith.

4. In February 2009, Venice residents voted in an official referendum of the Venice Neighborhood Council in favor of overnight restricted parking for residents. Venice is in a Coastal Zone and as such the California Coastal Commission has denied the City's prior two applications for a Coastal Development to allow permit parking. Although the residents, business operators and the City have expressed the desire to have permit zone parking, the Coastal Commission made it clear in their denials that there cannot be any reduction of on-street parking without a one-to-one replacement off-street. Parking structures similar to those found in the Venice neighboring cities such as Santa Monica and Manhattan Beach were suggested to provide off street parking.
5. The Venice Neighborhood Council in June 2017 requested the City prepare an inventory of the existing parking conditions in Venice and to include Beach Impact Parking and non-required parking spaces in commercially-zoned projects within the Venice Coastal Zone. In response to this request, the City described how such a study would be prepared as one of the elements of the upcoming Venice Coastal Zone Land Use Plan. To date no information has been published that describes the current inventory of parking conditions.
6. The community of Venice since its inception in 1905 has been a visitor destination which is often referred to as the number two tourist attraction in the entire state of California behind Disneyland. In this capacity, beach access is a priority and the number one means of transportation to this region is by single occupancy vehicles. There are no plans in the immediate or distant future to provide mass transit with remote park-and-ride lots outside the region. Autonomous self-driving automobiles might relieve some of the parking requirements but they are still many years away from wide scale adoption.
7. The commercially zoned property in the Venice Coastal Zone is underdeveloped when compared to any other growing community in Los Angeles City or neighboring communities. This is the result of conflicting conditions; on one hand, the parking demands are very high as described in both the City and State codes while on the other hand, the lot sizes are small and therefore parking consumes most, if not all, of the developable ground floor. This means historic structures that want to and should be preserved as described in the community

plan can't comply to code with onsite parking. Additionally, most of the commercial lots in Venice are undersized by all standards, averaging 2700 SF. Attempting to utilize a lot of this size in a new commercial project requires most of the entire ground floor to be consumed by parking, which makes the usable commercial space too small to be economically feasible. The solution as described in the 2012 In-Lieu plan is to create large parking structures and allow property owners to buy into the ongoing cost of a local shuttle system.³⁵

Similarly, the Venice Coastal Land Use Plan states that: "It is the policy of the City to provide increased parking opportunities for both visitors and residents of Venice, and improve summer weekend conditions with respect to Venice Beach parking and traffic control."³⁶ It also identifies the "Los Angeles County Metropolitan Authority (MTA) bus maintenance yard located between Main Street and Pacific Avenue south of Sunset Avenue [as] a potential site for public parking," estimating "that about 350 spaces could be provided on the approximately 3-acre site,"³⁷ but the site was instead commandeered for the Bridge Home Venice homeless shelter and will next be used for a large affordable housing project that is currently in development.³⁸

In light these facts—including Venice's massive parking deficit, the documented overutilization of LADOT Lot 731 and surrounding streets (which has only gotten worse over the past twenty years), the VNC's express desire to develop LADOT Lot 731 to relieve the Venice parking shortage while enhancing the beachgoing experience for residents and visitors, and the elimination—or, at a minimum, significant diminution—of the MTA maintenance yard as a parking asset—it is plainly improper for the City to take any action whatsoever with respect to the RDC until all parking plans and parking-related studies are finalized and made public.

B. The DAA Lacks—and the City Has Wrongfully Withheld—Environmental Information Required to Make Competent Findings Regarding the VTT

The developers told Venice residents for two years that they would prepare an EIR for the RDC. In December 2018, the developers released an Initial Study for the RDC identifying various issues that would have to be addressed through the EIR,³⁹ and the VNC, community groups and individual residents also submitted extensive comment as to the proper scope of the EIR for such a large, prominent and environmentally sensitive parcel.⁴⁰

³⁵ Ex. 34.

³⁶ Ex. 45, Venice Coastal Zone Certified Land Use Plan, Policy II.A.1. at III-5.

³⁷ Ex. 45, Venice Coastal Zone Certified Land Use Plan, Policy II.A.2. at III-6.

³⁸ Ex. 46 and <https://www.metro.net/projects/jd-division6/>.

³⁹ Ex. 47, EIR Materials for RDC.

⁴⁰ Ex. 28; Ex. 30.

The developers worked on the EIR for a year before deciding to seek a CEQA exemption under A.B. 1197,⁴¹ but have not released any records relating to the EIR other than a putative traffic study.⁴² A valid and timely request for records relating to the EIR was submitted under the California Public Records Act (“CPRA”), but the City refused to produce the record based on the so-called “deliberative process privilege.”⁴³ Moreover, aside from the dubious traffic study and a sea-level-rise report that the developers have said they will provide at some point after the October 22, 2020 hearing,⁴⁴ we are not aware of any environmental studies conducted in connection with the RDC or the Venice Dell Pacific Site.

As noted above, the Venice Dell Pacific Site is a 2.65-acre wetland parcel with a high water table straddling Grand Canal—and encompassing portions of a National Historic District—in a flood, sea-level-rise, tsunami and methane zone a block off one of the most iconic and most popular beaches in the world.⁴⁵ The RDC calls for maxing out the site, exemptions from virtually every major provision in the Venice Coastal Zone Specific Plan, and waiver of legal obligations to bring surrounding streets and sidewalks up to standard widths.⁴⁶

Approving the VTT requires findings with respect to environmental impacts.⁴⁷ The fact that the City has not undertaken a comprehensive environmental review of the project and building site or released existing environmental records to the public simply precludes further action with respect to the project at this juncture.⁴⁸

C. Exorbitant Project Costs of Nearly \$1 Million Per Unit Would Indefensibly Squander Public Treasure and Undercut the City’s So-Called “Housing First” Strategy

The developers’ own financial projections for the project show total development costs for the residential portion of the East Facility of \$40,110,464 and total development costs for the residential portion of the West Facility of \$29,624,425, for a total of \$69,734,889 for the residential portion of the project as a whole.⁴⁹ Moreover, the City estimates the cost of new parking at \$41,587 per space.⁵⁰ According to the Planning Department Staff Report, the RDC has

⁴¹ Ex. 1.

⁴² Ex. 48, RDC Traffic Study.

⁴³ Ex. 36.

⁴⁴ Ex. 1.

⁴⁵ Ex. 35; see <https://www.fightbackvenice.org/venice-canals-monster/>

⁴⁶ Ex. 12.

⁴⁷ Ex. 49, Required Findings for Vesting Tentative Tract.

⁴⁸ As noted above, Venice Vision’s counsel has concurrently filed a letter addressing environmental issues relating to the Venice Dell Pacific Site and RDC in detail.

⁴⁹ Ex. 7 at pdf file pages 19 through 22.

⁵⁰ Ex. 50, Sep. 25 Email Ryzhov to Miller re: HCIDLA Land Development – Replacement Parking. This \$41,587 per space figure is low compared to the City’s per-spot estimates for other supportive housing projects, which are as high as \$80,000 per spot, so in all probability, this analysis understates the cost of constructing new parking. If it does not understate the cost of new parking for RDC, one has to ask what

to replace 196 existing beach parking spaces that are being destroyed to make room for this project.⁵¹ Taking as true for now the developers' (lowball) assertion that 61 parking spaces are required for residential portions of the RDC, relevant parking costs come to \$10,687,859. The building site requires consolidation of 40 lots, so conservatively valuing each lot at \$1,250,000 and attributing 70% of the buildable lot to the residential portion of the project (based on square footage in the plans),⁵² at least \$35,000,000 in land value is properly allocable to the project (40 lots x \$1,250,000 per lot x 70% = \$35,000,000). Finally, VCHC is already 15% over budget on the nearby Rose Avenue Apartments supportive housing project (which is significantly smaller and less complicated than the RDC),⁵³ so it would be conservative to apply that overage factor here.

To summarize:

| | |
|---|---------------------|
| Projected Residential Development Costs: | \$69,734,889 |
| Projected Allocable Parking Costs: | \$10,687,859 |
| Conservative Estimate of Allocable Land Costs: | <u>\$35,000,000</u> |
| Projected Costs Allocable to Residential Portion (Before Overage) | \$115,422,748 |
| 15% Overage (Based on Rose Avenue Apartments) | <u>\$17,313,412</u> |
| Projected Costs Allocable to Residential Portion (After Overage) | \$132,736,160 |

There are 140 affordable and supportive units planned for the RDC totaling 64,280 square feet, for an average unit size of 460 square feet.⁵⁴

Therefore, the projected project costs are \$824,448 per 460-square-foot unit (\$1,792 per square foot), before likely overages, and \$948,115 per 460-square-foot unit (\$2,061 per square foot), including likely overages.

This is twice the unit price and almost five times the per square foot of the median existing condominium in Los Angeles⁵⁵ and completely blows away per unit and per square foot project costs for other supportive housing projects in Los Angeles, which the Controller for the

corners are being cut at the RDC to keep parking constructions so far below the construction costs in comparable projects. It may have to do with the fact that 28% of all RDC parking—and more than 60% of new RDC parking—comprises compact (as opposed to standard) spaces.

⁵¹ Ex. 35 at 2, 3, 22 and 24.

⁵² Ex. 11.

⁵³ Ex. 51, Jan. 15, 2020 Prop HHH Citizens Oversight Committee Memorandum, Attachment B, page 1 (pdf file page 15 of 18) (<http://cao.lacity.org/Homeless/PropHHHCOC-20200114e.pdf>).

⁵⁴ Ex. 11.

⁵⁵ Ex. 52; Ex. 53; <https://www.car.org/marketdata/data/countysalesactivity>

City of Los Angeles has already found to be indefensibly and unsustainably high,⁵⁶ such that at current levels of spend (to say nothing of the level of spend contemplated for the RDC) the City will simply be unable execute its “Housing First” plan or any meaningful fraction thereof.

D. The RDC Does Not Comply with AHOS Requirements for Use of the Venice Dell Pacific Site

The Transportation Committee Report pertaining to “a Request for Proposals (RFP) to provide an affordable housing project to serve homeless persons at City-owned Parking Lot NO. 731 located at 200 North Venice Boulevard” that was adopted by the City Council on May 24, 2016 states as follows:⁵⁷

1. INSTRUCT the Los Angeles Department of Transportation (LADOT) and City Administrative Officer (CAO), with the assistance of the Housing and Community Investment Department, to prepare an RFP to provide for an affordable housing project to serve homeless persons, along with replacement parking and an appropriate mix of additional public parking and/or other uses as necessary to comply with the Venice Coastal Zone Specific Plan at the City-owned and managed Parking Lot No. 731 located at 200 North Venice Boulevard.

2 DIRECT that the RFP described above in Recommendation No. 1 require that any project:

a. To be consistent with the Venice Coastal Zone Specific Plan.

b. Include elements to ensure neighborhood compatibility, that it increase public access to parking, and that the applicant for the project undertake significant community outreach leading up to and during the project’s entitlement process.

The City of Los Angeles Request for Qualifications/Proposals for the Affordable Housing Sites issued by the Office of the City Administrative Officer for September 15, 2016 submissions, similarly, states in pertinent part that: the Venice Dell Pacific Site is zoned OS-1SL-O, with “[p]otential future” R3 zoning; plans “must assume replacement parking [at] at least

⁵⁶ Ex. 77, ; <https://lacontroller.org/audits-and-reports/hhhactionplan/>

⁵⁷ Ex. 5; See also Ex. 6 (“I THEREFORE MOVE that the Council instruct the Los Angeles Department of Transportation, with the assistance of the Housing and Community Investment Department, to prepare and release a Request for Proposals (RFP) to provide for an affordable housing project to serve homeless persons, along with replacement parking and an appropriate mix of additional public parking and/or other uses as necessary to comply with the Venice Coastal Zone Specific Plan at the City-owned and managed Parking Lot #731 located at 200 North Venice Boulevard; I FURTHER MOVE that the RFP require any project to be consistent with the Venice Coastal Zone Specific Plan, that it include elements to ensure neighborhood compatibility, that it increase public access to parking, and that the applicant for the project undertake significant community outreach leading up to and during the project’s entitlement process.”)

a 1:1 ratio”; “[i]nnovative solutions for parking management and capacity [we]re encouraged”; “[d]evelopments must comply with the Venice Specific Plan.”⁵⁸

As noted above, the only informational meeting VCHC held for the general public regarding the RDC (prior to an October 14, 2020 Zoom conference conducted to largely to build support going into the October 22, 2020 DAA hearing) was more than three years ago in March 2017, back when few details were available and VCHC projected costs of just \$340,000 per unit.⁵⁹ Subsequent events were held on an invitation-only basis and generally limited to supporters.⁶⁰ Further, the VCHC did not collect signatures from neighbors in the vicinity or present the project to the VNC—or any of its committees—prior to submitting the project application to the City Planning Department.⁶¹ Thus, VCHC has plainly failed to satisfy the express requirement, adopted by the City Council itself, that “the project undertake significant community outreach leading up to and during the project’s entitlement process.”

Similarly, as set forth in Attachment A, the RDC fails to comply with the Venice Coastal Zone Specific Plan in almost all significant areas, including as to: lot consolidation (seeking to consolidate an excessive number of lots); height (doubling the applicable height limits in places); roof structures (providing for roof access structures that exceed applicable height limits by 50%); setbacks (providing no setbacks at all at the corner of N. Venice Boulevard and Pacific Avenue or above ground level, at essentially providing the minimal setback everywhere else); density (exceeding the permissible number of residential units by more than 40%); building frontage (failing to provide the ground floor community concessions required for commercial developments and multi-level parking structures); and parking (failing to provide the required number of parking spaces and making improper use of compact spaces to satisfy parking requirements).⁶²

Further, as evidenced by its immense size, excessive height, extensive canopied roof decks, outrageous 70-foot tower with observation deck, minimal ground-level setbacks, and complete lack of setbacks above the ground floor, the project was designed with utter disregard for the community, with no attempt at all to “ensure neighborhood compatibility.”⁶³

⁵⁸ Ex. 4 at 37 of 61.

⁵⁹ Ex. 1; Ex. 37.

⁶⁰ Ex. 44.

⁶¹ Ex. 54, Dec. 12, 2018 City Planning Application for RDC, pdf file page 10 of 14 (showing blanks on both portions of Neighborhood Contact Sheet).

⁶² VCHC appears to be of the view that it is eligible for reduced parking requirements and density bonuses under state law. That is not the standard, however, established by the City for making the Venice Dell Pacific Site available for the development of affordable housing under the Affordable Housing Opportunity Site (“AHOS”) program. The City expressly required that the proposed development comply with the Venice Coastal Zone Specific Plan in order for the Venice Dell Pacific Site to be developed under the AHOS program. That requirement has not been satisfied, regardless of whether the proposed parking and density is otherwise lawful.

⁶³ Ex. 11; <https://www.fightbackvenice.org/venice-canals-monster/>

In addition, the RDC does not increase public access to parking or involve “[i]nnovative solutions for parking management and capacity.”

The project plans the developers submitted to the City provide for two multi-level parking structures, a West Parking Tower and an East Parking Tower.

The East Parking Tower is located entirely to the east of Grand Canal and is wrapped on all four sides by other buildings, “Texas-Donut” style. Reaching the beach from the East Parking Tower requires walking distances of as much as 450 feet—and crossing at least one and, in some cases, two driveways⁶⁴—along either N. Venice Boulevard or S. Venice Boulevard, each of which constitutes a “Boulevard II” under the City’s classification scheme.⁶⁵ The sidewalk along N. Venice Boulevard between the East Parking Tower and Pacific Avenue is just 5 feet wide (with frequent obstructions like telephone poles, utility boxes and such) and the developers are seeking waiver of their legal obligation to expand it. The developers are also seeking waiver of their legal obligation to expand the sidewalk along S. Venice Boulevard, which is 12 feet wide, as well as their legal obligation to expand the sidewalk on Pacific Avenue (9 feet wide) and Dell Avenue (5 feet wide). City standards, policies and best practices call for sidewalks that are at least 15 feet wide. Furthermore, the area in question is expressly identified in the Mobility Plan 2035 as being part of a Transit Enhanced Network, Bicycle Enhanced Network, and Neighborhood Enhanced Network in a Pedestrian Enhanced District.⁶⁶

The East Parking Tower would provide 188 spaces of replacement beach parking; 23 spaces of new beach impact parking; and 41 new parking spaces that the developers claim they are not required to provide, for a total of 252 parking spaces.⁶⁷ 65 of these parking spaces are designated compact, but the developers have made no showing that compact parking spaces are acceptable substitutes for standard parking spaces.⁶⁸ In fact, the City has expressly stated that “replacement parking” must be provided at “at least a 1:1 ratio.” Replacing something big with something small is not “1:1.”

The Planning Department Staff Report states that there are 196 parking spaces—not 188 parking spaces—in LADOT Lot 731.⁶⁹ None of those existing spaces are compact, and roughly half are west of Grand Canal.

The developers are seeking commercial zoning for the Venice Dell Pacific Site. The Venice Coastal Zone Specific Plan requires one beach impact parking space per 640 square feet of ground floor space in a commercial project. The developers’ plans show 38,525 square feet of

⁶⁴ Ex. 86.

⁶⁵ Ex. 17 at pdf file page 21 through 23 of 202.

⁶⁶ Ex. 17.

⁶⁷ Ex. 11, G0.01.

⁶⁸ Ex. 11.

⁶⁹ Ex. 35 at 2, 3, 22 and 24.

ground floor space. Consequently, 61 beach impact parking spaces ($38,525/640=60.2$) are required.

Adding the 196 replacement parking spaces required to the 61 beach impact parking spaces required shows that the East Parking Tower must provide at least 257 spaces.

And finally, City records show that LADOT Lot 731 brings in \$1 million in revenue per year, accounting for nearly 5% of all revenue from public lots citywide.⁷⁰ The notion that the lot is “underutilized”—as required for inclusion in the AHOS program—is ridiculous.

In short, the East Parking Tower fails to satisfy conditions for use of the Venice Dell Pacific Site because it does not provide the full number of required replacement and beach impact parking spaces and improperly purports to replace existing parking and satisfy beach impact parking requirements with compact spaces. Further, it: (i) moves a significant number of beach parking spaces from the west side of Grand Canal to the east side of Grand Canal and, thus, further away from the beach; (ii) fails to provide, due to the “Texas Donut” architecture, the views and ocean breezes typical of parking structures in beach communities like Venice, Santa Monica, Manhattan Beach and Marina del Rey; (iii) subjects the public to the increased exposure to pollution (including Proposition 65 substances) and crime necessarily associated with fully enclosed parking structures; (iv) forces a substantial percentage of beachgoers to use substandard compact parking spaces that are uniquely unsuitable for beach parking (which typically involves the loading and unloading of family and friends, as well as large quantities of beach equipment like chairs, blankets, umbrellas, surfboards, boogie boards, SUP boards and kayaks);⁷¹ and (v) forces beachgoers—including elderly or infirm beachgoers and beachgoers corralling young children—to walk long distances to the beach across driveways on extremely substandard sidewalks with multiple obstacles (including telephone pole, utility boxes and two-way traffic) along boulevards heavily trafficked by cars and buses.⁷²

Thus, the East Parking Tower fails to satisfy conditions imposed by the City Council for development of the Venice Dell Pacific Site.

The West Parking Tower, for its part, provides 61 residential parking spaces, 42 commercial parking spaces, and 5 parking spaces that the developers claim they are not required to provide, for a total of 108 parking spaces.⁷³ 38 of these spaces are compact, and like the East Tower, the West Tower would be wrapped on all-four sides, “Texas Donut” style.

The developers claim that they are entitled to rely on the reduced parking requirements in AB 744, but even assuming (without conceding) that that is true for project approval, AB 744 does not apply to this analysis because the question here is whether the RDC satisfies separate requirements established by the City for use of the Venice Dell Pacific Site under AHOS. As

⁷⁰ Ex. 87, LADOT NO. 731 Revenue and Metrics.

⁷¹ Ex. 55, Boats and Kayaks Photographs.

⁷² Ex. 56, N. Venice Boulevard Photographs.

⁷³ Ex. 11, G0.01.

noted above, the City stated, without caveat, that it would only make the Venice Dell Pacific Site available for proposed developments that comply with the Venice Coast Zone Specific Plan, and thus, whatever bonuses or concessions may be available under state law are irrelevant to determining whether the parcel can be made available for development through the AHOS program.

The Venice Coastal Zone Specific Plan requires two parking spaces for each artist-in-residence space; two spaces for each unit in multiple dwelling structures; one guest space for every four units in multiple dwelling structures; one space for every 225 square feet of retail space; one space for every 75 square feet of community center space; one space for every 50 square feet of interior restaurant space; at least 10 spaces for outdoor restaurant service area; and one space for every 250 square feet of office space.⁷⁴

Thus, applying the use descriptions and square footage calculations in the developers' plans, the West Parking Tower must provide 420 parking spaces.

| USE | SPACES REQUIRED |
|---|--------------------|
| Artist-in-Residence (34 units) | 68 |
| Non-Artist Residents (and Guests) (116 units) | 261 |
| Retail Space (2,255 sq. ft.) | 11 |
| Restaurant (810 sq. ft.) | 17 |
| Outdoor Restaurant Service Area (assume 10 space minimum) | 10 |
| Art Studio ⁷⁵ (3,155 sq. ft.) | 43 |
| Supporting Office Space (685 sq. ft.) | 3 |
| Belltower Community Rooms (492 sq. ft.) | 7 |
| Total | 420 |

Further, even assuming that AB 744 somehow applies to the determination of whether the City can make the Venice Dell Pacific Lot available for development, the RDC would still have to provide at least 152 spaces in the West Parking Tower—almost 50% more than plans currently call for.

Plus, as with the East Parking Tower, the developers improperly use compact spaces to satisfy parking requirements and the enclosed “Texas-Donut” architecture would expose people using the parking structure to elevated rates of crime and pollution while depriving parkers—and the community in general—of the views and ocean breeze experience typically associated with parking structures in beach communities.

⁷⁴ Ex. 57, Sec. 11.C.; <https://planning.lacity.org/plans-policies/overlays/venice-coastal-zone>.

⁷⁵ Major Garcetti’s office has expressly described the “Art Studio” as “multi-purpose community space” and therefore the community space parking requirements plainly apply to the “Art Studio.”

In sum, the RDC fails to comply with the requirements for use of the Venice Pacific Dell Site under the AHOS and related City Council action. Further, the proposed parking schemes are insufficient under any measure, even factoring state law putatively reducing parking requirements for supportive and affordable housing projects. Thus, the City cannot make the Venice Dell Pacific Site available for the project and the project cannot move forward.

E. The RDC Violates Article 34 of the California Constitution, the City's Anti-Containment Policy, Law Prohibiting Housing Discrimination Based on Occupation, and the Equal Protection Rights of Private Landowners

As reflected in a recent study from Planning Urbanism, data from the California Tax Credit Allocation Committee ("CTCAC"),⁷⁶ which allocates Federal Low Income Housing Tax Credits ("LIHTC") in the state of California, and the Los Angeles Homeless Services Agency ("LAHSA")⁷⁷ show an extreme overconcentration of homeless shelters and subsidized housing in Venice relative to other parts of Council District 11.

In addition, as reflected data relating to Proposition HHH,⁷⁸ Proposition 279 and such,⁸⁰ there are 12 pending, in-process or new homeless shelters and housing projects in the Venice (which accounts for just 5% of Council District 11's landmass),⁸¹ including, for example, the Rose Avenue Apartments (12 units),⁸² the Lincoln Apartments Project (40 units next to an elementary school),⁸³ the Thatcher Yard Project (98 units on Marina Green),⁸⁴ the Marian Place Project (8 units for persons with mental illness next to a pre-school),⁸⁵ the CDRC Project (40 units next to a high school, middle school and elementary school) and Bridge Home Venice (a 3.15-acre shelter with 154 beds a block off the beach).

As a result of the overconcentration of homeless housing, shelters and services in Venice, Venice's homeless population has increased 133% since Prop HHH was passed and the City began implementing its Comprehensive Homeless Strategy in 2016, while declining in the rest of Council District 11 during the same period.⁸⁶ Further, all growth in Council District 11's homeless population during the period in question has been in the most diverse and least affluent communities in Council District 11—Venice, Mar Vista and Sawtelle / West Los Angeles—while the most affluent and less diverse communities—Pacific Palisades and Brentwood—have

⁷⁶ Ex. 59, CTCAC List of Projects; <https://www.treasurer.ca.gov/ctcac/projects.asp>

⁷⁷ Ex. 60, 2020 LAHSA Housing Inventory.

⁷⁸ <https://www.lamayor.org/HomelessnessTrackingHHH>

⁷⁹ <https://hcd.ca.gov/grants-funding/active-funding/nplh.shtml>

⁸⁰ www.fightbackvenice.org

⁸¹ <http://maps.latimes.com/neighborhoods/neighborhood/venice/>

⁸² Ex. 61, Public Records re: Rose Avenue Apartments Project.

⁸³ Ex. 62, Public Records re: Lincoln Avenue Apartments Project.

⁸⁴ Ex. 63, Public Records re: Thatcher Yard Project.

⁸⁵ Ex. 64, Public Records re: Marian Place Project.

⁸⁶ <https://www.lahsa.org/data?id=45-2020-homeless-count-by-community-city>

seen double-digit drops in their homeless populations since 2016.⁸⁷ According to data from LAHSA and the United States Department of Housing and Urban Development (“HUD”),⁸⁸ growth in Venice’s homeless population also greatly exceeds growth of the homeless populations in other Southern California beach communities, as well as the growth of the homeless population at the city, state and federal levels.

On March 16, 2016, the City Council formally reversed “the policy of containment that has led to over-concentrations of homeless services in certain parts of the City and County.”⁸⁹ The placement of yet another housing project in Venice—particularly one as massive and imposing as the RDC—plainly violates the City policy and strategy⁹⁰ with respect to the homeless crisis—including formal reversal of the containment policy—and, thus, the RDC project cannot be allowed to move forward.

Similarly, Article 34 of the California Constitution gives local residents the right to vote on public housing projects such as the RDC.⁹¹ In the 1990s, voters approved 52,500 units of public housing in the City of Los Angeles, with an allowance of 3,500 public housing units per City Council district, through a citywide referendum, Proposition B.⁹² Even assuming that referendum was sufficient to satisfy Article 34, Article 34 and Proposition B embody and codify the principle that the costs and burdens of public housing projects must be distributed equally across communities and taxpayers. That means that, as 5% of the CD11’s landmass, Venice should have no more than 175 of the 3,500 Article 34 housing units putatively approved under Prop B. As VCHC itself admits, there are already at least 42 Article 34 housing units in Venice,⁹³ and in the last year alone, an additional 150 units of Article 34 housing have gotten the green light in Venice at the Rose Avenue Apartments (14 units),⁹⁴ Lincoln Apartments (40 units)⁹⁵ and Thatcher Yard projects (98).⁹⁶ Plus, several more units are pending approval for the Marian Place Project.⁹⁷ Thus, Venice has exceeded the 175-unit Article 34 cap under Proposition 8, and voter approval is required for any additional projects in Venice, including the RDC.

⁸⁷ <http://maps.latimes.com/neighborhoods/neighborhood/venice/>;
<http://maps.latimes.com/neighborhoods/neighborhood/mar-vista/>;
<http://maps.latimes.com/neighborhoods/neighborhood/sawtelle/>;
<http://maps.latimes.com/neighborhoods/neighborhood/brentwood/>;
<http://maps.latimes.com/neighborhoods/neighborhood/pacific-palisades/>

⁸⁸ <https://www.hudexchange.info/programs/coc/coc-homeless-populations-and-subpopulations-reports/>

⁸⁹ Ex. 10.

⁹⁰ Ex. 9.

⁹¹ Ex. 66.

⁹² Ex. 66.

⁹³ Ex. 37 at pdf file page 6.

⁹⁴ Ex. 61.

⁹⁵ Ex. 62.

⁹⁶ Ex. 63.

⁹⁷ Ex. 64.

Further, discriminating against tenants on the basis of occupation—or “source of income”—is prohibited by law, and policies reserving units for “artists” are suspect under federal housing law⁹⁸ and the Fourteenth Amendment to the United States Constitution because, empirically, such policies favor white tenants over non-white tenants.⁹⁹ VCHC and HCHC used “artist housing” to build local support for the RDC but that aspect of the project may well be unlawful in its own right.

Finally, the City has recently blocked a number of projects in the area that either comply fully with applicable zoning and land use plans or seek variances far less significant than those required for the RDC. For example, Councilman Bonin took jurisdiction over—and completely shut down—a “by right” mixed-use development on Venice Boulevard near his home in Mar Vista in 2018 based on his subjective view that it was “not right” for the neighborhood.¹⁰⁰ Bonin similarly took jurisdiction over the much-anticipated Venice Place Project earlier this year—after it successfully completed a grueling multi-year approval process—and is now seeking to extract entirely new concessions from the developer.¹⁰¹ And a property owner was recently denied permission to combine two properties on Ocean Front Walk (a mere fraction of the lot consolidation required for the RDC) on the grounds that exceptions to lot consolidated rules could not be provided while the General Plan is being updated.¹⁰² Failure to enforce zoning, land use plans and such with the same vigor here raises obvious equal protection issues.

II. The RDC Fails to Satisfy Requirements for a CEQA Exemption Under A.B. 1197 Sections 65650, et seq. of the California Government Code

A. Relevant Law

1. A.B. 1197 (California Public Resources Code § 21080.27)

A.B. 1197 was passed as a “special statute” and as an “urgency statute” in 2019 and is codified as Section 21080.27 of the California Public Resources Code.¹⁰³ Cal. Pub. Res. Code § 21080.27.

As relevant here, Section 21080.27¹⁰⁴ provides that CEQA “does not apply to any activity approved by or carried out by the City of Los Angeles in furtherance of providing emergency shelters or supportive housing in the City of Los Angeles.” Cal. Pub. Res. Code § 21080.27, subd. (b)(1).

⁹⁸ Ex. 39; Ex. 40; Ex. 41; Ex. 42.

⁹⁹ Ex. 67, 2016, “The Rise of White-Segregated Subsidized Housing,” University of Minnesota Law School.

¹⁰⁰ Ex. 14.

¹⁰¹ Ex. 15.

¹⁰² Ex. 13.

¹⁰³ Ex. 68, California Public Resources Code, Section 21080.27.

¹⁰⁴ As used herein, “Section 21080.27” refers to Section 21080.27 of the California Resources Code, unless otherwise specified.

As used in Section 21080.27, “ ‘[s]upportive housing’ means supportive housing, as defined in Section 50675.14 of the Health and Safety Code, that meets the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division 1 of Title 7 of the Government Code or the eligibility requirements for qualified supportive housing or qualified permanent supportive housing set forth in Ordinance No. 185,489 or 185,492, and is funded, in whole or in part, by any of the following:

- (A) The No Place Like Home Program (Part 3.9 (commencing with Section 5849.1) of Division 5 of the Welfare and Institutions Code).
- (B) The Building Homes and Jobs Trust Fund established pursuant to Section 50470 of the Health and Safety Code.
- (C) Measure H sales tax proceeds approved by the voters on the March 7, 2017, special election in the County of Los Angeles.
- (D) General bond obligations issued pursuant to Proposition HHH, approved by the voters of the City of Los Angeles at the November 8, 2016, statewide general election.
- (E) The City of Los Angeles Housing Impact Trust Fund.”

Cal. Pub. Res. Code § 21080.27.

Ordinance No. 185,489—commonly known as the Interim Motel Conversion Ordinance (“IMCO”)¹⁰⁵—only applies to the conversion of existing motels to supportive housing and, outside of downtown Los Angeles, Ordinance No. 185,492—commonly known as the Permanent Supportive Housing Ordinance (“PSHO”)—only applies to projects of 120 units or less.¹⁰⁶ Thus, the RDC must satisfy “the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division 1 of Title 7 of the Government Code” to qualify for the A.B. 1197 CEQA exemption.

2. California Government Code Section 65650, et seq.

The “eligibility requirements for supportive housing” under Section 65650, et seq. of the California Government Code are as follows:

- (a) Supportive housing shall be a use by right in zones where multifamily and mixed uses are permitted, including nonresidential zones permitting multifamily uses, if the proposed housing development satisfies all of the following requirements:

¹⁰⁵ Ex. 70, Ordinance 185,489.

¹⁰⁶ Ex. 69, Ordinance 185,492.

- (1) Units within the development are subject to a recorded affordability restriction for 55 years.
- (2) One hundred percent of the units, excluding managers' units, within the development are restricted to lower income households and are or will be receiving public funding to ensure affordability of the housing to lower income Californians. For purposes of this paragraph, "lower income households" has the same meaning as defined in Section 50079.5 of the Health and Safety Code.
- (3) At least 25 percent of the units in the development or 12 units, whichever is greater, are restricted to residents in supportive housing who meet criteria of the target population. If the development consists of fewer than 12 units, then 100 percent of the units, excluding managers' units, in the development shall be restricted to residents in supportive housing.
- (4) The developer provides the planning agency with the information required by Section 65652.
- (5) Nonresidential floor area shall be used for onsite supportive services in the following amounts:
 - (A) For a development with 20 or fewer total units, at least 90 square feet shall be provided for onsite supportive services.
 - (B) For a development with more than 20 units, at least 3 percent of the total nonresidential floor area shall be provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens.
- (6) The developer replaces any dwelling units on the site of the supportive housing development in the manner provided in paragraph (3) of subdivision (c) of Section 65915.
- (7) Units within the development, excluding managers' units, include at least one bathroom and a kitchen or other cooking facilities, including, at minimum, a stovetop, a sink, and a refrigerator.

Cal. Gov. Code § 65651.¹⁰⁷

As used in the supportive housing eligibility requirements set forth in Section 65650 of the Government code, "target population":

¹⁰⁷ Ex. 71, Cal. Gov. Code § 65651.

means persons with low incomes who have one or more disabilities, including mental illness, HIV or AIDS, substance abuse, or other chronic health condition, or individuals eligible for services provided pursuant to the Lanterman Developmental Disabilities Services Act (Division 4.5 (commencing with Section 4500) of the Welfare and Institutions Code) and may include, among other populations, adults, emancipated minors, families with children, elderly persons, young adults aging out of the foster care system, individuals exiting from institutional settings, veterans, and homeless people.

Cal. Gov. Code § 65582, subd. (i);¹⁰⁸ see Cal. Gov. Code § 65650.¹⁰⁹

3. California Health & Safety Code Section 50675.14

Relevant definitions in Section 50675.14 of the California Health & Safety Code are as follows:

“Supportive housing” means housing with no limit on length of stay, that is occupied by the target population, and that is linked to onsite or offsite services that assist the supportive housing resident in retaining the housing, improving their health status, and maximizing their ability to live and, when possible, work in the community.

“Target population” means persons, including persons with disabilities, and families who are “homeless,” as that term is defined by Section 11302 of Title 42 of the United States Code, or who are “homeless youth,” as that term is defined by paragraph (2) of subdivision (e) of Section 12957 of the Government Code.

Cal. Health & Safety Code § 50675.14, subd. (a)(2) & (a)(3)(A).¹¹⁰

Thus, to qualify for the A.B. 1197 CEQA exemption, the following requirements must be satisfied:

1. The RDC must show that it is using one or more of the specified sources of funding, Cal. Pub. Res. Code § 21080.27, subd. (a)(3);
2. The RDC must constitute an “activity approved by or carried out by the City of Los Angeles,” Cal. Pub. Res. Code § 21080.27, subd. (b)(1);
3. A plan for the provision of supportive services must be provided, Cal. Gov. Code §§ 65651, subd. (a)(4), 65652;

¹⁰⁸ Ex. 72, Cal. Gov. Code § 65582.

¹⁰⁹ Ex. 73, Cal. Gov. Code § 65650.

¹¹⁰ Ex. 74, California Health & Safety Code § 50675.14.

4. The RDC must be in a “zone[] where multifamily and mixed uses are permitted,” Cal. Gov. Code § 65651, subd. (a);
5. “One hundred percent of the units, excluding managers’ units, within the [RDC] [must be] restricted to lower income households and [must] receiv[e] public funding...,” Cal. Gov. Code §§ 65651, subd. (a)(2);
6. “At least 25 percent of the units ... [must be] restricted to residents” “with low incomes who have one or more disabilities, including mental illness, HIV or AIDS, substance abuse, or other chronic health condition, or individuals eligible for services provided pursuant to the Lanterman Developmental Disabilities Services Act (Division 4.5 (commencing with Section 4500) of the Welfare and Institutions Code) and may include, among other populations, adults, emancipated minors, families with children, elderly persons, young adults aging out of the foster care system, individuals exiting from institutional settings, veterans, and homeless people,” Cal. Gov. Code §§ 65650, 65582 and Cal. Health & Safety Code § 50675.14; and
7. “[A]t least 3 percent of the total nonresidential floor area [must] be provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens.” Cal. Gov. Code § 65651, subd. (a)(5)(B).

B. Exemption Analysis

The developers have not shown that RDC satisfies the foregoing requirements and therefore does not qualify for an exemption from CEQA under A.B. 1197.

1. Funding Source

The Planning Department Reports states:

On February 16, 2018, the applicant received a Measure H funding commitment letter from the Los Angeles County Department of Health Services Housing for Health Division for the Project. The funding commitment provides that the Department will enter into a contract with an approved Intensive Case Management Services (‘ICMS’) provider at an estimated funding amount of up to \$367,200 per year, which will provide supportive services for 68 formerly homeless households in the Project. The term of the current supportive services funding commitment is through June 30, 2022, and includes the Department’s authority to exercise extension options.¹¹¹

The February 16, 2018 letter the Los Angeles County Department of Health Services referenced in the staff report (the “February 16, 2018 Letter”) is attached as Attachment B to an

¹¹¹ Ex. 35 at 6.

April 21, 2020 letter from the developers' attorneys at Latham & Watkins, LLP.¹¹² It is insufficient to satisfy A.B. 1197's "funding source" requirement for four reasons:

First, Section 21080.27, subdivision (a)(3) expressly requires that "housing" be funded from one of the five specified sources. The February 16, 2018 Letter does not pertain to—or even reference—the funding of "housing." It pertains solely to the funding of services, and thus cannot satisfy A.B. 1197.

Second, there is no indication anywhere in the letter that the funds referenced in the February 16, 2018 Letter would come from Measure H or any of the other specified sources of funding under Section 21080.27, subdivision (a)(3). That is a mere assertion by the developers' attorneys and the City erred in taking it at face value. In fact, the letter makes no reference at all to the source of funding, and the developers themselves expressly stated in writing on October 15, 2020 that project "[f]unding has not yet been secured."¹¹³

Third, the February 16, 2018 letter was issued nearly three years ago and merely states that "[t]he County intends" to provide "an estimated funding amount of up to \$367,200." This does not constitute a "commitment" to do anything, as most people understand the term, and in any event, Measure H has been rocked by epic shortfalls in recent years. Even if this were somehow construed as a commitment to expend Measure H funds on RDC housing (and it is impossible to see how it could be), some credible confirmation is required that the County intends to honor its commitment and is capable of doing so before the City can conclude that the statutory requirement with respect to funding source has been satisfied.

In light of the foregoing—including the developers' express admission that funding sources for the project have not yet been determined—A.B. 1197 has not been satisfied and the CEQA exemption cannot apply.

2. Provision of Supportive Services

The City Planning file for the RDC—as produced and made available for onsite inspection in response to public record requests—does not contain a supportive services plan setting forth "[t]he name of the proposed entity or entities that will provide supportive services," "[t]he proposed funding source or sources for the provided onsite supportive services," or "[p]roposed staffing levels" for supportive services.¹¹⁴ See Cal. Gov. Code §§ 65651, subd. (a)(4), 65652.¹¹⁵ Further, the Planning Commission Staff Report does not address this issue in any fashion. Thus, A.B. 1197 has not been satisfied and the CEQA exemption cannot apply.

3. Zoning

¹¹² Ex. 75, A.B. 1197 Exemption Letter, Attach. B.

¹¹³ Ex. 76, Lopez-Zubiri Email

¹¹⁴ Ex. 78, Public Records re: RDC.

¹¹⁵ Ex. 71A, Cal. Gov. Code § 65652.

As indicated in the Planning Department Staff Report, the Venice Dell Pacific Site is zoned OS-1XL-O, which is open space zoning that does not allow for multifamily uses.¹¹⁶ This issue is not addressed in the Planning Department Staff Report. Thus, A.B. 1197 is not satisfied and the CEQA Exemption does not apply.

4. 100% Affordable Housing

The developers claim that at least 34 of the units are to be reserved for artists. As set forth above, state law prohibits discrimination on the basis of a tenants “source of income,” and “artist housing” is suspect under federal law and the Fourteenth Amendment to the extent it favors white tenants. The developers have not shown that the 34 units it is purporting to reserve for low-income artists are lawful. This issue is not addressed in the Planning Department Staff Report. Thus, the developers have not shown that they have a plan under which 100% of units will go to affordable housing and AB 1197 has not been satisfied.

5. California Government Code Section 65650 Target Population

Section 21080.27 of the Public Resources Code and Section 65650 of the California Government Code together require that “[a]t least 25 percent of the units ... [must be] restricted to residents” “with low incomes who have one or more disabilities, including mental illness, HIV or AIDS, substance abuse, or other chronic health condition, or individuals eligible for services provided pursuant to the Lanterman Developmental Disabilities Services Act (Division 4.5 (commencing with Section 4500) of the Welfare and Institutions Code) and may include, among other populations, adults, emancipated minors, families with children, elderly persons, young adults aging out of the foster care system, individuals exiting from institutional settings, veterans, and homeless people.” Cal. Pub. Res. Code § 21080.27, subd. (a)(3); Cal. Gov. Code §§ 65651, subd. (a)(3), 65582, subd. (i).

There is no indication in the City Planning file for the RDC—as produced and made available for onsite inspection in response to public record requests—that this requirement has been satisfied and the issue is not addressed in the Planning Department Staff Report. Thus, A.B. 1197 has not been satisfied and the CEQA exemption does not apply.

6. Supportive Services as a Percentage of Total Nonresidential Floor Area

The January 7, 2020 Revision 2 project plans submitted to the City and posted to the VCHC website state that the “Floor-Area Ratio” is 1.15:1, based on Buildable Area and that the Buildable Area is 97,573 sq. ft.¹¹⁷ Thus, according to the developers themselves the total floor area for the RDC is 1.15 x 97,573, or 104,159 sq. ft. 104,140 sq. ft., similarly, is the floor area indicated in the Area Tabulation.

¹¹⁶ Ex. 35 at 1.

¹¹⁷ Ex. 11, G0.01.

According to the same plans, there is 64,280 sq. ft. of residential space, including 13,640 sq. ft. of live/work micro-apartments (i.e., “artist lofts”), 16,675 of studio apartment, 13,375 of 1-bedroom apartments and 20,590 of 2-bedroom apartments.¹¹⁸ Thus, there “total nonresidential floor area” is the total floor area—as stated by the developers—of 104,159 sq. ft minus the residential floor area—as stated by the developers—of 64,280 sq. ft., or 39,879 sq. ft.

The January 7, 2020 Revision 2 plans further state that there is 685 sq. ft. of “supporting office” space and that “[s]upporting office areas include office space for tenant supportive services and on-site storage[,] [i]ntended for use by internal staff and tenants only.”¹¹⁹ There is no indication that “on-site storage” constitutes “supportive services” under applicable law, so according to the plans something less than 685 sq. ft. has been allocated for “supportive services.” As such, something less than 1.7% of (685 sq. ft. / 39,879 sq. ft.) of total nonresidential floor area is “provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens.”

The Planning Department Staff Report does not address this issue. Thus, A.B. 1197 has not been satisfied and the CEQA exemption does not apply.

7. No CEQA Exemption Under A.B. 1197 Can Apply to the East Parking Tower

As noted above, RDC parking will be in two parking structures: the East Parking Tower and the West Parking Tower. The West Parking Tower will provide residential and commercial parking for the RDC, while the East Parking Tower will provide general public parking, primarily for beach access, with no residential parking for the RDC.¹²⁰

The developers stated at the October 6, 2020 LUPC meeting and at the Zoom presentation they made on October 14, 2020 that the City would own, operate, take the revenues from, and manage the development of the East Parking Tower, and that East Parking Tower was still in the design phase, as the City is still figuring out funding sources and determining the extent (if any) to which the East Parking Tower will incorporate “robotic”—or “automated lift”— parking.¹²¹ These facts are further reflected in documents relating to parking produced in response to public records requests.¹²²

As such, the East Parking Tower is plainly just another City parking lot that has nothing to do with supportive housing and thus requires complete CEQA review in its own right, even if some or all of the RDC somehow qualified for the CEQA exemption under A.B. 1197. The A.B. 1197 CEQA exemption, in other words, cannot apply.

¹¹⁸ Ex. 11, G0.01.

¹¹⁹ Ex. 11, G0.01.

¹²⁰ Ex. 11, G0.01.

¹²¹ Ex. 1.

¹²² Ex. 43, Public Records re: Parking.

For the foregoing reasons, the A.B. 1197 CEQA exemption cannot be approved for the RDC.

III. Waiver of Dedications and Improvements

A. Relevant Law

Los Angeles Municipal Code Section 12.37A provides:

No building or structure shall be erected or enlarged, and no building permit shall be issued therefor, on any lot in any R3 or less restrictive zone (as such order of restrictiveness is set forth in Subsection B of Section 12.23); or on any lot in the RD1.5, RD2 or RD3 Zones; if such lot abuts a major or secondary highway or collector street unless the one-half of the highway or collector street which is located on the same side of the center of the highway or collector street as such lot has been dedicated and improved for the full width of the lot so as to meet the standards for such highway or collector street provided in Subsection H of this section; and further provided that in the case of either a corner lot or an L-shaped interior lot abutting a major or secondary highway and a local street which intersect, that one-half of the local street, on the same side of the center of said local street as such lot, has been dedicated and improved for that portion of said lot or lots within 300 feet of the ultimate property line of said highway so as to meet the standards for local streets provided in Subsection H of this section and provide adequate right-turn ingress to and egress from the highway; or such dedication and improvement has been assured to the satisfaction of the City Engineer respectively. As used in this section, the Center/Control line of the arterial or collector street shall mean the center of those arterial or collector streets as shown on the Citywide Circulation System Map of the Circulation Element of the General Plan or, with respect to collector streets, on the adopted community plans of the Land Use Element of the General Plan on file in the offices of the Department of City Planning. (Amended by Ord. No. 184,718, Eff. 3/4/17.)¹²³

This means that the RDC developers are required to bring the sidewalks and streets surrounding the project up to prevailing standards with respect to width and corner cuts for safety, as well as use and enjoyment, and in keeping with well-established and universally recognized best practices.

The RDC developers are seeking waiver of all such obligations, including, specifically:¹²⁴

¹²³ Ex. 79.

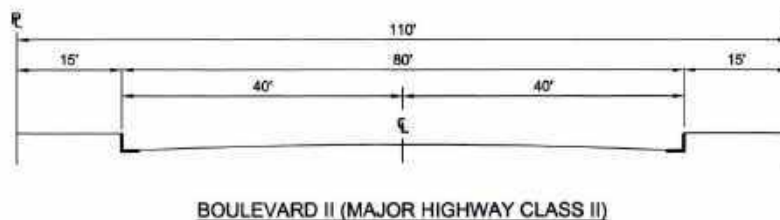
¹²⁴ Ex. 35 at 1.

- a. Dedication of 20.5 feet to complete a 43-foot half right-of-way along Pacific Avenue,
- b. Dedication of a 15-foot by 15-foot corner cut at the intersection of South Venice Boulevard and Pacific Avenue,
- c. Dedication of a 15-foot by 15-foot corner cut at the intersection of North Venice Boulevard and Pacific Avenue,
- d. Dedication of a 15-foot by 15-foot corner cut at the intersection of South Venice Boulevard and Dell Avenue, and
- e. Dedication of 10 feet to complete a 30-foot half right-of-way along Dell Avenue.

B. Existing Conditions

The Venice Dell Pacific Site is bounded by N. Venice Boulevard to the north, S. Venice Boulevard to the south, Dell Avenue to the east and Pacific Avenue to the west.

N. Venice Boulevard and S. Venice Boulevard are each classified by the City as “Boulevard II (Major Highway Class II).”¹²⁵ As such, each lane should measure at least 110 feet across with two lanes that are each 40 feet wide and two sidewalks—one on each side—that are each 15 feet wide.¹²⁶



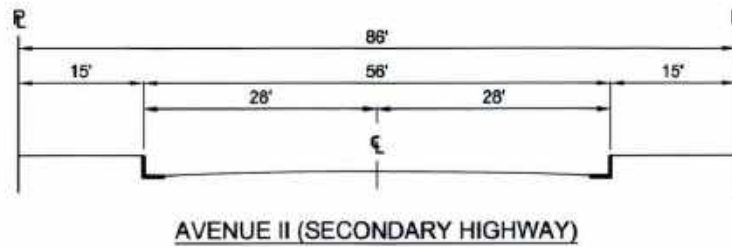
Pacific Avenue is an Avenue II.¹²⁷ As such, each lane should measure 28 feet across and each sidewalk should be 15-feet wide.¹²⁸

¹²⁵ Ex. 17, pdf file page 21 and 23 of 202.

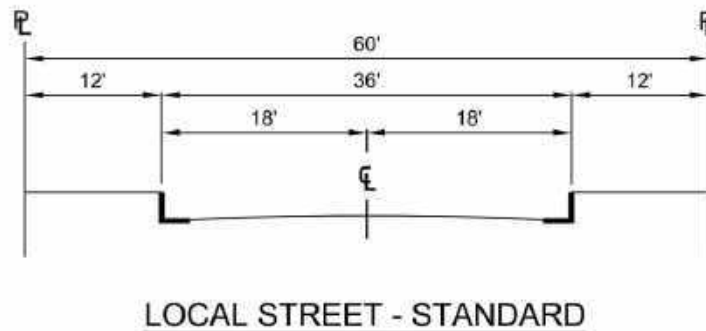
¹²⁶ Ex. 16 at 19.

¹²⁷ Ex. 17, pdf file page 21 and 23 of 202.

¹²⁸ Ex. 16 at 20.



Finally, Dell Avenue is a standard local street.¹²⁹ As such, each lane must be 18 feet wide and each sidewalk must be 12 feet wide.¹³⁰



Further, by extension, there should be with 15-foot-by-15-foot corner cuts where N. Venice Boulevard and S. Venice Boulevard intersect Pacific Avenue; and a corner cut of at least 15-foot-by-12-foot (and possibly 15-foot-by-15-foot) where S. Venice Boulevard intersects Dell Avenue.

These standards are intended to ensure “safe, accessible and vibrant streets” and “to ensure that the safety, accessibility, and convenience of all transportation users – pedestrians, bicyclists, transit riders, and motorists – is accommodated.”¹³¹ Further, they are meant to “encourage healthy recreational activities such as walking, running, and bicycling” and to “boost the economic activity and visibility of storefront businesses.”¹³² And they have been adopted as part of the City’s Mobility Plan 2035 and General Plan to achieve “five goals – Safety First, World Class Infrastructure, Access for all Angelenos, Informed Choices, and Clean Environments for a Healthy Community.”¹³³

¹²⁹ Ex. 17, pdf file page 21 and 22 of 203.

¹³⁰ Ex. 16 at 24.

¹³¹ Ex. 16 at 3.

¹³² Ex. 16 at 3.

¹³³ Ex. 16 at 4.

Further, under Mobility Plan 2035, the relevant portion of Venice Boulevard is part of a Transit Enhanced Network¹³⁴ and a Bicycle Enhanced Network (Low Stress Network) with Tier 1 Protected Bicycle Lanes,¹³⁵ in a Pedestrian Enhanced District,¹³⁶ while Pacific Avenue is in the West Subarea of a Neighborhood Enhanced Network.¹³⁷

Transit Enhanced Networks are supposed to provide a platform for “[i]mprov[ing] the performance and reliability of existing and future bus service.”¹³⁸ “Transit-Enhanced streets “were selected based on a data-driven analysis of factors such as ridership, destinations, employment, and population” and are intended to “provide reliable and frequent transit service that is convenient and safe; increase transit mode share; reduce single-occupancy vehicle trips; and integrate transit infrastructure investments with the identity of the surrounding street.”¹³⁹

Bicycle Enhanced Networks are supposed to “[p]rovide safe, convenient, and comfortable local and regional bicycling facilities[] for people of all types and abilities” and for “a host of slow moving modes including but not limited to scooters, skateboards, rollerblading, rideables and other future compact personal transportation technologies.”¹⁴⁰ “The Bicycle Enhanced Network is comprised of protected bicycle lanes, and bicycle paths to provide bikeways for a variety of users. This low-stress network provides a higher level of comfort than just a striped bicycle lane.”¹⁴¹

Moreover, the Coastal Transportation Corridor Specific Plan and West Los Angeles TIMP Specific Plan call for cycle tracks—or protected bicycle lane that are separated from vehicular traffic by a gap or barrier—on both N. Venice Boulevard and S. Venice Boulevard along the Venice Dell Pacific Site.¹⁴²

The City’s pedestrian infrastructure, for its part, is intended to “recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.”¹⁴³ And Pedestrian Enhanced Districts are areas “where pedestrian improvements on arterial streets” have been “prioritized to provide better walking connections to and from the major destinations within communities.”¹⁴⁴ “Further analysis and prioritization will be done as funding and projects come

¹³⁴ Ex. 17 at pdf file page 15 of 202.

¹³⁵ Ex. 17 at pdf file page 161 of 202.

¹³⁶ Ex. 17 at pdf file page 164 of 202.

¹³⁷ Ex. 17 at pdf file page 156 and 158 of 202.

¹³⁸ Ex. 17 at pdf file page 82 of 202.

¹³⁹ Ex. 17 at pdf file page 82 of 202.

¹⁴⁰ Ex. 17 at pdf file page 83 of 202.

¹⁴¹ Ex. 17 at pdf file page 83 of 202.

¹⁴² Ex. 18 at pdf file page 51 and 53 of 54.

¹⁴³ Ex. 17 at pdf file page 80 of 202.

¹⁴⁴ Ex. 17 at pdf file page 80 of 202.

through based on safety, public health, equity, access, social, and/or economic benefit objectives.”¹⁴⁵

And finally, “[t]he Neighborhood Enhanced Network is a selection of streets that provide comfortable and safe routes for localized travel of slower-moving modes such as walking, bicycling, or other slow speed motorized means of travel” that “complements the Pedestrian Enhanced Districts and the Bicycle Enhanced Network by identifying non-arterial streets important to the movement of people who walk and bike.”¹⁴⁶

Actual measurements of the streets and sidewalks surrounding the RDC are as follows:¹⁴⁷

- N. Venice Boulevard: sidewalk – 5 feet wide; traffic lanes – 25 feet wide.
- S. Venice Boulevard: sidewalk – 12 feet wide; north traffic lane – 20 feet wide; south traffic lane – 26.05 feet wide.
- Pacific Avenue: sidewalk – 9 feet wide;¹⁴⁸ northbound traffic lane – 42 feet wide; southbound traffic lane – 22.5 feet wide.
- Dell Avenue: sidewalk – 5 feet wide; southbound traffic lane – 20 feet wide; northbound traffic lane – 20 feet wide.
- *Corner Cuts*
- Southeast Corner of N. Venice Boulevard and Pacific Avenue: 5-foot-by-9-foot corner cut.
- Northeast Corner of S. Venice Boulevard and Pacific Avenue: 12-foot-by-9-foot corner cut.
- Northwest Corner of S. Venice Boulevard and Dell Avenue: 12-foot-by-5-foot corner cut.

Thus, all of the sidewalk widths and corner cuts in question are dramatically substandard, and in violation of best practices, City policy and common sense, as (with one exception) are the relevant street widths. The sidewalk on N. Venice Boulevard—one of the primary corridors for pedestrian, scooter, skateboard, rollerskate, pedestrian and wheelchair traffic to Venice Beach and the Venice Boardwalk, for example—is just one-third standard width and riddled with obstacles such as telephone poles and utility boxes.

C. Discussion

As noted above, standard sidewalks are necessary to ensure safety, accommodate increasing pedestrian traffic and a changing mobility mix (that increasing includes scooters, skateboard, bicycles, and such), make room for the elderly and disabled persons, and to promote

¹⁴⁵ Ex. 17 at pdf file page 80 of 202.

¹⁴⁶ Ex. 17 at pdf file page 81 of 202.

¹⁴⁷ Ex. 11, SV1.10.

¹⁴⁸ Ex. 81, Southeast Corner, N. Venice Boulevard and Pacific Avenue.

the use of sidewalks for social and commercial purposes in addition to locomotion.¹⁴⁹ They are also integral elements of strategies to make communities more livable, promote foot traffic to retail outlets and bring urban streetscapes to life.

Standard curb cuts, similarly, are necessary because they decrease the turning radius for traffic, which decreases the risk of pedestrian-vehicle collisions by inducing slower turns, decreasing the crossing distance for pedestrians, and increasing pedestrian visibility.¹⁵⁰

These issues are particularly important here and now because:

1. Venice Boulevard is the primary artery to and from Venice Beach and the Venice Boardwalk—two of the most heavily trafficked tourist destinations in the world;
2. The rights of way in question are in a tsunami zone, making swift, efficient, high-volume escape routes essential;¹⁵¹
3. As the last major parcel of open space in Venice, the Venice Dell Pacific Site is a crucial staging area for triage and emergency relief efforts, which Venice will lose if the RDC is built, making the need for robust rights of way all the more acute;
4. The rights-of-way in question are heavily trafficked by tourists and other visitors who are unfamiliar with the area and thus more likely to get confused or react slowly, reducing efficiency in the utilization of rights of way;
5. By their very nature, the beach and boardwalk invite a disproportionate amount of pedestrian traffic and unusually diverse mobility mix;
6. Traffic on the sidewalks and streets in question will frequently involve families with kids transporting all manner of beach equipment;
7. The RDC, if approved, would place new demands on the rights-of-way in question through the addition of residences, parking, retail space, community space and “artist lofts” that the developers claim are intended to encourage “window shopping” and the social use of sidewalks;
8. The RDC would negate the value of the median as a pedestrian refuge,¹⁵² by forcing all pedestrian traffic, with currently flows through the open space, ground level parking lot, onto the narrow sidewalk fronting the RDC along Pacific Avenue;
9. Sidewalks on the other side of N. Venice Boulevard, S. Venice Boulevard, Pacific Avenue and Dell Avenue are also grossly substandard (and even non-existent in places)¹⁵³ and Pacific Avenue—including Pacific Avenue at N. Venice Boulevard—has been identified as a High Injury Network street with a high concentration of

¹⁴⁹ Ex. 17; Ex. 18; Ex. 19; Ex. 20; Ex. 22; Ex. 80.

¹⁵⁰ Ex. 16, page Complete Street Design Guide, pdf pages 179 through 181 of 252.

¹⁵¹ Further to this point, we note that the RDC project—and proposed waiver of dedications and improvements—is contrary to the City’s recent emphasis on Local Hazard Mitigation and, specifically, the preservation and enhancement of evacuation routes in connection with housing. Ex. 89.

¹⁵² Ex. 16, pdf file page 184 of 252.

¹⁵³ Ex. 82; Ex. 83.

traffic collisions involving people walking and bicycling that result in severe injury and death;¹⁵⁴

10. As city planners are increasingly recognizing, providing adequate space for social distancing in crowded areas will be particularly important to healthy families, communities and businesses in the post-COVID era;¹⁵⁵ and
11. All required dedications and improvements to the streets and sidewalks surrounding the Venice Dell Pacific Site are essential to the objectives and standards for Transit Enhanced Networks, Bicycle Enhanced Networks, Pedestrian Enhanced Districts and Neighborhood Enhanced Networks.

In addition, the developers have set forth no valid reason why the required dedications and improvements to rights of way on N. Venice Boulevard, S. Venice Boulevard, Pacific Avenue and Dell Avenue should not be made. In fact, at 140 units, the RDC is nearly twice the size of the average supportive housing project in Los Angeles,¹⁵⁶ many times larger than other VCHC developments in Venice (and elsewhere), and more than 40% larger than the next largest supportive housing project in Venice (the Thatcher Yard Project) — not counting its commercial uses, community space, belltower and such.¹⁵⁷ Also, the RFP/Q specifically states that, because the Venice Dell Pacific Lot is so large, proposed projects need not use the entire site,¹⁵⁸ and Venice was originally told that there would only be “up to 90 small units.”¹⁵⁹ Even so, the developers consumed the entire building site, greatly exceeding height limits, maxing out ground floor setbacks and ignoring set back above the ground floor completely. There is simply no reason on the record why the project could not have been designed in a way that allowed fully for all proper dedications and improvements with respect to surrounding rights of way so that the goals of Mobility Plan 2035 could be achieved and that residents of and visitors to Venice could enjoy the corresponding benefits in safety and quality of life.

Moreover, there is no evidence that any analysis of walkability or bikeability justifying the requested waivers has been conducted,¹⁶⁰ and the minimal (virtually nonexistent) analysis that has been conducted takes no account whatsoever of the fact that the Venice Dell Pacific Site

¹⁵⁴

<http://ladot.maps.arcgis.com/apps/MapJournal/index.html?appid=488062f00db44ef0a29bf481aa337cb3&webmap=6ad51e9cf42c4ef09817e4b3b4d2eeb0>

¹⁵⁵ <https://www.cbc.ca/news/canada/covid-19-cities-design-physical-distancing-1.5550401>; <https://ny.curbed.com/2020/4/23/21231798/coronavirus-nyc-sidewalk-widths-pedestrians-biking>; <https://www.theglobeandmail.com/business/industry-news/property-report/article-wide-sidewalks-key-to-help-commercial-real-estate-weather-the-pandemic/>; <https://www.cnn.com/style/article/cities-design-coronavirus/index.html>; <https://www.bloomberg.com/news/articles/2020-03-06/how-the-coronavirus-could-change-city-planning>

¹⁵⁶ Ex. 84.

¹⁵⁷ Ex. 63.

¹⁵⁸ Ex. 4, page 37 of 61.

¹⁵⁹ Ex. 85.

¹⁶⁰ Ex. 19; Ex. 21.

is part of a Transit Enhanced Network, Neighborhood Enhanced Network and Bicycle Enhanced Network in a Pedestrian Enhanced District.¹⁶¹

And finally, knowingly and deliberately allowing substandard rights of way that do not come close to complying with prevailing standards, City policy, best practices or common sense in such a high risk, highly trafficked area—which will only be made more congested and confusing through the introduction of hundreds of new residents and new public concessions—will almost certainly strip the City of design immunity protections¹⁶² and subject the City to totally foreseeable lawsuits from tourists, RDC residents, other Venice Residents and others.

For the foregoing reasons, the requested waivers of dedications and improvements as to rights of way surrounding the Venice Dell Pacific Site are not justified and should be denied.

Thank you for taking the forgoing facts, issues and arguments into consideration in denying the A.B. 1197 CEQA exemption and the VTT for the RDC.

Sincerely,

s/ CHRISTIAN WREDE

Christian Wrede
VENICE VISION

Attachment A: Comparative Analysis: Venice Specific Plan Matrix / RDC Plans

¹⁶¹ Ex. 48, pdf file page 19 and 47 of 208; Ex. 19; Ex. 21.

¹⁶² Ex. 16, pdf file page 13 of 252.

ATTACHMENT A: COMPARATIVE ANALYSIS
Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
|--|--|---|
| GENERAL REQUIREMENTS | No permit shall be issued by LADBS for any Project unless the applicant has done all of the following: 1. Submitted an application, paid the application fee(s), and complied with all requirements in this Specific Plan, including Subsection 5.C | RDC does not comply with at least the following requirements in the Venice Coastal Zone Specific Plan: |
| LOT CONSOLIDATION: NUMBER OF LOTS Venice Coastal Zone Specific Plan, Section 9.A.1. | <p>Lot consolidation occurs when: (1) one or more structures are built over a lot line that divided two existing lots; or (2) a lot line is abandoned, a lot line is adjusted, lots are merged, or other action is taken by the City, for the purpose of allowing a structure to be built extending over what were previously two or more separate lots. Venice Coastal Zone Specific Plan, Sec. 5 Q.</p> <p>Lot Consolidation of contiguous lots may be permitted, provided the consolidation complies with conditions specified in Subsection 1 and 2 below. Subterranean development that is entirely below street elevation is exempt from this subsection. Venice Coastal Zone Specific Plan, Sec. 9.A.</p> <p><u>Venice Canals</u></p> <p>Venice Canals and Silver Strand residentially-zoned lots: Lot Consolidation shall not be permitted. Venice Coastal Zone Specific Plan, Sec. 9.A.1.a.</p> <p><u>North Venice</u></p> <p>A maximum of two residentially-zoned lots may be consolidated, provided the Venice Coastal Development Project conforms with development standards in Section 9 A 2 below. Venice Coastal Zone Specific Plan, Sec. 9.A.1.c.</p> | <p>RDC calls for consolidation of five lots in the Venice Canals Area and consolidation of approximately 35 lots in the North Venice Subarea.</p> <p>RDC does not comply with development standards in Section 9.A.2. of the Venice Coastal Zone Specific Plan and does not conform to the existing scale and characteristics of the surrounding community.</p> <p>Moreover, a mere fraction of the parking is subterranean. The vast majority of parking is in vertical towers as must as five-stories high.</p> |

¹ Unless otherwise indicated, citations in the “Requirement” column are to the Venice Coastal Zone Specific Plan, Ex. 57.

² Unless otherwise indicated, citations in the “RDC Characteristics” column are to the January 7, 2020 Project Plan, Ex. 11.

ATTACHMENT A: COMPARATIVE ANALYSIS
Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
|--|---|----------------------------------|
| | <p><u>Commercial</u></p> <p>Other Commercial Venice Coastal Development Projects: Two lots may be consolidated, provided the Venice Coastal Development Project conforms with development standards in Section 9 A 2 below; or three lots may be consolidated, provided the Venice Coastal Development Project conforms with development standards in Section 9 A 2 below and parking is subterranean with the roof at natural grade. Venice Coastal Zone Specific Plan, Sec. 9.A.1.e.(2).</p> <p><u>Mixed-Use and Multi-Family Residential</u></p> <p>Lot consolidation of more than two lots shall be permitted for mixed-use and multi-family residential Venice Coastal Development Projects, provided the project conforms to the existing scale and characteristic of the surrounding community, the required parking is on-site and the project conforms with development standards in Section 9 A 2 below. Venice Coastal Zone Specific Plan, Sec. 9.A.1.e.(4).</p> | |
| <p>LOT CONSOLIDATION: DEVELOPMENT STANDARDS Venice Coastal Zone Specific Plan, Section 9.A.2.</p> | <p>Access to subterranean parking shall be from an alley, where an alley exists, and all subterranean parking shall be fully below natural grade and shall not be visible from the street.</p> <p>Buildings shall be designed with visual breaks or Architectural Features, including balconies or terraces, with a change of material or a break in the plane for every 20 feet in horizontal length and every 15 vertical feet. Residential buildings shall provide habitable space on the Ground Floor, a ground level entrance, and landscaping and windows fronting the street.</p> <p>In the RD and R3 multiple-family zones, construction on the single building site may combine the density of the previously established lots.</p> | |

ATTACHMENT A: COMPARATIVE ANALYSIS

Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
|---|---|--|
| | For residential Venice Coastal Development Projects, front porches, bays and balconies shall be provided to maximize architectural variety. | |
| HEIGHT Venice Coastal Zone Specific Plan, Section 9.B. | <p><u>General</u></p> <p>Height shall be measured as the vertical distance from ground level, as specified below for each subarea, to the highest point of the roof or parapet wall, excluding roof deck railings that do not exceed 36 inches and are of an open design, unless specified otherwise in this Section.</p> <p><u>Venice Canals</u></p> <p>For lots in the Venice Canals Subarea, height shall be measured from the elevation of the centerline of the adjacent alleyway measured from the projection of the midpoint of the lot frontage, except where more than one building is being constructed on that lot, height for each building shall be measured from the projection of the midpoint of each building. Venice Coastal Zone Specific Plan, Section 9.B.2.</p> <p>A maximum height of 22 feet shall be permitted for any portion of a Venice Coastal Development Project which is within ten feet from the property line that faces the canal. Thereafter, an ascending height equal to one half the horizontal depth shall be permitted to a maximum height of 30 feet. Venice Coastal Zone Specific Plan, Section 10.E.2.</p> <p><u>North Venice</u></p> <p>Venice Coastal Development Projects with a Flat Roof shall not exceed a maximum height of 30 feet; or 35 feet for Venice Coastal Development Projects with Varied Rooflines, provided that any portion of the roof that exceeds 30 feet is set back from</p> | <p>The floor of the Tower is 55'; the railing and parapet walls of the Tower is 3'8"; the roof access for the Tower is 12'; and the top of the Tower structure is 67'. A3.10.</p> <p>The roof deck railings are 3'8". A3.10.</p> <p>Roof access for the bell/tower slash observation deck is 8'4." A3.10.</p> <p>The roof access structure on the West Facility is 10'. A3.10.</p> <p>Roof access structures on the East Facility are 12'. A3.11.</p> <p>The roofs on both facilities are littered with parapets, peg shaped towers, and permanent canopies. Measurements are not provided for these features by the developer, but all are well in excess of 36 inches, and many appear to be 6-feet or more in height. A3.10. & A3.11.</p> |

ATTACHMENT A: COMPARATIVE ANALYSIS

Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
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| | the required front yard at least one foot in depth for every foot in height above 30 feet. Venice Coastal Zone Specific Plan, Section 10.F.3. | |
| ROOF STRUCTURES Venice Coastal Zone Specific Plan, Section 9.C. | <p>For subareas where there is a specified Flat Roof height limit, Roof Access Structures shall not exceed the Flat Roof height limit by more than ten feet regardless of roof type. Venice Coastal Zone Specific Plan, Section 9.C.1.a.</p> <p>For subareas where there is no specified Flat Roof height limit, Roof Access Structures shall comply with LAMC Section 12.21.1 B 3. Venice Coastal Zone Specific Plan, Section 9.C.1.b.</p> <p><u>Venice Canals</u></p> <p>In the Venice Canals Subarea, Roof Access Structures shall be set back at least 60 horizontal feet from the mean high tide line of the fronting canal. Venice Coastal Zone Specific Plan, Section 9.C.1.f.</p> | <p>The roof deck railings are 3'8". A3.10.</p> <p>Roof access for the bell/tower slash observation deck is 8'4." A3.10.</p> <p>The roof access structure on the West Facility is 10'. A3.10.</p> <p>Roof access structures on the East Facility are 12'. A3.11.</p> <p>The roofs on both facilities are littered with parapets, peg shaped towers, and permanent canopies. Measurements are not provided for these features by the developer, but all are well in excess of 36 inches, and many appear to be 6-feet or more in height. A3.10. & A3.11.</p> <p>There are roof access structures on the West Facility and on the East Facility within 60 horizontal feet from Grand Canal. A2.10-12; A2.23; A2.20-22; A3.11.C2.</p> |
| SETBACKS | <p>The front yard setback for all residential Venice Coastal Development Projects shall be consistent with LAMC requirements, but shall not be less than five feet. Ground level patios, decks, landscaping and railings, wall and fences that do not exceed six feet in height may encroach into this setback, provided they observe a setback of one foot. Venice Coastal Zone Specific Plan, Section 10.F.4.a.</p> <p><u>Venice Canals</u></p> | <p>The average set back on the West Facility is less than 15'.</p> <p>The lot width is almost 174'9" for the West Facility and for the East Facility. A1.11. The, required area for the Permeable yard "between the property line that faces the canal and the front of any structures" for the West Facility and for the East Facility is 2,636.25 square feet</p> |

ATTACHMENT A: COMPARATIVE ANALYSIS

Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
|-----------------|--|---|
| | <p>An average setback of 15 feet, but not less than ten feet shall be maintained in the front yard adjacent to the property line which faces the canal. Venice Coastal Zone Specific Plan, Section 10.E.3.a.</p> <p>An open, Permeable yard with an area of at least 15 times the lot width and a minimum area of 450 square feet shall be maintained between the property line that faces the canal and the front of any structure. No Fill nor building extensions, including stairs and balconies, shall be placed in or over the required Permeable front yard area except fences up to 42 inches in height or Permeable decks at grade level not more than 18 inches high. Venice Coastal Zone Specific Plan, Section 10.E.3.a.</p> | <p>There is less than 2,636.25 square feet “between the property line that faces [Grand Canal]” and “the front of [] structures” for both the West Facility and the East Facility and a great deal of that space is paved or otherwise covered with materials that do not satisfy the Permeable requirement in the Venice Coastal Zone Specific Plan. A1.11; A2.20, G0.10; SV1.10; Venice Coastal Zone Specific Plan, Section 4.S.</p> <p>Also, a great deal of the square footage between the property line and “the front of [] structures” comes from the demolition of at least half of the Red Car Bridge. A1.10; A1.11.</p> |
| ACCESS | Driveways and vehicular access to Venice Coastal Development Projects shall be provided from alleys, unless the Department of Transportation determines that it is not Feasible. Venice Coastal Zone Specific Plan, Section 10.F.5.a. | Driveways and vehicular access are from Venice Boulevard and Dell, not from alleys. |
| DRAINAGE | Prior to issuance of a building permit for a new dwelling unit or an expansion of the existing footprint by more than ten percent, the applicant shall submit drainage plans, subject to the review and approval of the Department of Building and Safety, for a 100 cubic foot french drain or other water filtering device which provides equivalent on-site percolation. The french drain or other water filtering device shall be constructed and maintained as shown on the final plans. The applicant and all successors in interest shall maintain the approved Venice Coastal Development Project consistent with the drainage plans approved by the Department of Building and Safety. Venice Coastal Zone Specific Plan, Section 10.E.4. | We have not seen drainage plans, |
| DENSITY | <u>North Venice</u> | Gross lot area is 115,674 square feet; net lot area is 97,050 square feet; and buildable area is 90,573. |

ATTACHMENT A: COMPARATIVE ANALYSIS

Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
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| | <p>A maximum of two dwelling units per lot shall be permitted for all Venice Coastal Development Projects on multiple-family residentially-zoned lots. However, the lot area per dwelling unit shall not be less than 1,500 square feet on RD1.5 zoned lots and 1,200 square feet on R3 zoned lots; except that Venice Coastal Development Projects on lots greater than 4,000 square feet are permitted one unit for each 1,500 square feet on RD1.5 zoned lots or one unit for each 1,200 square feet on R3 zoned lots, provided that all units beyond the first two are Replacement Affordable Units. Venice Coastal Zone Specific Plan, Section 10.F.2.a.</p> <p><u>Commercial Zones</u></p> <p>Commercial Zones. No residential Venice Coastal Development Project on a commercially-zoned lot shall exceed the density permitted in the R3 Zone. Venice Coastal Zone Specific Plan, Section 10.F.2.b.</p> | <p>115,674/140 units is 826 square feet; 97,050/140 units is 693 square feet; and 90,573/140 units is 647 square feet.</p> <p>RDC density exceeds the density permitted by the Venice Coastal Zone Specific Plan by a factor of 50% or more by every measure.</p> |
| COMMERCIAL DEVELOPMENT | <p><u>Commercial and Industrial Design Standards</u></p> <p>The Venice Coastal Development Project shall include a Street Wall[*], which shall extend for at least 65 percent of the length of the Building Frontage,** and shall be located at the lot line or within five feet of the lot line, except that commercial buildings located on Ocean Front Walk shall have the Street Wall set zero feet from the building line. If the Street Wall is adjacent to a sidewalk cafe, public plaza, retail courtyard, arcade, or landscaped area, the Street Wall may be set back a maximum of 15 feet along the portion of the Venice Coastal Development Project that consists of the cafe, plaza, courtyard, landscaping or arcade. These areas shall not be considered in calculating the buildable area of a Venice Coastal Development Project, but with the exception of areas used only for landscaping, shall be considered in calculations for required parking. The required</p> | <p>The Street Wall on Pacific Avenue is less than 13' at the Tower and at the southwest balcony on Pacific. G0; G0.10.</p> <p>The Street Walls on N. Venice Boulevard, S. Venice Boulevard, and Dell Avenue measure 10'8" and are also non-compliant in terms of height and the placement of "pedestrian entrances, display windows or windows offering views into retail, office gallery or lobby space" (which requirements effectively preclude residential uses in commercial zoned projects in the Venice Coastal Zone Specific Plan). A3.10.C1, C3 & A3; A3.11</p> |

ATTACHMENT A: COMPARATIVE ANALYSIS

Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
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| | <p>Street Wall at the Ground Floor shall have a minimum height of 13 feet. Venice Coastal Zone Specific Plan, Section 11.B.1.a.</p> <p>At least 50 percent of the area of the Ground Floor Street Wall of a commercial Venice Coastal Development Project shall be devoted to pedestrian entrances, display windows or windows offering views into retail, office gallery or lobby space. Venice Coastal Zone Specific Plan. Section 11.B.1.b.</p> <p>Blank Walls[***] shall be limited to segments of 15 feet in length, except that Blank Walls that contain a vehicle entry door shall be limited to the width of the door plus five feet. Venice Coastal Zone Specific Plan, Section 11.A.1.c.</p> <p>*A "Street Wall" is "[a]n exterior wall of a building that faces a street." Venice Coastal Zone Specific Plan, Section 5.X.</p> <p>** "Building Frontage is the maximum length of a line or lines formed by connecting the points representing projections of the exterior building walls onto a public street or onto a courtyard that is directly accessible by pedestrians from a public street, whichever distance is greater."</p> <p>***A "Blank Wall" is a Street Wall or vehicle entry facing the street and having no architectural detailing, windows, doors or similar features. Venice Coastal Zone Specific Plan, Section 5.B.</p> <p><u>Floor Area Ratio</u></p> <p>Floor Area Ratio. In all commercial zones, floor area ratio (FAR) shall be limited to:</p> <ul style="list-style-type: none"> • 0.5 to 1 for retail only, including restaurants • to 1 for retail/office • 1.5 to 1 for retail and/or office and residential • <p>Venice Coastal Zone Specific Plan. Section 11.B.1.d.</p> | |

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Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² |
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| ACCESS | Driveways and vehicular access to Venice Coastal Development Projects shall be provided from alleys unless the Department of Transportation determines that it is not Feasible. New and existing curb cuts shall be minimized in order to protect and maximize public on-street parking opportunities. Venice Coastal Zone Specific Plan, Section 11 B.5.a. | |
| PARKING STRUCTURES | In multi-level parking structures, where there is parking on the Ground Floor[*], 70 percent of the frontage of the Ground Floor along the property line that adjoins a public street shall contain financial services, neighborhood retail, neighborhood services or other related uses permitted by the zone and determined by the Director of Planning. Venice Coastal Zone Specific Plan, Section 11.D.2. *A "Ground Floor" is the lowest story within a building, which is accessible to the street, the floor level of which is within three feet above or below curb level, which has frontage on or is primarily facing any pedestrian oriented street, and which is at least 20 feet in depth or the total depth of the building, whichever is less. Venice Coastal Zone Specific Plan, Section 5.M. | Neither the West Facility or East Facility satisfy this requirement on N. Venice Boulevard, Pacific Avenue, S. Venice Boulevard or Dell Avenue. A2.10, A2.20, A3.10, A3.11. |
| PARKING | Except as otherwise provided below, the parking standards are those set forth in Subsection D. The Parking Requirement Table shall apply to all Venice Coastal Development Projects. Venice Coastal Zone Specific Plan, Section 13.A. Artist-in-residence – Two spaces for each artist-in-residence unit. Multiple dwelling and duplex on a lot less than 40 feet in width, or less than 35 feet in width if adjacent to an alley. -- Two spaces for each dwelling unit; plus a minimum of one | RDC purports to provide 34 artist-in-residence units requiring 68 units. 116 residences (excluding artist-in-residence units) in multiple dwelling require 232 resident spaces plus 29 guest spaces – a total of 261 spaces. General Retail Space measuring 2,255 square feet requires 11 (10.02) spaces. Restaurant measuring 810 square feet requires 17 (16.2) spaces. |

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Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² | | | | | | | | | | | | |
|---------------------------------|---|--|---------------------|----|-----------------------|-----|--------------|----|------------|----|---------------------------------|----|------------|----|
| | <p>guest parking space for each four or fewer units (e.g., 0.25 guest parking space per unit, any fraction shall be rounded up to require one additional guest parking space). Exception: for Venice Coastal Development Projects where all required parking spaces are fully enclosed, any required guest spaces may be paid for at the same in lieu fee rate defined for BIZ parking under Section 13 E(1)(2) of this Specific Plan.</p> <p>General Retail Store, except as otherwise provided -- One space for each 225 square feet of floor area</p> <p>Recreational Uses – Dance Hall, Pool or Billiard Parlor, Roller or Ice Skating Rink, Exhibition Hall and Assembly Hall without fixed seats, including Community Center, Private Club, Lodge Hall and Union Headquarters – One space for each 75 square feet of floor area.</p> <p>Restaurant, Night Club, Bar and similar establishments and for the sale or consumption of food and beverages on the Premises. -- One space for each 50 square feet of Service Floor (including outdoor service areas).</p> <p>Outdoor restaurant service area – Drive-Through and Window Service Restaurant providing Outdoor Eating Area or Walk-up or Drive-up Window Service -- One space for each 50 square feet of floor area, but no fewer than ten spaces.</p> <p>Office Uses -- General Office and other Business, Technical Service, Administrative or Professional Offices – One space for each 250 square feet of floor area.</p> <p>Venice Coastal Zone Specific Plan, Section 13.D.</p> <p><u>Beach Impact Zone Parking Requirements</u></p> | <p>Outdoor Restaurant Service Ares requires at least 10 spaces.</p> <p>Art Studio measuring 3,155 square feet requires 43 (42.07) spaces.</p> <p>Supporting Office Space at 685 square feet requires 2 (1.04) spaces.</p> <p>Community rooms measuring 206 square feet and 286 square feet on fourth and fifth floors of Tower respectively (combined 492 square feet) require 10 (9.84) spaces.</p> <p>Ground Floor measurements as set forth in the proposal are 12,235 for the West Facility and 26,200 for the East Facility for a total of 38,435 excluding space required for parking.</p> <p>Beach impact parking for Ground Floor of commercial projects is 1 space per 640 square feet. Plans show 38,525 square feet of ground floor space so 60 beach impact parking spaces are required.</p> <p>In addition, replacement of 196 (or, at a minimum, 188) existing parking spaces is required. (AHOS program).</p> <p>Total Parking Required per Venice Specific Plan:</p> <table><tr><td>Artist-in-Residence</td><td>68</td></tr><tr><td>Non-Artist Residences</td><td>261</td></tr><tr><td>Retail Space</td><td>11</td></tr><tr><td>Restaurant</td><td>17</td></tr><tr><td>Outdoor Restaurant Service Area</td><td>10</td></tr><tr><td>Art Studio</td><td>43</td></tr></table> | Artist-in-Residence | 68 | Non-Artist Residences | 261 | Retail Space | 11 | Restaurant | 17 | Outdoor Restaurant Service Area | 10 | Art Studio | 43 |
| Artist-in-Residence | 68 | | | | | | | | | | | | | |
| Non-Artist Residences | 261 | | | | | | | | | | | | | |
| Retail Space | 11 | | | | | | | | | | | | | |
| Restaurant | 17 | | | | | | | | | | | | | |
| Outdoor Restaurant Service Area | 10 | | | | | | | | | | | | | |
| Art Studio | 43 | | | | | | | | | | | | | |

ATTACHMENT A: COMPARATIVE ANALYSIS

Venice Coastal Zone Specific Plan / RDC Plans

| TOPIC | REQUIREMENT ¹ | RDC CHARACTERISTICS ² | | | | | | | | |
|---------------------------------|---|---|-------------------------|---|-----------------------|---|--------------|----|---------------------------------|------------|
| | <p>In addition to the above requirements, all Venice Coastal Development Projects located within the Beach Impact Zone shall provide parking spaces in accordance with this Subsection.</p> <p>One parking space for each 640 square feet of floor area of the Ground Floor for commercial and industrial Venice Coastal Development Projects. In lieu of physically providing the spaces, a fee of \$18,000.00 per space may be paid for up to 50 percent of the total number of parking spaces required in this subdivision. Provided, however, that no payment shall be allowed in lieu of any parking space required by LAMC Section 12.21 A4. All fees shall be paid into the Venice Coastal Parking Impact Trust Fund.</p> <p>One parking space for each 1,000 square feet of the floor area of the Ground Floor[*] for multiple dwelling Venice Coastal Development Projects of three units or more. In lieu of physically providing the space, a fee of \$18,000.00 per space may be paid for up to 100 percent of the total number of parking spaces required in this subdivision. Provided, however, that no payment shall be allowed in lieu of any parking space required by the LAMC. All fees shall be paid into the Venice Coastal Parking Impact Trust Fund.</p> <p>In no event shall the number of Beach Impact Zone parking spaces required for Venice Coastal Development Projects of three or more dwelling units, or commercial or industrial Venice Coastal Development Projects, be less than one parking space for residential Venice Coastal Development Projects and two parking spaces for commercial and industrial Venice Coastal Development Projects.</p> <p>*"Ground Floor" is Ground floor is the lowest story within a building which is accessible to the street, the floor level of which is within three feet above or below curb level, which has</p> | <table><tr><td>Supporting Office Space</td><td>3</td></tr><tr><td>Tower Community Rooms</td><td>7</td></tr><tr><td>Beach Impact</td><td>61</td></tr><tr><td>Replacement of Existing Parking</td><td><u>196</u></td></tr></table> <p>Minimum Total Parking 677 spaces</p> <p>Per Venice Coastal Zone Specific Plan</p> <p>Parking reductions under AB 744 do not apply because the RFP/Q and the City Council motion approving the RFP / Q expressly require compliance with the Venice Coastal Zone Specific Plan. Similarly, the motion approving the RFP/Q expressly calls for improving – and not further degrading – the parking supply in Venice.</p> <p>Finally, 103 of the spaces provided in the RDC plan are compact spaces.</p> <p>Thus, netting out the replacement of 196 existing spaces (which are full-size) roughly 2 of every 3 new spaces the developer has proposed (103 of 164 spaces) comprises compact spaces.</p> <p>Neither the Venice Coastal Zone Specific Plan nor AB 744 allows parking requirements to be satisfied with compact spaces.</p> | Supporting Office Space | 3 | Tower Community Rooms | 7 | Beach Impact | 61 | Replacement of Existing Parking | <u>196</u> |
| Supporting Office Space | 3 | | | | | | | | | |
| Tower Community Rooms | 7 | | | | | | | | | |
| Beach Impact | 61 | | | | | | | | | |
| Replacement of Existing Parking | <u>196</u> | | | | | | | | | |

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| | <p>frontage on or is primarily facing any Pedestrian Oriented Street, and which is at least 20 feet in depth or the total depth of the building, whichever is less. LAMC 13.07 C.</p> <p>Venice Coastal Zone Specific Plan, Section 13.E.</p> | |

Exhibit B

Letter Submitted on January 12, 2021
by Venice Vision

VENICE VISION
P.O. Box 778
VENICE, CALIFORNIA 90294

January 12, 2020

VIA ELECTRONIC MAIL

City of Los Angeles
200 N. Spring Street
Los Angeles, CA 90012
ira.brown@lacity.org

Re: 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 - 2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-82288; CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-6667-SE

Honorable Members of the Deputy Advisory Agency and City Hearing Officer:

I write regarding the Reese Davidson Community and related matters. This letter supplements the comment letter I submitted on behalf of Venice Vision on October 21, 2020. Thank you for giving due consideration to my October 20, 2020 letter, as well as the additional points raised below.

I. The Approval Process for the Reese Davidson Community Cannot Commence Now

The approval process for the Reese Davidson Community cannot commence now—and the January 13, 2021 hearing before the Deputy Advisory Agency and the City Hearing Officer should be continued to a later date—for the following reasons.

First, the records that have been provided to the public do not accurately reflect development plans for the proposed building site (the “Venice-Dell-Pacific Site”). The records that have been provided to the public indicate that the Reese-Davidson Community is the only project planned for the proposed building site and that it will include 252 conventional parking spaces in a parking tower east of Grand Canal (“East Parking Tower”).

Documents provided by Mayor Garcetti’s Office,¹ however, show that the East Parking Tower will be developed, funded, owned and operated separately from the Reese Davidson Community and that, consequently, there are two projects on the proposed building site. Further, these documents show that plans for the East Parking Tower are still in development, but that the East Parking Tower will have more than 252 parking spaces and will likely involve a robotic or automated lift parking system of some sort. They also show that studies required for the East

¹ Ex. A.

Parking Tower have not been completed and that funding for the East Parking Tower has not yet been secured.

These facts render the plans for the Reese Davidson Community not only inaccurate, but materially misleading. They also negate any findings in the traffic study for the Reese Davidson Community, since it does not examine the use of robotic or automated lift parking at the building site.

The replacement of beach parking is a condition precedent for construction of the Reese Davidson Community. Therefore, no hearings can properly take place until complete plans for the East Parking Tower have been provided to the public for review, analysis and comment.

Second, multiple requests have been submitted to the City for production of the complete environmental file for the Reese-Davidson Community, but the City has withheld the most relevant portions of the file—including studies, communications and other records relating to environmental impacts—without a valid basis for doing so.² The DAA cannot make a competent finding as to the environmental impacts of the Reese-Davidson Community without such materials, and the approval process cannot properly proceed until the public has had an opportunity to review, analyze and provide comment on them.

Moreover, the City is unable to assess the environmental impact of the East Parking Tower in any meaningful sense because plans for the East Parking Tower are not yet available, and it is not even known at this point how much parking or what type of parking will be provided.

Regardless of whether the California Environmental Quality Act (“CEQA”) is deemed to apply to the Reese-Davidson Community, the City must make fact-based findings that development will not have adverse environmental impacts before approving lot consolidation and the proposed tract map. It is not currently in a position to do so.

Third, FEMA flood zone maps are currently being revised and the City’s analysis of sea level rise as it affects the proposed building site is still in process. It is impossible to determine whether development on the Venice-Dell-Pacific Site is safe—or even possible—until the updated maps and complete information regarding sea level rise become available.

Fourth, the COVID pandemic and related shutdown have made it unduly difficult for Venice residents—and other interested parties—to collect information regarding the proposed projects at the Venice-Dell-Pacific Site and participate meaningfully in the hearing process. Hearings regarding projects of this magnitude should not commence until conditions return to normal and the City can ensure that all due process rights with respect to notice and hearing are properly protected.

² Ex. B.

For the foregoing reasons, the hearing process should not proceed at this time. At a minimum, the DAA record should be held open—and no findings or recommendations should be made—until the foregoing issues have been addressed.

II. The Record Should Be Held Open to Allow Sufficient Time to Respond to the Developer Presentation Regarding the Reese-Davidson Community

It appears that the developers have a lengthy presentation planned regarding the Reese-Davidson Community for the January 13, 2021 hearing. To the extent material information becomes available for the first time in that presentation, the record should be held open—and any findings or recommendations—should be held in abeyance until the public has had adequate time to collect information and provide a response.

III. The Reese-Davidson Community Is Not Consistent with Applicable General and Specific Plans

Even allowing for proposed amendments to the Venice Land Use Plan (which would be improper for a variety of reasons set forth elsewhere, including by October 20, 2020 letter), the Reese-Davidson Community does not conform to the Venice Land Use Plan because the height of roof structures—including railings, turrets, canopies and access towers—have not been properly accounted for. In addition, the Reese-Davidson Community fails to provide the parking required and exceeds density limits under the Venice Land Use Plan, even assuming the proposed amendments are adopted. Also, neighborhood commercial areas are generally characterized by one and two story low-rise structures. That is not true of the Reese-Davidson Community.



IV. A.B. 1197 Exemption Is Not Warranted for the Reese-Davidson Community

The Staff Report states:

On February 16, 2018, the applicant received a Measure H funding commitment letter from the Los Angeles County Department of Health Services Housing for Health Division for the Project. The funding commitment provides that the Department will enter into a contract with an approved Intensive Case Management Services (“ICMS”) provider at an estimated funding amount of up to \$367,200 per year, which will provide supportive services for 68 formerly homeless households in the Project. The term of the current supportive services funding commitment is through June 30, 2022, and includes the Department’s authority to exercise extension options. Additionally, the Applicant will be pursuing funding from the No Place Like Home Program, the City’s Housing Impact Trust Fund, and the Building Homes and Jobs Trust Fund, depending on availability.

It is clear from the face of the February 16, 2018 letter from that it is not a “funding commitment.” Moreover, even if could somehow be characterized as a “funding commitment,” the Staff Report acknowledges that it would expire on June 30, 2022. None of the supportive housing units in the Reese Davidson Community will be in operation by then.

The Staff Report also states:

Additionally, the Applicant will be pursuing funding from the No Place Like Home Program, the City’s Housing Impact Trust Fund, and the Building Homes and Jobs Trust Fund, depending on availability.

None of these funds, however, have yet been secured, however, and, in any event, Reese-Davidson cannot get funding from any of these sources because public records show that the caps on public housing under Article 34 of the California Constitution have already been exceeded in the Council District 11 and for the city as a whole. Relevant city agencies have failed to investigate this issue adequately and do not have accurate or reliable Article 34 counts. Further, and the Reese-Davidson Community cannot get funding from the No Place Like Home (“NPLH”) Program because the target population for the Reese-Davidson Community, as

defined in proposed amendments to the Venice Land Use Plan,³ is different from the NPLH target population.⁴

Similarly, the Staff Report makes no showing of any kind that the Reese-Davidson Community meets any of the eligibility requirements in Government Code Section 65650 (AB 2162); LAMC Section 14.00 A.12; or LAMC Section 14.00 A.13, and my letter of October 20, 2020 sets forth in detail why the Reese-Davidson Community does not satisfy criteria for an A.B. 1197 exemption.

The DAA therefore cannot find that the A.B. 1197 CEQA exemption applies to the Reese-Davidson Community.

V. The A.B. 1197 CEQA Exemption Does Not Apply to the East Parking Tower

The East Parking Tower is separate from the Reese-Davidson Community in all meaningful respects, including funding, development, use, operation and ownership. Moreover, it does not contain supportive housing or even parking for supportive housing. Thus any A.B. 1197 CEQA that might somehow apply to the Reese-Davidson Community does not extend to the East Parking Tower, and the East Parking Tower (which is to be funded by the Department of Transportation) cannot independently satisfy the funding source requirement or other criteria for the A.B. 1197 CEQA exemption. A complete environmental review for the East Parking Tower is therefore required.

VI. The A.B. 1197 Exemption Does Not Apply to the Requested General Plan Amendment, Zone Change, or Specific Plan Amendment

The requested General Plan Amendment would amend the Land Use designation from Open Space to Neighborhood Commercial, the Zone Change would change the zone from OS-1XL-O to C2-1L-0, and the Specific Plan Amendment would amend the Venice Coastal Zone Specific Plan to permit a 140 dwelling units, supportive services, and commercial uses.

According to the proposed amendment to the Venice Land Use Plan, the Neighborhood Commercial land use designation is intended to accommodate local neighborhood commercial facilities and services which provide daily convenience goods and services to persons living in nearby residential areas. The 1L height district within a C zone allows for a maximum height of 75 feet.

³ Persons with qualifying lower incomes who (i) have one or more disabilities, including mental illness, HIV or AIDS, substance abuse, or other chronic health condition, and are homeless as defined by any Los Angeles City, Los Angeles County, State of California, or Federal guidelines; or (ii) are chronically homeless, as defined by any Los Angeles City, Los Angeles County, State of California, or Federal guidelines.

⁴ Adults with serious mental illness, or children with severe emotional disorders and their families and persons who require or are at risk of requiring acute psychiatric inpatient care, residential treatment, or outpatient crisis intervention because of a mental disorder with symptoms of psychosis, suicidality or violence and who are homeless, chronically homeless, or at risk of chronic homelessness. (<https://hcd.ca.gov/grants-funding/active-funding/nplh.shtml>).

A zone change to R3 without any height increases or commercial uses would be more than sufficient to accommodate the number of residences—including supportive housing units—in the Reese-Davidson Community, as well as the delivery of supportive services. Neither the 75-foot height limit or provisions for commercial facilities and services are “in furtherance of” supportive housing. As emergency legislation, A.B. 1197 must be construed narrowly. The amendments and zone changes the developers are seeking are not eligible for the A.B. 1197 CEQA exemption to the extent that they differ from the status quo, exceed the most restrictive classifications allowing for the delivery of the proposed supportive housing units, and “further” something other than supportive housing (like design flourishes, “starchitecting” and commercial activity).

The Reese-Davidson Community will cost more than \$100 billion to build and consume more than 3-acres of land but will only deliver 68 supportive housing units, representing less than a quarter of the overall build. The A.B. 1197 CEQA exemption does not give carte blanche to developers for projects of this nature.

Thank you,

Christian K. Wrede

Christian K. Wrede

EX. A

0150-11424-0002

T R A N S M I T T A L

| | | |
|--|------|-------------------------|
| TO The Department of Transportation | DATE | COUNCIL FILE NO. |
| FROM The Mayor | | COUNCIL DISTRICT All |

Department of Transportation proposed contract with Jeff Oviedo and Associates, Inc. to evaluate the relative costs, benefits, and feasibility of an automated parking facility at the proposed Reese Davidson Community housing development

This contract is not authorized for execution. The Department may resubmit this for approval when sufficient funds can be identified within the Special Parking Revenue Fund and the Fund returns to a healthy status.

See the City Administrative Officer report attached.

MAYOR

RHL:BA:06200088t

Report From
OFFICE OF THE CITY ADMINISTRATIVE OFFICER
Analysis of Proposed Contract
(\$25,000 or Greater and Longer than Three Months)

| | | | |
|---|----------------|---|----------------------------------|
| To: The Mayor | Date: 06-05-20 | C.D. No. All | CAO File No.: 0150-11424-0002 |
| Contracting Department/Bureau: Department of Transportation | | Contact: David Cataldo (213) 978-4938 | |
| Reference: Department of Transportation report transmittal dated January 24, 2020; request for report from Mayor's Office on March 16, 2020 | | | |
| Purpose of Contract: To evaluate the relative costs, benefits, and feasibility of a structural and/or automated parking facility | | | |
| Type of Contract: (X) New contract | | Contract Term Dates: 90 days from the date of execution | |
| Contract/Amendment Amount: \$68,060 | | | |
| Proposed amount \$68,060 + Prior award(s) \$0 = Total \$68,060 | | | |
| Source of funds: Special Parking Revenue Fund No. 363 | | | |
| Name of Contractor: Jeff Oviedo and Associates, Inc. | | | |
| Address: 260 Newport Center Drive, Suite 100 Newport Beach, CA 92660 | | | |
| | Yes | No | N/A |
| 1. Council has approved the purpose | X | | |
| 2. Appropriated funds are available | X | | |
| 3. Charter Section 1022 findings completed | X | | |
| 4. Proposals have been requested | X | | |
| 5. Risk Management review completed | X | | |
| 6. Standard Provisions for City Contracts included | X | | |
| 7. Workforce that resides in the City: n/a % | | | |
| Contractor has complied with: | | | |
| 8. Business Inclusion Program | | | X |
| 9. Equal Benefits & First Source Hiring Ordinances | X | | |
| 10. Contractor Responsibility Ordinance | X | | |
| 11. Disclosure Ordinances | X | | |
| 12. Bidder Certification CEC Form 50 | X | | |
| 13. Prohibited Contributors (Bidders) CEC Form 55 | | | X |
| 14. California Iran Contracting Act of 2010 | X | | |


RECOMMENDATION

That the Mayor deny the General Manager of the Department of Transportation (LADOT), or designee, the authorization to execute a contract with Jeff Oviedo and Associates, Inc. to evaluate the relative costs, benefits, and feasibility of an automated parking facility.

SUMMARY

In 2011, Council District (CD) 11 released a Request for Information (RFI) for potential development of additional parking capacity on City-owned parking lots in Venice. The RFI mentioned the development of affordable housing on the City-owned lots in an effort to address homelessness and parking in Venice. Through that RFI process, CD 11 determined that Municipal Lot 731, located at 200 North Venice Boulevard, was the best option for development of affordable housing while retaining a public parking component.

On January 22, 2019, the City Council issued a Motion (C.F. 19-0072) instructing the Department of Transportation (LADOT) to study the options of parking design and evaluate the relative costs and benefits of an automated parking facility to replace or increase the number of parking spaces at the proposed Reese Davidson Community housing development (Municipal Lot 731), and to provide specifications of an automated parking facility, if one is deemed feasible.

| | | |
|---------------|---------|---|
| Bret Avrashow | |  |
| BA | Analyst | City Administrative Officer |

Since LADOT does not have the staff or expertise to evaluate the cost and benefits of an automated parking facility, nor to provide facility specifications, it is necessary to contract for the services. On May 3, 2019, LADOT issued a Task Order Solicitation to the pre-qualified firms established from the Request for Qualifications (RFQ) for Services for Asset Management Planning and Economic Development issued by this Office. Jeff Oveido and Associates, Inc. (JOA Group) was the only proposal received and LADOT found that the firm meets the criteria of the Task Order Solicitation.

The Personnel Department determined that there are City classifications that can perform the scope of work. The LADOT solicited interest from 44 City departments to perform the work. 15 City departments responded that they did not have sufficient staff to complete the work and 29 City departments were non-responsive. On October 1, 2019, this Office determined that, in accordance with Charter Section 1022, the proposed work can be completed more economically if the work is done by a contractor than City employees due to the intermittent, short-term project-specific nature of the proposed work.

The LADOT is requesting authority to execute a contract with JOA Group, Inc. to evaluate the relative costs, benefits, and feasibility of a structural and/or automated parking facility for a term of 90 days from the date of execution and at a total cost not-to-exceed \$68,060. Funding is provided within the Special Parking Revenue Fund (SPRF) Contractual Services Account. The attached LADOT report provides further detail on the proposed contract (Attachment). This Office has confirmed that the recommended contractor has submitted the required documentation in compliance with City contracting policies.

The Mayor's Fiscal Year 2019-20 Belt-tightening Memo dated March 19, 2020 suspended all contract execution until the end of the fiscal year. The memo states that "Special Fund contracts with no General Fund impact may receive an exemption to this provision following a review of the financial health of those special funds and the necessity of contracts by the CAO and my consideration and approval". Following the impact of COVID-19 and the City's Stay at Home order, LADOT reports that parking lot revenue is almost zero and parking meter revenue is down 90 percent from the projected amounts. Since parking lots, including the Hollywood and Highland Lot 745, and parking meters are the SPRF's two main sources of revenue, the fiscal health of the SPRF is under close monitoring by this Office. Funding for this contract was not included in the 2020-21 Proposed Budget. At this time, it is not clear that sufficient funds will exist to support this contract along with all the critical activities required to maintain the parking system. The Department may re-submit this contract for approval when sufficient funds have been identified.

While the proposed study could eventually lead to a recommendation to build a revenue-generating automated parking structure in the future, the outcome of the study cannot be predicted. Since any excess monies from the SPRF are transferred directly to the General Fund, any unnecessary expenditure is a potentially negative impact to the General Fund. Therefore, this proposed contract is not recommended for exemption because it is not critical for public safety, it is not clearly revenue generating and is not legally required.

FISCAL IMPACT STATEMENT

There is a potential General Fund Impact. Surplus funds from the Special Parking Revenue Fund are transferred to the General Fund. However, at this time no fiscal impact is anticipated as it is unclear if sufficient funds will exist to support this contract.

FINANCIAL POLICIES STATEMENT

The recommendations in this report comply with the City's Financial Policies in that current year revenues are used for current year expenses.

Attachment: Department of Transportation Report dated January 24, 2020

RHL:BA:06200088

CITY OF LOS ANGELES
INTER-DEPARTMENTAL MEMORANDUM

Date: January 24, 2020

To: Honorable Eric Garcetti, Mayor
Office of the Mayor
Attention: Heleen Ramirez, Legislative Coordinator

From: Seleta J. Reynolds,  General Manager
Department of Transportation

Subject: **AGREEMENT BETWEEN DEPARTMENT OF TRANSPORTATION AND JEFF OVIEDO & ASSOCIATES, INC. FOR AN AUTOMATED PARKING FACILITY REVIEW IN VENICE**

SUMMARY

The Los Angeles Department of Transportation (LADOT) is requesting an authority to execute a 90-day agreement with Jeff Oviedo & Associates, Inc. (JOA Group) to evaluate the relative costs and benefits of a structural and/or automated parking facility and to prepare the specifications for an automated facility, if economically feasible, for Municipal Lot 731, located at 200 North Venice Boulevard, in Venice, California.

RECOMMENDATION

That the Mayor:

Authorize the LADOT General Manager to execute a 90-day agreement with JOA Group to evaluate the relative costs and benefits of a structural and/or automated parking facility and to prepare the specifications for an automated facility, if economically feasible, for a not-to-exceed amount of \$68,060.

BACKGROUND

In 2011, Council District (CD) 11 released a Request for Information (RFI) for potential development of additional parking capacity on City-owned parking lots in Venice. The RFI contemplated the development of affordable housing on the City-owned lots in an effort to address two of the pressing issues facing Venice: homelessness and parking. Through that RFI process, CD 11 determined that Municipal Lot 731, located at 200 North Venice Boulevard, was the best option for development of public parking, along with affordable housing.

On January 22, 2019 the Los Angeles City Council issued a Motion (CF# 19-0072) instructing LADOT to study the options of parking design and evaluate the relative costs and benefits of an automated parking facility to replace or increase the number of parking spaces at the proposed Reese Davidson Community housing, and to provide specifications of an automated parking facility, if one is deemed feasible.

Since LADOT does not have the staff or expertise to evaluate the cost and benefits of an automated parking facility nor to provide facility specifications, it is necessary to contract for the services. On May

3, 2019 LADOT issued a Task Order Solicitation to the pre-qualified firms established from the Request for Qualifications (RFQ) for Services for Asset Management Planning and Economic Development issued by the Office of the Chief Administrative Officer. JOA Group was the only proposal received and LADOT found that the firm meets the criteria of the Task Order Solicitation.

The draft 90-day Agreement with JOA Group in an amount not to exceed \$68,060 to perform the parking study is attached for consideration.

FINANCIAL IMPACT

Funding for this Agreement will come from Fund 363, Special Parking Revenue Fund, within FY 2018, Account 94N050. There is no impact to the General Fund.

SJR:LE:dc

Attachment



VENICE PARKING STUDY



TIERRA WEST ADVISORS, INC.
PREPARED FOR: CITY OF LOS ANGELES,
DEPARTMENT OF TRANSPORTATION
JUNE 2020

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Executive Summary

The Hollywood Community Housing Corporation (“HCH”) and Venice Community Housing (“VCH”) – jointly, “Developer” - have partnered to propose the development of a mixed-use affordable housing project, named the *Reese Davidson Community Project* (“Project”). The City of Los Angeles Department of Transportation (“LADOT”) retained Tierra West Advisors, Inc. (“Tierra West”) to conduct a Parking Needs Study and Parking Rate Study (“Venice Parking Study”) of the Project area and examine the needs of the community within one quarter (1/4) linear mile and walking distance to Municipal Lot 731, the anticipated future site of the Reese Davidson Community Project.

- Intent of the Project is to develop affordable and supportive housing on a City-owned parking lot
- The parking lot is located at 200 N. Venice Boulevard and anchored by Municipal Lot 731, and extends to the east with frontage along 204-208 E. North Venice Boulevard (“Parking Study Area and/or “Project Site”)
- Project Site Area Boundaries: located between North and South Venice Boulevards, and Dell and Pacific Avenues (excluding 3 private properties on the northeast corner of the site)

The Project Site is currently developed with surface parking, City of Los Angeles Municipal Lot 731.

- Lot 731 currently contains 196 vehicular parking spaces and a two-story, 2,072 square-foot residential building consisting of four dwelling units
- The Venice Canal system bifurcates the Project Site creating two portions also known as 200 N. Venice Boulevard and 204-208 E. North Venice Boulevard, respectively
- City to retain ownership of Project Site and enter into a ground lease with development team

The Reese Davidson Community Project proposes a new mixed-use development on approximately 115,674 square-feet located in the Venice Community Plan Area of the City of Los Angeles.

- The Project to provide 140 residential units (including 4 units for management staff)
 - West Site to include three-story building (with five-story campanile at NW corner of North Venice Blvd. and Pacific Ave.) with 63 residential units, restaurant and retail uses, and above-ground parking structure for resident’s parking
 - East Site to include three-story building with 77 residential units, art studio, and above-ground parking structure containing LADOT-managed Public Parking
- Project currently designed to provide approximately 360-401 total parking spaces and 136 bicycle parking spaces
 - East Site garage, where the designated Public Parking spaces will be located, is currently designed to provide 252 – 301 parking spaces, according to the Developer’s projections
 - The Developer needs to provide a minimum of 8 additional replacement parking spaces due to the discrepancy between their count of 188 spaces and the actual number of 196 spaces
 - In the Project’s architectural plans, the Developer estimates that between 41-82 Additional Parking Spaces can be accommodated in the East Site Garage, in addition to the 196 Replacement Parking Spaces
 - Tierra West’s report will assume 196 replacement parking spaces, and 260-301 proposed parking spaces in the East Site garage for this study
 - 196 (replacement parking spaces) + 41 (minimum Additional Parking Spaces in East Site Garage per Developer’s architectural plans) + 23 (Beach Impact Parking Spaces per Developer’s architectural plans) = 260 minimum East Site Garage spaces

- 196 (replacement parking spaces) + 82 (maximum Additional Parking Spaces in East Site Garage per Developer's architectural plans) + 23 (Beach Impact Parking Spaces per Developer's architectural plans) = 301 maximum East Site Garage spaces
- Project will be constructed in two phases:
 - Phase 1 (approximately 20 months) with an estimated start date of January 2022 and completion in September 2023.
 - Phase 2 (approximately 18 months) with an estimated start date of December 2022 and completion in June 2024
 - Total time period for both phases is approximately 30 months

Tierra West's enclosed Venice Parking Study includes analysis of:

1. Both on-street and off-street parking supply (public and private lots and structures);
2. Calculation of existing parking demand;
3. Occupancy counts impact of planned and proposed new developments;
4. Prediction of future parking needs;
5. Recommendations for mechanisms to increase parking supply where warranted;
6. Studies alternatives for relocating parking and/or offsetting parking revenue during construction of the Reese Davidson Housing Development;
7. And provides a parking rate survey of all public and private parking lots and structures as well as street parking in Venice within one quarter (1/4) linear mile and walking distance to Municipal Lot 731. Survey includes daily and monthly rates as well as daily parking maximums.

Conclusions

From the Parking Needs Study (Part 1) and Parking Rate Survey (Part 2), the consultant team has derived the following conclusions regarding the Parking Study Area:

- Overall, the parking supply in the Parking Study Area is sufficient and meets local parking demand during the observed parking times:
 - Weekday Midday
 - Weekday PM
 - Weekend Midday
 - Weekend PM
 - Holiday AM
- However, the parking supply in the Parking Study Area is unmet or at capacity (street parking and public lots are 85% filled or more, per ITE manual) during the observed parking times:
 - Holiday Midday
- Of the twenty-one (21) future proposed development projects on file with City of Los Angeles Department of City Planning, the consultant team has determined four (4) projects to have the most relevant parking impact on the Reese Davidson Community Project
 - 1033 S Abbott Kinney (Mixed Use) – 0.5 miles walking distance from project area
 - 825 S Hampton Drive (Mixed Use) – 0.6 miles walking distance from project area
 - 595 Venice Boulevard (New 3 story manufacturing and retail) – 0.5 miles walking distance from project area

- 320 E Sunset Avenue (Bakery with retail and restaurant) – 0.75 miles walking distance from project area
- If the future proposed development projects provide a number of parking spaces based on City Municipal Code, the parking demand should be lower than parking spaces required, based on current demand that was observed
 - However, the parking demand that was observed in this Parking Study may not be the same in the future
 - Public parking spaces will become effectively “frozen” for the next 50+ years after completion of the Project; the area is fully built out
 - There is no best-practice tool to accurately forecast parking demand 50+ years into the future with reliable precision
 - Therefore, it is possible that in the future new developments or other outside factors could cause the area’s parking demand to increase, and the current proposed public parking inventory could be insufficient in the future.
- The consultant team surveyors encountered numerous homeless encampments that often blocked access to legal street parking spaces
 - Tents, shopping carts, trash, and other items were observed to block the public right-of-way, obstructing an estimated thirteen (13) public parking spaces
- The removal of Municipal Lot 731 from the public parking supply during the Project’s construction would result in a loss of \$1,020,821.60 average annual revenue for the City
 - Over the estimated 30 (thirty) month timetable for Phase 1 and Phase 2 of construction, the City would sustain an estimated loss of \$2,552,054.00 in Lot 731 parking revenue
- The current Developer’s architectural plans will move LADOT’s public parking lot approximately 500 feet further east (away from the beach), relative to Lot 731’s current public parking lot location
 - One concern is that the Project’s proposed East Site garage public parking area will be less competitive and lose parking to lots that are closer to the beach
 - Our analysis based on the Scope of Work is inconclusive on this topic, but future studies could be undertaken to assess if the Developer’s public parking lot placement could potentially result in additional public parking revenue loss for LADOT
- Changing the number of access points for public parking from 5 (at the current Lot 731) to 2 (proposed in the new Reese Davidson Community Project) could lead to queuing, but would have no direct measurable effect on parking demand at the East Site public parking garage
 - The change in access points for public parking could potentially impact roadway operations and traffic queuing impacts, which are not in the Scope of this particular Study
 - In transportation literature, garage queuing has been linked to “cruising for parking”, where drivers will search for available curbside parking spaces to avoid garage prices
 - However, its direct impact on LADOT’s public parking demand is not measurable
 - Could potentially result in additional parking revenue loss, but inconclusive per the Scope of this Parking Study

Recommendations

Recommendations for mechanisms to increase parking supply where warranted

There are two common approaches to increase the availability of parking that are applicable to the Parking Study Area in Venice: 1) addition of new parking spaces, and 2) new parking management techniques

- For potentially increasing the number of parking spaces available at the Reese Davidson Community Project, LADOT could consider installing mechanized means to increase supply, as deemed necessary by future developments and changing parking demand
 - The Developer estimates that an additional 41 parking spaces can be added with the installation of an automated parking system
- The current architectural plans provided by the Developer feature above-ground parking structures on the East Site and West Site; to potentially add new public parking spaces, the Developer could consider exploring the impact of extending the parking structure to ½ floor below ground
 - This could potentially add another parking floor to the parking structure
 - The Developer should consider exploring this solution to increase the number of public parking spaces within the East Site garage in order to meet future unknown demand
 - Without the certainty of knowing whether or not the current design of the East Garage will adequately meet the parking demands in the next 50+ years, compounded by limited land for development outside the Project Site, the current architectural plan may not adequately address the need for parking expansion
- Regarding new management techniques that could increase the parking supply, the consultant team recommends that LADOT consider opportunities for valet parking, adjusted competitive parking rates, or additional signage to direct users to LADOT parking lots
 - Incentives, such as rate discounts, could also be an effective strategy in encouraging additional parking.
 - Implementing rate discounts would require additional cost considerations on LADOT's behalf, requiring additional vetting to determine return on investment and impact on LADOT parking revenue projections
 - Improving wayfinding and information systems to ensure that customers are aware of LADOT's parking lot location and competitive prices

Alternatives for relocating parking and/or offsetting parking revenue during construction of the Reese Davidson Housing Development

The removal of Municipal Lot 731 from the public parking supply during the Project's construction would result in a loss of \$1,020,821.60 average annual revenue for the City, as well as the temporary loss of 196 public parking spaces. Over the estimated 30 (thirty) month timetable for Phase 1 and Phase 2 of construction, the City would sustain an estimated loss of \$2,552,054.00 in Lot 731 parking revenue.

Our consultant team recommends that the City help offset the lost revenue by promoting parking at Lot 701 more actively, offering competitive parking rates and clearer signage that directs traffic towards its 150 available spaces. The 150 spaces in Lot 701 would provide available replacement parking during the construction of the Reese Davidson Community Project. 150 spaces represent 76.5% of the 196 spaces that will be lost when construction begins. If Lot 701 can be used to replace 76.5% of Lot 731's parking, then the City could potentially offset some of the estimate lost Lot 731 parking revenue.

- $(\$2,552,054.00) \times (.765) = \$1,951,556.31$ potential replacement parking revenue gained by using Lot 701 as replacement parking
- $\$2,552,054.00 - \$1,951,556.31 = \$600,497.69$ in estimated lost Lot 731 parking revenue if Lot 701 is used for replacement parking during construction

The consultant team does not recommend that LADOT allow the Developer to use Lot 701 for a laydown site during construction of the Reese Davidson Community Project, in order to provide the most temporary replacement public parking spaces as possible to the community after Lot 731 is closed. LADOT has stated that its main goal is to preserve as many public parking spaces as possible during the Project's construction.

From the parking analysis of the Reese Davidson Community Project and surrounding parking lots, there is no current significant shortage in parking that needs to be addressed. As such, there does not appear to be an area-wide need for the provision of additional public parking at this moment.

Another concern is the Reese Davidson Community Project effectively "freezing" public parking supply for the next 50+ years, and constricting the City's flexibility to add additional public parking to accommodate future parking demands. There is no best practice instrument to accurately forecast future parking demand for 50+ years; if LADOT's top priority is maintaining flexibility for an unpredictable future, then it should select a public parking alternative within the Reese Davidson Community East Site that maximizes the amount of public parking spaces. The current architectural design for the East Site garage does not allow the City to provide more than 301 spaces for public parking.

Project Background

In December 2016, the City approved the Venice-Dell-Pacific site to be included in its Affordable Housing Opportunity Sites Program, and selected VCH/HCH (“Developer”) to pursue an affordable and permanent supportive housing development on the site. The City’s program also requires that any development proposal include the provision of public parking spaces in an amount equal to the current public spaces provided on the surface lots. In January 2017, the City and VCH/HCH entered into an Exclusive Negotiating Agreement (“ENA”) for the site. On December 18, 2018 the Developers received signed notices from the City of Los Angeles regarding the Notice of Preparation of Environmental Impact Report and Public Scoping Meeting. The full application for Reese Davidson Community Project has been filed with the City of Los Angeles as of December 12, 2018.



1 - Project Site for Reese Davidson Community Project

Existing Conditions

The Project site is currently developed with surface parking containing 196 vehicular parking spaces and a two-story, 2,072 square-foot residential building containing four dwelling units, located on the northern portion of the Site. LADOT staff counted 196 available parking spaces in Lot 731 in March 2020, updating previous recorded counts such as 188 (reported by the Developer's architectural firm) and 177 (previously recorded by City of Los Angeles).

The Project Site is located within the planning boundaries of the Venice Community Plan ("Community Plan") of the City of Los Angeles; adopted in September 2000. The Project Site has a General Plan land use designation of Open Space and is zoned OS-1XL-O (Open Space, Height District 1XL, Oil Drilling District). The Project Site is also located within the Los Angeles Coastal Transportation Corridor Specific Plan, the Venice Coastal Zone Specific Plan, as well as within a Transit Priority Area ("TPA") pursuant to Senate Bill SB 743.



2 - City of LA Municipal Lot 731

PART 1: PARKING NEEDS STUDY



PART 1 - PARKING NEEDS STUDY

METHODOLOGY

Parking data collection was gathered during peak summer months (July 2019 – September 2019), as requested by the City. To determine existing on-street and off-street parking demand, the consultant team conducted windshield and walking surveys within the Parking Study Area to estimate the parking utilization on a block-by-block basis. Windshield surveys are systematic parking observations made from a moving vehicle; walking surveys are systematic parking observations made on foot by the surveyor. Surveyors used manual clickers to count the on-street and off-street parking demand at a given time, and recorded the parking data onto Microsoft Excel spreadsheets. The spreadsheets were later grouped into Microsoft Excel workbooks for further analysis by the expert team. These workbooks can be found in the Appendices section of this report.

The weekend parking study was completed during typical Saturday Midday and PM/Evening periods. At hot spots (where parking demand is at or near 100 percent), the consultant team estimated the additional parking demand that was not being accommodated in the respective study area. This is typically done through observations of illegal parking (such as within red zones, blocked crosswalks, double parking or spillover parking into residential neighborhoods) as well as vehicular circulation patterns when visitors circle a specific area in search for parking.

Overall, the consultant team of surveyors conducted windshield and walking surveys on sixteen (16) separate occasions to collect parking data. The surveys were collected during Weekday Midday, Weekday PM, Weekend Midday, and Weekend PM times. Additional data was also collected for Holiday AM, and Holiday Midday times during Labor Day Weekend (8/31/19 – 9/2/19).

Parking data were collected during these periods to capture different levels of demand:

- Data collected during the Weekday Midday and PM periods reflect the peak parking demand of typical weekday conditions.
- Data collected during Weekend Midday and PM periods shows the parking needs of a typical weekend with the impact of visitors to the area.
- Data collected during Holiday AM and Holiday Midday periods are expected to reflect the busiest days of parking during the year with a high volume of visitors.

Our consultant team was also comprised of transportation experts Kittelson and Associates, Inc. (“Kittelson”). The Portland, Oregon-based firm has twenty-six (26) regional offices across the U.S., and provides comprehensive transportation engineering, planning, and research services to government and private organizations. Kittelson’s staff have developed expertise in all aspects of mobility/transportation studies, including traffic operations (using advanced operations and micro-simulation software packages), multimodal analysis, travel demand forecasting, safety analysis, active transportation planning, goods movements, access management, and policy development.

Based on planned and proposed future development (anticipated within the next five years) provided by the City, the Kittelson team has estimated the peak parking demand for the Parking Study Area. The demand will be based on information from the Institute Transportation Engineers (ITE) Parking Generation Manual, 5th Edition. In addition, the team will document the parking supply proposed for each development site (or an estimation of supply based on the City’s parking requirements).



3 - Parking Study Area Map, with ¼ radius shown in Green, Project Site in Red, and public lots shown in Purple

Parking Needs Survey Data & Analysis

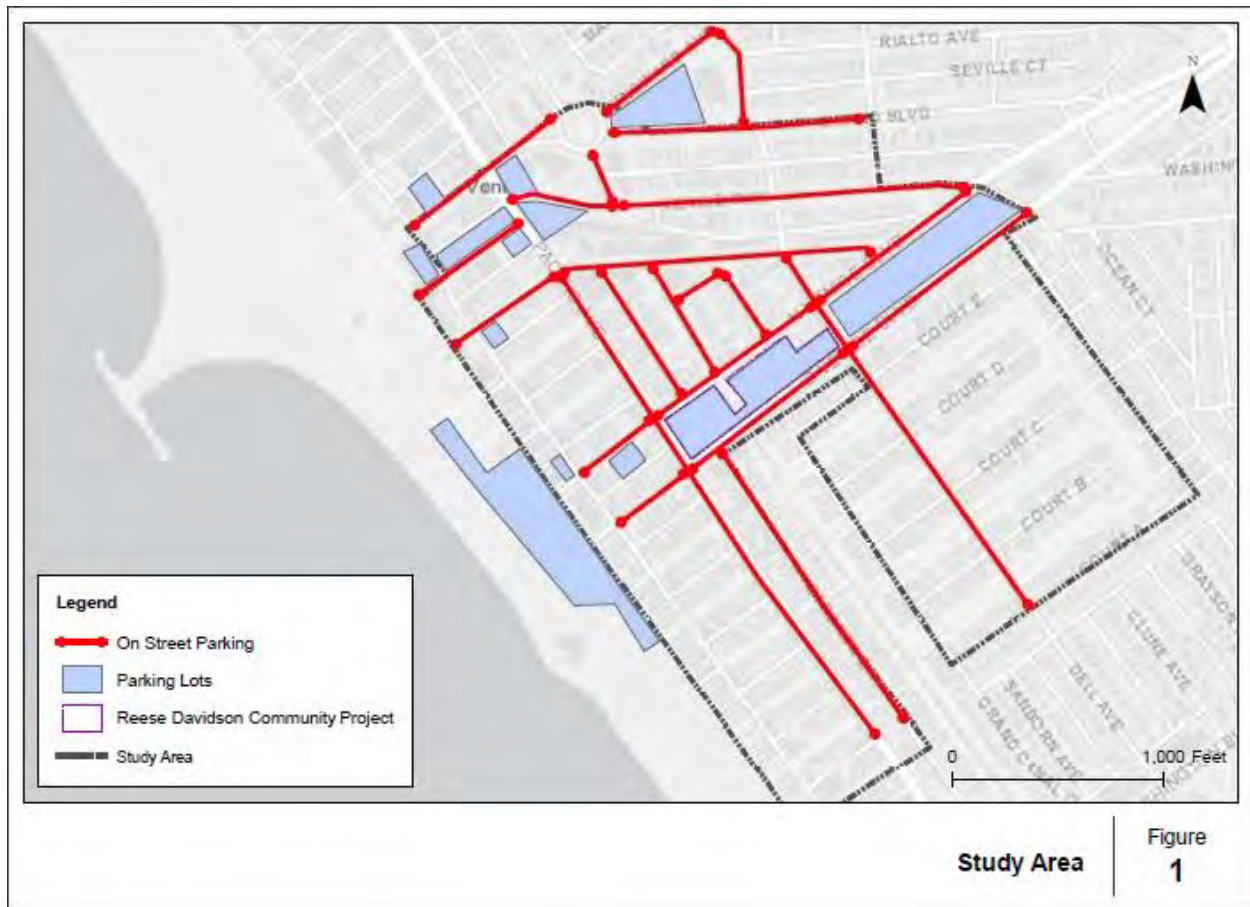


Figure 1 Study Area

- The Parking Study Area includes the areas within a $\frac{1}{4}$ mile radius surrounding Municipal Lot 731, the Project Site where the Reese Davidson Community Project is proposed.
- There are **13** public parking lots within the Parking Study Area.
- On-street parking is allowed on **18** streets.

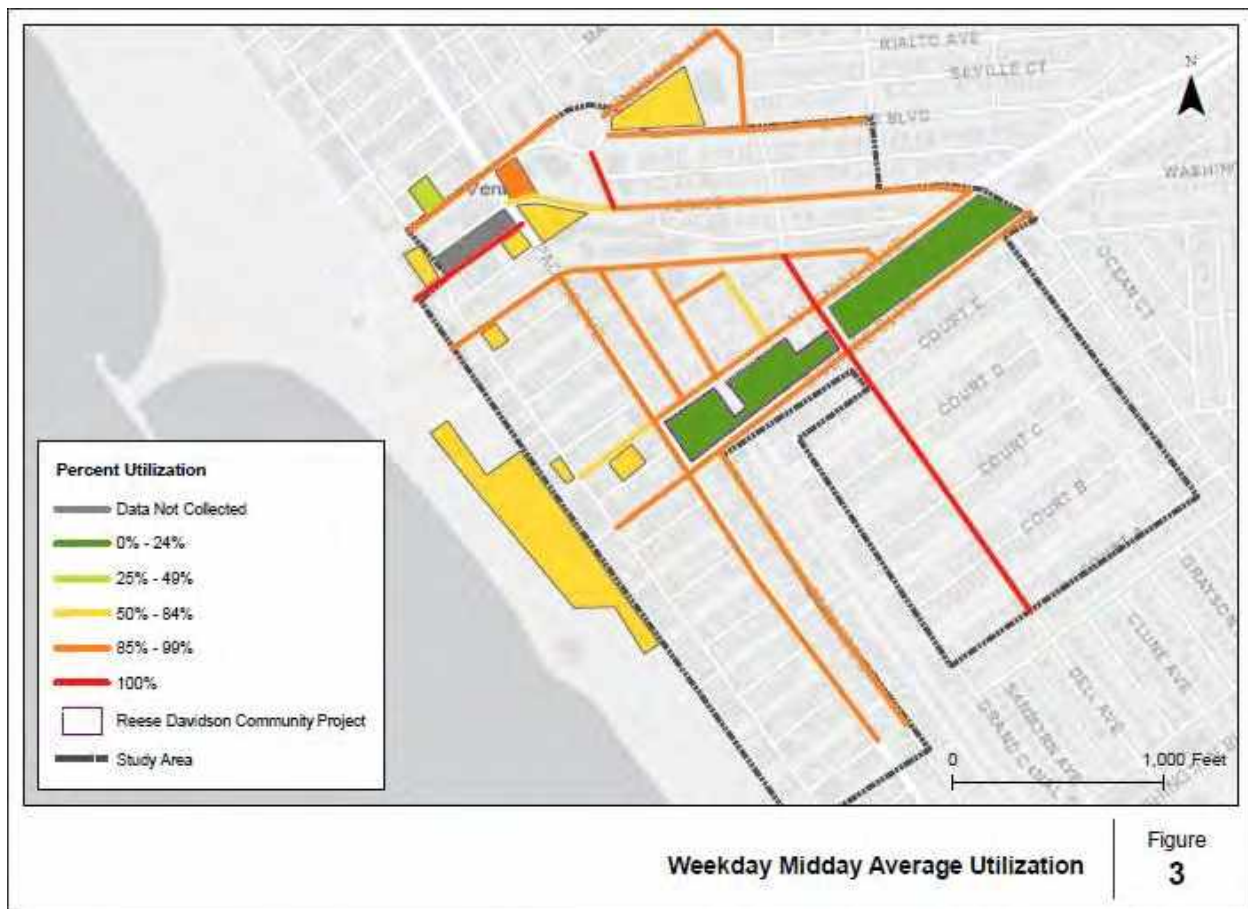


Figure 3 Weekday Midday Average Utilization

- The utilization of all on-street parking were surveyed as being higher than 49% during the Weekday Midday time-frame.
- The utilization of on-street parking is 100% on Dell Avenue, 17th Avenue and Main Street.
- The utilization of all parking lots is less than 85%, with the exception of Los Angeles City lot 761 at 1608 S. Pacific Avenue, with a utilization rate between 85% and 99%

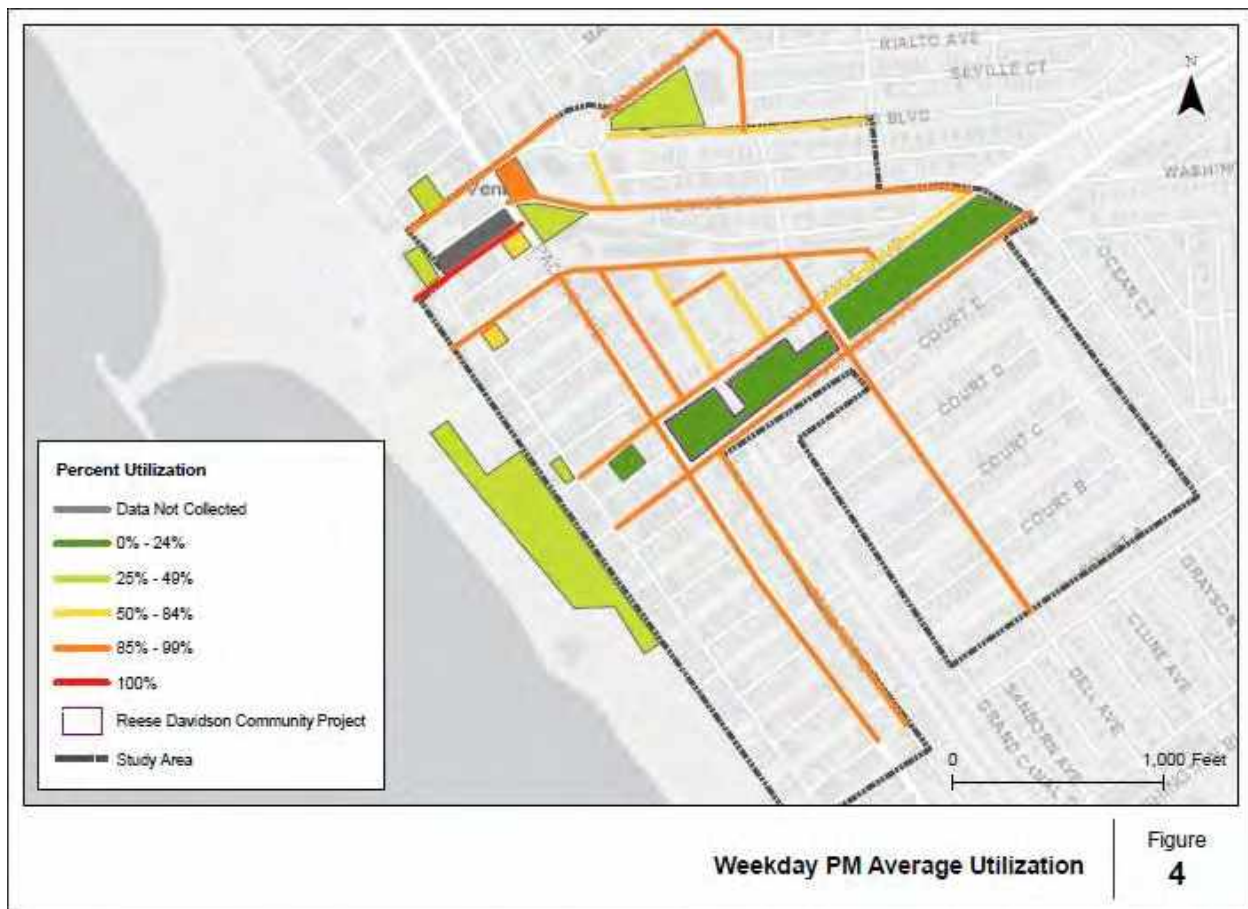


Figure 4 Weekday PM Average Utilization

- The utilization of all on-street parking is higher than 49% when surveyed during Weekday PM times.
- The utilization of 17th Avenue on-street parking is 100%.
- The utilization of all parking lots is lower than 50% with the exception of parking lots on the southeast corner of 17th Avenue and Pacific Avenue, and Muscle Beach on Speedway (between 18th Avenue and 18th Place) with a utilization between 50% and 84%.

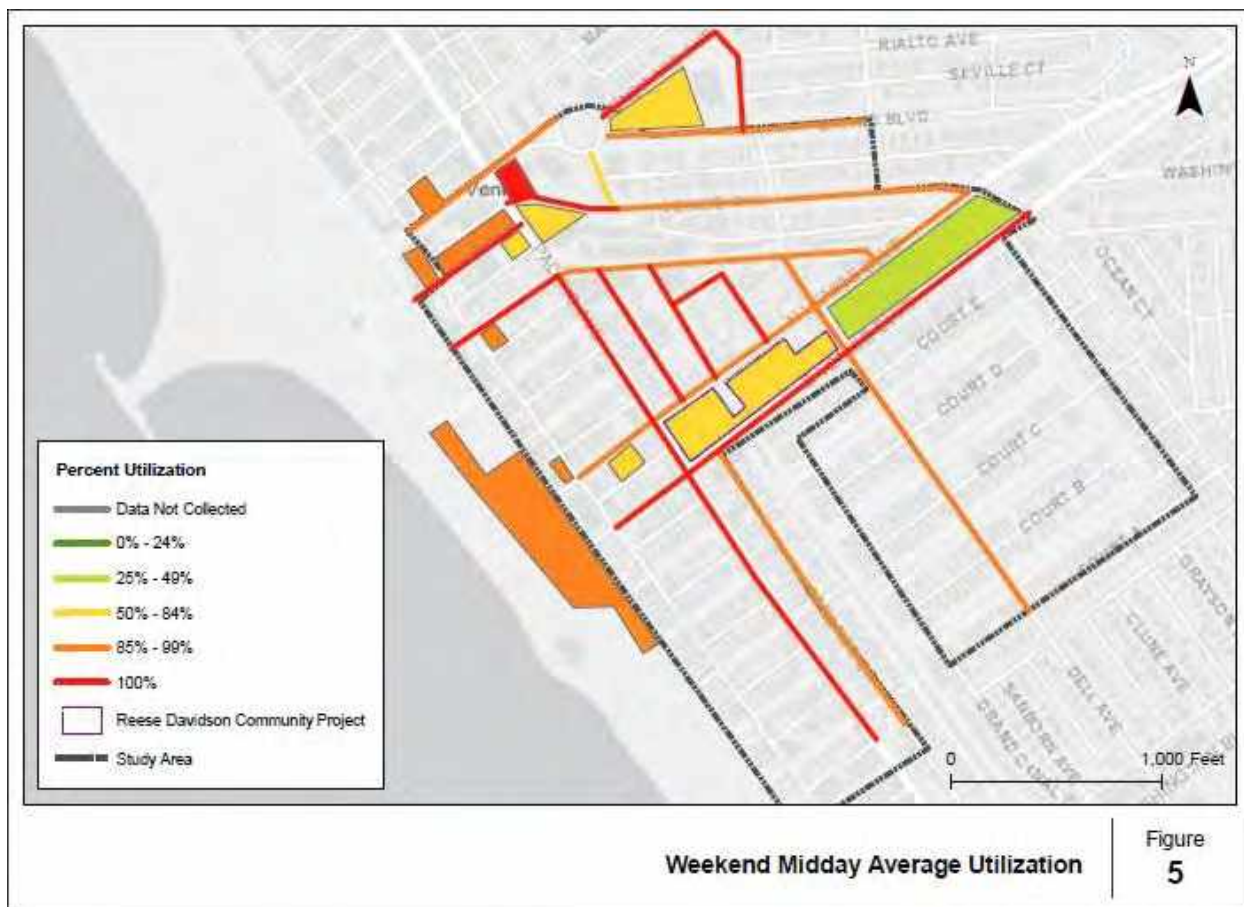


Figure 5 Weekend Midday Average Utilization

- The utilization of all on-street parking is higher than 85% when surveyed during the Weekend Midday times, with the exception of Main Street with a utilized rate between 50% and 84%.
- The utilization rate of on-street parking is 100% on the following key streets: 17th Avenue, 18th Avenue, Pacific Avenue, Venice Way between Pacific Avenue and Main Street, S. Venice Blvd, Pacific Avenue, Strongs Drive, Canal Street, Grand Canal, Alberta Avenue, Windward Avenue between Windward Circle and Riviera Avenue, and Riviera Avenue.
- The utilization rate of all parking lots is higher than 49%, with the exception of Los Angeles City Lot 701 at 2150 Dell Ave/S. Venice Boulevard, with a lower utilization rate ranging between 25% and 49%.
- Los Angeles City Lot 761 at 1608 S. Pacific Avenue has a utilization rate of 100%.

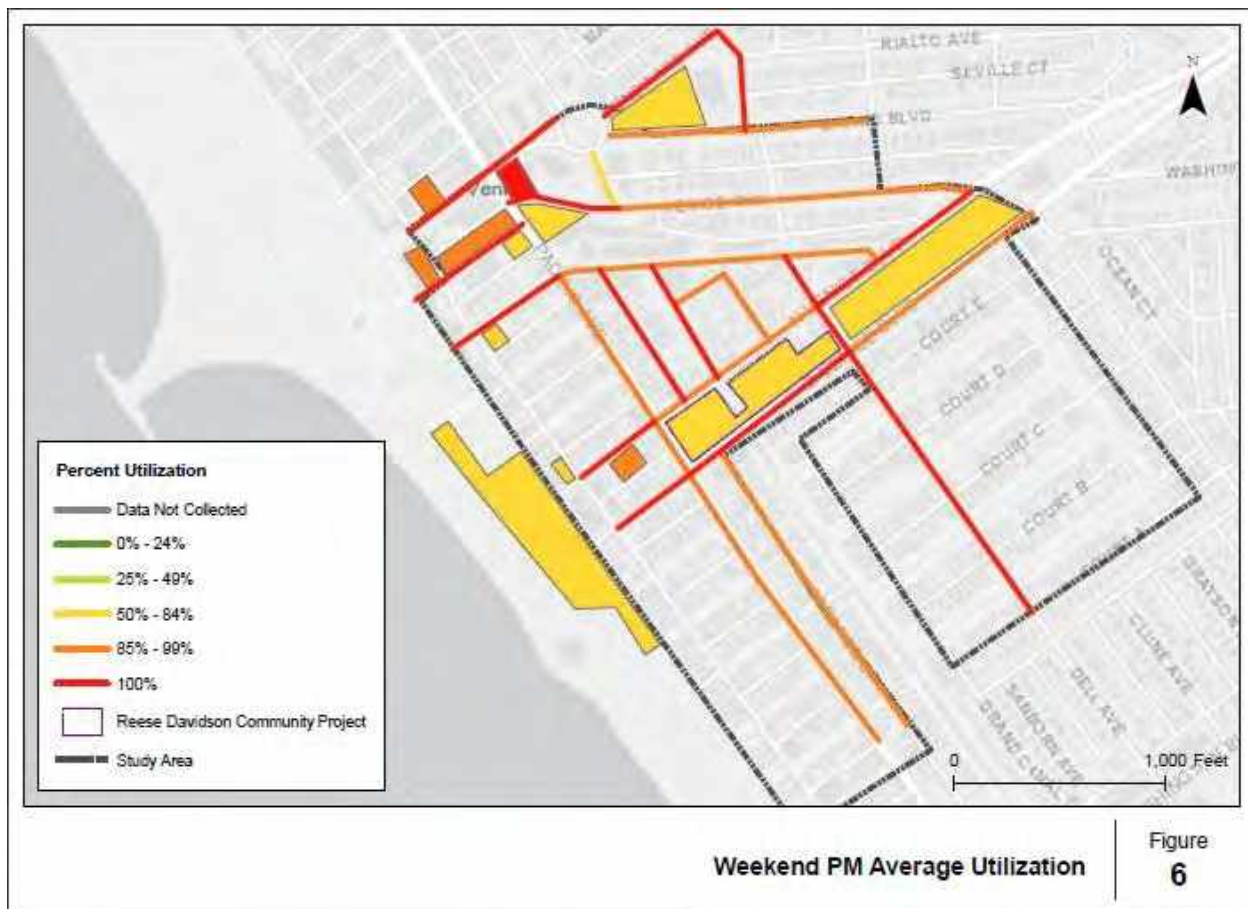


Figure 6 Weekend PM Average Utilization

- The utilization of all on-street parking is higher than 85% when surveyed during the Weekend PM times, with the exception of Main Street with a utilization rate between 50% and 84%.
- The utilization of on-street parking is 100% on the following key streets; Windward Avenue, Riviera Avenue, 17th Avenue, 18th Avenue, Venice Way between Pacific Avenue and Main Street, Strongs Drive, Canal Street, Dell Avenue, S. Venice Boulevard between Speedway and Dell Avenue, N. Venice Boulevard between Dell Avenue and Venice Way, and N. Venice Boulevard between Pacific Avenue and Speedway.
- The utilization of all parking lots is higher than 50%.
- Los Angeles City Lot 761 at 1608 S. Pacific Avenue was observed to have substantially higher utilization rate of 100%, compared to other lots.

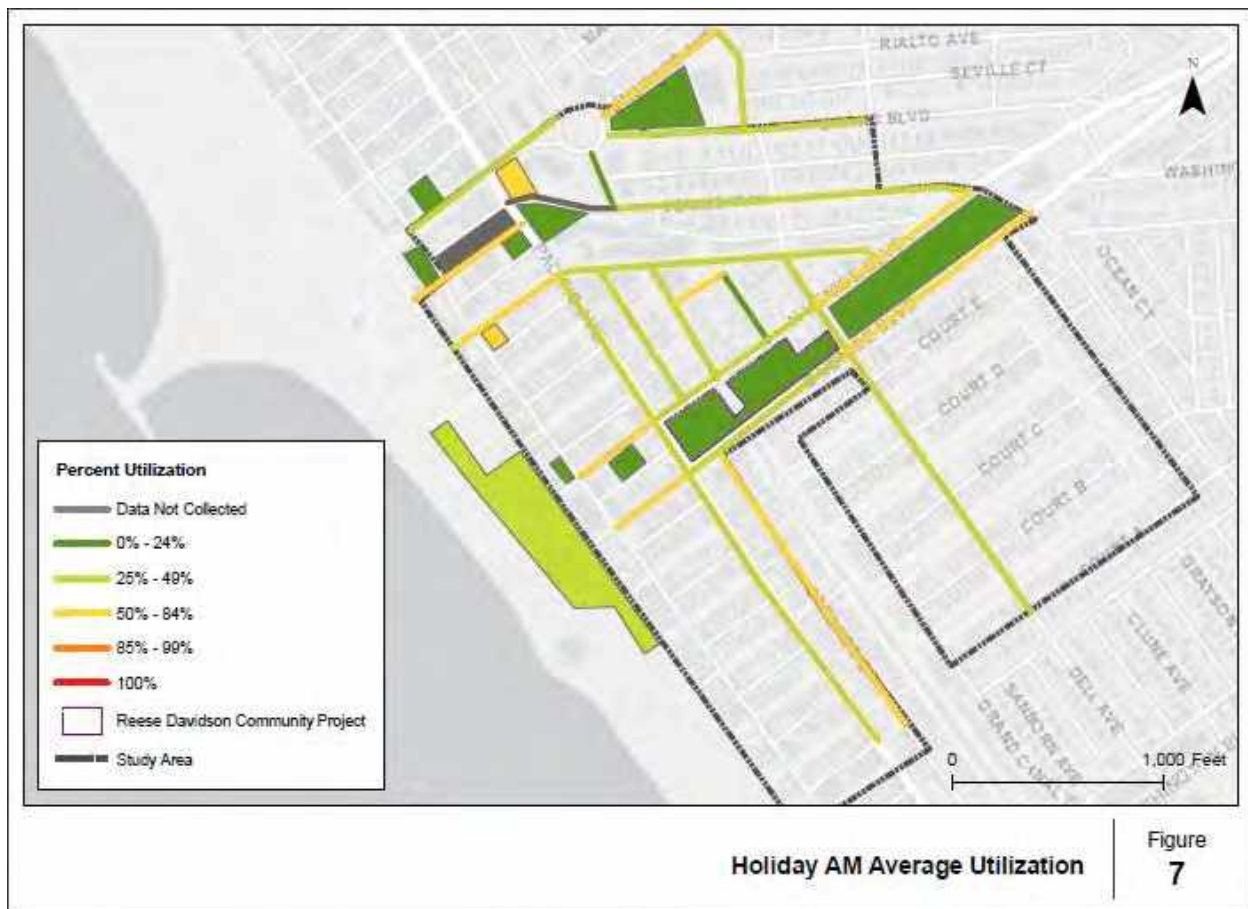


Figure 7 Holiday AM Average Utilization

- The utilization of all on-street parking is lower than 85% when surveyed during the Holiday AM times throughout Labor Day Weekend 2019.
- The utilization rate of most parking lots was less than 50%. The utilization rate of Los Angeles City lot 761 at 1608 S. Pacific Avenue and Muscle Beach parking lot on Speedway between 18th Avenue and 18th Place ranged between 50% and 84%.

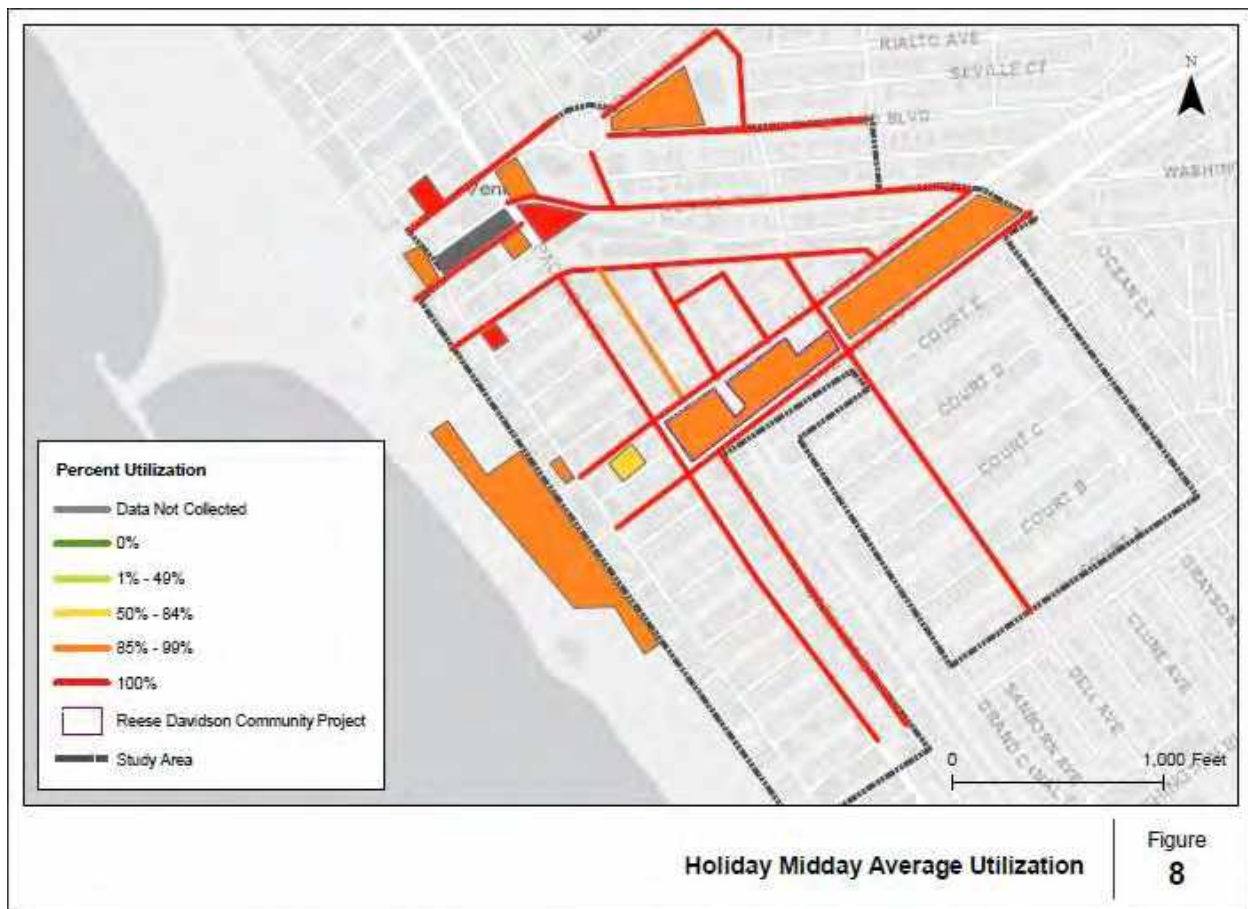


Figure 8 Holiday Midday Average Utilization

- The utilization rate of all on-street parking was 100% when surveyed during the Holiday Midday times, with the exception that the utilization of Strongs Drive was between 85% and 99%.
- The utilization rate of all parking lots was higher than 85% (considered as “full” by ITE manual), with the exception that the utilization of the parking lot at 42 N. Venice Boulevard was between 50% and 84%.

Overview of Required & Proposed Parking at Reese Davidson Community Project

The parking structure west of the canal will be for the residents of the affordable housing and the commercial/retail uses; it is not pertinent to this Parking Study, which aims to measure the demand for replacement Public Parking within the East Site garage.

Table 1 below highlights the Automobile Parking Summary at the Reese Davidson Community Project's East Garage, provided by Eric Owen Moss Architects.

Table 1 – Architect's Automobile Parking Summary, East Garage

| EAST GARAGE | TYPE | REQUIRED | PROVIDED |
|-------------|------------------------------|----------|----------|
| | New Parking (Beach Impact) | 23 | 23 |
| | Replacement Parking (Public) | 188 | 188 |
| | New Parking (Non-Required) | - | 41 |
| | East Garage Subtotal | 211 | 252 |

There is a key discrepancy in the number of Replacement Parking (Public) spaces, with the Developer assuming 188 replacement parking spaces in the most recent Architectural plans that are listed in above Table 1.

LADOT staff counted 196 replacement parking spaces in March 2020, requiring that eight (8) additional Replacement Parking (Public) spaces be added to the East Garage total.

Table 2, below, is a revised table showing that the Developer needs to add the additional replacement parking spaces.

Table 2 – Architect's Revised Automobile Parking Summary, East Garage

| TYPE | REQUIRED | PROVIDED | IF AUTOMATED |
|------------------------------|--------------------|--------------------|--------------------|
| New Parking (Beach Impact) | 23 | 23 | 23 |
| Replacement Parking (Public) | 188 196 | 188 196 | 188 196 |
| New Parking (Non-Required) | - | 41 | 82 |
| East Garage Subtotal | 219 | 260 | 301 |

In summary, the Developer's current architectural plans state that a minimum of 252 parking spaces will be provided in the East Garage; this needs to be revised in order to accommodate eight (8) extra Replacement Parking (Public) spaces, for a new total of 260 spaces minimum in the East Garage.

LADOT will later decide on the specifications for the Public Parking Structure located on the East Site. If LADOT chooses an automated structure (i.e. mechanical / lift style) then there could be increase in the number of public parking spaces, compared to the 252 spaces in the Architect's latest design (should be revised to 260 spaces as described above).

The Consultant's understanding is that the City will determine if the East Garage Public Parking Structure will be conventional (an alternative where the Developer estimates 260 spaces) or fully automated (an alternative where the Developer estimates 41 additional new spaces, for a total of 301 spaces).

Table 2 - Reese Davidson Community Project Proposed Parking Analysis (also included in Appendices)

| Project | Location | Land use | Size | Units | ITE Weekday Parking Demand ¹ | ITE Weekend Parking Demand ¹ | Required Parking Spaces ² | Spaces Provided (East) ² | Total Parking Spaces Provided | Parking Space Shortage ³ |
|----------------|---------------------------------|---------------------------|--------|--------|---|---|--------------------------------------|-------------------------------------|-------------------------------|-------------------------------------|
| Reese Davidson | 204-208 ENorth Venice Boulevard | Affordable Housing | 140 | d.u | 139 | 134 | 61 | 0 | 61 | -78 |
| | | Art Studio | 3.155 | k.s.f. | 7 | 13 | 6 | 0 | 6 | -7 |
| | | Retail | 2.255 | k.s.f. | 4 | 7 | 10 | 0 | 10 | 3 |
| | | Restaurant | 1.310 | k.s.f. | 12 | 16 | 26 | 0 | 26 | 10 |
| | | Beech Impact Parking | 22.970 | k.s.f. | NA | NA | 23 | 23 | 23 | NA |
| | | Replacement Parking | | | NA | NA | 196 | 188 | 188 | -8 |
| | | Additional Parking Spaces | | | NA | NA | NA | 41-82 | 46-87 | NA |
| | | Total | | | 162 | 170 | 322 | 252-293 | 360-401 | 190 - 231 |

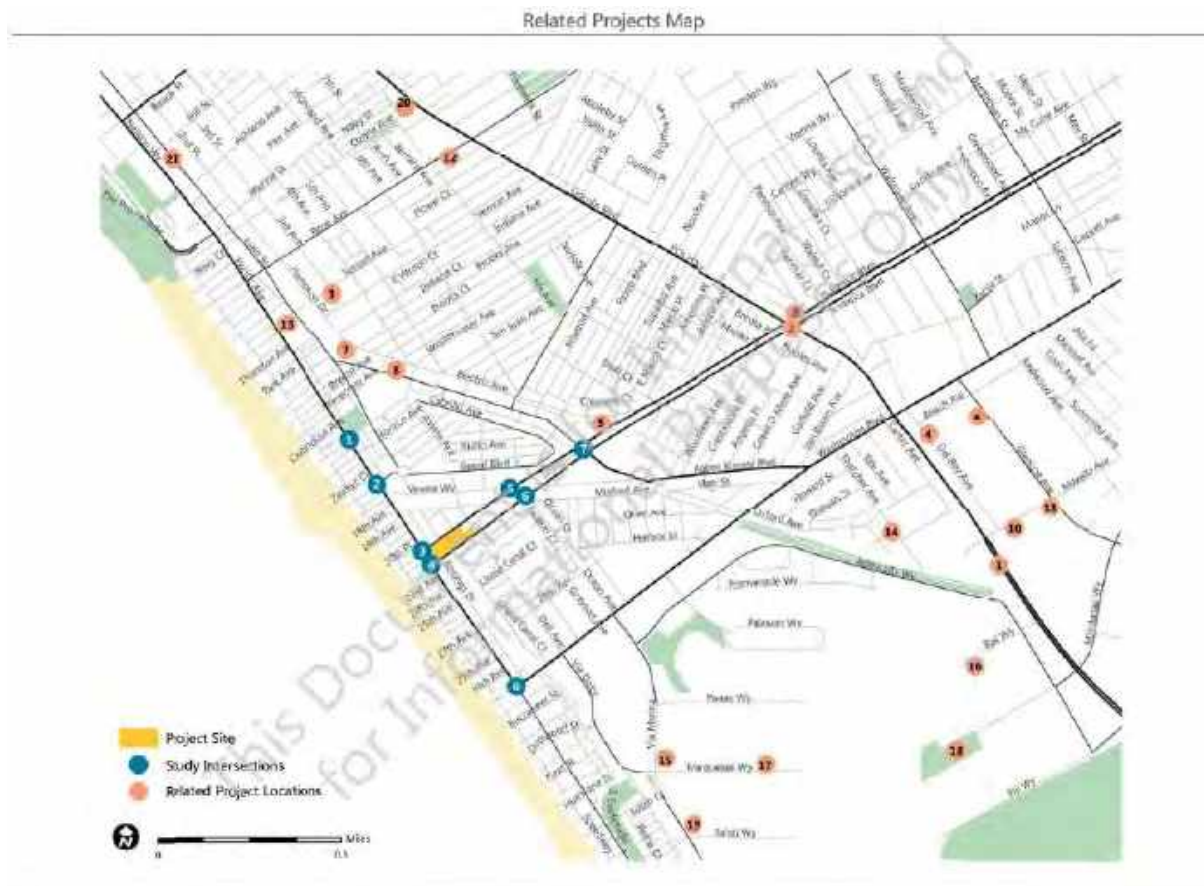
1. Parking demand rates are from Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition. If both Sunday and Saturday parking rates are available, the higher rate has been used for conservative consideration
2. The "Required Parking Spaces" and "Parking Spaces Provided" are provided by the Architectural Plan (Eric Owen Moss Architects). The required parking spaces for "Replacement Parking" has been updated with 196 existing parking spaces counted by LADOT staff at Lot 731
3. The "Parking Space Shortage" is the difference between total parking spaces provided and the maximum ITE parking demand

Reese Davidson Proposed Project Site Parking Conclusions

- 1. The Developer's designated parking spaces for "affordable housing" and "art studio" are lower than the parking demand estimated from ITE.**
- 2. By deducting the ITE maximum parking demand of 170 (weekend) from total 260 - 301 spaces proposed at the East Site garage, our analysis estimates that there will be 90-131 spaces available for other parking usage in the East Site garage under the current architectural plans**
- 3. There is a shortage of 8 replacement parking spaces in the Architectural Plan. This is due to the Developer counting 188 replacement parking spaces from Lot 731, and LADOT counting 196 replacement parking spaces.**
- 4. Overall, the proposed parking supply is higher than the observed demand, but more parking spaces need to be assigned for affordable housing unit uses and art studio uses to meet ITE standards.**
- 5. The current architectural design for the East Site garage does not allow the City to provide more than 301 spaces for public parking. If future parking demands increase, it is possible that the maximum public parking spaces provided in this design will not meet future demand.**

Prediction of Future Parking Needs

The City of Los Angeles Department of City Planning provided information pertaining to future proposed development projects within the Venice planning area shared by the Reese Davidson Community Project. In total, there are twenty-one (21) proposed projects in the surrounding area that the Department of City Planning conservatively forecasts to be built out by 2023. The future proposed development projects can be seen on the map below from the Developer's TIA study.



4 - Map of Future Proposed Development Projects (Source: KOA Draft Traffic Impact Study, November 2019)

Of the twenty-one (21) future proposed development projects on file with City Planning, our traffic engineering expert, Kittleson, has determined four (4) projects to have a relevant parking impact on the Reese Davidson Community Project. The following future proposed development projects are in within a 0.5-0.75 mile proximity of the Project Site:

- 1033 S Abbott Kinney (Mixed Use) – 0.5 miles walking distance from project area
- 825 S Hampton Drive (Mixed Use) – 0.6 miles walking distance from project area
- 595 Venice Boulevard (New 3 story manufacturing and retail) – 0.5 miles walking distance from project area
- 320 E Sunset Avenue (Bakery with retail and restaurant) – 0.75 miles walking distance from project area

Table 3 – Future Proposed Development Projects Parking Analysis

| Project | Location | Land use | Size | Units | ITE Land Use Code | ITE Weekday Parking Demand ¹ | ITE Weekend Parking Demand ² | City of LA Municipal Code Parking Spaces Requirement ³ | Parking Space Shortage |
|--|----------------------|--------------------------------|--------|--------|-------------------|---|---|---|------------------------|
| Bakery with Retail & Restaurant | 320 E Sunset Ave | Retail / Restaurant | 4,675 | k.s.f. | 939 | 37 | 46 | 47 | 1 |
| | | Total | | | | 37 | 46 | 47 | |
| New 3-Story Manufacturing & Retail | 595 Venice Blvd | Office | 25,150 | k.s.f. | 710 | 60 | 7 | 50 | |
| | | Retail | 5,028 | k.s.f. | 820 | 10 | 15 | 20 | |
| | | Total | | | | 70 | 22 | 70 | 0 |
| | | Condominium | 8 | d.u. | 220 | 10 | 13 | 16 | |
| Mixed-Use | 825 S Hampton Dr | Retail | 2,430 | k.s.f. | 820 | 5 | 7 | 10 | |
| | | Restaurant | 4,100 | k.s.f. | 932 | 39 | 50 | 41 | |
| | | Gym | 2,780 | k.s.f. | 492 | 13 | 9 | 28 | |
| | | Total | | | | 66 | 80 | 95 | 15 |
| Mixed-Use | 1033 S. Abbot Kinney | Hotel | 78 | Rooms | 310 | 58 | 90 | 156 | |
| | | Multifamily Housing (Mid-Rise) | 4,000 | d.u. | 221 | 5 | 8 | 8 | |
| | | Shopping Center | 4,670 | k.s.f. | 820 | 9 | 14 | 19 | |
| | | Quality Restaurant | 3,810 | k.s.f. | 931 | 40 | 65 | 38 | |
| | | General Office Building | 2,0270 | k.s.f. | 710 | 5 | 1 | 4 | |
| | | Total | | | | 117 | 177 | 225 | 17 |
| 1. Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition | | | | | | | | | |
| 2. If both Sunday and Saturday parking rates are available, the higher rate has been used for conservative consideration | | | | | | | | | |
| 3. City of LA Municipal Code Article 2 section 12.21 | | | | | | | | | |

Findings:

- 1. If the future proposed development projects provide a number of parking spaces based on City Municipal Code, the parking demand should be lower than parking spaces provided, so there will be no parking spaces shortage.**
- 2. There is no best practice instrument to accurately forecast future parking demand for the next 50+ years; if maintaining flexibility for an unpredictable future is a top priority, then a public parking alternative within the Reese Davidson Community East Site garage that maximizes the amount of public parking spaces should be pursued.**
- 3. The current architectural design for the East Site garage does not allow the City to provide more than 301 spaces for public parking. If additional studies or new parking demand projections are conducted by the City in the future, it remains a possibility that the current Project design will not provide adequate public parking spaces to meet future demand.**

PART 2: PARKING RATE SURVEY



PART 2 – PARKING RATE SURVEY

METHODOLOGY

As stated earlier in this document, there are **13** public parking lots within the Parking Study Area. Within those 13 public parking lots, there are **1,202** total parking spaces. Figure 2 below, “Parking Supply” (referenced earlier in the Parking Needs Study), maps the public parking lots in Blue.



In this second section of our report, the consultant team has compiled a Parking Rate Survey to document the parking rates for all public and private parking structures within $\frac{1}{4}$ (0.25) linear mile and walking distance of Municipal Lot 731. Parking lot rates were compiled from windshield and walking surveys during the sixteen (16) separate occasions the consultant team visited the Parking Study Area, as well as rate data collected from Parkopedia.com.

Parkopedia is an online and mobile parking resource that allows drivers to find the closest parking to their destination, tells them how much it will cost and whether the space is available. Parkopedia provides detailed information on 70 million parking spaces in over 15,000 cities globally, including real-time parking space availability information in over 4,000 cities (including the City of Los Angeles). Parkopedia information includes:

- Address with entrance and exit coordinates
- Area Shape
- Opening Hours
- Full price list
- Total number of parking spaces
- Operator contact details
- Security information (CCTV, light, gate)
- Payment information (cash, credit cards, phone)
- Height restrictions
- EV charging, etc.



5 - Lot 731, observed during a Weekday Midday time

Parking Rate Survey Data

The following Parking Rate Survey (see on Table 4 on following page) includes daily rates for Winter (October to April) and Summer (May to September). The Parking Rate Survey also lists Weekday/Weekend rates, as well as the respective lot's hours of operation. All rates are subject to weather and demand, as lot operators have the option to adjust the listed rates at their own discretion. In instances where the rate on the Parkopedia website was inconsistent with the rates provided by the lot attendant, the lot attendant's stated rate is listed.

Table 4– Parking Rate Survey

| | | | | Winter Rates | | | | Summer Rates | | | |
|---|---|---|----------------------------|---|---|---------------------|--|--------------------------------------|---------------------------------|--------------------|--|
| PARKING LOTS | | Managing Company | Available Spaces | Weekday Hours | Mon-Fri | Weekend Hours | Sat & Sun & Holiday | Weekday Hours | Mon-Fri | Weekend Hours | Sat & Sun & Holiday |
| 1 | 29 Windward Ave Windward Ave & Speedway | Safety Parking Valet | 65 | 9am-8pm | \$10/2 hrs \$20/All Day SUV \$25-\$30 | 9am-8pm | \$10/2 hrs \$20/All Day \$30 Max & SUV | 9am-8pm | \$15/2 hrs \$20/All Day | 9am-8pm | \$15/2 hr \$30/All Day up to \$40 |
| 2 | LA CITY LOT 761 1608 S Pacific Ave (Windward Ave) | City - metered 1 hr | 14 | 8am-6pm | \$1/hr | 8am-6pm | \$1/hr | 8am-6pm | \$1/hr | 8am-6pm | \$1/hr |
| 3 | 100 Venice Way - Venice Way & Pacific Ave | Safety Parking Valet | 35 | 9am-8pm | \$10/2 hrs \$20/All Day | 9am-8pm | \$35 Flat Rate | 9am-8pm | \$35 Flat Rate | 9am-8pm | \$45 Flat Rate |
| 4 | 32 17th Ave - 17th Ave/17th Place & Pacific Ave | Pacific Parking | 36 | 9am-12am | \$10/2hrs \$15/3hrs \$20/All Day | 9am-12am | \$15/2hrs, \$20/3hrs, \$30/All Day | 9am-12am | \$15/3 hrs \$25/All Day | 9am-12am | \$15/2 hrs \$25/4 hrs \$40/All Day |
| 5 | 15 17th Ave - 17th Ave & Speedway | Sidewalk Enterprises | 51 | 9am-12am | \$10/3 hrs \$20/All Day | 9am-12am | \$10/3 hrs \$20/All Day | 9am-12am | \$10/2 hrs \$15-\$20/All Day | 9am-12am | \$15/2 hrs \$20-30/All Day |
| 6 | Muscle Beach Parking - Speedway/20th PL & 19th Ave | Cash Only, could not find attendant | 15 | | | | | | | | |
| 7 | 9 N Venice Blvd & Speedway | Safety Parking Valet | 12 | 9am-8pm | \$10/2 hrs \$20/All Day | 9am-8pm | \$10/2 hrs \$20/All Day | 9am-8pm | \$15/2 hrs \$30/All Day | 9am-8pm | \$15/2 hrs \$40/All Day |
| 8 | 42 N Venice Blvd - Between Speedway & | Imperial Parking Solutions | 125 | | Mon-Wed, Sun | | Thu-Sat | | Mon-Wed, Sun | | Thu-Sat |
| | | | | 7am-12am | \$10 | 7am-2am | \$10 | 7am-12am | \$10 | 7am-2am | \$10 |
| 9 | Hotel Erwin | 2 lots, 30-40 cars each, not able to tell difference between hotel guest car & beach goer car | 60-80 Hotel & beach guests | | \$10/2 hrs \$15/ All Day | | \$15/2 hrs \$20 All Day | | \$15/2 hrs \$20-\$30/All Day | | \$20/2 hrs \$30/All Day |
| 10 | LA CITY LOT 731 - 200 N Venice Blvd/S Venice Blvd | Modern Parking | 196 | October-April | | | | May-September | | | |
| | | | | 7am-9am | \$4 | 7am-9am | \$4 | 7am-9am 4pm-8pm | \$5 | 9am-4pm | \$20, \$30 (60%) Max \$45 per Attendant |
| | | | | 9am-5pm 5pm-11pm | \$7-15 \$2 | 9am-5pm 5pm-11pm | \$7-15 \$3(Fri-Sun) | 9am-4pm | \$10, \$20 (60%), \$30 (80%) | | |
| 11 | LA CITY LOT 701 - 2150 Dell Ave/S Venice Blvd/Way | Modern Parking | 150 | October-April | | | | May-September | | | |
| | | | | 7am-9am | \$4 | 7am-9am | \$4 | 7am-9am 4pm-8pm | \$5 | 7am-9am 4pm-8pm | \$5 |
| | | | | 9am-5pm | \$7-\$12 | 9am-5pm | \$7-\$12 | 9am-5pm | \$10, \$20 (60%), \$30 (80%) | 9am-5pm | \$20, \$30 (60%) Max \$45 per Attendant |
| 12 | Post Office - Windward Ave & Riviera Ave | Valet not consistant, rate unknown | 14 | | | | | | | | |
| 13 | County Parking Lot -339 | Modern Parking | 339 | Day after last Sun in Sept-last Fri before Memorial | | | | Sat before Memorial-last Sun in Sept | | | |
| | | | | 6am-9am | \$5 | 6am-8am | \$5 | 6am-9am | \$5 | 6am-8am | \$9 |
| | | | | 9am-5pm | \$7 | 8am-6pm | \$9 | 9am-5pm | \$9 | 8am-6pm | \$18 |
| | | | | 5pm-12am | \$5 | 6pm-12am | \$5 | 5pm-12am | \$5 | 6pm-12am | \$9 |
| All rates subject to weather & demand. Rates on website inconsistent with rates told by attendant. | | | | | | | | | | | |
| *(%) indicates the rate charged upon reaching that percentage of capacity, at the discretion of the attendant | | | | | | | | | | | |
| https://en.parkopedia.com/parking/garage/42_n_venice_blvd/90291/los_angeles/?arriving=201909031600&leaving=201909031800 | | | | | | | | | | | |

- All rates subject to weather and demand, as determined by the lot attendant.
- When inconsistent on Parkopedia's database, the rate provided by the lot attendant at the time of the survey is displayed.

Parking Revenue Overview for City-owned Lots 701 and 731

The City of Los Angeles provided revenue summaries for the 2017/2018 and 2018/2019 fiscal years (July to June) for City-owned Municipal Lots 701 and 731. The complete revenue summaries can be found in the Appendices section of this report.

Lot 701

- Not typically used to accommodate public parking during Winter (October to April)
- 10,105.5 average annual parking receipts
- 842.1 average monthly parking receipts
- \$195,843.18 average annual net parking revenue
- \$16,320.27 average monthly net parking revenue
- Top 3 Busiest months
 - July
 - August
 - June

Lot 731

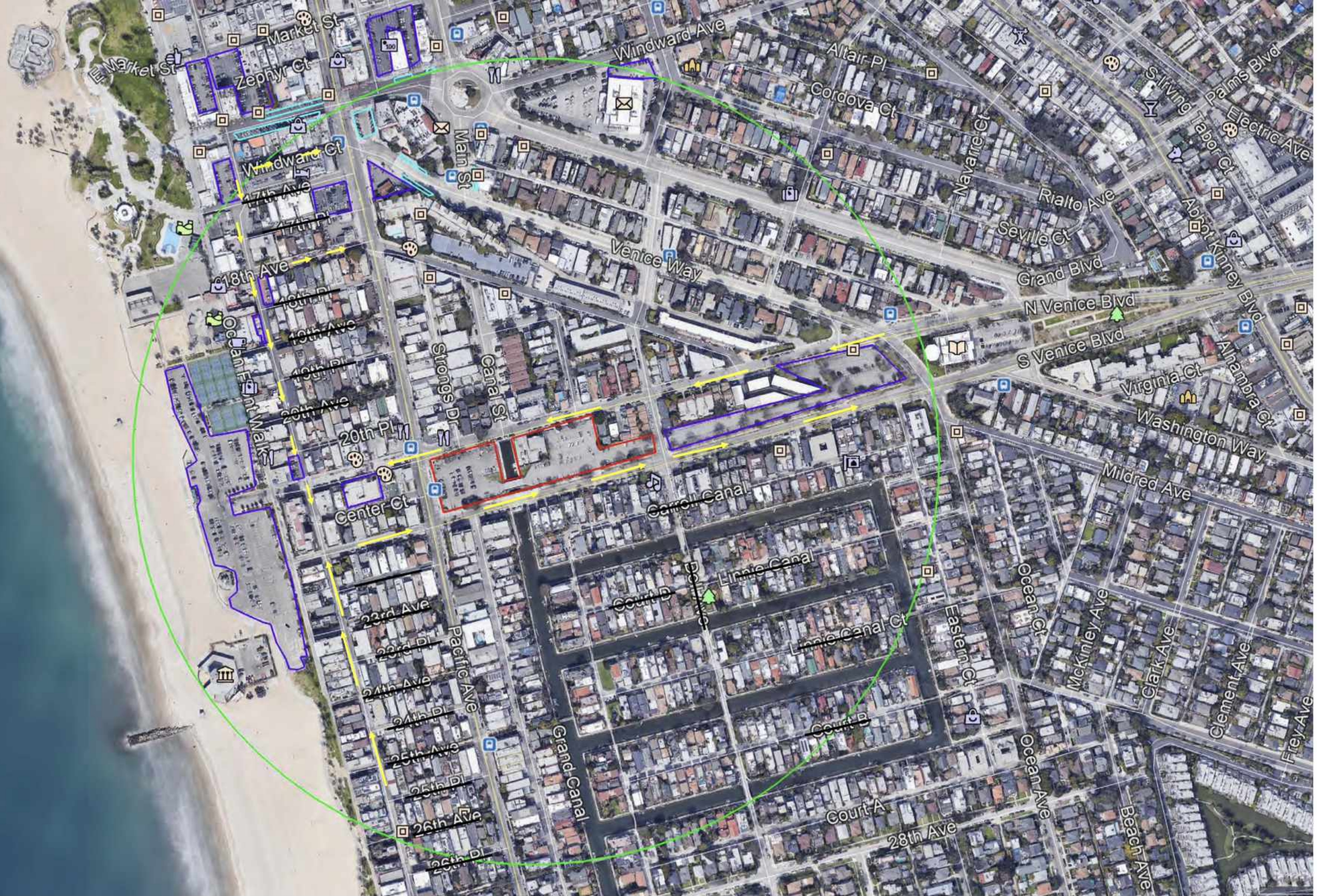
- Open to public all year
- 71,021.5 average annual parking receipts
- 5,918.5 average monthly parking receipts
- \$1,020,821.60 average annual net parking revenue
- \$85,068.47 average monthly net parking revenue
- Top 3 Busiest months
 - July
 - August
 - June

Parking Revenue Implications of Reese Davidson Community Project

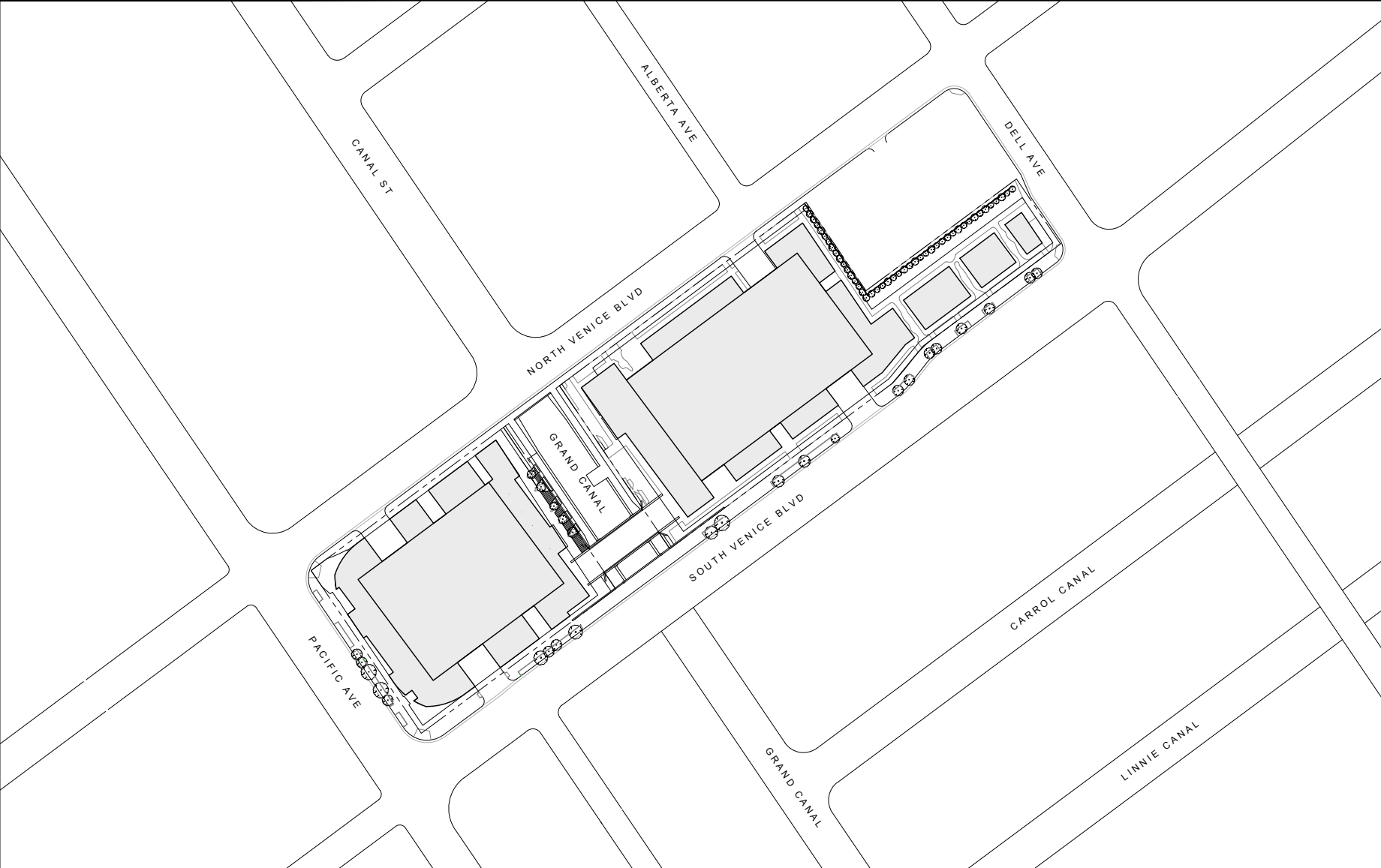
The removal of Municipal Lot 731 from the public parking supply during the Project's construction would result in a loss of \$1,020,821.60 average annual revenue for the City, as well as the temporary loss of 196 public parking spaces. Over the estimated 30 (thirty) month timetable for Phase 1 and Phase 2 of construction, the City would sustain an estimated loss of \$2,552,054.00 in Lot 731 parking revenue.

APPENDICES





CONTEXT MAP



| | | | | | |
|-----------------------|--|-----------------------|--|---------------------|--|
| CENTER LINE | | ROOMNAME/NUMBER | | NORTH ARROW | |
| PROPERTY LINE | | DOOR NUMBER | | ELEVATION | |
| HIDDEN/CONCEALED LINE | | WINDOW NUMBER | | BUILDING SECTION | |
| ELEVATION CONTROL | | WALL TYPE | | DETAIL/WALL SECTION | |
| WORK POINT | | CSI NUMBER | | DETAIL ENLARGEMENT | |
| SPOT ELEVATION | | EXISTING CONSTRUCTION | | INTERIOR ELEVATION | |
| DIMENSIONS | | NEW CONSTRUCTION | | | |
| GRIDLINES | | 1 HOUR CONSTRUCTION | | | |
| | | 2 HOUR CONSTRUCTION | | | |

| | | | | | | |
|------------------------------|-------------------------------|-------------------------------|--|----------------------------|--|---------------------------|
| ● AT | CONT. CONTINUOUS | F.L. FLOW LINE | LAM. LAMINATED | PLAST. PLASTER / PLASTIC | S.S. STAINLESS STEEL | WP WATER PROOF / ING |
| ABV. ABOVE | CORD. COORDINATE | F.G. FLANGE | L.G. LONG | PL. PANEL | S.S. SEE STRUCTURAL DRAWINGS | W.R. WATER RESISTANT |
| A.C. ASPHALTIC CONCRETE | A.C. ASPHALTIC CONCRETE | F.R. FLOOR | L.T. LIGHT WEIGHT | P.O.C. POINT OF CONNECTION | STAG. STAGGERED | W.S. WALL SECTION |
| A.D. AREA DRAIN | CP CEMENT PLASTER | F.O.B. FACE OF BLOCK | | P.P. PRE-PAINTED | STD. STANDARD | W.W.F. WELDED WIRE FABRIC |
| ADJ. ADJACENT / ADJUST | | F.O.F. FACE OF FINISH | M. MEN | P.T. PRESSURE TREATED | STL. STEEL | & AND |
| ALUM. ALUMINUM | DBL. DOUBLE | F.O.S. FACE OF STUD | M. MAXIMUM | P.T. POINT | STL. STRAIGHT | # NUMBER / POUND |
| ALLOW. ALLOWABLE | DEM. DEMOLISH | FOUNT. FOUNTAIN | M.S. MACHINE BOLT | PUB. PUBLIC | STRUCT. STRUCTURAL | CL CENTER LINE |
| ALT. ALTERNATE | DET. DETAIL | F.O.W. FACE OF WALL | MER. MEMBRANE | r RADIUS | SUPP. SUPPORT | |
| ANOD. ANODIZED | DIA. DIAMETER | FRMG. FRAMING | MCH. MECHANICAL | R RISER | SYM. SYMMETRICAL | |
| APPROX. APPROXIMATE | DIM. DIMENSION | F.S. FAR SIDE | MEMB. MEMBRANE | R.B. RIDGE BEAM | T & B TOP AND BOTTOM | |
| ARCH. ARCHITECTURAL | DN. DOWN | FTG. FOOTING | MEZZ. MEZZANINE | R.D. ROAD | T.D. TOP OF DRAIN | |
| ARCHT. ARCHITECT | DO. DOOR | FURRG. FURRING | MFR. MANUFACTURER | R.D. ROOF DRAIN | TEL. TELEPHONE | |
| ASST. ASSEMBLY | DR. DRIVE | | MIN. MINIMUM | REF. REFERENCE | TEMP. TEMPERED / TEMPORARY | |
| | DWG. DRAWING | GA. GAUGE | MTD. MOUNTED | REG. REGULAR | THK. THICK | |
| BEL. BELOW | D.W. DRYWALL | G.I. GALVANIZED IRON | GL. GLASS | REIN. REINFORCED | THRD. THREADED | |
| BD. BOARD | (D) DEMOLISH | G.L.B. BLUE LAMINATED BEAM | N. NORTH | RETD. REQUIRED | T.O.B. TOP OF BLOCK | |
| BIT. BITUMINOUS | E. EAST | G.S.M. GALVANIZED SHEET METAL | N.I.C. NOT IN CONTRACT | R.O.F. ROOF | T.O.C. TOP OF CURB | |
| BLDG. BUILDING | E.F. EACH FACE | G.B. GLUE LAMINATED BEAM | N.O. NUMBER | R.A. RETURN AIR | T.O.P. TOP OF PARAPET | |
| BK. BLOCK | E.J. EXPANSION JOINT | O.P.D. O.P.SUM BOARD | N.T.S. NOT TO SCALE | R.A.R. RETURN AIR REGISTER | T.O.R. TOP OF ROOF | |
| BKLG. BLOCKING | EA. EACH | | | R.M. ROOM | T.O.S. TOP OF SHEATHING / TOP OF STEEL | |
| BM BEAM | EA.W. EACH WAY | H.B. HOSE BIB | O. OVER | R.O.R. ROOFING | T.O.W. TOP OF WINDOW / TOP OF WALL | |
| BOT. BOTTOM | EL. / ELEV. ELEVATION | H.D. HEAD | O.A. OUTSIDE AIR | R.O.F. ROOF RAFTER | | |
| B.O.C. BOTTOM OF COLUMN | EL. EQUAL | H.E. HEADER | O.C. ON CENTER | S. SOUTH | U.N.O. UNLESS OTHERWISE NOTED | |
| B.S. BOTH SIDES | EQ. EQUIP. | H.M. HOLLOW METAL | O.D. OUTSIDE DIAMETER / OVERFLOW DRAIN | S.A. SUPPLY AIR | | |
| BET. BETWEEN | EQ. EQUIP. EQUIPMENT | HORIZ. HORIZONTAL | O.F. OUTSIDE FACE OF STUD | S.A.R. SUPPLY AIR REGISTER | VERT. VERTICAL | |
| BT. BOTTOM OF TRUSS | EXH. EXHAUST | H.R. HIGH POINT | O.F.S. OUTSIDE FACE OF STUD | SCHD. SCHEDULE | V.C.P. VITRIFIED CLAY PIPE | |
| CEM. CEMENT | EXT. EXTERIOR | H.R. HOUR | O.H. OVERHEAD / OVERHANG | SECT. SECTION | V.V. VENTRY IN FIELD | |
| C.J. CEILING JOIST | | H.R. HAND RAIL | ON OPPOSITE HAND | SHT. SHEET | V.T.R. VENT THROUGH ROOF | |
| CLG. CEILING | | | OP. OPPOSITE | SHTG. SHEATHING | W. WEST / WOMEN | |
| CLR. CLEAR | F.D. FLOOR DRAIN | I.D. INSIDE DIAMETER | OPPG. OPENING | SK. SKYLIGHT | WD. WOOD | |
| C.M.U. CONCRETE MASONRY UNIT | FDN. FOUNDATION | IND. INDICATOR | PERF. PERFORATED | SKLT. SKYLIGHT | WIND. WINDOW | |
| CTNTRSK. COUNTERSUNK | F.F. FINISH FLOOR | INSUL. INSULATION | PERIM. PERIMETER | S.C. SOLID CORE | W/ WITH | |
| COL. COLUMN | F.H.W.S. FLAT HEAD WOOD SCREW | INT. INTERIOR | P.L. PLATE | SQ. SQUARE | W.F. WIDE FLANGE | |
| CONC. CONCRETE | FIN. FINISH | JST. JOIST | P.V.WOOD | SPRINK. SPRINKLER | W.O. WITHOUT | |
| CONN. CONNECTION | FIXT. FIXTURE | JNT. JOINT | P.L. PROPERTY LINE | SP. SHEAR PANEL | W.P. WORKING POINT | |
| CONST. CONSTRUCTION | | | | | | |

[illegible]

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|-------|---------------------|---|---|--|--|--|--|--|--|--|
| G0 | Cover & Sheet Index | ■ | □ | | | | | | | |
| G0.01 | Project Information | ■ | □ | | | | | | | |
| G0.10 | 3D Views | ■ | □ | | | | | | | |

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|--------|--------|---|---|--|--|--|--|--|--|--|--|
| SV1.10 | Survey | ■ | □ | | | | | | | | |
| SV1.11 | Survey | ■ | □ | | | | | | | | |

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| L1.10 | Landscape Plan - West | ■ | □ | | | | | | | | |
| L1.11 | Landscape Plan - East | ■ | □ | | | | | | | | |



REVISION: 2



Perspective Looking North from Pacific Ave.



Perspective Looking West Along South Venice Blvd.



Perspective Looking West Along Dell Avenue.



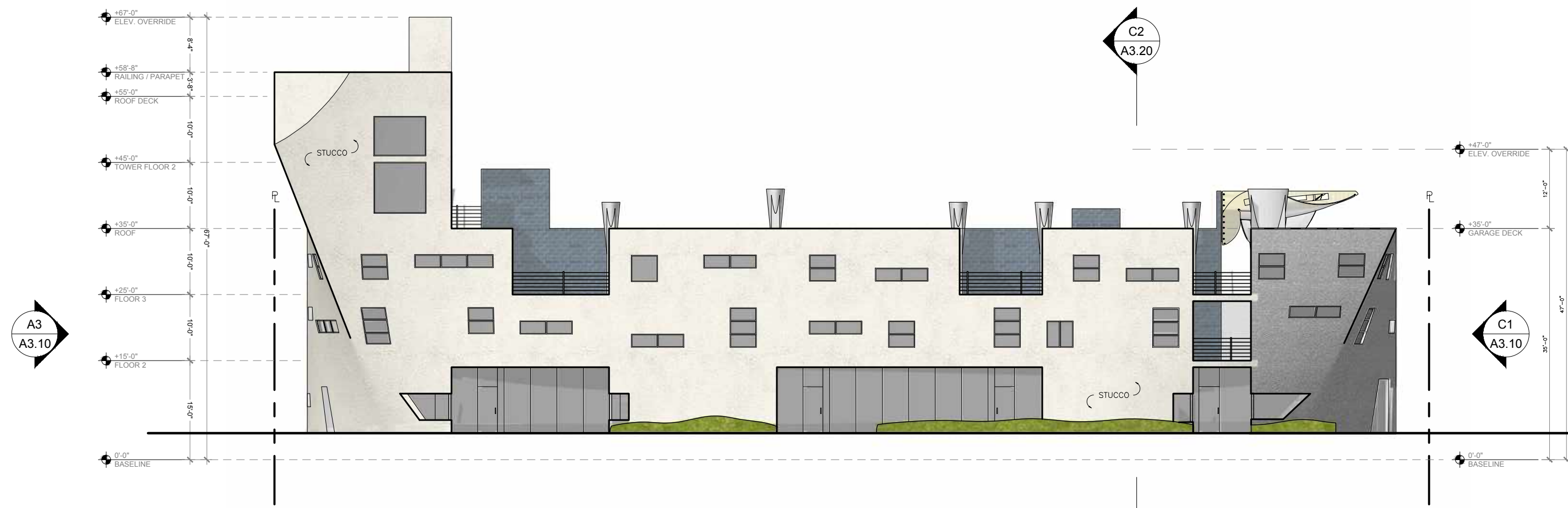
Perspective Looking Southeast Along Grand Canal



Perspective Looking East Along Grand Canal



Perspective Looking South Along North Venice Blvd.



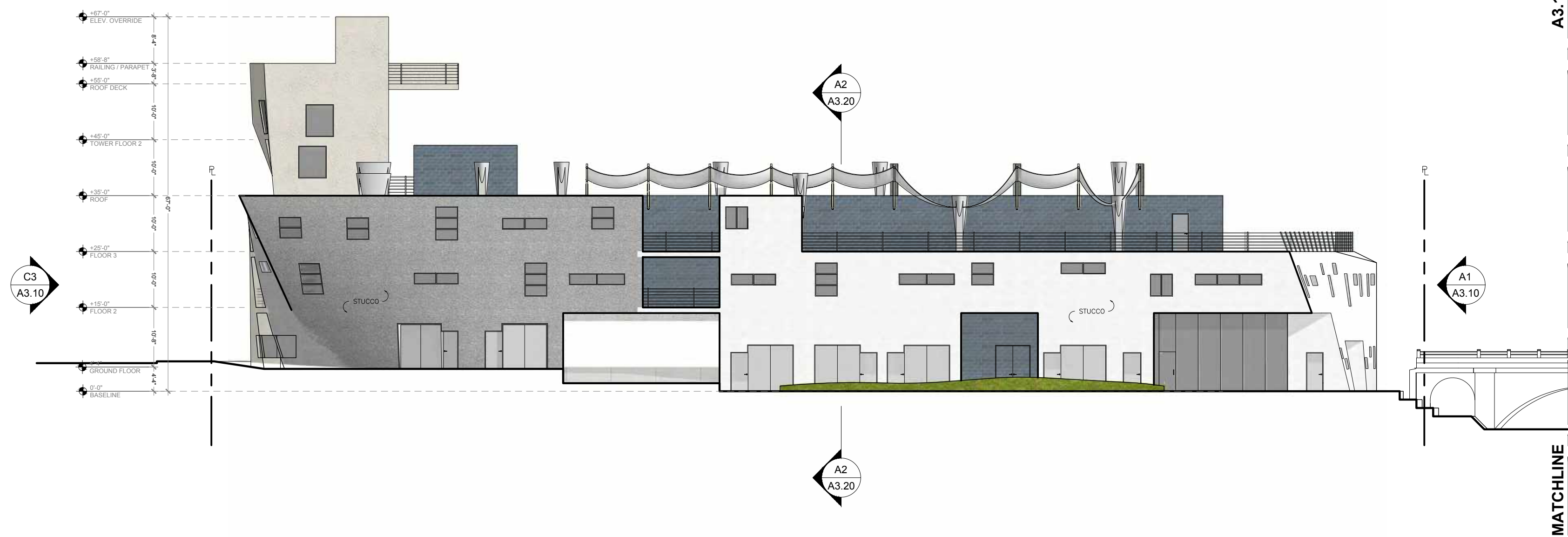
WEST ELEVATION
SCALE: 1/16" = 1'-0"

C3



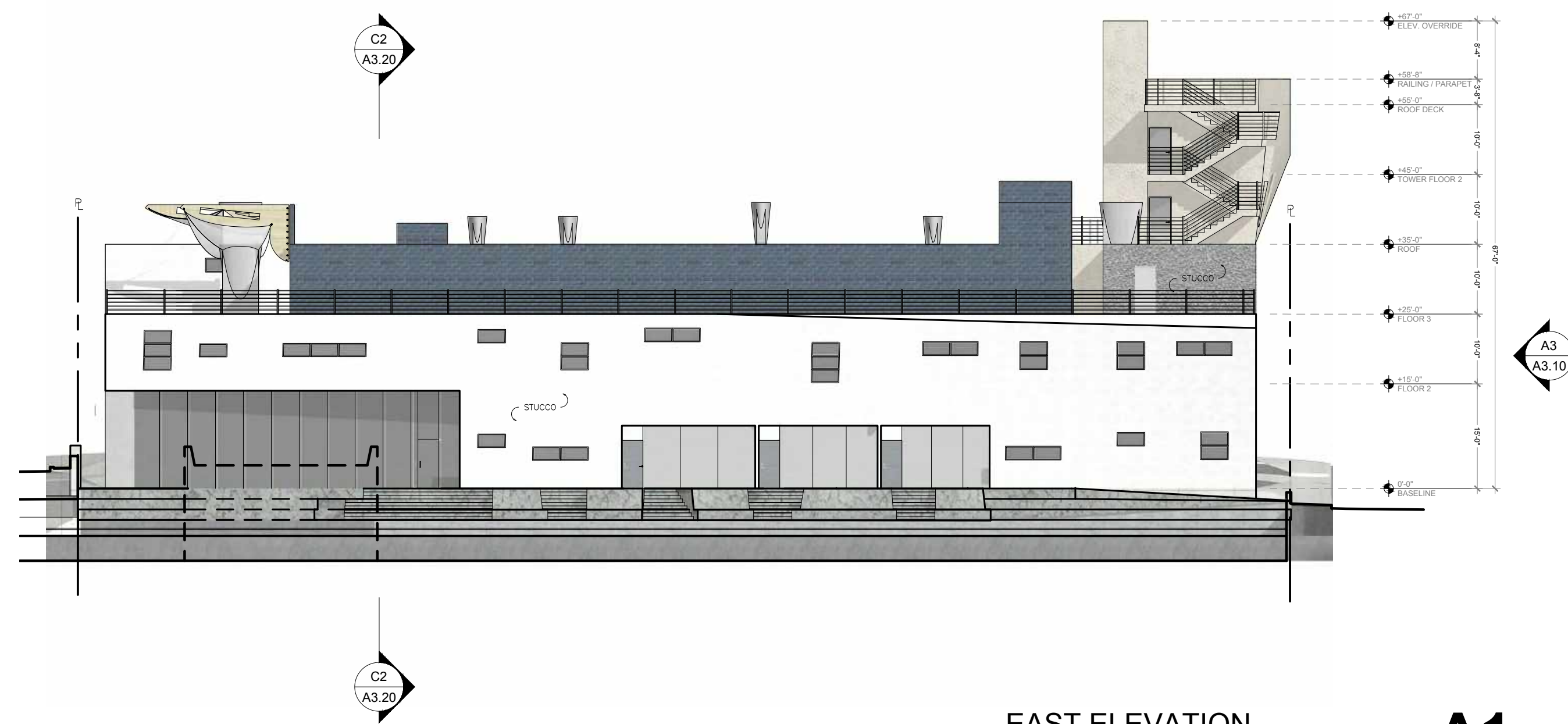
NORTH ELEVATION
SCALE: 1/16" = 1'-0"

A3



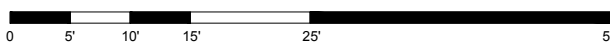
SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

C1



EAST ELEVATION
SCALE: 1/16" = 1'-0"

A1



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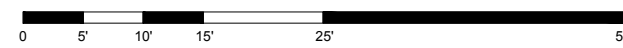
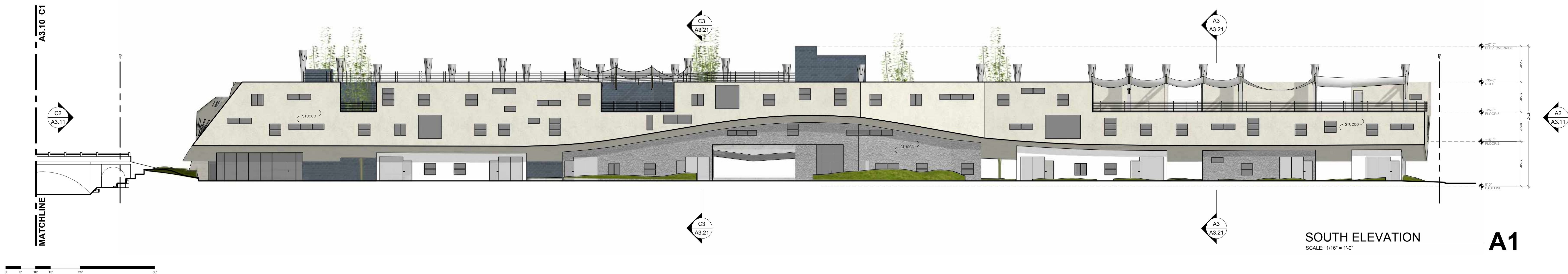
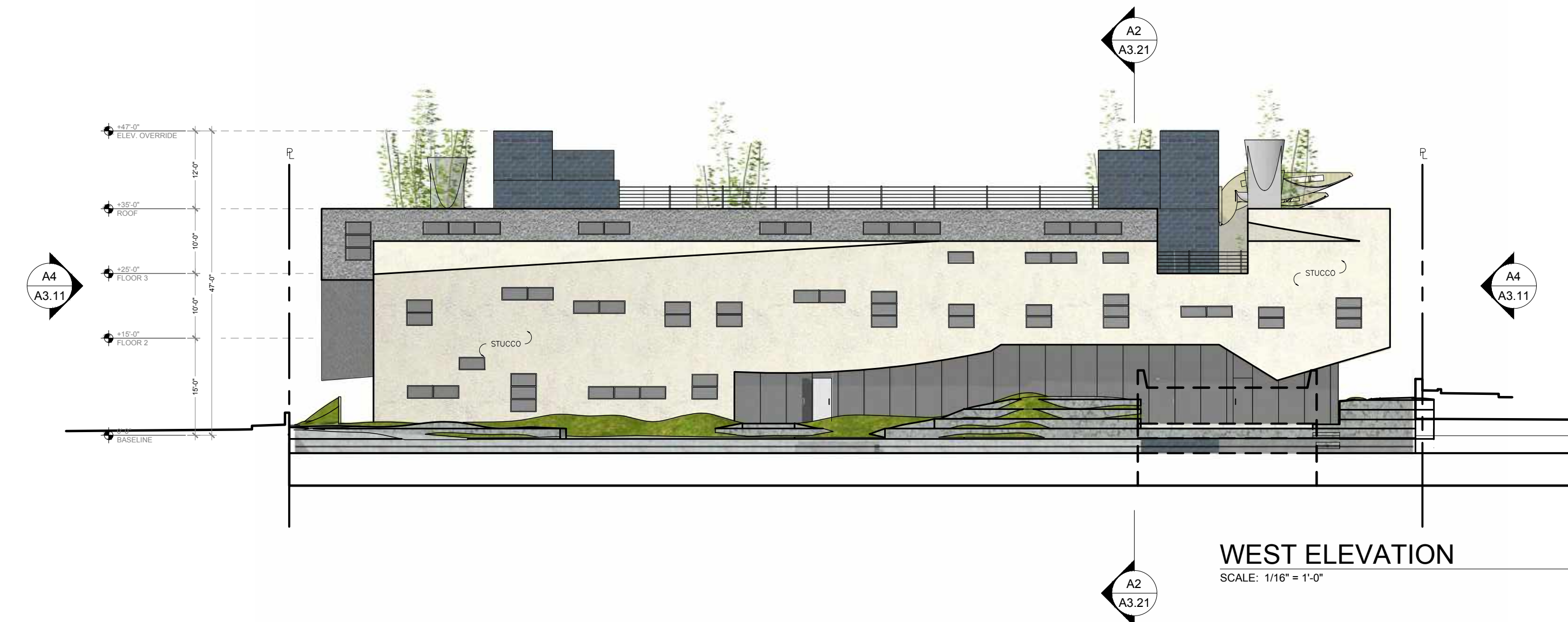
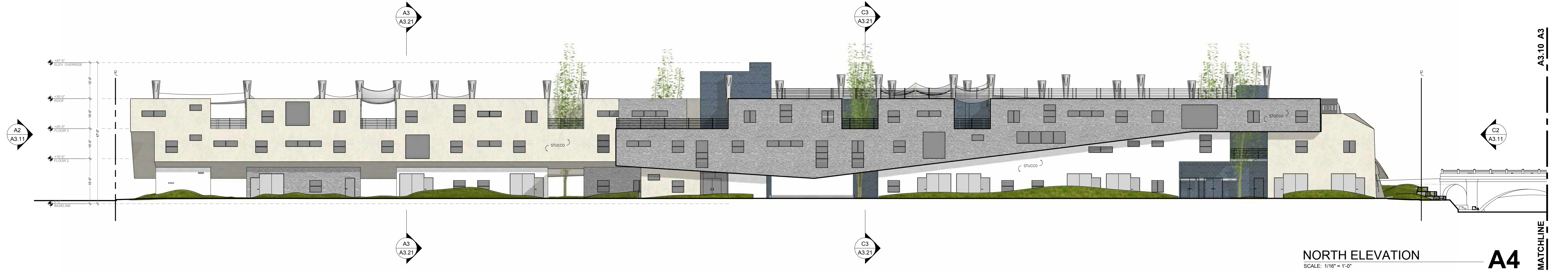
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PROJECT TITLE

REESE DAVIDSON COMMUNITY

SHEET TITLE

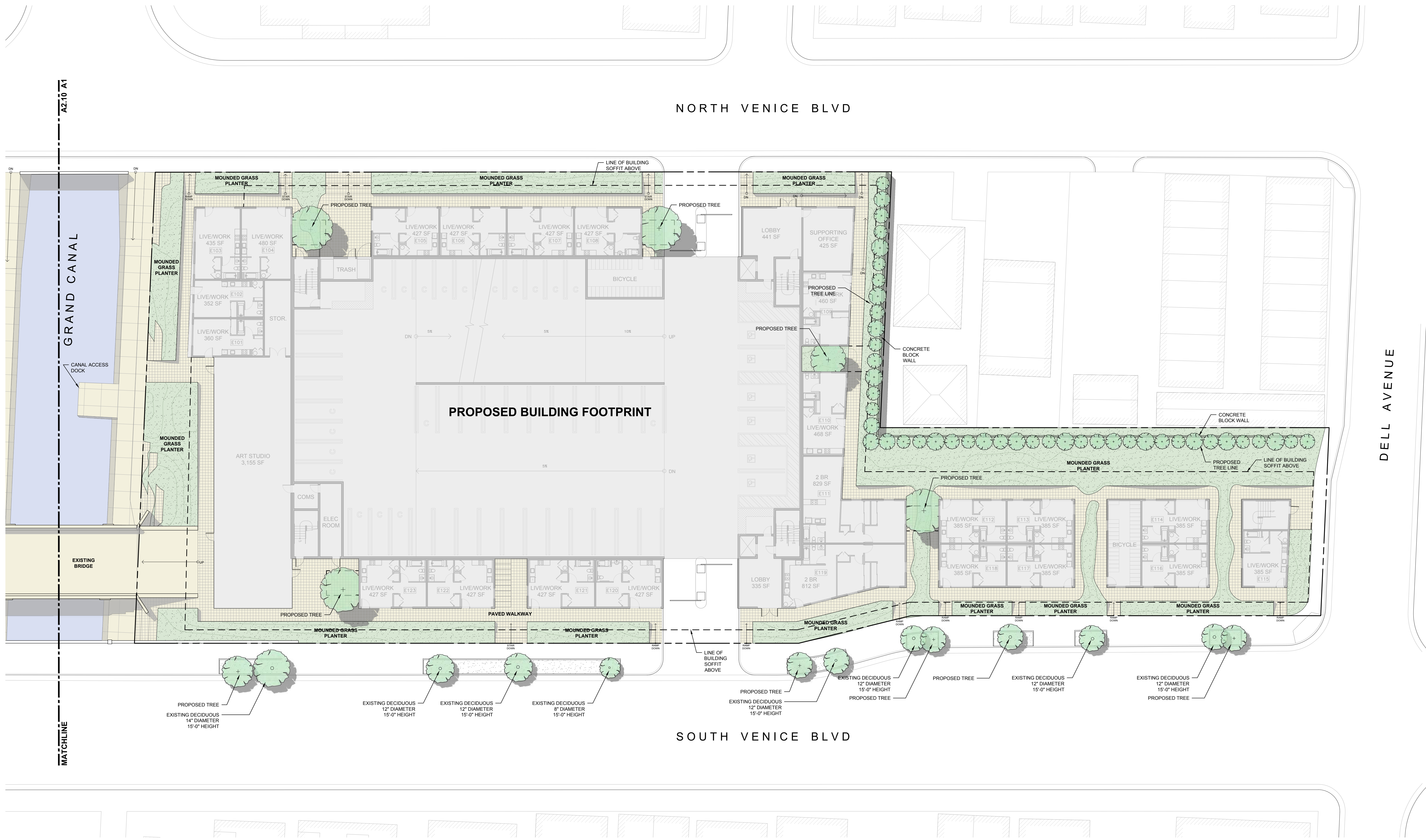
ELEVATIONS - EAST

DATE: 01/07/20

REVISION: 2

SHEET NUMBER

A3.11



LANDSCAPE PLAN
SCALE: 1/16" = 1'-0"

A1

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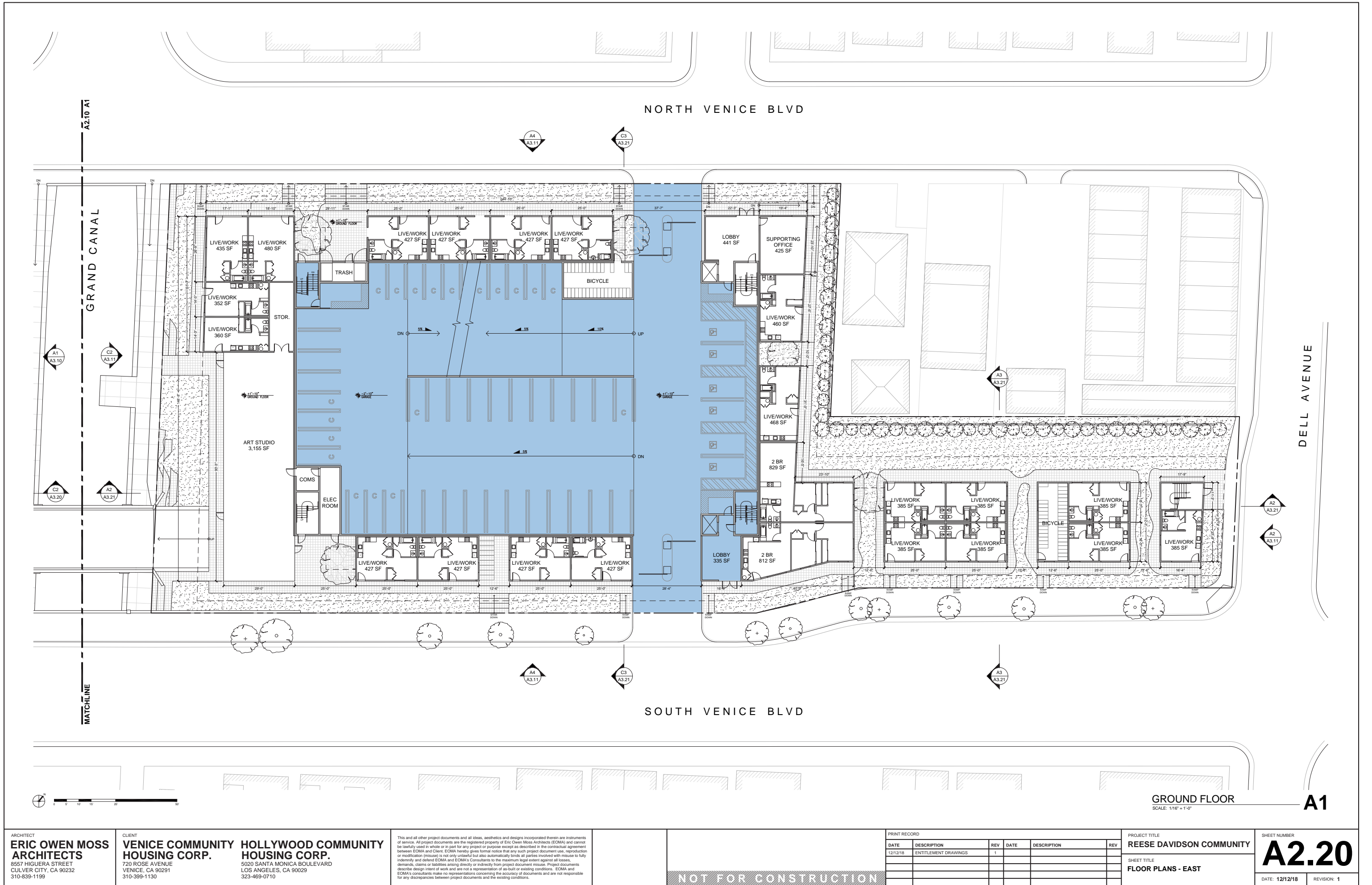
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| REESE DAVIDSON COMMUNITY | | L1.11 | |
| SHEET TITLE | | DATE: 01/07/20 | REVISION: 2 |
| LANDSCAPE PLAN - EAST | | | |



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PROJECT TITLE
REESE DAVIDSON COMMUNITY

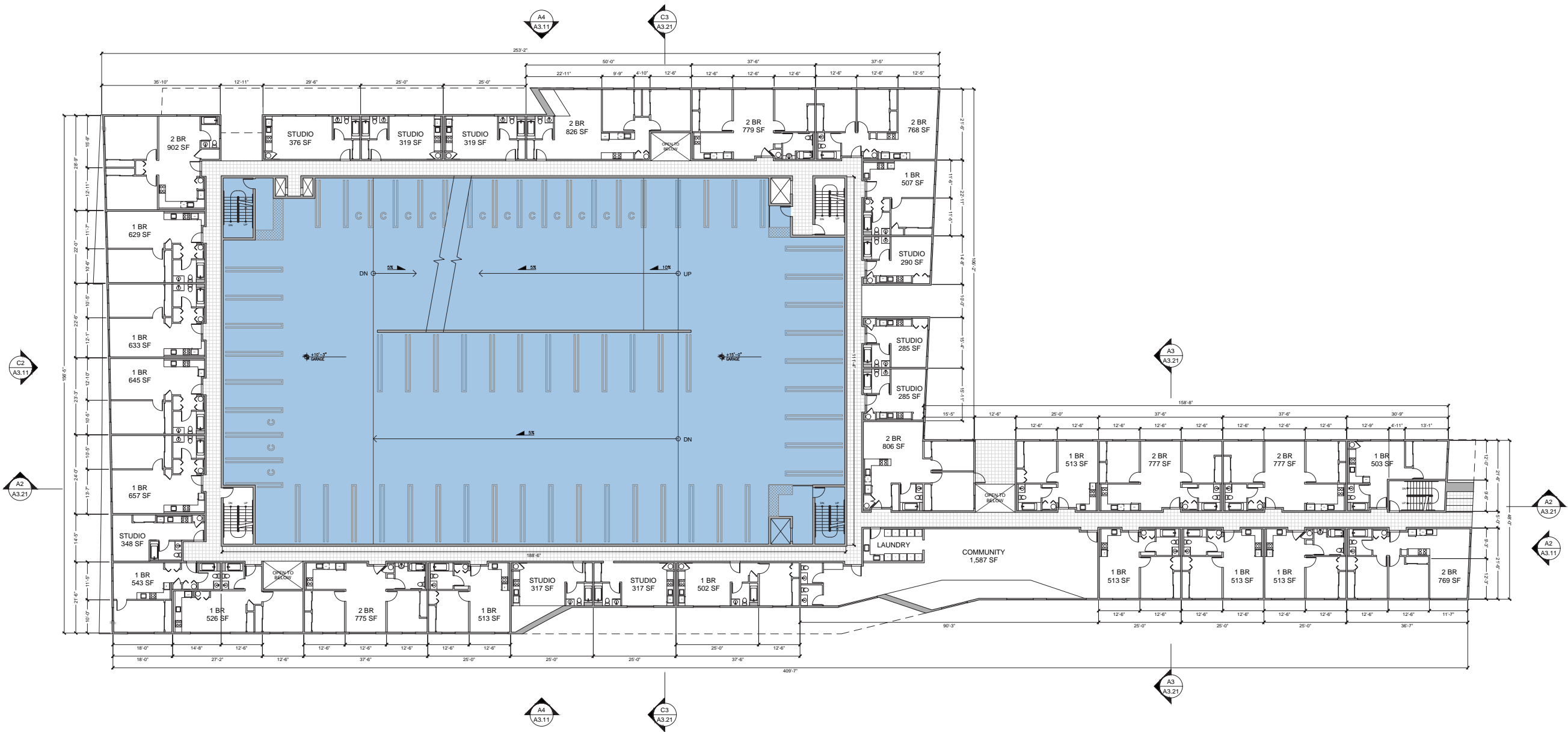
SHEET TITLE
FLOOR PLANS - EAST

SHEET NUMBER
A2.20

DATE: 12/12/18 REVISION: 1

A2.11 A1

MATCHLINE



SECOND FLOOR
SCALE: 1/16" = 1'-0"

A1

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PROJECT TITLE
REESE DAVIDSON COMMUNITY

SHEET TITLE
FLOOR PLANS - EAST

SHEET NUMBER
A2.21

DATE: 12/12/18
REVISION: 1

A2.11 C1

MATCHLINE



THIRD FLOOR
SCALE: 1/16" = 1'-0"

A1

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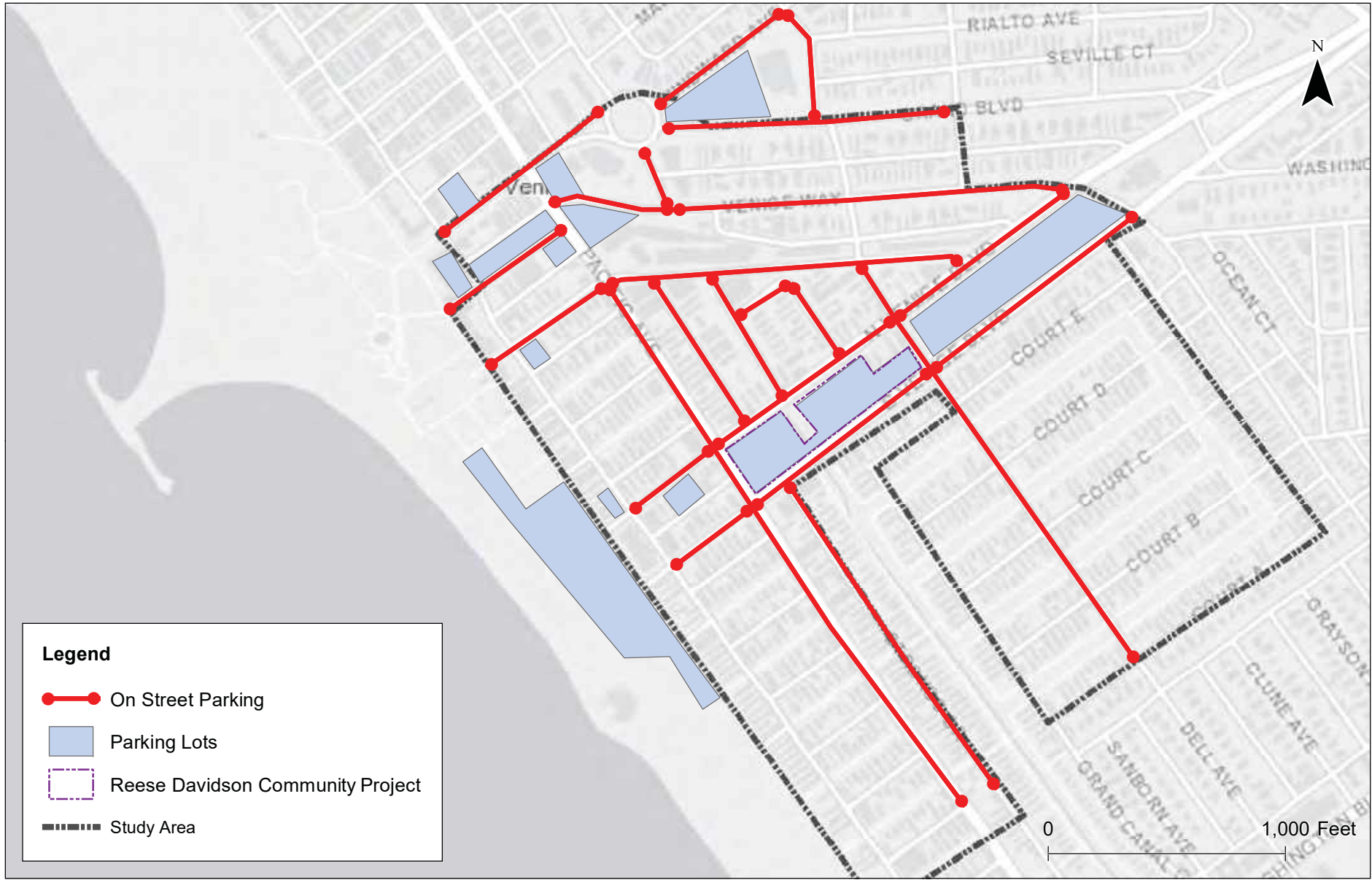
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PROJECT TITLE
REESE DAVIDSON COMMUNITY

SHEET TITLE
FLOOR PLANS - EAST

SHEET NUMBER
A2.22

DATE: 12/12/18 REVISION: 1

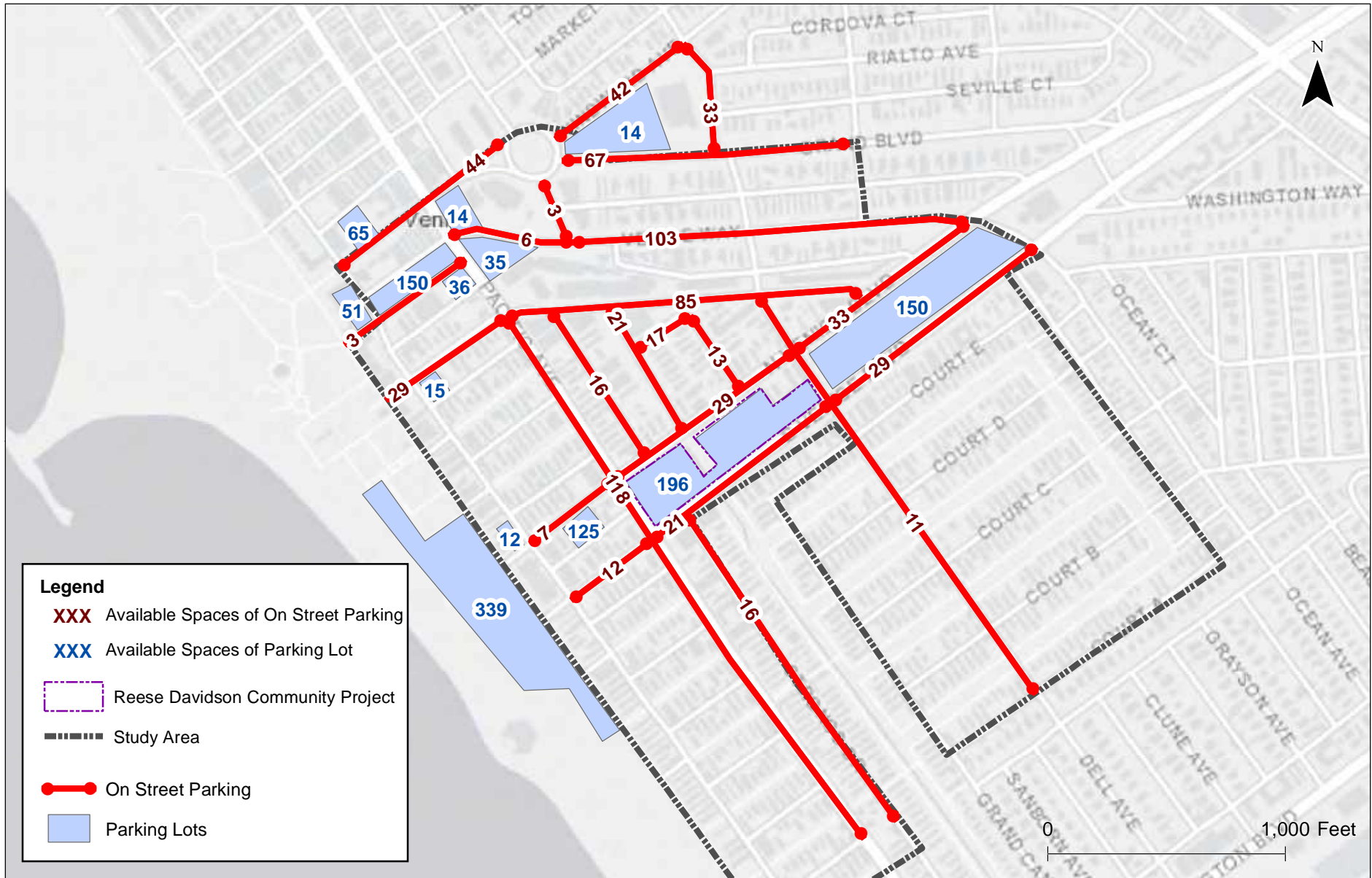


Legend

- On Street Parking
- Parking Lots
- Reese Davidson Community Project
- Study Area

Study Area

**Figure
1**



Parking Supply

Figure
2



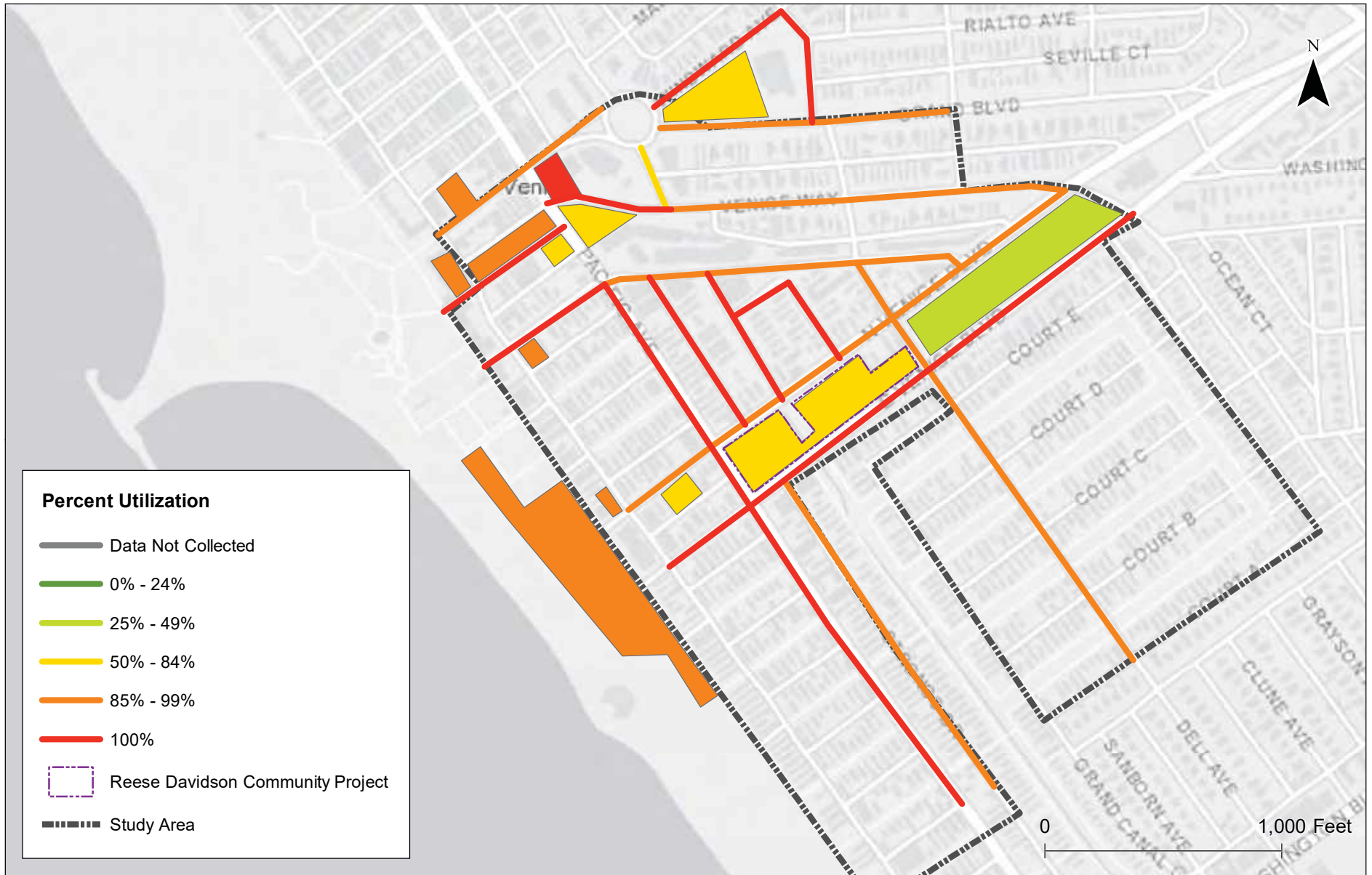
Weekday Midday Average Utilization

Figure 3



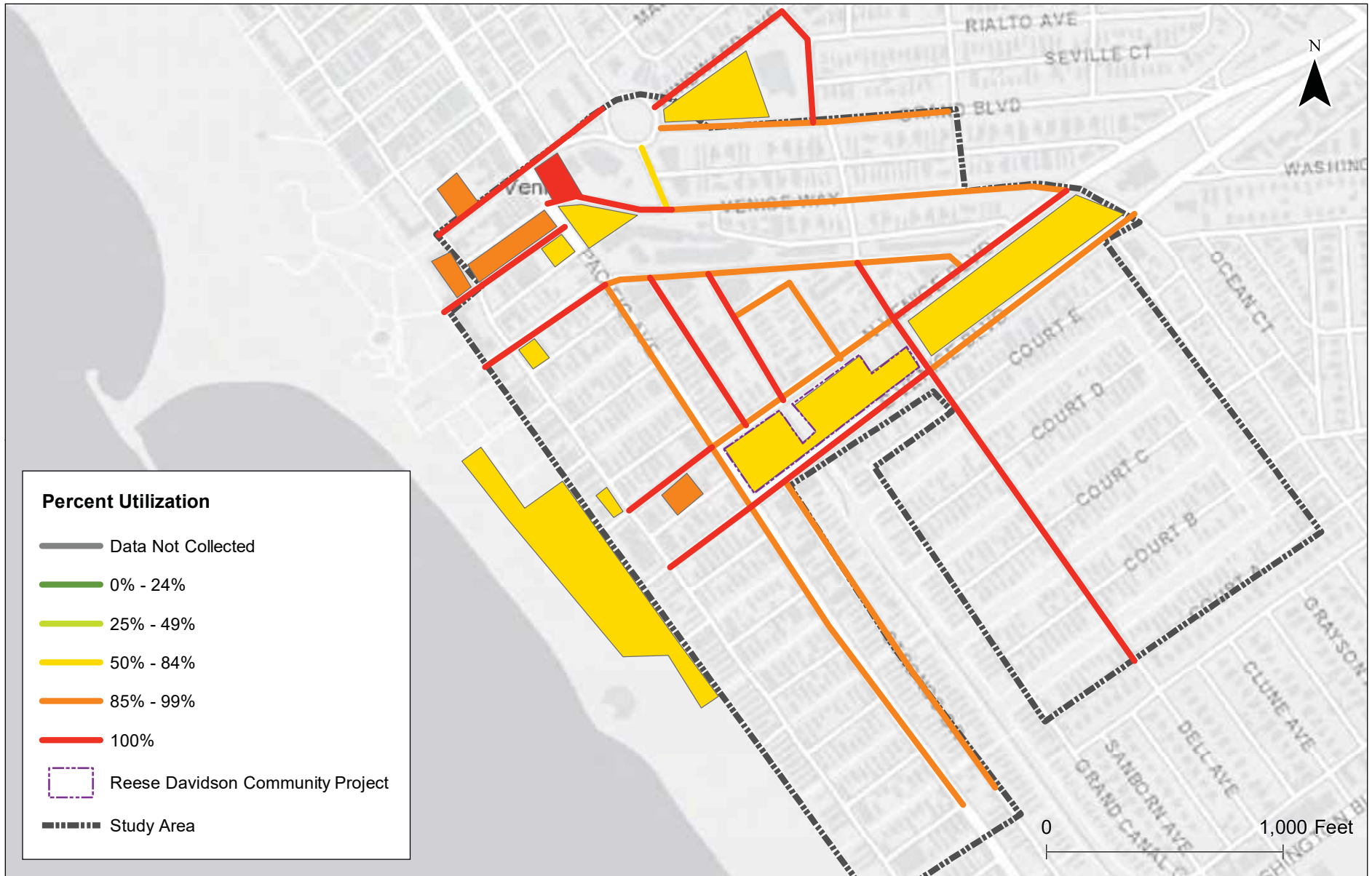
Weekday PM Average Utilization

Figure 4



Weekend Midday Average Utilization

Figure 5



Weekend PM Average Utilization

Figure
6



Holiday AM Average Utilization

Figure 7



Figure
8

| Project | Location | Land use | Size | Units | ITE Land Use Code | ITE Weekday Parking Demand ¹ | ITE Weekend Parking Demand ² | City of LA Municipal Code Parking Spaces Requirement ³ | Parking Space Shortage |
|------------------------------------|----------------------|--------------------------------|--------|--------|-------------------|---|---|---|------------------------|
| Bakery with Retail & Restaurant | 320 E Sunset Ave | Retail /Restaurant | 4.675 | k.s.f. | 939 | 37 | 46 | 47 | |
| | | Total | | | | 37 | 46 | 47 | 1 |
| New 3-Story Manufacturing & Retail | 595 Venice Blvd | Office | 25.150 | k.s.f. | 710 | 60 | 7 | 50 | |
| | | Retail | 5.028 | k.s.f. | 820 | 10 | 15 | 20 | |
| | | Total | | | | 70 | 22 | 70 | 0 |
| Mixed-Use | 825 S Hampton Dr | Condominium | 8 | d.u. | 220 | 10 | 13 | 16 | |
| | | Retail | 2.430 | k.s.f. | 820 | 5 | 7 | 10 | |
| | | Restaurant | 4.100 | k.s.f. | 932 | 39 | 50 | 41 | |
| | | Gym | 2.780 | k.s.f. | 492 | 13 | 9 | 28 | |
| | | Total | | | | 66 | 80 | 95 | 15 |
| Mixed-Use | 1033 S. Abbot Kinney | Hotel | 78 | Rooms | 310 | 58 | 90 | 156 | |
| | | Multifamily Housing (Mid-Rise) | 4.000 | d.u. | 221 | 5 | 8 | 8 | |
| | | Shopping Center | 4.670 | k.s.f. | 820 | 9 | 14 | 19 | |
| | | Quality Restaurant | 3.810 | k.s.f. | 931 | 40 | 65 | 38 | |
| | | General Office Building | 2.0270 | k.s.f. | 710 | 5 | 1 | 4 | |
| | | Total | | | | 117 | 177 | 225 | 17 |

1. Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition

2. If both Sunday and Saturday parking rates are available, the higher rate has been used for conservative consideration

3. City of LA Municipal Code Article 2 section 12.21

Findings:

1. If the future proposed development projects provide a number of parking spaces based on City Municipal Code, the parking demand should be lower than parking spaces provided, so there will be no parking spaces shortage.

2. There is no best practice instrument to accurately forecast future parking demand for the next 50-100 years; if LADOT's top priority is maintaining flexibility for an unpredictable future, then it should select a public parking alternative within the Reese Davidson Community East Site garage that maximizes the amount of public parking spaces.

3. The current architectural design for the East Site garage does not allow the City to provide more than 301 spaces for public parking. If additional studies or new parking demand projections are conducted by the City in the future, it remains a possibility that the current Project design will not provide adequate public parking spaces to meet future demand.

| Project | Location | Land use | Size | Units | ITE Weekday Parking Demand ¹ | ITE Weekend Parking Demand ¹ | Required Parking Spaces ² | Parking Spaces Provided (East Garage) ² | Total Parking Spaces Provided | Parking Space Shortage ³ |
|----------------|-------------------------------------|---------------------------|--------|--------|--|--|---|--|----------------------------------|--|
| Reese Davidson | 204-208 E North Venice Boulevard | Affordable Housing | 140 | d.u | 139 | 134 | 61 | 0 | 61 | -78 |
| | | Art Studio | 3,155 | k.s.f. | 7 | 13 | 6 | 0 | 6 | -7 |
| | | Retail | 2,255 | k.s.f. | 4 | 7 | 10 | 0 | 10 | 3 |
| | | Restaurant | 1,310 | k.s.f. | 12 | 16 | 26 | 0 | 26 | 10 |
| | | Beach Impact Parking | 22,970 | k.s.f. | NA | NA | 23 | 23 | 23 | NA |
| | | Replacement Parking | | | NA | NA | 196 | 188 | 188 | -8 |
| | | Additional Parking Spaces | | | NA | NA | NA | 41 - 82 | 46 - 87 | NA |
| | | Total | | | 162 | 170 | 322 | 252 - 293 | 360 - 401 | 190 - 231 |

1. Parking demand rates are from Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition. If both Sunday and Saturday parking rates are available, the higher rate has been used for conservative consideration

2. The "Required Parking Spaces" and "Parking Spaces Provided" are provided by the Architectural Plan (Eric Owen Moss Architects). The required parking spaces for "Replacement Parking" has been updated with 196 existing parking spaces counted by LADOT staff at Lot 731

3. The "Parking Space Shortage" is the difference between total parking spaces provided and the maximum ITE parking demand

Findings:

1. The designated parking spaces for "affordable housing" and "art studio" are lower than the parking demand estimated from ITE.

2. By deducting the ITE maximum parking demand of 170 (weekend) from total 260 - 301 spaces proposed at the East Site garage, our analysis estimates that there will be 90-131 spaces available for other parking usage in the East Site garage under the current architectural plans

3. There is a shortage of 8 replacement parking spaces in the Architectural Plan. This is due to the Developer counting 188 replacement parking spaces from Lot 731, and LADOT counting 196 replacement parking spaces

4. Overall, the proposed parking supply is higher than the demand, but more parking spaces need to be assigned for affordable housing unit uses and art studio uses to meet ITE standards.

5. The current architectural design for the East Site garage does not allow the City to provide more than 301 spaces for public parking. If future parking demands increase, it is possible that the maximum public parking spaces provided in this design will not meet future demand.

PARKING LOTS

LADOT

| | Date, Day and Time | | | Saturday 9/3/2019 7am-10 AM | Sunday 9/2/2019 2pm-3 PM | Monday 9/2/2019 12pm-2 pm | Wednesday 9/4/2019 6:30pm-8pm | Thursday 9/5/2019 3-5 PM | Friday 9/6/2019 6:30-7:45 | Saturday 9/7/2019 2-3:30 | Sunday 9/8/2019 3-4:30 PM | Monday 9/9/2019 6:30-8:00 PM | Tuesday 9/10/2019 12pm-2pm | Wednesday 9/11/2019 6pm-8pm | Friday 9/13/2019 5:30-7 | Saturday 9/14/2019 2-3:30 PM | Sunday 9/15/2019 3-4:30 | Monday 9/16/2019 1 pm-3 pm | Tuesday 9/17/2019 6pm - 8pm |
|--------------|--|---|------------------|-----------------------------------|--------------------------------|---------------------------------|-------------------------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|---------------------------------------|----------------------------------|-----------------------------------|-------------------------------|------------------------------------|-------------------------------|----------------------------------|-----------------------------------|
| PARKING LOTS | | | Available Spaces | | | | | | | | | | | | | | | | |
| 1 | 29 Windward Ave - Windward Ave & Speedway | Safety Parking Valet | 65 | 65 | 0 | 0 | 46 | 35 | 10 | 4 | 5 | 42 | 43 | 31 | 8 | 3 | 4 | 23 | 44 |
| 2 | LA CITY LOT 761 1608 S Pacific Ave (Windward Ave) | City - metered 1 hr | 14 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 100 Venice Way - Venice Way & Pacific Ave | Safety Parking Valet | 35 | 30 | 0 | 0 | 30 | 22 | 16 | 10 | 4 | 35 | 7 | 16 | 15 | 6 | 7 | 10 | 19 |
| 1 | Hotel Erwin - 1697 Pacific Ave | | 150 | | | | | | | | denied | | | | | 3 | | | |
| 2 | 32 17th Ave - 17th Ave/17th Place & Pacific Ave | Pacific Parking | 36 | 33 | 2 | 2 | 22 | 22 | 15 | 0 | 6 | 25 | 8 | 4 | 15 | 13 | 10 | 15 | 12 |
| 3 | 15 17th Ave - 17th Ave & Speedway | Sidewalk Enterprises | 51 | 48 | 2 | 5 | 30 | 30 | 14 | 4 | 3 | 32 | 25 | 47 | 40 | 0 | 5 | | 27 |
| 4 | Muscle Beach Parking - Speedway between 20th PL & 19th Ave | | 15 | 0 | 0 | 0 | 10 | 5 | 6 | 2 | 0 | 11 | 9 | 4 | 8 | 1 | 10 | 5 | 5 |
| 5 | 9 N Venice Blvd & Speedway | Safety Parking Valet | 12 | 12 | 1 | 2 | 12 | 6 | 8 | 0 | 4 | 5 | 5 | 3 | 8 | 1 | 0 | 2 | 4 |
| 6 | 42 N Venice Blvd - Between Speedway & Pacific Ave | Imperial Parking Solutions | 125 | 115 | 1 | 60 | 110 | 100 | denied | denied | 1 denied | denied | denied | denied | denied | 42 | denied | 44 | denied |
| 7 | LA CITY LOT 731 - 200 N Venice Blvd/S Venice Blvd | | 196 | 184 | 34 | 29 | 169 | 139 | 136 | 107 | 61 | 186 | 139 | 165 | 139 | 90 | 119 | 169 | 168 |
| 8 | LA CITY LOT 701 - 2150 Dell Ave/S Venice Blvd/Way | No car entry after 6pm | 150 | 145 | 20 | 20 | 145 | 135 | 147 | 100 | 30 | closed | 150 | 150 | 139 | closed for swap meet | 50 | 105 | 150 |
| 9 | Post Office - Windward Ave & Riviera Ave | Had Valet on certain Sat./Sun. 23 max Valet 9/1, 9/8, | 14 | 14 | 0 | 4 | 14 | 0 | 10 | 3 | 2 | 7 | 4 | 3 | 9 | 3 | 12 | P.O. use only | 10 |
| 10 | County Parking Lot -339 | | 339 | 170 | 10 | 5 | 250 | 170 | | 0 | 85 | 251 | 157 | 232 | 224 | 35 | 40 | 180 | 223 |

DIAGONAL STREETS

| | | | | | | | | | | | | | | | | | | | |
|---|-------------|------------------------------|-----|----|---|---|---|----|----|---|---|----|---|----|----|---|----|----|----|
| 1 | Grand Blvd | Main St to Andalusia Ave | 67 | 32 | 0 | 0 | 7 | 2 | 5 | 1 | 2 | 11 | 1 | 15 | 18 | 0 | 15 | 15 | 10 |
| 2 | Venice Way | Pacific Ave to Main St | 6 | 6 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 3 | Venice Way | Main St to N Venice Blvd | 103 | 39 | 0 | 0 | 0 | 10 | 6 | 1 | 1 | 24 | 2 | 13 | 11 | 1 | 4 | 16 | 23 |
| 4 | Mildred Ave | Pacific Ave to N Venice Blvd | 85 | 29 | 0 | 0 | 3 | 2 | 14 | 2 | 0 | 22 | 4 | 15 | | 1 | 1 | 21 | 14 |

NORTH SOUTH STREETS

| | | | | | | | | | | | | | | | | | | | |
|----|----------------|------------------------------|-----|----|---|---|---|---|---|---|---|----|---|---|----|---|---|----|---|
| 1 | Pacific Ave | Windward Ave to Mildred Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | Pacific Ave | Mildred to 27th Pl | 118 | 12 | 0 | 0 | 3 | 6 | 0 | 0 | 0 | 11 | 9 | 4 | 12 | 1 | 2 | 14 | 6 |
| 3 | Stronggs Drive | Mildred Ave to N Venice Blvd | 16 | 3 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 4 | Stronggs Drive | S Venice Blvd to 27th Pl | 16 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 3 | 4 | 2 |
| 5 | Main St | Windward Ave to Venice Way | 3 | 2 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 0 | 4 |
| 6 | Canal St | Mildred Ave to N Venice Blvd | 21 | 3 | 0 | 0 | 8 | 6 | 5 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 1 |
| 7 | Grand Canal | Court E to Court A | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | Alberta Ave | Grand Canal to N Venice Blvd | 13 | 7 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 1 | 5 | 0 | 0 | 0 | 1 | 5 |
| 9 | Riviera Ave | Windward Ave to Mildred Ave | 33 | 16 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 7 |
| 10 | Dell Ave | Mildred Ave to Court A | 11 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

EAST WEST STREETS

| | | | | | | | | | | | | | | | | | | | |
|-------|---|------------------------------------|----|----|---|---|---|-----|---|---|---|---|----|---|----|----|---|---|----|
| 1 | Windward Ave | Speedway to Main St | 44 | 12 | 0 | 0 | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 6 | 4 | 0 | 0 | 0 | 8 |
| 2 | Windward Ave | Main St to Riviera Ave | 42 | 0 | 0 | 0 | 0 | 2 | 7 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 9 | 2 |
| 3 | Windward Ct | Speedway to Pacific Ave | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4 | 17 Ave | Boardwalk to Pacific Ave | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 17 Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6 | 18th Ave | Boardwalk to Pacific Ave | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 1 | 11 |
| 7 | 18th Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 8 | 19th Ave (WALK WAY ONLY) | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 9 | 19th Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 10 | 20th Ave (WALK WAY ONLY) | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 11 | 20th Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 12 | N. Venice Blvd | Speedway to Pacific Ave | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 1 | |
| 13 | N. Venice Blvd | Pacific Ave to Dell Ave | 29 | 9 | 0 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 10 | 1 | 7 | 0 | 0 | 4 | |
| 14 | N. Venice Blvd | Dell Ave to Venice Way/Mildred Ave | 33 | 0 | 0 | 0 | 0 | 9 | 6 | 4 | 1 | 0 | 11 | 2 | 12 | 11 | 0 | 7 | |
| 15 | Center Court | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | | |
| 16 | S. Venice Blvd | Speedway to Pacific Ave | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 3 | |
| 17 | S. Venice Blvd | Pacific Ave to Dell Ave | 21 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 1 | 1 | 0 | 0 | 1 | |
| 18 | S. Venice Blvd | Dell Ave to Venice Way/Mildred Ave | 29 | 0 | 0 | 0 | 0 | 4 | 2 | 5 | 0 | 0 | 6 | 1 | 5 | 4 | 2 | 4 | |
| 19 | Virginia Court | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 20 | 23rd Ave (WALK WAY ONLY) | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 21 | 23rd Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 16 | 24th Ave (WALK WAY ONLY) | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 17 | 24th Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 18 | 25th Ave (WALK WAY ONLY) | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 19 | 25th Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 20 | 26th Ave (WALK WAY ONLY) | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 21 | 26th Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 22 | 27th Ave (WALK WAY ONLY) | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 23 | 27th Place | Boardwalk to Pacific Ave | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 24 | Court E (ALLEY WAY) | Grand Canal to Eastern Ct | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| 25 | Court D (ALLEY WAY) | Grand Canal to Eastern Ct | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 26 | Court C/Howland Canal/Linnie Canal (Alley Way) | Grand Canal to Eastern Ct | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 27 | Court B/Howland Canal/Sherman Canal (Alley Way) | Grand Canal to Eastern Ct | 0 | 0 | 0 | 0 | 0 | n/a | 0 | 0 | 0 | 0 | | | | 0 | 0 | | |
| 28 | Grand Canal | Canal St and Alberta Ave | 17 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 2 | 1 | |
| TOTAL | | | | | | | | | | | | | | | | | | | |

LABOR DAY WEEKEND

FIRST
FRIDAY

PARKING LOTS
LADOT

| | | | | Winter Rates | | | | Summer Rates | | | |
|--------------|--|---|----------------------------|---|---|----------------------------|--|--------------------------------------|---------------------------------|---|--|
| PARKING LOTS | | Managing Company | Available Spaces | Weekday Hours | Mon-Fri | Weekend Hours | Sat & Sun & Holiday | Weekday Hours | Mon-Fri | Weekend Hours | Sat & Sun & Holiday |
| 1 | 29 Windward Ave - Windward Ave & Speedway | Safety Parking Valet | 65 | 9am-8pm | \$10/2 hrs \$20/All Day SUV \$25-\$30 | 9am-8pm | \$10/2 hrs \$20/All Day \$30 Max & SUV | 9am-8pm | \$15/2 hrs \$20/All Day | 9am-8pm | \$15/2 hr \$30/All Day up to \$40 |
| 2 | LA CITY LOT 761 1608 S Pacific Ave (Windward Ave) | City - metered 1 hr | 14 | 8am-6pm | \$1/hr | 8am-6pm | \$1/hr | 8am-6pm | \$1/hr | 8am-6pm | \$1/hr |
| 3 | 100 Venice Way - Venice Way & Pacific Ave | Safety Parking Valet | 35 | 9am-8pm | \$10/2 hrs \$20/All Day | 9am-8pm | \$35 Flat Rate | 9am-8pm | \$35 Flat Rate | 9am-8pm | \$45 Flat Rate |
| 4 | 32 17th Ave - 17th Ave/17th Place & Pacific Ave | Pacific Parking | 36 | 9am-12am | \$10/2hrs \$15/3hrs \$20/All Day | 9am-12am | \$15/2hrs, \$20/3hrs, \$30/All Day | 9am-12am | \$15/3 hrs \$25/All Day | 9am-12am | \$15/2 hrs \$25/4 hrs \$40/All Day |
| 5 | 15 17th Ave - 17th Ave & Speedway | Sidewalk Enterprises | 51 | 9am-12am | \$10/3 hrs \$20/All Day | 9am-12am | \$10/3 hrs \$20/All Day | 9am-12am | \$10/2 hrs \$15-\$20/All Day | 9am-12am | \$15/2 hrs \$20-30/All Day |
| 6 | Muscle Beach Parking - Speedway/20th PL & 19th Ave | Cash Only, could not find attendant | 15 | | | | | | | | |
| 7 | 9 N Venice Blvd & Speedway | Safety Parking Valet | 12 | 9am-8pm | \$10/2 hrs \$20/All Day | 9am-8pm | \$10/2 hrs \$20/All Day | 9am-8pm | \$15/2 hrs \$30/All Day | 9am-8pm | \$15/2 hrs \$40/All Day |
| 8 | 42 N Venice Blvd - Between Speedway & Pacific | Imperial Parking Solutions | 125 | Mon-Wed, Sun 7am-12am \$10 | | Thu-Sat 7am-2am \$10 | | Mon-Wed, Sun 7am-12am \$10 | | Thu-Sat 7am-2am \$10 | |
| 9 | Hotel Erwin | 2 lots, 30-40 cars each, not able to tell difference between hotel guest car & beach goer car | 60-80 Hotel & beach guests | \$10/2 hrs \$15/ All Day | | \$15/2 hrs \$20 All Day | | \$15/2 hrs \$20-\$30/All Day | | \$20/2 hrs \$30/All Day | |
| 10 | LA CITY LOT 731 - 200 N Venice Blvd/S Venice Blvd | Modern Parking | 196 | October-April | | | | May-September | | | |
| | | | | 7am-9am | \$4 | 7am-9am | \$4 | 7am-9am 4pm-8pm | \$5 | 9am-4pm \$20, \$30 (60%) Max \$45 per Attendent | |
| | | | | 9am-5pm 5pm-11pm | \$7-15 \$2 | 9am-5pm 5pm-11pm | \$7-15 \$3(Fri-Sun) | 9am-4pm | \$10, \$20 (60%), \$30 (80%) | | |
| 11 | LA CITY LOT 701 - 2150 Dell Ave/S Venice Blvd/Way | Modern Parking | 150 | October-April | | | | May-September | | | |
| | | | | 7am-9am | \$4 | 7am-9am | \$4 | 7am-9am 4pm-8pm | \$5 | 7am-9am 4pm-8pm | \$5 |
| | | | | 9am-5pm | \$7-\$12 | 9am-5pm | \$7-\$12 | 9am-5pm | \$10, \$20 (60%), \$30 (80%) | 9am-5pm | \$20, \$30 (60%) Max \$45 per Attendent |
| 12 | Post Office - Windward Ave & Riviera Ave | Valet not consistant, rate unknown | 14 | | | | | | | | |
| 13 | County Parking Lot - 339 | Modern Parking | 339 | Day after last Sun in Sept-last Fri before Memorial | | | | Sat before Memorial-last Sun in Sept | | | |
| | | | | 6am-9am | \$5 | 6am-8am | \$5 | 6am-9am | \$5 | 6am-8am | \$9 |
| | | | | 9am-5pm | \$7 | 8am-6pm | \$9 | 9am-5pm | \$9 | 8am-6pm | \$18 |
| | | | | 5pm-12am | \$5 | 6pm-12am | \$5 | 5pm-12am | \$5 | 6pm-12am | \$9 |

All rates subject to weather & demand. Rates on website inconsistent with rates told by attendant.

*(%) indicates the rate charged upon reaching that percentage of capacity, at the discretion of the attendant

https://en.parkopedia.com/parking/garage/42_n_venice_blvd/90291/los_angeles/?arriving=201909031600&leaving=201909031800

2017/2018 REVENUE SUMMARY
LOT 701 (2150 Dell Avenue, Venice)

Contract No.

| Month | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | TOTAL |
|---|-------------|-------------|-------------|--------------|--------------|--------------|------------|--------------|------------|--------------|-------------|-------------|--------------|
| Daily/Trans # | 3,436 | 2,184 | 1,498 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 661 | 1,845 | \$9,624 |
| Gross Receipts | \$65,415.00 | \$35,455.00 | \$23,280.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$14,250.00 | \$34,600.00 | \$173,000 |
| Monthly # | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$12 |
| Gross Receipts | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$15.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$220 |
| Gross Film Comp Rec's: | \$0.00 | \$1,200.00 | \$6,150.00 | \$420.00 | \$1,400.00 | \$400.00 | \$4,720.00 | \$1,000.00 | \$8,860.00 | \$0.00 | \$2,400.00 | \$1,100.00 | \$27,650 |
| Valet: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| Gross Receipts | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 |
| Others: | | | | | | | | | | | | | |
| Gross Receipts | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0 |
| GROSS RECEIPTS | \$65,430.00 | \$36,670.00 | \$29,445.00 | \$435.00 | \$1,415.00 | \$415.00 | \$4,735.00 | \$1,015.00 | \$8,885.00 | \$25.00 | \$16,675.00 | \$35,725.00 | \$200,870.00 |
| GROSS NET RECEIPTS | \$59,481.82 | \$33,336.36 | \$26,768.18 | \$395.45 | \$1,286.36 | \$377.27 | \$4,304.55 | \$922.73 | \$8,077.27 | \$22.73 | \$15,159.09 | \$32,477.27 | \$182,609.09 |
| PARK OCC TAX DUE | \$5,948.18 | \$3,333.64 | \$2,676.82 | \$39.55 | \$128.64 | \$37.73 | \$430.45 | \$92.27 | \$807.73 | \$2.27 | \$1,515.91 | \$3,247.73 | \$18,260.91 |
| TOTAL NET REVENUE | \$59,481.82 | \$33,336.36 | \$26,768.18 | \$395.45 | \$1,286.36 | \$377.27 | \$4,304.55 | \$922.73 | \$8,077.27 | \$22.73 | \$15,159.09 | \$32,477.27 | \$182,609.09 |
| Paystation/Meter Revenue | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| FINAL NET REVENUE | \$59,481.82 | \$33,336.36 | \$26,768.18 | \$395.45 | \$1,286.36 | \$377.27 | \$4,304.55 | \$922.73 | \$8,077.27 | \$22.73 | \$15,159.09 | \$32,477.27 | \$182,609.09 |
| Contract Compensation due Operator | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$39,108.00 |
| Bonus Compensation | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Total Contract Comp Pd | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$39,108.00 |
| Suppl Services Pd | \$0.00 | \$0.00 | \$0.00 | \$375.00 | \$0.00 | \$242.25 | \$0.00 | \$180.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$797.25 |
| TOTAL PAID TO OPERATOR | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,634.00 | \$3,259.00 | \$3,501.25 | \$3,259.00 | \$3,439.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$3,259.00 | \$39,905.25 |
| PFD Maintenance Expenses (Acct 0030) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| NET PROFIT/(DEFICIT) TO SPRF | \$56,222.82 | \$30,077.36 | \$23,509.18 | (\$3,238.55) | (\$1,972.64) | (\$3,123.98) | \$1,045.55 | (\$2,516.27) | \$4,818.27 | (\$3,236.27) | \$11,900.09 | \$29,218.27 | \$142,703.84 |

2018/2019 REVENUE SUMMARY
LOT 701 (2150 Dell Avenue, Venice)

Contract No.

| Month | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | TOTAL |
|---|-------------|-------------|-------------|--------------|------------|--------------|--------------|-------------|--------------|--------------|------------|-------------|--------------|
| Daily/Trans # | 3,376 | 2,548 | 1,970 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 475 | 2,218 | \$10,587 |
| Gross Receipts | \$69,735.00 | \$45,990.00 | \$29,355.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$9,440.00 | \$39,555.00 | \$194,075 |
| Monthly # | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \$12 |
| Gross Receipts | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$25.00 | \$300 |
| Gross Film Comp Rec's: | \$0.00 | \$3,300.00 | \$11,250.00 | \$0.00 | \$4,400.00 | \$0.00 | \$1,700.00 | \$11,980.00 | \$2,980.00 | \$0.00 | \$0.00 | \$0.00 | \$35,610 |
| Valet: | | | | | | | | | | | | | \$0 |
| Gross Receipts | | | | | | | | | | | | | \$0 |
| Others: | | | | | | | | | | | | | |
| Gross Receipts | | | | | | | | | | | | | \$0 |
| GROSS RECEIPTS | \$69,760.00 | \$49,315.00 | \$40,630.00 | \$25.00 | \$4,425.00 | \$25.00 | \$1,725.00 | \$12,005.00 | \$3,005.00 | \$25.00 | \$9,465.00 | \$39,580.00 | \$229,985.00 |
| GROSS NET RECEIPTS | \$63,418.18 | \$44,831.82 | \$36,936.36 | \$22.73 | \$4,022.73 | \$22.73 | \$1,568.18 | \$10,913.64 | \$2,731.82 | \$22.73 | \$8,604.55 | \$35,981.82 | \$209,077.27 |
| PARK OCC TAX DUE | \$6,341.82 | \$4,483.18 | \$3,693.64 | \$2.27 | \$402.27 | \$2.27 | \$156.82 | \$1,091.36 | \$273.18 | \$2.27 | \$860.45 | \$3,598.18 | \$20,907.73 |
| TOTAL NET REVENUE | \$63,418.18 | \$44,831.82 | \$36,936.36 | \$22.73 | \$4,022.73 | \$22.73 | \$1,568.18 | \$10,913.64 | \$2,731.82 | \$22.73 | \$8,604.55 | \$35,981.82 | \$209,077.27 |
| Paystation/Meter Revenue | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| FINAL NET REVENUE | \$63,418.18 | \$44,831.82 | \$36,936.36 | \$22.73 | \$4,022.73 | \$22.73 | \$1,568.18 | \$10,913.64 | \$2,731.82 | \$22.73 | \$8,604.55 | \$35,981.82 | \$209,077.27 |
| Contract Compensation due Operator | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$40,404.00 |
| Bonus Compensation | | | | | | | | | | | | | \$0.00 |
| Total Contract Comp Pd | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$3,367.00 | \$40,404.00 |
| Suppl Services Pd | \$0.00 | \$0.00 | \$230.00 | \$0.00 | \$0.00 | \$65.00 | \$27.44 | \$0.00 | \$565.00 | \$755.24 | \$2,203.48 | \$2,287.40 | \$6,133.56 |
| TOTAL PAID TO OPERATOR | \$3,367.00 | \$3,367.00 | \$3,597.00 | \$3,367.00 | \$3,367.00 | \$3,432.00 | \$3,394.44 | \$3,367.00 | \$3,932.00 | \$4,122.24 | \$5,570.48 | \$5,654.40 | \$46,537.56 |
| PFD Maintenance Expenses (Acct 0030) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| NET PROFIT/(DEFICIT) TO SPRF | \$60,051.18 | \$41,464.82 | \$33,339.36 | (\$3,344.27) | \$655.73 | (\$3,409.27) | (\$1,826.26) | \$7,546.64 | (\$1,200.18) | (\$4,099.51) | \$3,034.07 | \$30,327.42 | \$162,539.71 |

JB671191 - Venice Dell Pacific Affordable Housing EIR
Related Projects - Trip Generation

| Project | | Location | Land use | Size | Units | Weekday Daily Total | Weekday AM Peak | | | Weekday PM Peak | | | Saturday Mid-Day | | | |
|-----------------------|--|-------------------------------------|--|----------|--------|------------------------|-----------------|-------|-------|-----------------|-------|-------|------------------|-------|-------|-------|
| | | | | | | | Total | In | Out | Total | In | Out | Daily | Total | In | Out |
| City of Los Angeles | | | | | | | | | | | | | | | | |
| 1 | MDR-LCP Admendment | 1 Marina Expressway | Residential | 2,044 | d.u. | 21,050 | 1,707 | 622 | 1,085 | 2,503 | 1,378 | 1,125 | 9,259 | 736 | 405 | 331 |
| | | | Senior Housing - Attached | 129,000 | d.u. | | | | | | | | 0 | 35 | 16 | 19 |
| | | | Hotel | 505,000 | rooms | | | | | | | | 4,136 | 364 | 204 | 160 |
| | | | Shopping Center | 273,741 | k.s.f. | | | | | | | | 12,625 | 1,232 | 641 | 591 |
| | | | Turnover Sit-Down Restaurant (Seating) | 1323,000 | seats | | | | | | | | 7,409 | 701 | 372 | 329 |
| | | | General Office Building | 26,000 | k.s.f. | | | | | | | | 57 | 14 | 7 | 7 |
| | | | Library | 3,000 | k.s.f. | | | | | | | | 240 | 38 | 20 | 18 |
| | | | Dry Stack Spaces | 0.375 | k.s.f. | | | | | | | | 0 | 0 | 0 | 0 |
| 2 | House Pies | 1020 E Venice Blvd | High-Turnover Restaurant | 8,895 | k.s.f. | 396 | 33 | 18 | 15 | 33 | 20 | 13 | 50 | 5 | 2 | 3 |
| 3 | Bakery with Retail & Restaurant | 320 E Sunset Ave | Retail /Restaruant | 4,675 | k.s.f. | 861 | 46 | 21 | 25 | 81 | 56 | 25 | 830 | 48 | 25 | 23 |
| 4 | Mixed-Use | 4040 S Del Rey Ave | Apartments | 195 | d.u. | 1,839 | 88 | -50 | 139 | 121 | 149 | -28 | 957 | 86 | 42 | 44 |
| | | | Mini-Warehouse | 80,000 | k.s.f. | | | | | | | | 156 | 25 | 15 | 10 |
| 5 | New 3-Story Manufacturing & Retail | 595 Venice Blvd | Office | 25,150 | k.s.f. | 556 | 56 | 50 | 6 | 85 | 15 | 70 | 56 | 13 | 7 | 6 |
| | | | Retail | 5,028 | k.s.f. | | | | | | | | 232 | 23 | 12 | 11 |
| 6 | Mixed-Use (Inclave) | 4065 S Glencoe Ave | Office | 35,206 | k.s.f. | -191 | 105 | 67 | 38 | 101 | 2 | 99 | 78 | 19 | 10 | 9 |
| | | | Retail | 1,500 | k.s.f. | | | | | | | | 69 | 7 | 4 | 3 |
| | | | Apartments | 49,000 | d.u. | | | | | | | | 399 | 34 | 17 | 17 |
| | | | Condominium | 8 | d.u. | | | | | | | | 65 | 6 | 3 | 3 |
| 7 | Mixed-Use | 825 S Hampton Dr | Retail | 2,430 | k.s.f. | 493 | 34 | 18 | 16 | 49 | 28 | 21 | 112 | 11 | 6 | 5 |
| | | | Restaurant | 4,100 | k.s.f. | | | | | | | | 502 | 46 | 23 | 23 |
| | | | Gym | 2,780 | k.s.f. | | | | | | | | 25 | 9 | 4 | 5 |
| | | | Hotel | 78 | Rooms | | | | | | | | 639 | 56 | 31 | 25 |
| 8 | Mixed-Use | 1033 S. Abbot Kinney | Multifamily Housing (Mid-Rise) | 4,000 | d.u. | 23 | 2 | 0 | 2 | 3 | 2 | 1 | 20 | 2 | 1 | 1 |
| | | | Shopping Center | 4,670 | k.s.f. | 160 | 4 | 2 | 2 | 11 | 5 | 6 | 215 | 21 | 11 | 10 |
| | | | Quality Restaurant | 3,810 | k.s.f. | 238 | 3 | 2 | 1 | 15 | 12 | 3 | 343 | 41 | 24 | 17 |
| | | | General Office Building | 2,0270 | k.s.f. | 9 | 3 | 3 | 0 | 7 | 2 | 5 | 4 | 1 | 1 | 0 |
| 9 | Apartments | 1015 E. Venice | Multifamily Housing (Mid-Rise) | 56 | d.u. | 305 | 20 | 5 | 15 | 25 | 15 | 10 | 275 | 25 | 12 | 13 |
| 10 | Apartments | 13488 W. Maxella | Mid-Rise Residential with 1st-Floor Commercial | 65 | d.u | 224 | 20 | 6 | 14 | 23 | 16 | 7 | 319 | 56 | 28 | 28 |
| 11 | Mixed-Use | 13400 W Maxella Ave | Shopping Center | 27,300 | k.s.f. | 1,031 | 26 | 16 | 10 | 104 | 50 | 54 | 1,259 | 123 | 64 | 59 |
| | | | Multifamily Housing (High-Rise) | 592 | d.u | 2,634 | 184 | 44 | 140 | 213 | 130 | 83 | 2,682 | 213 | 117 | 96 |
| | | | Affordable Housing | 66 | d.u | 269 | 33 | 13 | 20 | 22 | 12 | 10 | 537 | 46 | 23 | 23 |
| 12 | Apartments | 718 E. Rose | Affordable Housing | 35 | d.u | 143 | 18 | 7 | 11 | 12 | 7 | 5 | 285 | 25 | 13 | 12 |
| 13 | MTA Lot | Pacific/Main Ave, s/o Sunset Ave | Assisted Living | 154 | Beds | 400 | 29 | 18 | 11 | 52 | 23 | 29 | 451 | 42 | 19 | 23 |
| 14 | Thatcher Yard | 3233 Thatcher Ave | Affordable Housing | 98 | d.u. | 400 | 49 | 20 | 29 | 33 | 18 | 15 | 798 | 69 | 35 | 34 |
| County of Los Angeles | | | | | | | | | | | | | | | | |
| 15 | Rsidiential | Via Marina and Marquesas Way | Multifamily Housing (Mid-Rise) | 526 | d.u. | 2,861 | 189 | 49 | 140 | 231 | 141 | 90 | 2,583 | 231 | 113 | 118 |
| 16 | Mixed-Use | 13443 Bali Street | Shopping Center | 6.30 | k.s.f. | 238 | 6 | 4 | 2 | 24 | 12 | 12 | 291 | 28 | 15 | 13 |
| | | | Quality Restaurant | 7.50 | k.s.f. | 629 | 5 | - | - | 59 | 40 | 19 | 675 | 80 | 47 | 33 |
| | | | General Office Building | 3.05 | k.s.f. | 30 | 4 | 3 | 1 | 4 | 1 | 3 | 7 | 2 | 1 | 1 |
| 17 | Mixed-Use | 13967 Marquesas Way | Multifamily Housing (Mid-Rise) | 585.00 | d.u. | 3,182 | 211 | 55 | 156 | 257 | 157 | 100 | 2,872 | 257 | 126 | 131 |
| | | | Shopping Center | 8.00 | k.s.f. | 302 | 8 | 5 | 3 | 30 | 14 | 16 | 369 | 36 | 19 | 17 |
| 18 | Commercial Building | 13650 Mindanao Street | Shopping Center | 83.00 | k.s.f. | 3,133 | 78 | 48 | 30 | 316 | 152 | 164 | 3,828 | 374 | 194 | 180 |
| 19 | Hotel | Via Marina and Tahiti Way | Hotel | 288.00 | rooms | 2,408 | 135 | 80 | 55 | 173 | 88 | 85 | 2,359 | 207 | 116 | 91 |
| City of Santa Monica | | | | | | | | | | | | | | | | |
| 20 | Commercial Building | 3280 Lincoln Boulevard | Shopping Center | 3,898 | k.s.f. | 147 | 4 | 2 | 2 | 15 | 7 | 8 | 180 | 18 | 9 | 9 |
| 21 | 2740 Main Street | 2740 Main Street | Shopping Center | 4,833 | k.s.f | 182 | 5 | 3 | 2 | 18 | 9 | 9 | 223 | 22 | 11 | 11 |
| TOTAL | | | | | | 44,477 | 3,140 | 1,151 | 1,985 | 4,664 | 2,583 | 2,081 | 58,471 | 5,427 | 2,865 | 2,562 |

ATTACHMENT D

Related Projects Map





Azeen Khanmalek <azeen.khanmalek@lacity.org>

Automated Parking Garage

2 messages

Anup Patel <apatel@vchcorp.org>

Tue, Jun 23, 2020 at 11:59 AM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Azeen,

Hope all is well. I would like to review the scope for the automated parking garage feasibility study. Can you send that to us? I believe Sara had initially requested it. I am hoping there is a way we can move it forward even General Obligation Funds aren't available.

Regards,

Anup

Azeen Khanmalek <azeen.khanmalek@lacity.org>

Wed, Jun 24, 2020 at 9:59 AM

To: Anup Patel <apatel@vchcorp.org>

Hi Anup,

Sorry for the delay. Here is the scope of work that was included in DOT's proposed contract.

Provide recommendation on whether an automated or a standard garage construction is best suited for this development considering traffic patterns, usage, construction and maintenance costs and the challenges due to high water table and ocean proximity. Current usage of the lots in the area and projected future use will be provided by LADOT from a separate contractor survey.

Provide preliminary concept design for a possible automated parking facility to be constructed as part of a proposed Reese Davidson Community project in Municipal Lot 731, located at 200 North Venice Boulevard.

Provide basic specifications for the construction and installation of an automated parking facility within the confines of the proposed Reese Davidson Community project.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

DOT & the Venice Parking Study

8 messages

Sarah Letts <sletts@hollywoodhousing.org> Tue, Mar 17, 2020 at 9:30 AM
To: "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, "Magdalena Zakaryan - Housing and Community Investment Department (magdalena.zakaryan@lacity.org)" <magdalena.zakaryan@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Anup Patel <apatel@vchcorp.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>

Rick, Maggie and Gohar

I hope you are all doing well. I'm writing today to ask you to please ask David Cataldo when HCHC will receive the final copy of the Venice Parking Study that is being completed by Tierra West. When we spoke to David on our call on March 11th he said it should be ready before March 18th.

Also, it is critically important that the vendor for the 2nd parking study (to determine if the public parking structure will be automated or conventional) receives their Notice to Proceed (NTP) ASAP.

On the March 11th call David said there had been a snag in getting this study underway because the NTP was not submitted correctly. David said DOT is getting it submitted and asking Diego and Azeen from Mayor's office to assist with getting it expedited through the process. The vendor who will be working on this study is the JAO Group (aka Jeff Olvedo (sp?) & Associates).

Thank you

Sarah

Sarah Letts <sletts@hollywoodhousing.org>
To: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Tue, Mar 17, 2020 at 11:25 AM

Hi Azeen

Do you have any insights into the status of both studies for Reese Davidson? Are you available for a brief call this afternoon so we can strategize?

Thank you, and I hope you and your circle of friends and family are staying healthy.

All my best

Sarah

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>

Wed, Mar 25, 2020 at 1:16 PM

Hi Sarah,

I'm so sorry for the delay. As you can imagine things have been nuts here. We've all been working around the clock on COVID19 response. Can you touch base for a few minutes in the next couple hours about this?



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Wed, Mar 25, 2020 at 4:32 PM

Hi Azeen

Sorry for my delayed response. I am free now until 5pm. I have a conference call from 5 to 6pm and then I'm free after 6pm.

On Thursday I am free all day up until my 5pm HCHC Board meeting.

Thank you

Sarah

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>

Thu, Mar 26, 2020 at 1:45 PM

What's a good number to reach you? Can you talk between 3:30 and 5?



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Thu, Mar 26, 2020 at 1:47 PM

My cell is [REDACTED] and I am available between 3:30 and 5pm today

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>

Thu, Mar 26, 2020 at 1:48 PM

Great I'll call you at at around 3:30-4.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Thu, Mar 26, 2020 at 1:50 PM

Sounds good

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Fwd: CAO REPORT - CONTRACT - JEFF OVIEDO AND ASSOCIATES, INC. - AUTOMATED PARKING FACILITY AT THE PROPOSED REESE DAVIDSON COMMUNITY HOUSING DEVELOPMENT

1 message

David Hirano <david.hirano@lacity.org>

Tue, Jul 7, 2020 at 1:34 PM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Cc: "Wagner, Jacqueline" <jacqueline.wagner@lacity.org>, Blair Miller <blair.miller@lacity.org>

Azeen -

This report was provided to Heleen Ramirez on June 5, 2020.

Please let me know if have any questions.

- David Hirano

----- Forwarded message -----

From: **Mary Jay Paco** <maryjay.paco@lacity.org>

Date: Fri, Jun 5, 2020, 4:20 PM

Subject: CAO REPORT - CONTRACT - JEFF OVIEDO AND ASSOCIATES, INC. - AUTOMATED PARKING FACILITY AT THE PROPOSED REESE DAVIDSON COMMUNITY HOUSING DEVELOPMENT

To: CAO Release - Mayor Submissions <cao.release-mayor-submissions@lacity.org>

Cc: Bret Avrashow <bret.avrashow@lacity.org>, David Hirano <david.hirano@lacity.org>

ATTACHED.



20200605 TRAN DEPT CONTRACT - JEFF OVIEDO AND ASSOCIATES, INC. - AUTOMATED PARKING FACILITY AT THE PROPOSED REESE DAVIDSON COMMUNITY HOUSING DEVELOPMENT.pdf

478K



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Fwd: Reese Davidson Community - Architectural drawings

1 message

Amy Anderson <amy.anderson@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Thu, Feb 6, 2020 at 5:27 PM

----- Forwarded message -----

From: **Sarah Letts** <sletts@hollywoodhousing.org>
Date: Wed, Jan 8, 2020 at 11:23 AM
Subject: Reese Davidson Community - Architectural drawings
To: Amy Anderson <amy.anderson@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

If you have a chance to look at the drawings, the parking to the west of the canal is associated with all 140 units of housing. The parking to the east of the canal is a new public parking structure to be controlled by DOT.

From: Eleanor Atkins
Sent: Wednesday, January 08, 2020 10:41 AM
To: Sarah Letts <sletts@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Becky Dennison (bdennison@vchcorp.org) <bdennison@vchcorp.org>; Anup Patel <apatel@vchcorp.org>; Rick Tonthat <rick.tonthat@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>; Gohar Paronyan <gohar.paronyan@lacity.org>; Magdalena Zakaryan <magdalina.zakaryan@lacity.org>; david.cataldo@lacity.org; rauhman.laverne@lacity.org
Cc: Eric McNevin <mcnevin@ericowenmoss.com>
Subject: Re: Reese Davidson Community Monthly Check-in

Hi All,

Thanks for the productive call today. Here is a link to the 12/12/18 Entitlement drawings:
<https://we.tl/t-QwgxNTHm0G>

Thanks,

Eleanor

Eleanor Atkins | Senior Housing Finance Consultant

Mailing Address: Hollywood Community Housing Corporation

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From: Sarah Letts <sletts@hollywoodhousing.org>

Sent: Tuesday, January 7, 2020 5:14 PM

To: Eleanor Atkins <eatkins@hollywoodhousing.org>; Conference Call Number <conferencecallnumber@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Becky Dennison (<bdennison@vchcorp.org>) <bdennison@vchcorp.org>; Anup Patel <apatel@vchcorp.org>; Rick Tonthat <rick.tonthat@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>; Gohar Paronyan <gohar.paronyan@lacity.org>; Kompheak Taing <kompheak.taing@lacity.org>

Cc: magdalina.zakaryan@lacity.org <magdalina.zakaryan@lacity.org>

Subject: RE: Reese Davidson Community Monthly Check-in

Following is the agenda for the Reese Davidson call tomorrow at 9:30am and the call-in number is [REDACTED] code [REDACTED]

Have a good evening

Sarah

AGENDA

1. Topics to discuss with DOT (and the DOT representative may choose to drop off the call after this discussion)
 - a. Public Parking Structure: David Cataldo from DOT and Eric McNevin from EOMA to discuss design of the Public Parking Structure with the goal to identify potential issues. Eric will drop off the call after this discussion.
 - b. Parking Studies commissioned by DOT: VCH/HCH need copies of the 2 studies in anticipation of our meeting with the Coastal Commission.
2. Plan for meetings during 2020
 - c. Who from HCID should be included in the meeting invite? Is Kompheak no longer working on RDC?
 - d. Recommend continuing with monthly meetings. We'd like to meet in person about once per quarter and we'd like to meet in person in February.
3. Planning Department
 - e. Meeting with Planning Dept on December 17th went well. RDC will stay with the Major Projects team; the updated entitlements package and the AB 1197 letter will be submitted to Planning within about 1 week.
4. Schedule / Timeline
 - f. We will post an updated timeline to Smartsheet in the near future.

- g. Question: Any info HCID can share about the Managed Pipeline timing and process?
- h. VCH/HCH needs help to engage with DOT so the project can meet its aggressive schedule
- 5. Proformas
 - i. VCH/HCH are working on updated proformas (2020 rents to be input; sources to be updated) and will post to Smartsheet in the near future.
 - j. VCH/HCH still evaluating different funding sources that we intend to apply for and determine how having a nominal ground lease payment would impact scoring
 - k. Residential vs. Commercial Prevailing Wages: Discuss because it will impact the proforma. Since each phase is primarily residential, we hope to save money by paying residential prevailing wages.
 - l. MOU Between DOT/HCID/CAO: When can this memo be shared with the development team?
 - m. The Proforma for Phase 2 (east side) will exclude the sources/uses for the public parking structure, but we need to talk to DOT about how it will be financed.

From: Sarah Letts

Sent: Monday, January 06, 2020 11:11 AM

To: Eleanor Atkins <eatkins@hollywoodhousing.org>; Conference Call Number <conferencecallnumber@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Becky Dennison <bdennison@vchcorp.org> <bdennison@vchcorp.org>; Anup Patel <apatel@vchcorp.org>; Rick Tonthat <rick.tonthat@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>; Gohar Paronyan <gohar.paronyan@lacity.org>; Kompheak Taing <kompheak.taing@lacity.org>

Cc: magdalina.zakaryan@lacity.org

Subject: RE: Reese Davidson Community Monthly Check-in

Dear HCID Colleagues

Happy New Year!

The purpose of this email is to confirm your availability on Wednesday, January 8th at 9:30am for our monthly call regarding the Reese Davidson Community. If this time/date works for you, we will send out the agenda.

Thanks so much

Sarah

-----Original Appointment-----

From: Eleanor Atkins

Sent: Wednesday, September 11, 2019 11:52 AM

To: Eleanor Atkins; Conference Call Number; Sarah Letts; Victoria Senna; Becky Dennison <bdennison@vchcorp.org>; Anup Patel; Rick Tonthat; Helmi Hisserich; Gohar Paronyan; Kompheak Taing

Cc: magdalina.zakaryan@lacity.org

Subject: Reese Davidson Community Monthly Check-in

When: Wednesday, January 08, 2020 [REDACTED] 9 AM (UTC-08:00) Pacific Time (US & Canada).

Where: call in [REDACTED] access [REDACTED]

This overlaps the November board project committee call.

-----Original Appointment-----

From: Eleanor Atkins

Sent: Wednesday, September 11, 2019 11:52 AM

To: Eleanor Atkins; Conference Call Number; Sarah Letts; Victoria Senna; Becky Dennison
(bdennison@vchcorp.org); Anup Patel; Rick Tonthat; Helmi Hisserich; Gohar Paronyan; Kompheak Taing

Cc: magdalina.zakaryan@lacity.org

Subject: Reese Davidson Community Monthly Check-in

When: Occurs the second Wednesday of every 1 month(s) effective 10/9/2019 until 10/9/2020 from 9:30 AM to 10:30 AM (UTC-08:00) Pacific Time (US & Canada).

Where: call in [REDACTED] access [REDACTED]

Hi All-- We are extending the invite for monthly check-ins (2nd Wed of every month at 9:30a). We will pick up in Oct.

--



Amy Anderson

Chief Housing Officer, City Homelessness Initiatives

Mayor

Eric

Garcetti

Office of Los Angeles Mayor Eric Garcetti

amy.anderson@lacity.org





Azeen Khanmalek <azeen.khanmalek@lacity.org>

Fwd: Reese Davidson update requested

6 messages

Blair Miller <blair.miller@lacity.org>

Wed, Mar 25, 2020 at 12:42 PM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>, Amy Anderson <amy.anderson@lacity.org>

Azeen and Amy,

I hope you are both staying safe and healthy. I understand the Mayor's office is in the middle of a crisis and there may be nothing COVID-related that can be addressed at this time. However, I am forwarding this email to you in case you are still working on affordable housing.

Background: DOT has two reports that are critical path items for HCHC and VCH to move their Venice affordable housing development forward. This was one of the original AHOS sites from 2016.

These reports were already quite delayed, which is how they became critical path items, and now due to the emergency, there is no time certain to have them completed.

I have already alerted Diego de la Garza, the Mayor's liaison with DOT, and Eric Bruins and Krista Kline in CD 11's office.

Any assistance you can provide in this matter would be most appreciated.

Thank you,

Blair Miller

Office of the City Administrative Officer | City of Los Angeles

Asset Management

(d) 213-473-7598 (f) 213-473-7514

200 North Main Street Suite 1500, LA 90012

----- Forwarded message -----

From: **Gohar Paronyan** <gohar.paronyan@lacity.org>

Date: Wed, Mar 25, 2020 at 12:27 PM

Subject: Re: Reese Davidson update requested

To: Blair Miller <blair.miller@lacity.org>

Cc: Rick Tonthat <rick.tonthat@lacity.org>, Magdalina Zakaryan <magdalina.zakaryan@lacity.org>

Hi Blair,

The report is still a critical path for the project. HCH was requesting the report for their Coastal Commission staff meeting, but HCH has rescheduled the meeting.

I followed up on the status of the report with DOT and due to emergency assignments, DOT has not completed the review of the report and therefore the report is not ready to be provided to the developer. I was informed by DOT they will get the study reviewed as soon as they can.

Best,
Gohar

On Wed, Mar 25, 2020 at 11:09 AM Blair Miller <blair.miller@lacity.org> wrote:

Team,

We are updating our front office this afternoon @ 2 p.m. regarding projects.

Is there a status update on the DOT reports and whether they are still critical path items for Reese Davidson?

Thank you,

Blair Miller

Office of the City Administrative Officer | City of Los Angeles
Asset Management
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200 North Main Street Suite 1500, LA 90012

--



Gohar Paronyan

Land Development Unit | Management Analyst
Housing Strategies & Services Division
Housing & Community Investment Dept | City of Los Angeles
1200 W 7th St 8th Fl, Los Angeles, CA 90017
O (213) 808-8969 | Gohar.Paronyan@lacity.org

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Blair Miller <blair.miller@lacity.org>
Cc: Amy Anderson <amy.anderson@lacity.org>

Wed, Mar 25, 2020 at 12:51 PM

Hi Blair,

HCHC reached out to me about this issue, and I've been in contact with DOT to move this forward. Thanks



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Blair Miller <blair.miller@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>
Cc: Amy Anderson <amy.anderson@lacity.org>

Wed, Mar 25, 2020 at 12:52 PM

Thank you.

Blair Miller

Office of the City Administrative Officer | City of Los Angeles
Asset Management
(d) 213-473-7598 (f) 213-473-7514
200 North Main Street Suite 1500, LA 90012

[Quoted text hidden]

Amy Anderson <amy.anderson@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Thu, Mar 26, 2020 at 7:32 AM

On Wed, Mar 25, 2020 at 12:52 PM Azeen Khanmalek <azeen.khanmalek@lacity.org> wrote:

[Quoted text hidden]

--



Amy Anderson

Chief Housing Officer, City Homelessness Initiatives
Office of Los Angeles Mayor Eric Garcetti
amy.anderson@lacity.org

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Blair Miller <blair.miller@lacity.org>

Thu, Mar 26, 2020 at 9:40 AM

Hi Blair,

DOT says the automated garage study is with the CAO for review. Is someone on your staff reviewing it?



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Blair Miller <blair.miller@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Thu, Mar 26, 2020 at 10:09 AM

Hi! I got updated information from our CAO staff. Please call me at your convenience.

Thank you,

Blair Miller

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Asset Management
(d) 213-473-7598 (f) 213-473-7514
[200 North Main Street Suite 1500, LA 90012](#)

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

RDC - Notice to Proceed

11 messages

Sarah Letts <sletts@hollywoodhousing.org>
To: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Mon, Apr 13, 2020 at 1:05 PM

Hi Azeen

I hope you are doing well and staying healthy. As a follow-up from our call with HCID on Wednesday, I was wondering if there is an update on the Notice to Proceed for the parking study for Reese Davidson.

Thanks so much

Sarah

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Apr 14, 2020 at 11:34 AM

Hi Sarah,

I had a good conversation with the CAO yesterday. Can we connect tomorrow about it?



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Apr 14, 2020 at 11:37 AM

Sure. I have 3 calls on the calendar on Wednesday and the only one I can't move is from 9 to 9:30am. Let me know what time suits your schedule after 9:30am and I will be available.

Thanks, and enjoy the sunny day.

Best

Sarah

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Apr 14, 2020 at 11:40 AM

I'm pretty open tomorrow. I can do between 10 and noon, and again between 2 and 4. Do either of those time frames work. I don't think we need to schedule more than a half hour.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Apr 14, 2020 at 11:51 AM

Let's talk at 10am and then I won't need to reschedule my call at 11am. I'll send you and Becky a calendar invite with HCHC's conference call number.

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Apr 14, 2020 at 11:51 AM

Sounds good, talk to you then.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Becky Dennison <bdennison@vchcorp.org>
To: Sarah Letts <sletts@hollywoodhousing.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>

Tue, Apr 14, 2020 at 12:37 PM

Sorry for delay – I have a 10 am that can't change, but can get updated from Sarah. Thanks for the followup Azeen.

Becky Dennison

Executive Director

Venice Community Housing

200 Lincoln Blvd.

Venice, CA 90291

(310) 573-8399

bdennison@vchcorp.org

Building affordable housing and communities since 1988

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Thu, Apr 16, 2020 at 7:58 PM

Hi Azeen

After we spoke yesterday Becky and I were able to schedule a call with Krista and Eric from CD11 this afternoon. After that call, Eric spoke to Ken Husting to confirm what we thought Ken said on the call with HCID on April 8th – that he is really open to the P3 idea. Ken restated to Eric that he is open to the P3 idea, in which case, the study is not necessary. At this point, Becky and I suggest that you signal to the CAO that they don't need to work on the NPT for the parking study because we are going to pursue the P3 idea.

Thanks for your help with this and have a good evening.

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Fri, Apr 17, 2020 at 10:25 AM

Hi Sarah,

I'm glad to hear that. I think the P3 option is a great idea (depending on the details, of course). Let me know how I can help you move forward with this idea.

Azeen Khanmalek
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
(213) 448-4730

[Quoted text hidden]



image002.png
20K

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Fri, Apr 17, 2020 at 10:27 AM

Thanks Azeen and we will keep you in the loop.

Have a good weekend!

[Quoted text hidden]

Becky Dennison <bdennison@vchcorp.org>

Fri, Apr 17, 2020 at 1:14 PM

To: Sarah Letts <sletts@hollywoodhousing.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>

Yes, thanks Azeen – for the work and advice on this one.

Becky Dennison

Executive Director

Venice Community Housing

200 Lincoln Blvd.

Venice, CA 90291

(310) 573-8399

bdennison@vchcorp.org

Building affordable housing and communities since 1988

From: Sarah Letts [mailto:sletts@hollywoodhousing.org]

Sent: Friday, April 17, 2020 10:27 AM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

[Quoted text hidden]

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson - Agenda for call on 3/11 at 9:30am

4 messages

Sarah Letts <sletts@hollywoodhousing.org>

Mon, Mar 9, 2020 at 12:32 PM

To: "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Anup Patel <apatel@vchcorp.org>, Becky Dennison <bdennison@vchcorp.org>
Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Dear Colleagues at HCID

In anticipation of our call on Wednesday at 9:30am, see below for the draft agenda. Please let us know if you would like to add anything to the agenda.

Thank you

Sarah

Reese Davidson Community – DRAFT Agenda

1. Meeting with CA Coastal Commission (CCC) staff on March 18, 2020 at 10:30am.
2. DOT Parking Studies
 - a. Draft Traffic Demand Study sent by Tierra West to DOT on Jan 24th. In Feb VCH/HCH responded to all questions posed by Tierra West. Will the Traffic Demand Study be finalized before our meeting with the CCC on March 18th?
 - b. Did DOT issue NTP to the vendor for the 2nd parking study analyzing automated vs. conventional parking? The results of this study are on the critical path and impact many aspects of the overall project.
3. Relocation - We would like to initiate the relocation process asap. Tenants will need to be relocated before construction can commence on the DOT parking. Senior/disabled households can stay up to 1 year from receiving the notice to vacate.
 - a. At least 3 of the 4 households are senior/disabled.
 - b. We want to get the households signed up for waitlists for VCH and HCHC housing as soon as possible.
 - c. Does the City have household income information?
4. VCH/HCH to provide update on discussion with borrower counsel
 - a. Ground lease - 2 ground leases for area under housing only, executed at construction closing
 - b. Proposed ownership entities -- form an LLC to act as the turn-key developer of the DOT parking structure
5. Pro formas - to be updated once 2020 TCAC rent/income info published. To be submitted to HCID in early May
6. Misc.

Gohar Paronyan <gohar.paronyan@lacity.org>

Wed, Mar 11, 2020 at 7:58 AM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Anup Patel <apatel@vchcorp.org>, Becky Dennison <bdennison@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Hello Sarah,

David will be joining us in today's call. DOT wanted to point out that no traffic demand study being issued by DOT, only the parking study and the automated garaged study. I believe it might have been an error in naming the study when drafting the agenda but it was mentioned for calcification.

Talk to you soon.

Best,
Gohar

[Quoted text hidden]

--



Gohar Paronyan

Land Development Unit | Management Analyst

Housing Strategies & Services Division

Housing & Community Investment Dept | City of Los Angeles

1200 W 7th St 8th Fl, Los Angeles, CA 90017

O (213) 808-8969 | Gohar.Paronyan@lacity.org

Sarah Letts <sletts@hollywoodhousing.org>

Wed, Mar 11, 2020 at 9:15 AM

To: Gohar Paronyan <gohar.paronyan@lacity.org>

Cc: "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Anup Patel <apatel@vchcorp.org>, Becky Dennison <bdennison@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Hi Gohar

Thank you for clarifying and we look forward to speaking with everyone in 15 minutes.

Sarah

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>

Thu, Apr 2, 2020 at 3:54 PM

To: "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, Gohar Paronyan

<gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Anup Patel <apatel@vchcorp.org>, Becky Dennison <bdennison@vchcorp.org>

Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Dear HCID Colleagues

For our call next Wednesday at 9:30am, let me know if you would like to make any changes to the draft agenda copied below. Please ask David Cataldo to join the first part of the meeting.

Thanks so much

Sarah

Reese Davidson Community – DRAFT Agenda

1. Topics to discuss with DOT

- a. Venice Parking Study by Tierra West. When will it be finalized and available for VCH/HCH to share with Coastal Commission staff?
- b. We understand that DOT cannot issue the NTP for the 2nd parking study analyzing automated vs. conventional parking. Discuss next steps.
- c. Funding for Public Parking Structure. Discuss Public Private Partnership (P3) ideas.

2. Relocation - We would like to initiate the relocation process asap. Senior/disabled households can stay up to 1 year from receiving the notice to vacate.

- a. At least 3 of the 4 households are senior/disabled.
- b. We want to get the households signed up for waitlists for VCH and HCHC housing as soon as possible.
- c. Does the City have household income information?

3. Legal – topics to vet early in the process

- a. Memo (attached) summarizes topics to discuss with the City Attorney. Discuss next steps & timing.

4. SB 330

- a. It is possible that SB 330 doesn't apply to RDC because the Entitlements Application was submitted on 12/12/18 and City Planning sent a letter on 1/2/19 stating that the application is "deemed complete" (see attached). The development team subsequently submitted revisions to the original application. Discuss with the group if RDC is exempt from SB 330.

5. Pro formas - 2020 TCAC rent/income info has been published. Goal to submit revised proformas to HCID in early May

[Quoted text hidden]

2 attachments



Memo to City dated 3-12-20 - Legal Entities & Ground Leases.docx

17K



2019-0102 - RDC Project - LADCP Deemed Complete Letter.pdf

772K

DEPARTMENT OF
CITY PLANNING

CITY PLANNING COMMISSION

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CITY OF LOS ANGELES
CALIFORNIA



ERIC GARCETTI
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EXECUTIVE OFFICER

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LISA M. WEBBER, AICP

DEPUTY DIRECTOR

(213) 978-1274

<http://planning.lacity.org>

January 2, 2019

Sarah Letts and Rebecca Dennison(A)
Hollywood Community Housing Corp. and
Venice Community Housing Corp
5020 Santa Monica Boulevard
Los Angeles, CA 90026

Christopher Murray
Rosenheim & Associates
21600 Oxnard Street
Woodland Hills, CA 91367

Reese Davidson Community Project: CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR; VTT-78228; ENV-2018-6667-EIR

The Department of City Planning, Major Projects Section, has completed its review of the application materials for the proposed Reese Davidson Community Project (Project) located at 2102 South Pacific Avenue. The application entitlements filed on December 12, 2018, have been deemed complete and include the following requests:

CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR: A General Plan Amendment from Open Space to Neighborhood Commercial; a Vesting Zone and Height District Change from OS-1XL-O to (T)(Q)C2-1L-O; a Specific Plan Amendment; Project Permit Compliance; Coastal Development Permit; Waiver of Dedication and Improvements; and a Site Plan Review.

VTT-78228: A Vesting Tentative Tract Map to merge and resubdivide the property for an airspace subdivision and approval of a haul route.

ENV-2018-6667-EIR: Environmental Impact Report for the purpose of determining environmental impacts pursuant to California Environmental Quality Act (CEQA).

Based on careful review of the application and supplemental information provided, the Department of City Planning finds that the case file(s) contain sufficient information to satisfy the processing of the requested entitlements associated with the Project. Please note that this determination has been made with the understanding that the Department of City Planning may request additional information, as necessary, to review and analyze the environmental effects of the Proposed Project in accordance CEQA, the Los Angeles Municipal Code, and other Departmental policies and plans, as appropriate.

Sincerely,

Heather Bleemers
Senior City Planner, Major Projects Section
213-847-3682



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson - Agenda for call on 5/13 at 9:30am

3 messages

Sarah Letts <sletts@hollywoodhousing.org>

Fri, May 8, 2020 at 1:26 PM

To: Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalena Zakaryan - Housing and Community Investment Department (magdalena.zakaryan@lacity.org)" <magdalena.zakaryan@lacity.org>, "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Allison Riley <ariley@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>

Dear Colleagues at HCID

I hope you are all doing well and staying safe. In anticipation of our monthly call for Reese Davidson on Wednesday 5/13 at 9:30am, see below for the DRAFT agenda. Also, if Ken Husting could join the call along with David Cataldo, that would be very helpful because we need to have a substantive discussion about the public parking structure. Ken and David have not been cc:ed on this email so please forward the agenda and confirm their participation in the call.

Thanks so much and have a good weekend.

Sarah

REESE DAVIDSON COMMUNITY – DRAFT AGENDA

1. Topics to discuss with DOT

a. Venice Parking Study by Tierra West. When will it be finalized and available for VCH/HCH to share with Coastal Commission staff?

b. Public Private Partnership

- Please send DOT's Design specifications for parking lots (if they are different than the design specs in the MOU)
- We've spoken to Alex Chaves of PCAM about a potential P3. Are there other parking operators we should talk to?
- Discuss Terms Sheet (term; renewals; ground lease payment; % of revenue; guarantees; parking rates)
- Consider scheduling another meeting focused on the P3 for the RDC public parking structure

2. Relocation - We would like to initiate the relocation process asap, but the City Attorney informed HCID that VCH/HCH cannot reach out to the tenants with only an ENA and no site control.

a. Relocation Plan should be available to give to HCID by early June. After we give the Plan to HCID what are your next steps?

b. Does the City have household income information? Gohar ask GSD for copies of rent rolls.

3. Legal – topics to vet early in the process

a. Memo (attached) summarizes topics to discuss with the City Attorney. Discuss next steps & timing.

4. AB 1197 & SB 330

a. The AB 1197 letter has been submitted to the City Attorney; VCH/HCH will provide HCID with updates via these monthly calls.

b. It appears SB 330 doesn't apply to RDC because the Entitlements Application was submitted on 12/12/18 and City Planning sent a letter on 1/2/19 stating that the application is "deemed complete".

5. Pro formas - 2020 TCAC rent/income info has been published. Goal to submit revised proformas to HCID before the meeting date on 5/13

6. Misc.

From: Sarah Letts

Sent: Thursday, April 2, 2020 3:55 PM

To: rick.tonthat@lacity.org; Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org) <magdalina.zakaryan@lacity.org>; Gohar Paronyan <gohar.paronyan@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>; Eleanor Atkins <eatkins@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Anup Patel <apatel@vchcorp.org>; Becky Dennison <bdennison@vchcorp.org>

Cc: azeen.khanmalek@lacity.org

Subject: RE: Reese Davidson - Agenda for call on 3/11 at 9:30am

Dear HCID Colleagues

For our call next Wednesday at 9:30am, let me know if you would like to make any changes to the draft agenda copied below. Please ask David Cataldo to join the first part of the meeting.

Thanks so much

Sarah

Reese Davidson Community – DRAFT Agenda

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a. Venice Parking Study by Tierra West. When will it be finalized and available for VCH/HCH to share with Coastal Commission staff?

b. We understand that DOT cannot issue the NTP for the 2nd parking study analyzing automated vs. conventional parking. Discuss next steps.

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- 5. **Pro formas** - 2020 TCAC rent/income info has been published. Goal to submit revised proformas to HCID in early May

6. Misc.

From: Sarah Letts

Sent: Monday, March 9, 2020 12:33 PM

To: rick.tonthat@lacity.org; Magdalena Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org) <magdalina.zakaryan@lacity.org>; Gohar Paronyan <gohar.paronyan@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>; Eleanor Atkins <eatkins@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Anup Patel <apatel@vchcorp.org>; Becky Dennison <bdennison@vchcorp.org>

Cc: azeen.khanmalek@lacity.org

Subject: Reese Davidson - Agenda for call on 3/11 at 9:30am

Dear Colleagues at HCID

In anticipation of our call on Wednesday at 9:30am, see below for the draft agenda. Please let us know if you would like to add anything to the agenda.

Thank you

Sarah

Reese Davidson Community – DRAFT Agenda

1. Meeting with CA Coastal Commission (CCC) staff on March 18, 2020 at 10:30am.
2. DOT Parking Studies
 - a. Draft Traffic Demand Study sent by Tierra West to DOT on Jan 24th. In Feb VCH/HCH responded to all questions posed by Tierra West. Will the Traffic Demand Study be finalized before our meeting with the CCC on March 18th?
 - b. Did DOT issue NTP to the vendor for the 2nd parking study analyzing automated vs. conventional parking? The results of this study are on the critical path and impact many aspects of the overall project.
3. Relocation - We would like to initiate the relocation process asap. Tenants will need to be relocated before construction can commence on the DOT parking. Senior/disabled households can stay up to 1 year from receiving the notice to vacate.
 - a. At least 3 of the 4 households are senior/disabled.
 - b. We want to get the households signed up for waitlists for VCH and HCHC housing as soon as possible.
 - c. Does the City have household income information?

4. VCH/HCH to provide update on discussion with borrower counsel
 - a. Ground lease - 2 ground leases for area under housing only, executed at construction closing
 - b. Proposed ownership entities -- form an LLC to act as the turn-key developer of the DOT parking structure
5. Pro formas - to be updated once 2020 TCAC rent/income info published. To be submitted to HCID in early May
6. Misc.



Memo to City dated 3-12-20 - Legal Entities & Ground Leases.docx

17K

Sarah Letts <sletts@hollywoodhousing.org>

Tue, May 12, 2020 at 5:44 AM

To: Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Allison Riley <ariley@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>

Good morning HCID

Please let us know if Ken and David will be able to join our RDC call on Wednesday at 9:30am so we can be better prepared for the call.

Thanks so much

Sarah

[Quoted text hidden]

Gohar Paronyan <gohar.paronyan@lacity.org>

Tue, May 12, 2020 at 7:56 AM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: Allison Riley <ariley@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Becky Dennison <bdennison@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>

Good morning Sarah,

David accepted my invite and Ken has accepted it as a maybe. I have provided them the draft agenda as well.

Best,
Gohar

[Quoted text hidden]

--

Gohar Paronyan

Land Development Unit | Management Analyst
Housing Strategies & Services Division



Housing & Community Investment Dept | City of Los Angeles

[1200 W 7th St 8th Fl, Los Angeles, CA 90017](#)

O (213) 808-8969 | Gohar.Paronyan@lacity.org



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson - Follow-up from Meeting with BOE

3 messages

Sarah Letts <sletts@hollywoodhousing.org>

Tue, Feb 25, 2020 at 5:01 PM

To: Blair Miller <blair.miller@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, David Cataldo <david.cataldo@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>

Good afternoon David and Blair

I have a update from our Reese Davidson meeting on Feb 13th. We have secured a meeting with the staff of the Coastal Commission on Wednesday, March 18th and we've answered questions raised by the City's traffic demand vendor, Tierra West (with the last response going from VCH/HCH to Tierra West yesterday).

Could the Traffic Demand Study be finalized before our March 18th meeting with Coastal so we can share the report with them?

Thanks so much

Sarah

Blair Miller <blair.miller@lacity.org>

Tue, Feb 25, 2020 at 5:06 PM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, David Cataldo <david.cataldo@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>

Sarah,

Thank you for the update. Your email should be directed to HCID and DOT, though I appreciate you keeping me on the CC.

Blair Miller

Office of the City Administrative Officer | City of Los Angeles

Asset Management

(d) 213-473-7598 (f) 213-473-7514

200 North Main Street Suite 1500, LA 90012

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>

Tue, Feb 25, 2020 at 5:16 PM

To: Blair Miller <blair.miller@lacity.org>

Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, David Cataldo <david.cataldo@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "rick.tonthat@lacity.org" <rick.tonthat@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>

Got it. Thank you for clarifying and I will keep you on the cc:

Sarah

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson - P3

5 messages

Sarah Letts <sletts@hollywoodhousing.org>

Tue, Apr 21, 2020 at 2:39 PM

To: Blair Miller <blair.miller@lacity.org>

Cc: Becky Dennison <bdennison@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Hi Blair

Over the past 10 days there were 2 conversations with Ken Husting that have led us to the conclusion that DOT thinks we should explore the possibility of a Public Private Partnership (P3) for the public parking garage at Reese Davidson. The first time he said it was during our monthly call with HCID on April 8. David Cataldo couldn't join that call because he was sick so Ken gave us his opinion on that agenda item. He said during the 2008/09 crisis they considered some P3s but he is glad they didn't do them. He said this crisis is different and he is open to a P3. Becky and I had a follow-up conversation with Krista and Eric from CD11 to discuss the P3 idea and then Eric called Ken and on April 16th and confirmed that Ken remains open to a P3.

Can we schedule a 30 minute call to gather your thoughts on P3s? I cc:ed Azeen to keep him in the loop.

Thanks

Sarah

Blair Miller <blair.miller@lacity.org>

Tue, Apr 21, 2020 at 2:43 PM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: Becky Dennison <bdennison@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>

Hi Sarah,

Thanks for the update.. I think having a call is a good idea.

I am copying the Chief of our Asset Management Group, Jacqueline Wagner. She has a great deal of experience with P3s in the City and she should be included in this conversation.

I have the ability to check the City employee's schedules, and it looks like Jaki, Azeen and I are free on Thursday at 11 a.m. and 4 p.m., if either of these times work for you.

Thank you,

Blair Miller

Office of the City Administrative Officer | City of Los Angeles

Asset Management

(d) 213-473-7598 (f) 213-473-7514

200 North Main Street Suite 1500, LA 90012

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>

Tue, Apr 21, 2020 at 3:01 PM

To: Blair Miller <blair.miller@lacity.org>

Cc: Becky Dennison <bdennison@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>

Becky and I are both on a call at 11am but I am free at 4pm.

Becky are you available at 4pm? If not, could Allison fill in for you?

Thanks

Sarah

Sent from my iPhone

On Apr 21, 2020, at 2:43 PM, Blair Miller <blair.miller@lacity.org> wrote:

[Quoted text hidden]

Becky Dennison <bdennison@vchcorp.org>

Tue, Apr 21, 2020 at 4:53 PM

To: Sarah Letts <sletts@hollywoodhousing.org>, Blair Miller <blair.miller@lacity.org>

Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>

I can do Thursday at 4. I have an interview at 3, so I might be just a couple minutes late., but I'll be on as close to 4 as possible.

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>

Tue, Apr 21, 2020 at 5:45 PM

To: Becky Dennison <bdennison@vchcorp.org>, Blair Miller <blair.miller@lacity.org>

Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>

Great – I will send out the meeting invite and we'll use our conference call number.

Have a good evening!

Sarah

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson - Schedule Request (Public Parking P3)

3 messages

Allison Riley <ariley@vchcorp.org>

Mon, Jun 1, 2020 at 12:18 PM

To: "ken.husting@lacity.org" <ken.husting@lacity.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>

Hello, as we've previously discussed, we'd like to set-up a call with the RDC team and the CAO, Mayor's Office, and DOT to review the next steps in establishing a P3 for the public parking lot at RDC.

Please complete this Doodle poll and let us know your availability: <https://doodle.com/poll/q8ei3nsuetmkiwuu>

I corrected the Sunday, June 14th times to Monday. If you have already completed the poll and are available on the 15th, please return to Doodle, or let me know.

Please fill out the Doodle by end of day tomorrow, Tuesday, June 2nd.

Thanks. We look forward to connecting in the next week or two. Thanks!

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Mon, Jun 1, 2020 at 1:09 PM

To: Allison Riley <ariley@vchcorp.org>

Cc: "ken.husting@lacity.org" <ken.husting@lacity.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Eleanor Atkins

<eatkins@hollywoodhousing.org>, Krista Kline <krista.kline@lacity.org>, Eric Bruins <eric.bruins@lacity.org>, Blair Miller <blair.miller@lacity.org>

Hi all,

Since this a CD 11 project, we believe the Council Office should be involved, and I've cc'ed Krista Kline and Eric Bruins so they can respond.

Thank you,

Mandana Khatibshahidi | 213.473.9729

Asset Management Group | Office of the City Administrative Officer (CAO)

City Hall East, 15th Floor

[City of Los Angeles](#)

[Quoted text hidden]

Eric Bruins <eric.bruins@lacity.org>

Mon, Jun 1, 2020 at 5:01 PM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Cc: Allison Riley <ariley@vchcorp.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, Azeen Khanmalek

<azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, Becky Dennison

<bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna

<vsenna@hollywoodhousing.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Krista Kline <krista.kline@lacity.org>,

Blair Miller <blair.miller@lacity.org>

Thank you, Mandana. I've responded to the Doodle poll.

[Quoted text hidden]

--

Eric Bruins

Transportation Policy Director

Councilmember Mike Bonin

City of Los Angeles

213-444-3508 | www.11thdistrict.com



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Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson Automated Parking garage study

4 messages

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Blair Miller <blair.miller@lacity.org>

Tue, Apr 7, 2020 at 5:24 PM

Hi Blair,

I'm emailing to check in on the status of a request from DOT for authority to execute a 90-day agreement with Jeff Oviedo and Associates to evaluate the costs and benefits of an automated parking garage at Municipal Lot 731, 200 N. Venice Blvd. Thanks so much!



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

Blair Miller <blair.miller@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Tue, Apr 7, 2020 at 7:43 PM

Thanks Azeen!

Blair Miller
Office of the City Administrative Officer | City of Los Angeles
Asset Management
(d) [213-473-7598](tel:213-473-7598) (f) [213-473-7514](tel:213-473-7514)
[200 North Main Street Suite 1500, LA 90012](https://www.lacity.org/200-North-Main-Street-Suite-1500)

[Quoted text hidden]

Blair Miller <blair.miller@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Fri, Apr 10, 2020 at 5:24 PM

Hi Azeen. David Hirano from the CAO has questions about how this contract fits into the Mayor's new budget priorities - revenue, public safety and legal requirements.

I scheduled a meeting for the three of us on Monday afternoon.

I look forward to speaking with you then. Have a great weekend!

Blair Miller
Office of the City Administrative Officer | City of Los Angeles
Asset Management
(d) [213-473-7598](tel:213-473-7598) (f) [213-473-7514](tel:213-473-7514)
[200 North Main Street Suite 1500, LA 90012](https://www.lacity.org/200-North-Main-Street-Suite-1500)

On Tue, Apr 7, 2020 at 5:24 PM Azeen Khanmalek <azeen.khanmalek@lacity.org> wrote:
[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>

Fri, Apr 10, 2020 at 5:29 PM

To: Blair Miller <blair.miller@lacity.org>

Sounds good, talk to you then.

Azeen Khanmalek
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
(213) 448-4730

[Quoted text hidden]



Reese Davidson Community - Public Parking

14 messages

Eleanor Atkins <eatkins@hollywoodhousing.org>

Mon, Jun 15, 2020 at 12:51 PM

To: Allison Riley <ariley@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>, Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>, "Krista.Kline@lacity.org" <Krista.Kline@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Magdalena Zakaryan <magdalena.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>

Thank you all for the productive call on Friday. Here is a summary of the action items we discussed:

- GO Bonds - Mandana to email the group whether general obligation bonds can be used, by Friday, June 19
- Automated Parking Study - Azeen will try again to get City funding approved for the study and specs for a potential automated parking garage. If the funding is approved, City will ask the vendor to expedite completion of the study.
 - If not approved, VCH/HCH will determine if the project budget can absorb the cost of the study.
- P3 structure - We will continue to dual track the possibility of City funding and P3.
 - VCH/HCH will continue discussions with potential Parking Partners to add to the existing P3 and will provide more details to the group at the next all-hands call (please see Doodle link below)
 - Deal Terms - VCH/HCH to research taxes for private structure on public land

We would like to schedule another call within the next few weeks to report on our discussions with potential partners for the P3.

Please complete this Doodle survey with your availability: <https://doodle.com/poll/hsuwnzbvgvae6kxir>

Thanks,
Eleanor

Eleanor Atkins | Senior Housing Finance Consultant

Mailing Address: Hollywood Community Housing Corporation
5020 Santa Monica Blvd. | Los Angeles, CA | 90029-2412
C: [REDACTED] | F: 323.454.4679

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From: Allison Riley
Sent: Wednesday, June 3, 2020 11:55 AM

To: Allison Riley <ariley@vchcorp.org>; Sarah Letts <sletts@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Eleanor Atkins <eatkins@hollywoodhousing.org>; Becky Dennison <bdennison@vchcorp.org>; Anup Patel <apatel@vchcorp.org>; Azeen Khanmalek <azeen.khanmalek@lacity.org>; Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>; Blair Miller <blair.miller@lacity.org>; Jacqueline Wagner <jacqueline.wagner@lacity.org>; ken.husting@lacity.org <ken.husting@lacity.org>; david.cataldo@lacity.org <david.cataldo@lacity.org>; rauhman.lavergne@lacity.org <rauhman.lavergne@lacity.org>; eric.bruins@lacity.org <eric.bruins@lacity.org>; Krista.Kline@lacity.org <Krista.Kline@lacity.org>

Subject: Reese Davidson Community - P3 for Public Parking

When: Friday, June 12, 2020 1:00 PM-2:00 PM.

Where: Conference Call: 425-436-6315 Pin: 582249#

Thanks to everyone who filled out the doodle poll. Friday, June 12, 2020 at 1pm looked like it worked for everyone so far, so let's plan on talking then.

Please feel free to forward this invitation if I missed anyone on your team that wants to participate.

I'll follow-up with an agenda before the call.

We look forward to moving continuing this conversation.

Best regards,
Allison Riley
Senior Director of Housing Development
Venice Community Housing
200 Lincoln Boulevard
Venice, CA 90291
Office: 424-268-5120
Mobile [REDACTED]
Email: ariley@vchcorp.org

Sarah Letts <sletts@hollywoodhousing.org>
To: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Jun 16, 2020 at 11:40 AM

Hi Azeen

Have you heard anything about the status of the Venice Parking Study by Tierra West? Let me know if it is appropriate for me to reach out to Ken since he mentioned that a draft of the study should have been available by last Friday.

Thanks

Sarah

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Jun 16, 2020 at 1:25 PM

I haven't heard anything yet, good call. Ya I think it's a good time to reach out to him and ask if a draft is ready yet. Feel free to CC me.

[Quoted text hidden]

Azeen Khanmalek
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
(213) 448-4730

Sarah Letts <sletts@hollywoodhousing.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>

Tue, Jun 16, 2020 at 2:00 PM

Will do and I'll cc: you and Becky.

We had an internal discussion about the RDC project absorbing the almost \$70k for the Automated Parking Study. Can you share with us the scope and/or specific information that was given to the vendor? Our conversation got stuck on the basic question: Will the project pay for information it needs?

Thanks

Sarah

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>
To: "ken.husting@lacity.org" <ken.husting@lacity.org>, David Cataldo <david.cataldo@lacity.org>
Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Becky Dennison <bdennison@vchcorp.org>

Tue, Jun 16, 2020 at 2:08 PM

Good afternoon Ken and David

Could you give us an update on the Venice Parking Study? When do you expect a draft to be available for us to share with the staff of the Coastal Commission?

Thanks so much

Sarah

From: Eleanor Atkins <eatkins@hollywoodhousing.org>
Sent: Monday, June 15, 2020 12:51 PM
To: Allison Riley <ariley@vchcorp.org>; Sarah Letts <sletts@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Becky Dennison <bdennison@vchcorp.org>; Anup Patel <apatel@vchcorp.org>; Azeen Khanmalek <azeen.khanmalek@lacity.org>; Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>; Blair Miller <blair.miller@lacity.org>; Jacqueline Wagner <jacqueline.wagner@lacity.org>; ken.husting@lacity.org; david.cataldo@lacity.org; rauhman.lavergne@lacity.org; eric.bruins@lacity.org; Krista.Kline@lacity.org; Gohar Paronyan <gohar.paronyan@lacity.org>; Rick Tonthat <rick.tonthat@lacity.org>; Magdalena Zakaryan <magdalena.zakaryan@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>

[Quoted text hidden]

[Quoted text hidden]

Ken Husting <ken.husting@lacity.org>
To: Sarah Letts <sletts@hollywoodhousing.org>

Tue, Jun 16, 2020 at 2:56 PM

Cc: David Cataldo <david.cataldo@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Becky Dennison <bdennison@vchcorp.org>





Hi Sarah,

I'm reviewing the final draft now. Assuming everything is fine, we should be able to share it this week.

Take care,
Ken

Ken Husting, P.E.

Principal Transportation Engineer
Parking Management

Los Angeles Department of Transportation
213.972.8430    



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Sarah Letts <sletts@hollywoodhousing.org>

Tue, Jun 23, 2020 at 11:22 AM

To: Ken Husting <ken.husting@lacity.org>

Cc: David Cataldo <david.cataldo@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Becky Dennison <bdennison@vchcorp.org>

Hi Ken

Any updates on the status of the Venice Parking Study?

Thank you

Sarah

From: Ken Husting <ken.husting@lacity.org>

Sent: Tuesday, June 16, 2020 2:56 PM

To: Sarah Letts <sletts@hollywoodhousing.org>

[Quoted text hidden]

[Quoted text hidden]

Ken Husting <ken.husting@lacity.org>

Tue, Jun 23, 2020 at 11:35 AM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: David Cataldo <david.cataldo@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Eric Bruins <eric.bruins@lacity.org>





Hi Sarah,

The attached report is still in draft form, but I'm sharing it so that it doesn't cause any more delay. I personally am not happy with the report since they didn't give a true forecast of the future demand and simply agreed that the 250-300 spaces proposed for public parking should be enough. I was looking for a more definitive number with the methodology and they didn't do it. Nevertheless, the report in the current form should suffice for the Coastal Commission meeting.

Take care,
Ken

Ken Husting, P.E.

Principal Transportation Engineer
Parking Management

Los Angeles Department of Transportation
213.972.8430    



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[Quoted text hidden]

 **Final Draft Report v6 w appendices.pdf**
12988K

Sarah Letts <sletts@hollywoodhousing.org>

Tue, Jun 23, 2020 at 11:39 AM

To: Ken Husting <ken.husting@lacity.org>

Cc: David Cataldo <david.cataldo@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Eric Bruins <eric.bruins@lacity.org>

Thank you Ken. We appreciate that you have shared a copy of the report and we will reach out to the staff of the Coastal Commission to get a meeting on the calendar.

All my best

[Quoted text hidden]

Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Tue, Jun 23, 2020 at 6:10 PM

To: Eleanor Atkins <eatkins@hollywoodhousing.org>

Cc: Allison Riley <ariley@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>, "Krista.Kline@lacity.org" <Krista.Kline@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Magdalena Zakaryan <magdalena.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>

Hi everyone -

The replacement of Public Parking cannot be paid for by GO Bonds (only the parking associated with the housing itself can be paid for via GO bonds). At this time, it appears that MICLA financing *could* be a feasible option, and would have to be explored further, keeping in mind that things could change given the City's financial situation.

Thanks,

Mandana Khatibshahidi | 213.473.9729

Asset Management Group | Office of the City Administrative Officer (CAO)

City Hall East, 15th Floor

[City of Los Angeles](#)

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Azeen Khanmalek <azeen.khanmalek@lacity.org>

Wed, Jun 24, 2020 at 9:47 AM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Cc: Eleanor Atkins <eatkins@hollywoodhousing.org>, Allison Riley <ariley@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>, "Krista.Kline@lacity.org" <Krista.Kline@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Magdalena Zakaryan <magdalena.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>

Thanks Mandana. Can you go into a bit more detail about the MICLA funds? What are the variables that will determine whether these funds are an option? And what would be a feasible timeline for exploration of this option? Thank you.



Azeen Khanmalek, AICP

Affordable Housing Production Manager

Mayor's Office of City Homelessness Initiatives

200 N. Spring St., room 1725 | Los Angeles, CA 90012

Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>

Wed, Jun 24, 2020 at 11:26 AM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>, Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Cc: Eleanor Atkins <eatkins@hollywoodhousing.org>, Allison Riley <ariley@vchcorp.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>, "Krista.Kline@lacity.org" <Krista.Kline@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Magdalena Zakaryan <magdalena.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>

To the Group

I have the same questions about MICLA as Azeen. I found the attached ordinance dated 5-14-19 online for the Municipal Improvement Corporation of Los Angeles (MICLA) to provide the group with a little background information.

Thank you

Sarah

From: Azeen Khanmalek [mailto:azeen.khanmalek@lacity.org]

Sent: Wednesday, June 24, 2020 9:48 AM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Cc: Eleanor Atkins <eatkins@hollywoodhousing.org>; Allison Riley <ariley@vchcorp.org>; Sarah Letts

<sletts@hollywoodhousing.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Becky Dennison <bdennison@vchcorp.org>; Anup Patel <apatel@vchcorp.org>; Blair Miller <blair.miller@lacity.org>; Jacqueline Wagner <jacqueline.wagner@lacity.org>; ken.husting@lacity.org; david.cataldo@lacity.org; rauhman.lavergne@lacity.org; eric.bruins@lacity.org; Krista.Kline@lacity.org; Gohar Paronyan <gohar.paronyan@lacity.org>; Rick Tonthat <rick.tonthat@lacity.org>; Magdalena Zakaryan <magdalina.zakaryan@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>

Subject: Re: Reese Davidson Community - Public Parking

Thanks Mandana. Can you go into a bit more detail about the MICLA funds? What are the variables that will determine whether these funds are an option? And what would be a feasible timeline for exploration of this option? Thank you.

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[Quoted text hidden]



MICLA Lease Revenue Bond Ordinance.pdf
1558K

Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Thu, Jun 25, 2020 at 12:25 PM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: Azeen Khanmalek <azeen.khanmalek@lacity.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Allison Riley <ariley@vchcorp.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>, "Krista.Kline@lacity.org" <Krista.Kline@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Magdalena Zakaryan <magdalina.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>

All -

Our plan had been to obtain authority for the concept of using City funds to build the replacement public parking in June. However, due to the pandemic and ensuing and continuing budget crisis, we will instead pursue this path in November of this year, as part of LADOT's FY 2021-22 budget request.

In order to obtain conceptual approval to move forward with the use of MICLA and facilitate the budget request, it is critical that we know by November exactly what will be spent on the replacement public parking structure between the time period of July 2021 and June 2022.

Thanks,

Mandana Khatibshahidi | 213.473.9729

Asset Management Group | Office of the City Administrative Officer (CAO)

City Hall East, 15th Floor

[City of Los Angeles](#)

[Quoted text hidden]

Allison Riley <ariley@vchcorp.org>

Fri, Jun 26, 2020 at 3:11 PM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Cc: Azeen Khanmalek <azeen.khanmalek@lacity.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>, "Krista.Kline@lacity.org" <Krista.Kline@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Magdalena Zakaryan <magdalina.zakaryan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, Sarah Letts <sletts@hollywoodhousing.org>

Thanks again, Mandana. We look forward to exploring the MICLA idea further in the coming weeks.

We're also going to be gathering proposals from third-party parking vendors in July, so we think it's best to hold off on the next meeting of all parties until we have a better understanding of what the private market may be able to do.

We'll be in touch in July to schedule a meeting with this whole team in early August.

We appreciate everyone's commitment and creativity as we get closer to making the Reese Davidson Community a reality.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile



Email: ariley@vchcorp.org

From: Mandana Khatibshahidi [mailto:mandana.khatibshahidi@lacity.org]

Sent: Thursday, June 25, 2020 12:26 PM

To: Sarah Letts <sletts@hollywoodhousing.org>

[Quoted text hidden]

[Quoted text hidden]

ORDINANCE NO. ~~186101~~_____

An ordinance amending the Los Angeles Administrative Code to add Sections 5.162.47 and 5.162.48 to create two special funds for the lease financing referred to herein as the Municipal Improvement Corporation of Los Angeles (MICLA) Lease Revenue Bonds, Series 2019-A (Capital Equipment) and MICLA Lease Revenue Refunding Bonds, Series 2019-B (Real Property). The two special funds are: (i) a special fund to record certain accounting transactions for the MICLA Lease Revenue Bonds, Series 2019-A (Capital Equipment); and (ii) a special fund to record certain accounting transactions for the MICLA Lease Revenue Refunding Bonds, Series 2019-B (Real Property).

**THE PEOPLE OF THE CITY OF LOS ANGELES
DO ORDAIN AS FOLLOWS:**

Section 1. Sections 5.162.47 and 5.162.48 are added to the Los Angeles Administrative Code to read as follows:

Sec. 5.162.47. MICLA Lease Revenue Bonds, Series 2019-A (Capital Equipment).

There is created in the Treasury of the City of Los Angeles a special fund, named the "**MICLA Lease Revenue Bonds, Series 2019-A (Capital Equipment) Accounting Fund**" (Series 2019-A Accounting Fund) for the purpose of recording accounting transactions for the funds received from, and to be only used to retire certain maturities of commercial paper notes issued by MICLA, the proceeds of which were used to finance and refinance the acquisition of certain items of equipment of the City. The City Controller shall administer the Series 2019-A Accounting Fund. All earnings of the Series 2019-A Accounting Fund shall be retained in the Series 2019-A Accounting Fund to be used for the purposes permitted by the MICLA Lease Revenue Bonds, Series 2019-A (Capital Equipment) and Lease Revenue Refunding Bonds, Series 2019-B (Real Property) transaction, and the monies in the Series 2019-A Accounting Fund shall not revert to the Reserve Fund at the close of each fiscal year.

Sec. 5.162.48. MICLA Lease Revenue Bonds, Series 2019-B (Real Property).


There is created in the Treasury of the City of Los Angeles a special fund, named the "**MICLA Lease Revenue Refunding Bonds, Series 2019-B (Real Property) Accounting Fund**" (Series 2019-B Accounting Fund) for the purpose of recording accounting transactions for the funds received from, and to be only used to retire certain maturities of commercial paper notes issued by MICLA and to refund certain lease revenue bonds issued by MICLA, the proceeds of which were used to finance and refinance the acquisition and improvement of certain real property of the City. The City Controller shall administer the Series 2019-B Accounting Fund. All earnings of the Series 2019-B Accounting Fund shall be retained in the Series 2019-B Accounting Fund to be used for the purposes permitted by the MICLA Lease Revenue Bonds, Series 2019-A (Capital Equipment) and Lease Revenue Refunding Bonds, Series 2019-B (Real

Property) transaction, and the monies in the Series 2019-B Accounting Fund shall not revert to the Reserve Fund at the close of each fiscal year.

Sec. 2. The City Clerk shall certify to the passage of this ordinance and have it published in accordance with Council policy, either in a daily newspaper circulated in the City of Los Angeles or by posting for ten days in three public places in the City of Los Angeles: one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall; one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall East; and one copy on the bulletin board located at the Temple Street entrance to the Los Angeles County Hall of Records.

Approved as to Form and Legality

MICHAEL N. FEUER, City Attorney

By 
AMY PHAM
Deputy City Attorney

Date 4/9/19

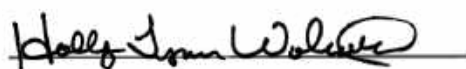
File No. _____

m:\econ dev_pub finance\public finance\amy pham\micla 2019 bonds\micla 2019 lrb fund ordinance.doc

The Clerk of the City of Los Angeles hereby certifies that the foregoing ordinance was passed by the Council of the City of Los Angeles.

CITY CLERK

MAYOR





Ordinance Passed 04/30/2019

Approved 05/07/2019

Ordinance Effective Date: 05/14/2019
Council File No.: 19-0369

DECLARATION OF POSTING ORDINANCE

I, **Staci Roberts** state as follows: I am, and was at all times hereinafter mentioned, a resident of the State of California, over the age of eighteen years, and a Deputy City Clerk of the City of Los Angeles, California.

Ordinance No. **186101** - a copy of which is hereto attached, was finally adopted by the Los Angeles City Council on **04/30/2019**, and under the direction of said City Council and the City Clerk, pursuant to Section 251 of the Charter of the City of Los Angeles and Ordinance No. 172959, I conspicuously posted a true copy of said ordinance at each of the three public places located in the City of Los Angeles, California, as follows: 1) one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall; 2) one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall East; 3) one copy on the bulletin board located at the Temple Street entrance to the Los Angeles County Hall of Records beginning on **05/14/2019** and will be continuously posted for ten or more days.

I declare under penalty of perjury that the foregoing is true and correct.



Deputy Clerk

Date: 05/10/2019

Ordinance Effective Date: 05/14/2019

Council File No.: 19-0369



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson

5 messages

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Tue, Apr 28, 2020 at 3:56 PM

Hi Ken,

I hope you're well. I believe you may have spoken with the folks from HCHC and CD 11 about this, but wanted to make sure you're in the loop as well. We are moving forward with some tentative exploration of the possibility of a PPP for the parking garage portion of the Reese Davidson project.

I had a couple questions for you. One I wanted to check in on the status of the Tierra West study. Second, do you know of any other studies that may have been done in terms of parking demand and/or automated parking for the Venice area? We heard that there may have been some studies done a couple years back on these issues. Also - does DOT have design standards or specifications in terms of parking garage design and/or layout? And lastly, who from DOT do you think would need to be a part of such a conversation about a PPP? Yourself? Anyone else from DOT? Thanks so much for your help.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

Ken Husting <ken.husting@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Tue, Apr 28, 2020 at 5:23 PM

Hi Azeen,

I'm good. Hope you are too. Thanks for reaching out to me. Yes, I've heard from HCID and CD 11 about the desire to explore the possibility of a P3. Below are answers to your questions.

- Status of Tierra West: The study is expected to be completed within the next 2-3 weeks. The consultant is revising the report based on our comments.
- Other studies: I believe the Planning Dept. did a parking study of the Venice area, but may not have focused on the future demand of this lot like our study does.
- Design standards: LADOT does not have any typical design standards for parking garages other than some specific requirements about ADA compliance, size of parking spaces, EV charging, etc. Building and Safety or BOE may have some design standards when it comes to traditional parking garage design. I doubt any City department has design standards when it comes to automated garages, hence why we were trying to bring a consultant on board to help us.
- Part of the P3 discussion: From LADOT: me, Angela Berumen (Budget/Admin Chief MA), and David Cataldo (Acting Parking Facilities Division Manager)

Please let me know if you need anything else.

Thanks,
Ken

Ken Husting, P.E.

Principal Transportation Engineer
Parking Management



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[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Wed, Apr 29, 2020 at 8:30 AM

Thanks Ken. I'll make sure Angela, David, and yourself are included in further conversations. Where can DOT's requirements be found? In the LAMC?

Also, you had mentioned that you had numbers as to the gross revenue of the parking lot at the Reese Davidson site. Could you share that information with me? Do you think there is any other information or data that comes in, from any other source, that may shed light on what the net revenue is? Thanks so much.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Tue, May 5, 2020 at 5:17 PM

Hi Ken,

Just wanted to follow up on my last email. Thanks so much.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Ken Husting <ken.husting@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Tue, May 5, 2020 at 5:45 PM

Hi Azeen,

Sorry for the delay. We have an agreement with HCID and the CAO for certain requirements to be met with replacement parking for affordable housing. See attached. There are also more specific parking space requirements set by Building and Safety in their building code.

Lot 731 Annual Gross Revenue

- FY 2018-19: \$1,000,131
- FY 2017-18: \$1,041,512

Because the way the budget is set up, calculating the net revenue would be more of a budgeting exercise for maybe the CAO. They would need to take into account several costs including, but not limited to any maintenance, enforcement, and administrative and overhead costs. This may be more work than it is worth.

Take care,

Ken _____

Ken Husting, P.E.

Principal Transportation Engineer
Parking Management

Los Angeles Department of Transportation

213.972.8430    



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15200020 MOU LADOT Parking Replacement Policy Final Signed.pdf

637K



CITY HALL
LOS ANGELES, CALIFORNIA 90012

**MEMORANDUM OF UNDERSTANDING AMONG THE LOS ANGELES
HOUSING AND COMMUNITY INVESTMENT DEPARTMENT, THE LOS
ANGELES DEPARTMENT OF TRANSPORTATION, AND THE CITY
ADMINISTRATIVE OFFICER OF THE CITY OF LOS ANGELES**

This Memorandum of Understanding ("MOU") is hereby made and entered into by and between the Housing and Community Investment Department of the City of Los Angeles (HCIDLA), the Los Angeles Department of Transportation (LADOT), and the City Administrative Officer (CAO) of the City of Los Angeles regarding a parking replacement policy for LADOT Special Parking Revenue Fund (SPRF) Off-Street Parking Facilities, which may be transferred to HCIDLA for the development of affordable housing. HCIDLA, LADOT, and CAO are herein collectively referred to as the "Parties".

RECITALS

WHEREAS, in response to the lack of affordable housing in the City of Los Angeles, the Mayor and Council adopted a Comprehensive Homeless Strategy (CHS) that describes ongoing responsibilities and measurable actions, including identifying potential City-owned sites for affordable housing;

WHEREAS, in response to the CHS, CAO created and administers an Affordable Housing Opportunity Sites (AHOS) program to evaluate City-owned sites for their potential use as affordable housing sites;

WHEREAS, in response to the housing crisis, HCIDLA established a Land Development Unit to facilitate the creation of affordable housing on publicly owned land;

WHEREAS, when a City-owned property has been evaluated as a potential affordable housing site by the CAO and authorized by the City Council, HCIDLA selects

a developer through a competitive process and negotiates a development agreement for supportive and affordable housing on the property;

WHEREAS, LADOT operates and maintains 111 off-street parking facilities, including 15 parking structures and 96 surface parking lots;

WHEREAS, all off-street parking facilities in Attachment A are maintained by the SPRF;

WHEREAS, as of the date of this document, 29 of the City's surface parking lots are under consideration or in development for housing;

WHEREAS, in each case, individual replacement parking requirements were negotiated between LADOT and HCIDLA;

WHEREAS, as part of their continuing effort to support the City's need for affordable housing sites, the LADOT presented a Replacement Parking Policy, outlined in this MOU, for the City's off-street parking facilities to streamline the replacement parking plan negotiation.

AGREEMENT

In support of the stated purpose as described above, the parties have agreed to the following:

- 1) If directed by Council Motion, any surface parking lot on the off-street parking facilities list, and the parking structure at 14401 Friar Street, may be evaluated by the CAO as a suitable site for affordable housing, following the adopted Asset Management Evaluation Framework and the Opportunity Site Review Process. Such evaluation will include a review of all applicable Vehicle Parking Districts, Parking Waivers, and existing parking agreements or easements.
- 2) For all off-street parking facilities considered under the Framework, the amount of replacement parking will be determined on the basis of the following matrix:

Replacement Parking Determination

| | | Occupancy ¹ | | |
|------------------------------|----------------------------------|--|--|---|
| | | Low (<40%) | Medium (≥40% to <70%) | High (≥70%) |
| # of Existing Parking Spaces | 0-24 (18 lots) | No replacement parking. | No replacement parking. | No replacement parking. |
| | 25-99 (71 lots) | No replacement parking. | Some replacement parking except if the calculated number is < 25 spaces. If < 25 spaces, no replacement parking required. Replacement number based on occupancy + 15% additional spaces. | Full replacement parking. Additional parking spaces beyond existing at request and expense of LADOT. ² |
| | 100+ (7 lots and 1 structure) | No replacement parking except when ≥ 40 spaces are occupied during peak period. If ≥ 40, then the number of occupied spaces + 15% is the replacement number. | Some replacement parking. Replacement number based on occupancy + 15% additional spaces. | Full replacement parking. Additional parking spaces beyond existing at request and expense of LADOT. ² |

¹ Occupancy to be determined by the weekly average peak number of the vehicles parked in the lot. LADOT or its designee to conduct the occupancy counts.

² Additional spaces to be funded through the SPRF. Additional spaces may be required in special cases where parking demand is expected to increase because of a change in demand, for example, significant removal of nearby on- or off-street parking is anticipated.

- 3) Authorization for Housing on LADOT Off-Street Parking Facility
 - a. A Council Motion initiates the assessment of any parking lot for use as housing. The CAO assessment process includes consultation with HCIDLA and LADOT.
 - b. Once a parking lot has been determined to be a suitable site for affordable housing, the CAO will submit a report to the Municipal Facilities Committee (MFC) that will include a request for approval by the Council and the Mayor for the following:
 - i. Authority to transfer the jurisdiction of the site from LADOT to HCIDLA. (See "Transfer of Jurisdiction", Section 8 below).
 - ii. Authorization for HCIDLA to issue a solicitation document, such as a Request for Qualifications (RFQ) or a Request for Proposals (RFP).

- c. In that same report, the CAO will report the estimated fiscal impact, including annual loss of revenue to SPRF (if any) and an approximate land value of the parking lot based on a Class "C" Appraisal.
 - d. For LADOT lots where replacement public parking will be provided on site, LADOT will be party to a Joint Development Agreement (JDA) with HCIDLA and the affordable housing developer. This JDA will enumerate the rights and responsibilities of each party.
- 4) Permanent Replacement Parking Determination
- a. Permanent Replacement Public Parking requirements will be set according to the matrix in Section 2, above.
 - b. Within 180 days after the date of this MOU, LADOT will review the daily rate charged at each pay station and metered facility with 25 or more spaces and will increase rates, subject to approval of the Board of Transportation Commissioners, to a level that increases revenue potential while still serving the interest of the general public.
 - c. Once an LADOT lot that is currently free of charge has been approved by City Council for development, then the lot will be metered by LADOT for a minimum of six months up to one year, subject to the approval of the Board of Transportation Commissioners, in order to determine the true parking demand based on the reduction in occupancy.
 - d. Based on the increased rates, LADOT will complete a parking demand analysis to establish baseline replacement parking requirements for all off-street parking facilities with 25 or more spaces.
 - e. The parking demand analysis will be used as the basis for the replacement parking requirements for up to five (5) years after the date of completion unless superseded by a more recent LADOT analysis.
 - f. Prior to the completion of the parking demand analysis, LADOT will work with the CAO and HCIDLA in good faith to determine the individual replacement parking requirements for a specific facility, if such a determination is required in order to facilitate the development of affordable housing.

- 5) Cost Burden
 - a. The cost of replacement parking shall not be paid from the SPRF unless there is a net increase of additional spaces requested by LADOT.
- 6) Temporary Replacement Public Parking Requirements

Developer will make a good faith effort to meet the following temporary replacement public parking requirements:

 - a. Number of spaces: The same number that are required to be replaced permanently.
 - b. Location of spaces: Within ½ mile of the existing parking lot.
 - c. Rent or lease costs: If any, will be incurred by the housing developer.
 - d. LADOT or the contracted operator will incur all operation and maintenance costs.
 - e. All revenue generated by the spaces will be collected by LADOT.
 - f. Up to 30% of the temporary replacement, public parking spaces may be compact.
 - g. In the event that the proposed developer of the property is unable to identify a suitable location after a good faith effort to satisfy the requirements, LADOT will work with HCIDLA, CAO, and the developer to help satisfy the requirements.
- 7) Solicitation (Request for Proposals/RFP) Documents
 - a. LADOT will be given at least 10 working days to review and comment on the parking section of any draft solicitation (RFP) document.
 - b. Parking requirements as established in the solicitation (RFP) cannot be changed by LADOT once released for competitive bid.
- 8) Transfer of Jurisdiction
 - a. Transfer of Jurisdiction will be recommended in the initial MFC report and approved by Mayor and Council. The transfer will be completed on the following schedule:
 - i. The proposed Date of Transfer will be stated in the Development Agreement.
 - ii. LADOT will receive notification from HCIDLA in writing 45 days prior to the date by which the transfer will be completed.

- iii. HCIDLA will be responsible for coordinating with GSD on the legal requirements to effectuate the transfer.

9) **Replacement Parking Design**

- a. Replacement parking shall consist of no more than 10% compact spaces. Exceptions can be made on a case-by-case basis by LADOT, based on cost burden to the affordable housing developer (ex. additional floor of construction for a few parking spaces). In such cases, HCIDLA will present the request in writing, with supplemental materials including budgets and site plans. LADOT may request additional information for review. Once all information has been transmitted to LADOT, LADOT will respond within 30 calendar days.
- b. No stacked parking allowed except for in automated garages.

10) **Replacement Parking Operation and Maintenance**

- a. All replacement public parking shall be paid public parking to cover increased operation and maintenance expenses.
- b. LADOT shall operate and maintain the replacement public parking.
- c. LADOT shall collect all revenue and pay all expenses related to operation of the replacement public parking.

11) **Property Development Responsibilities**

- a. All developments shall provide automated Parking Access and Revenue Control System (PARCS) equipment that meets LADOT requirements.
- b. All developments shall separate access and utilities between public and private spaces, to the extent possible. If the spaces cannot be physically separated, then a formula assigning proportionate cost sharing will be determined.

12) **Electric Vehicle (EV) Requirements**

- a. Five percent (5%) of the total public parking spaces shall be fully equipped with EV infrastructure.
- b. An additional ten percent (10%) of the public spaces shall be partially equipped with EV infrastructure to allow for easy conversion to EV service.
- c. Spaces designated for EV use cannot be compact size.

- d. The housing development must include a dedicated electric meter for EV chargers.
 - e. These EV requirements shall be adjusted to conform in accordance to any updated policy adopted by the State, or City Council and Mayor, subsequent to this MOU.
- 13) Replacement parking in areas with several lots within walking distance of each other (ex. 1,000 feet or less) may consolidate replacement parking on one or more of the lots. The distance threshold will be evaluated on a case-by-case basis by LADOT.
- 14) SPRF Reimbursement

Affordable housing developments on City-owned land pay a commitment fee and, if approved by Mayor and Council, a ground lease fee. The fees are as follows:

Project Deposit. This non-refundable project deposit is paid to HCIDLA by the developer when they sign the Exclusive Negotiating Agreement (ENA). If the project proceeds to construction, this deposit will be included as a project cost. If the project does not proceed to construction due to the fault of the developer, this fee will be transferred to LADOT for deposit in the SPRF.

If Mayor and Council approve a ground lease on a LADOT-controlled site, payments from the development may be shared with LADOT, subject to the development's funding source restrictions. The remainder of this section describes how these payment will be distributed.

Base Rent. Approved ground leases may include a base rent payment to HCIDLA.

Residual Receipts. The ground lease may include a "residual receipts" lease payment. The definition of "residual receipts" is the payment of outstanding obligations to the public agencies after all other operating expenses have been paid. The "residual receipts" amount is the difference between the income to the property and the expenses, annually. Soft lenders, including the City, are entitled to a share of the residual receipts.

The City's pro rata share of the residual receipts, as set out in the Lease Agreement, is referred to here as the "Annual Residual Receipts payment."

Annual Residual Receipts payment are due for the full term of the ground lease, and any extension terms. The interest rate is set in the lease documents.

For housing developments built on land that was funded by SPRF, the value of that land, plus any other funds invested by the City, will be considered the total amount of the City's investment. The Annual Residual Receipts payment will be allocated as follows:

- a. For LADOT parking facilities where all of the permanent parking is replaced, the SPRF will receive no residual receipt payment.
- b. For LADOT parking facilities where there is no permanent replacement parking, the SPRF will receive a percentage of the Annual Residual Receipts payment. The amount paid to SPRF will be based on the value of the land as a percentage of the City's total investment in the property. That percentage will be set in the lease agreements.
- c. For LADOT parking facilities where only part of the permanent parking is replaced, the SPRF will receive a percentage of the Annual Residual Receipts Payment. The amount paid to SPRF will be based on the value of the land as part of the City's total investment in the property, prorated according to how many parking spaces are not replaced. That percentage will be set in the lease agreements.

HCIDLA will be responsible for securing the Class "A" appraisal that determines the value of the land. LADOT will have the right to request an appraisal review.

E. FURTHER ASSURANCES: COOPERATION

The Parties agree and promise to act in good faith, and to use their best efforts, to effectuate the terms and conditions of this MOU. The Parties further agree to execute all further documents necessary and appropriate, to carry out and effectuate the terms of this MOU and any other obligations contained in this Agreement. The Parties further understand and agree that the assurances of this MOU are non-binding.

F. EFFECTIVE DATE AND TERMINATION

This MOU is effective upon the date of the last signature below and shall remain effective for a period of five (5) years from the date of last signature below. The MOU may be extended if all parties involved agree.

G. MODIFICATION

Modifications of this MOU shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by all parties, prior to any changes being performed.

H. COUNTERPARTS

This MOU may be executed in counterparts, each of which, when the parties hereto have signed this MOU, shall be one and the same instrument.

[REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this MOU as of the last written below.

Executed this _____ day of _____, 2019

For: Los Angeles Housing + Community Investment Department

By: _____

RUSHMORE D. CERVANTES

General Manager

Executed this _____ day of _____, 2019

For: Los Angeles Department of Transportation

By: _____

SELETA J. REYNOLDS

General Manager

Executed this 29th day of October, 2019

For: City Administrative Officer

By: _____


RICHARD H. LLEWELLYN, JR.

City Administrative Officer

Doc ID: 15200020

IN WITNESS WHEREOF, the parties hereto have executed this MOU as of the last written below.

Executed this 31ST day of OCTOBER, 2019

For: Los Angeles Housing + Community Investment Department

By:

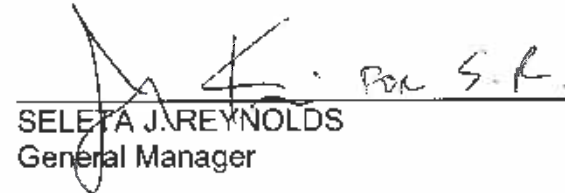


RUSHMORE D. CERVANTES
General Manager

Executed this 5TH day of NOVEMBER, 2019

For: Los Angeles Department of Transportation

By:



SELETA J. REYNOLDS
General Manager

Executed this _____ day of _____, 2019

For: City Administrative Officer

By:

RICHARD H. LLEWELLYN, JR.
City Administrative Officer

Doc ID: 15200020



Azeen Khanmalek <azeen.khanmalek@lacity.org>

Reese Davidson

7 messages

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Wed, May 27, 2020 at 1:20 PM

Hi Ken,

I just wanted to follow up about what that other site you were talking about for Reese Davidson. Also - any movement on that Tierra West study?



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Fri, May 29, 2020 at 4:38 PM

Hi Ken,

Just wanted to follow up on the alternative lot. Also, for the Tierra west study, can we potentially see a draft copy or something?

Azeen Khanmalek
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
(213) 448-4730
[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Tue, Jun 2, 2020 at 11:48 AM

Hi Ken,

Just wanted to follow up again.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Ken Husting <ken.husting@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Tue, Jun 2, 2020 at 12:24 PM

Hi Azeen,

Only about an hour ago did I get a response from my staff that was off since last week. The Tierra West contractor has been unresponsive. We are giving them a deadline to provide justification for the cost increase or they need to finalize the report.

As for the alternate property site, it is Lot 701 at 2150 at Dell Ave (just a block away).

Lot 731 (Current proposed AHOS site): 177 spaces in FY19 generated gross revenue of \$1 million and is probably worth tens of millions to the City for market rate development, which a developer would have to replace the existing parking for free.

Lot 701 (Alternate site to Lot 731): 150 spaces in FY19 generated gross revenue of \$222.5K and, based on occupancy rates, we could request minimal to possibly no parking replacement from affordable housing developer.

Take care,
Ken

Ken Husting, P.E.

Principal Transportation Engineer
Parking Management

Los Angeles Department of Transportation
213.972.8430



image.gif

LADOT



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[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Thu, Jun 4, 2020 at 3:18 PM

Thanks Ken. What's the deadline that DOT is giving them? Is there a draft version of the report you are able to share? The developers told me that the Coastal Commission is adamant that they want to see parking data, so even some rough data from a draft that they can use in a meeting with the commission would be very helpful. Thanks so much.

Azeen Khanmalek
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
(213) 448-4730

[Quoted text hidden]

Ken Husting <ken.husting@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Thu, Jun 4, 2020 at 6:59 PM

Hi Azeen,





A couple of days ago the consultant finally abandoned their request for additional funding. They have until the end of this month to get us the final version of the report. We may get a shareable draft as early as June 12th.

Have a good one.

Ken

Ken Husting, P.E.

Principal Transportation Engineer
Parking Management

Los Angeles Department of Transportation
213.972.8430    



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[Quoted text hidden]

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Ken Husting <ken.husting@lacity.org>

Thu, Jun 4, 2020 at 7:12 PM

Very exciting! Thanks Ken, looking forward to it. Have a good weekend.

Azeen Khanmalek
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
(213) 448-4730

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

RE: Invitation: Reese Davidson - Public Parking / MICLA @ Fri Jul 10, 2020 1pm - 2pm (PDT) (ariley@vchcorp.org)

3 messages

Allison Riley <ariley@vchcorp.org>

Tue, Jul 7, 2020 at 2:44 PM

To: "mandana.khatibshahidi@lacity.org" <mandana.khatibshahidi@lacity.org>, "sletts@hollywoodhousing.org" <sletts@hollywoodhousing.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "augusto.gutierrez@lacity.org" <augusto.gutierrez@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Blair Miller <blair.miller@lacity.org>, Natalie Brill <natalie.brill@lacity.org>, Anup Patel <apatel@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>

Thanks again for taking some time for us to understand the MICLA financing. Here's an agenda for our discussion.

1. Introductions
2. MICLA Overview
3. Developer Questions:
 - a. Finance policy indicates that projects need to be competitively bid. We want to confirm that the competitive bidding is referring to construction bids.
 - b. Is MICLA only available if the City stays in as the developer as they would be the borrower/lessee until MICLA is paid off?
 - c. Is it possible for a third party developer to borrow from MICLA, if the project meets the objectives? For example, could this be a tool to partially fund the development of the parking lot?
 - d. Is the budget by Fiscal Year that you need by November, a result of construction bids or estimates?
 - i. What are the issues if we're over or under in a given fiscal year?
 - e. If the city allocates MICLA in one fiscal year, what's the risk that it wouldn't approve funding for the balance in the following year? When would financing for the whole project be committed?

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

-----Original Appointment-----

From: mandana.khatibshahidi@lacity.org [mailto:mandana.khatibshahidi@lacity.org]

Sent: Friday, June 26, 2020 7:45 PM

To: mandana.khatibshahidi@lacity.org; sletts@hollywoodhousing.org; azeen.khanmalek@lacity.org; Jacqueline Wagner; augusto.gutierrez@lacity.org; Becky Dennison; Blair Miller; Natalie Brill; Anup Patel; Allison Riley

Subject: Invitation: Reese Davidson - Public Parking / MICLA @ Fri Jul 10, 2020 1pm - 2pm (PDT) (ariley@vchcorp.org)

When: Friday, July 10, 2020 1:00 PM-2:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where:

You have been invited to the following event.

Reese Davidson - Public Parking / MICLA

When Fri Jul 10, 2020 1pm – 2pm Pacific Time - Los Angeles

Joining info Join with Google Meet



Join by phone



Calendar ariley@vchcorp.org

Who

- mandana.khatibshahidi@lacity.org - organizer
- sletts@hollywoodhousing.org
- azeen.khanmalek@lacity.org
- Jacqueline Wagner
- augusto.gutierrez@lacity.org
- bdennison@vchcorp.org
- Blair Miller
- Natalie Brill
- apatel@vchcorp.org
- ariley@vchcorp.org

[more details »](#)

Going (ariley@vchcorp.org)? **Yes - Maybe - No** [more options »](#)

Invitation from [Google Calendar](#)

You are receiving this courtesy email at the account ariley@vchcorp.org because you are an attendee of this event.

To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at <https://www.google.com/calendar/> and control your notification settings for your entire calendar.

Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Fri, Jul 10, 2020 at 3:59 PM

To: Allison Riley <ariley@vchcorp.org>

Cc: "sletts@hollywoodhousing.org" <sletts@hollywoodhousing.org>, "azeen.khanmalek@lacity.org"

<azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "augusto.gutierrez@lacity.org"

<augusto.gutierrez@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Blair Miller <blair.miller@lacity.org>, Natalie Brill

<natalie.brill@lacity.org>, Anup Patel <apatel@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Helmi

Hisserich <helmi.hisserich@lacity.org>, Ken Husting <ken.husting@lacity.org>, David Cataldo <david.cataldo@lacity.org>,

Gohar Paronyan <gohar.paronyan@lacity.org>, Eric Bruins <eric.bruins@lacity.org>, Krista Kline <krista.kline@lacity.org>

Hi Everyone,

Thank you for participating on the call this afternoon. Below is a recap of the main discussion points. Please let us know if you have any other questions, and let me know if I missed anything.

MICLA Q&A

1. Finance policy indicates that projects need to be competitively bid. We want to confirm that the competitive bidding is referring to construction bids.

Per City Charter, the projects must be competitively bid. In certain cases, the City Attorney *may* deem it legal/feasible to enter into a sole source contract, but competitive bidding is the rule, not the exception.

2. Is MICLA only available if the City stays in as the developer as they would be the borrower/lessee until MICLA is paid off?

If MICLA is used, it has to be a City project for the public's benefit, and a City department would have to be the PM. The General Fund would be obligated to pay MICLA annually for the capital used for the construction of the parking structure.

3. Is it possible for a third party developer to borrow from MICLA, if the project meets the objectives? For example, could this be a tool to partially fund the development of the parking lot?

MICLA is a financing tool managed by the City and available only for the City's use. An outside third party cannot borrow from MICLA.

4. Is the budget by Fiscal Year that you need by November, a result of construction bids or estimates?

The City's budget process begins in November and departments develop their budget requests for consideration by the Mayor's Office. In a typical year, once a project has made it through the review process and it is included in the Mayor's Budget (released on April 20th), it is usually, but not always approved. However, the current budget year is not typical, and next year is unlikely to be either. It should be noted that all actions included in the Mayor's Budget are subject to deliberations and changes by the City Council.

5. What are the issues if we're over or under in a given fiscal year?

If the project is over in a given fiscal year, and an amount is needed in excess of that appropriation amount, then Council/Mayor would have to approve. If the project is under the appropriation amount, then the funding can roll over to the following fiscal year. Per IRS rules, MICLA funds must be spent within three years from the date of appropriation.

6. If the city allocates MICLA in one fiscal year, what's the risk that it wouldn't approve funding for the balance in the following year?

As Natalie stated, it is very rare for an appropriation to be 'canceled,' and the last time this occurred was during the 2008 recession. In light of the ongoing pandemic and current state of the economy, we cannot predict anything. However, we can try to anticipate and plan as best as possible.

7. When would financing for the whole project be committed?

The total budget would be approved when the Council/Mayor approve the entire project and commit to

funding the budgeted amount. However, the funds are authorized/allocated on an annual basis depending on the actual amount needed per the expenditure plan.

Have a great weekend.

Thanks,

Mandana Khatibshahidi | 213.473.9729

Asset Management Group | Office of the City Administrative Officer (CAO)

City Hall East, 15th Floor

[City of Los Angeles](#)

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>

Fri, Jul 10, 2020 at 4:52 PM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>, Allison Riley <ariley@vchcorp.org>

Cc: "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "augusto.gutierrez@lacity.org" <augusto.gutierrez@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Blair Miller <blair.miller@lacity.org>, Natalie Brill <natalie.brill@lacity.org>, Anup Patel <apatel@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, Ken Husting <ken.husting@lacity.org>, David Cataldo <david.cataldo@lacity.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Eric Bruins <eric.bruins@lacity.org>, Krista Kline <krista.kline@lacity.org>

Thank you Mandana and everyone else for joining the call. It was very informative and if other questions arise we will reach out again.

Have a good weekend.

Sarah

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

RE: MICLA

2 messages

Allison Riley <ariley@vchcorp.org>

Fri, Jun 26, 2020 at 2:59 PM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Cc: Blair Miller <blair.miller@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Anup Patel <apatel@vchcorp.org>

Hi Mandana, thanks for helping to coordinate this call. Here's our availability:

Tues 7/7: noon

Weds 7/8: 1pm

Friday 7/10: 1pm

Tuesday 7/14: 3pm or later

Weds 7/15: 1pm

Friday 7/17: 1pm

I'm adding Azeen to see if he's available to join us.

Have a great weekend!

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

From: Mandana Khatibshahidi [mailto:mandana.khatibshahidi@lacity.org]

Sent: Friday, June 26, 2020 12:02 PM

To: Sarah Letts <sletts@hollywoodhousing.org>
Cc: Blair Miller <blair.miller@lacity.org>; Allison Riley <ariley@vchcorp.org>; Becky Dennison <bdennison@vchcorp.org>
Subject: Re: MICLA

Hi all -

We can schedule a call with Natalie. Currently, she and her team are busy with budget year-end activities, but she'll be available in July. Please provide some date/time options for the week of July 6 and July 13.

Thanks,

Mandana Khatibshahidi | 213.473.9729

Asset Management Group | **Office of the City Administrative Officer (CAO)**

City Hall East, 15th Floor

[City of Los Angeles](#)

On Thu, Jun 25, 2020 at 4:54 PM Sarah Letts <sletts@hollywoodhousing.org> wrote:

Got it – thank you

From: Blair Miller <blair.miller@lacity.org>
Sent: Thursday, June 25, 2020 4:15 PM
To: Sarah Letts <sletts@hollywoodhousing.org>
Cc: Allison Riley <ariley@vchcorp.org>; Becky Dennison <bdennison@vchcorp.org>; Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>
Subject: Re: MICLA

Sarah, Becky and Allison,

Please copy Mandana Khatibshahidi on all matters related to Reese Davidson - thank you!

Mandana will consult with the team regarding a response.

Thank you,

Blair Miller

Office of the City Administrative Officer | City of Los Angeles

Asset Management

213-473-7598

200 North Main Street Suite 1500, LA 90012

On Thu, Jun 25, 2020 at 3:20 PM Sarah Letts <sletts@hollywoodhousing.org> wrote:

Hi Blair

I shared info with the team about MICLA and I'm cc:ing Allison and Becky from VCH because Allison is putting in a lot of time trying to figure out the public parking for Reese Davidson. Any chance we could set up a 30 minute call with Natalie sooner rather than later? In case you want to preview questions we have for Natalie, some of Allison's questions are summarized below:

- In the City's Finance Policies, Allison found a section that talks about what and how MICLA can be used for lease-purchase transactions. One thing that caught her eye was that it can only be used for projects that have already been competitively bid. We want to confirm that the competitive bidding is referring to construction bids.
- Is MICLA only available if the City stays in as the developer as they would be the borrower/lessee until MICLA is paid off?
- Is it possible for a third party developer to borrow from MICLA if the project meets the objectives? For example, could this be a tool to partially fund the development of the parking lot? If so, VCH/HCH may want to modify our outreach to potential parking partners.

Thank you

Sarah

Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Fri, Jun 26, 2020 at 3:24 PM

To: Allison Riley <ariley@vchcorp.org>

Cc: Blair Miller <blair.miller@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Anup Patel <apatel@vchcorp.org>

Thanks, Allison. I just sent out an invite for 7/10 at 1PM.

Have a good weekend.

[Quoted text hidden]

[Quoted text hidden]



Azeen Khanmalek <azeen.khanmalek@lacity.org>

RE: Reese Davidson - Agenda for our meeting on Weds Feb 12th

3 messages

Sarah Letts <sletts@hollywoodhousing.org>

Tue, Feb 11, 2020 at 12:28 PM

To: Rick Tonthat <rick.tonthat@lacity.org>

Cc: Becky Dennison <bdennison@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalena Zakaryan - Housing and Community Investment Department (magdalena.zakaryan@lacity.org)" <magdalena.zakaryan@lacity.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "apatel@vchcorp.org" <apatel@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Rick

On Thursday will HCID and DOT be able to stay past 2pm to discuss items on the Weds agenda that we don't cover in our BOE meeting from 1 to 2pm?

I'll bring copies of the Weds agenda that is embedded in this email to guide our discussion.

Thanks

Sarah

From: Rick Tonthat [mailto:rick.tonthat@lacity.org]

Sent: Tuesday, February 11, 2020 11:45 AM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: Becky Dennison <bdennison@vchcorp.org>; Eleanor Atkins <eatkins@hollywoodhousing.org>; Gohar Paronyan <gohar.paronyan@lacity.org>; Helmi Hisserich <helmi.hisserich@lacity.org>; Magdalena Zakaryan - Housing and Community Investment Department (magdalena.zakaryan@lacity.org) <magdalena.zakaryan@lacity.org>; Victoria Senna <vsenna@hollywoodhousing.org>; apatel@vchcorp.org

Subject: Re: Reese Davidson - Agenda for our meeting on Weds Feb 12th

Hi Sarah,

Gohar and Magdalena are both out tomorrow. I will cancel tomorrow's meeting and we can discuss any open items at the meeting on Thursday.

On Thu, Feb 6, 2020 at 4:32 PM Sarah Letts <sletts@hollywoodhousing.org> wrote:

Got it. Can you give David a heads-up that when we see him on the 13th, we will be asking the questions below:

- a. Draft Traffic Demand Study sent by vendor to DOT on Jan 24th. What is the status of DOT's review? When can VCH/HCH have a copy that we can share with the staff of the CA Coastal Commission? We are working on scheduling a meeting with the staff of the CCC later in February.
- b. We understand that DOT will issue a Notice to Proceed (NTP) to the vendor for the 2nd report before the end of February. Please tell us as much as possible about the vendor's schedule for completing the decision about automated vs. conventional parking and the associated specifications.

c. Can the decision regarding automated vs. conventional be expedited? Many things in the schedule are contingent upon this decision, particularly the need to have preliminary design and cost estimates by November 2020. How early in the process will you be able to tell VCH/HCH whether it will be automated vs. conventional?

Thank you

Sarah

From: Gohar Paronyan [mailto:gohar.paronyan@lacity.org]

Sent: Thursday, February 6, 2020 4:24 PM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: rick.tonthat@lacity.org; Helmi Hisserich <helmi.hisserich@lacity.org>; Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org) <magdalina.zakaryan@lacity.org>; Becky Dennison <bdennison@vchcorp.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Eleanor Atkins <eatkins@hollywoodhousing.org>; apatel@vchcorp.org

Subject: Re: Reese Davidson - Agenda for our meeting on Weds Feb 12th

Hello Sarah,

David will be attending the February 13th meeting at the CAO's office. I don't think his attends this meeting is necessary. I will send him an invite for our March monthly meetings.

However, I think it's a great idea to invite Azeen to our February 12, 2020 meeting. Please add him to the invite and I can add his name with the security desk.

Thanks,

Gohar

On Thu, Feb 6, 2020 at 3:29 PM Sarah Letts <sletts@hollywoodhousing.org> wrote:

Good afternoon HCID

Reaching out again to ask if I can invite DOT (David Cataldo) to the meeting on Weds 2/12 or do we need to rely on someone else to reach out to DOT?

Also, I spoke to Amy Anderson in the Mayor's office today and she has a new hire named Azeen and she asked me to include him in our monthly Reese Davidson meetings.

Thanks

Sarah

From: Sarah Letts

Sent: Wednesday, February 5, 2020 2:04 PM

To: Gohar Paronyan <gohar.paronyan@lacity.org>; rick.tonthat@lacity.org; Helmi Hisserich <helmi.hisserich@lacity.org>; Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org) <magdalina.zakaryan@lacity.org>

Cc: Becky Dennison <bdennison@vchcorp.org>; Victoria Senna <vsenna@hollywoodhousing.org>; Eleanor Atkins

<eatkins@hollywoodhousing.org>; apatel@vchcorp.org

Subject: Reese Davidson - Agenda for our meeting on Weds Feb 12th

Good Afternoon HCID colleagues

See below for the proposed agenda for our meeting on Wednesday, Feb 12th at 9:30am. As a reminder, the last time we spoke we decided 2 things:

1. We'll ask DOT to join the meeting (via conference call is fine) and we will cover the DOT topics first.
2. VCH/HCH would like to meet in person on a quarterly basis so we will come to HCID on 2/12. The front desk should be notified that Becky Dennison, Sarah Letts, Anup Patel and Victoria Senna will attend the 9:30am meeting.

QUESTION: Can we invite DOT to the first part of our meeting or will HCID invite them to join the call?

The proposed agenda for our meeting next Weds is as follows:

AGENDA

1. Topics to discuss with DOT
 - a. Draft Traffic Demand Study sent by vendor to DOT on Jan 24th. What is the status of DOT's review? When can VCH/HCH have a copy that we can share with the staff of the CA Coastal Commission? We are working on scheduling a meeting with the staff of the CCC later in February.
 - b. We understand that DOT will issue a Notice to Proceed (NTP) to the vendor for the 2nd report before the end of February. Please tell us as much as possible about the vendor's schedule for completing the decision about automated vs. conventional parking and the associated specifications.
 - c. Can the decision regarding automated vs. conventional be expedited? Many things in the schedule are contingent upon this decision, particularly the need to have preliminary design and cost estimates by November 2020. How early in the process will you be able to tell VCH/HCH whether it will be automated vs. conventional?
2. Topics to discuss with HCID
 - a. Discuss draft Schedule of Major Deadlines
 - b. IIG joint applicant: Ask about City concern regarding executing HCD Standard Agreement on City-owned sites.
 - c. Relocation: When can we initiate contact with tenants regarding relocation? We would like to do it sooner than later to get tenants signed up for VCH housing waitlists.
 - d. Financing: Bridge loan needed during period of time between closing of Phase 1A and closing of Phase 2

We look forward to meeting with you next week.

All my best

Sarah

**Gohar Paronyan**

Land Development Unit | Management Analyst
Housing Strategies & Services Division
Housing & Community Investment Dept | City of Los Angeles
1200 W 7th St 8th Fl, Los Angeles, CA 90017
O (213) 808-8969 | Gohar.Paronyan@lacity.org

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**Rick Tonthat**

Land Development Unit
Housing Strategies & Services Division
Housing & Community Investment Dept | City of Los Angeles
1200 W 7th St 8th Fl, Los Angeles, CA 90017
PH: (213) 808-8904 | rick.tonthat@lacity.org

Rick Tonthat <rick.tonthat@lacity.org>

Tue, Feb 11, 2020 at 12:47 PM

To: Sarah Letts <sletts@hollywoodhousing.org>

Cc: Becky Dennison <bdennison@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "apatel@vchcorp.org" <apatel@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

HCID will be available after the meeting but we cannot speak for DOT.

[Quoted text hidden]

[Quoted text hidden]

Sarah Letts <sletts@hollywoodhousing.org>

Wed, Feb 12, 2020 at 10:18 AM

To: Rick Tonthat <rick.tonthat@lacity.org>

Cc: Becky Dennison <bdennison@vchcorp.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "Magdalina Zakaryan - Housing and Community Investment Department (magdalina.zakaryan@lacity.org)" <magdalina.zakaryan@lacity.org>, Victoria Senna <vsenna@hollywoodhousing.org>, "apatel@vchcorp.org" <apatel@vchcorp.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Hi Rick

When we talk on Thursday at 2pm, I'd like to add to the agenda a discussion of how SB 330 (see attached) will impact Reese Davidson since there are 4 households living in the apartment building east of the canal.

Thank you

[Quoted text hidden]



Implementation of State Law SB 330 - Housing Crisis Act of 2019.pdf

1548K



CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

January 17, 2020

TO: All Staff
Other Interested Parties

FROM: **Vincent P. Bertoni**, AICP, Director of Planning, Department of City Planning *B*
Frank M. Bush, General Manager, Department of Building and Safety *fy. for*
Rushmore Cervantes, General Manager, Housing and Community Investment Department *Rac*

SUBJECT: IMPLEMENTATION OF STATE LAW SB 330 - HOUSING CRISIS ACT OF 2019

I. INTRODUCTION

On October 9, 2019, the Governor signed into law the Housing Crisis Act of 2019 (SB 330). SB 330 creates new state laws regarding the production, preservation and planning for housing. It amends the State Housing Accountability Act, Permit Streamlining Act and Planning and Zoning Law all under Title 7 of the California Government Code. The bill is in effect as of January 1, 2020.

This memorandum serves as interim guidance for staff and project applicants regarding City processes as they relate to the implementation of SB 330 and does not create any new or additional City ordinances or regulations. It reflects most but does not cover all circumstances and may be subject to additional information, interpretation and consideration. This memorandum provides a summary of pertinent sections of SB 330 for reference purposes only and is not intended to conflict with State Law.

II. SUMMARY OF SB 330 PROVISIONS

SB 330 aims to increase certainty in the development process, speeding the review of new Housing Development Projects, preserving existing affordable housing and preventing certain zoning actions that reduce the availability of housing. The bill establishes a statewide housing emergency until January 1, 2025. During the duration of the statewide housing emergency, SB 330 does the following:

- Creates a new vesting process for zoning and land use ordinances, policies, and standards in place at the time that a preliminary application is submitted, with limitations;
- Requires that the historic status or designation of any site be determined at the time an application for a discretionary action is deemed complete;
- Prohibits imposing or enforcing non-objective design review standards established after January 1, 2020;
- Clarifies the Permit Streamlining Act regarding the review of development applications for completeness;
- Shortens required permit review timeframes and limits the number of public hearings for housing projects that meet all applicable objective zoning standards;
- Prohibits legislative actions that reduce total zoned capacity for housing (i.e. "downzoning") in the City;
- Clarifies the circumstances under which Housing Development Projects may have their density reduced under the Housing Accountability Act;
- Prohibits approval of a Housing Development Project that results in a net loss of housing units; and
- Creates new housing replacements, eviction protections, relocation assistance, and right-of-return requirements.

A project that meets any of the following criteria (items 1-3 below) per California Government Code Section 65589.5(h)(2)(B) is subject to the provisions of SB 330 where those provisions refer to a Housing Development Project.

1. The project is residential only and creates two or more new residential units on a project site.
2. The project is a mixed-use development consisting of residential and nonresidential uses with at least two-thirds of the square footage of the project designated for residential use, including dwelling units and any uses accessory to the residential units.
3. The project is transitional housing or supportive housing.

For the purposes of the definition of a Housing Development Project, any area used or proposed to be used as a hotel or other transient use is not considered a residential use.

III. DEVELOPMENT REVIEW PROCESS CHANGES

A. New Filing Requirements for Discretionary Housing Development Projects

HCIDLA Replacement Unit Determination Letter

All Housing Development Projects related to an application for a discretionary action filed with the Department of City Planning on or after January 1, 2020 will require a Replacement Unit Determination letter from the Housing and Community Investment Department (HCIDLA) before any City Planning entitlement application related to the project can be deemed complete pursuant to the Permit Streamlining Act.

Housing Development Projects related to City Planning applications deemed complete prior to January 1, 2020 do not require a Replacement Unit Determination letter in order to continue processing the entitlement request.

LADBS Preliminary Zoning Assessment

In order to implement SB 330 and other State housing laws as they pertain to the expeditious review of Housing Development Projects, the Department of City Planning will require that discretionary Housing Development Projects that have not been deemed complete by January 1, 2020 receive a Preliminary Zoning Assessment from the Los Angeles Department of Building and Safety (LADBS) before any City Planning application related to the project can be deemed complete pursuant to the Permit Streamlining Act. Applicants will need to submit for zoning Plan Check with LADBS to ascertain if there are any zoning issues or necessary approvals associated with the project and site that should be resolved.

B. New Preliminary Application Process to Provide Certain Vesting Rights

SB 330 creates a new vesting process for discretionary Housing Development Projects during the five-year period until January 1, 2025. It does this by creating a new "preliminary application" process that establishes a new date for the purposes of locking projects into the ordinances, policies, and standards adopted and in effect when a preliminary application (including all of the information required) is submitted and deemed complete. The vesting does not apply to California Environmental Quality Act (CEQA) determinations, including historic resource determinations pursuant to CEQA. In order for a Housing Development Project to receive initial vesting rights, a preliminary application must include all of the information required on the Department of City Planning SB330 Preliminary Application Filing Instructions form (CP-4063) consistent with subdivision (a) of California Government Code Section 65941.1 and upon verification that the preliminary application processing fee is paid.

C. Historic Cultural Monument Nominations

Pursuant to Section 5 of SB 330 and Section 65913.10 of the California Government Code, when a site is nominated for Historic Cultural Monument status, the City must determine whether the site contains a Historic Cultural Monument by the time that a City Planning application is deemed complete per the Permit Streamlining Act for a discretionary action on a Housing Development Project at the site. A determination as to whether a parcel of property is a historic site shall remain valid during the pendency of the Housing Development Project for which the application was made unless any archaeological, paleontological, or tribal cultural resources are encountered during any grading, site disturbance, or building alteration activities. This provision does not automatically expire.

D. Limits on Project Review Timelines and Number of Public Hearings

SB 330 shortens the timeline to approve or disapprove a Housing Development Project with an associated Environmental Impact Report (EIR) from 120 to 90 days, and from 90 to 60 days for a Housing Development Project that is at least 49% low-income, publicly subsidized, and involves an associated EIR.

The bill also prevents jurisdictions from conducting more than five public hearings in connection with the approval of a Housing Development Project that meets objective zoning standards. The definition of "hearing" found in California Government Code section 65905.5 includes required meetings, hearings and continued hearings such as those associated with City/Area Planning Commissions, Design Review Boards, and HPOZ Boards. A "hearing" also includes appeals, except for those related to the approval or disapproval of a legislative action. The five hearings are counted from the deemed-complete date of the City Planning application. The law requires that a decision be made on the project no later than the fifth and final meeting. Meetings held solely pursuant to CEQA law, including CEQA appeals, are not counted toward the number hearings.

IV. RESTRICTIONS ON ACTIONS TO REDUCE HOUSING

A. Prohibitions on the Adoption of Plans, Zoning Ordinances, Moratoria, and Other Certain Actions That Result in Fewer Housing Units

In "affected" cities such as the City of Los Angeles, SB 330 generally prohibits zoning actions that result in fewer housing units than are permitted as of January 1, 2018. These actions include the adoption of plans that result in a net downzoning or otherwise reduce housing and population, except for specified reasons involving health and safety, affordable housing and voter initiatives. In addition, the bill generally prohibits local limits on the amount of housing or population through a moratorium on housing development, or limits on approvals, permits or housing units that can be approved or constructed.

These provisions require an analysis by City Planning that any legislative action, until 2025, would not lessen housing intensity, as described in Section 13 of SB 330 to include reductions to height, density, or floor area ratio, new or increased open space or lot size requirements, or new or increased setback requirements, minimum frontage requirements, or maximum lot coverage limitations, or anything that would lessen the intensity of housing. These restrictions apply to any zone where housing is an allowable use, even if the intent is not to reduce housing intensity. This provision does not impact zoning efforts that reduce intensity for certain parcels, as long as density is increased on other parcels and therefore result in no net loss in zoned housing capacity or intensity.

The law does create certain exceptions from these provisions, including an exception for Housing Development Projects located within a very high fire hazard severity zone as provided in Section 51177 of the California Government Code and in cases meant to preserve or facilitate the production of affordable housing for lower income households or housing that traditionally serves lower income households. A moratorium to protect against an imminent threat to the health and safety of persons residing in the vicinity of the area subject to the moratorium is also permitted, as are voter-approved local initiatives or referenda.

B. Prohibitions on the Establishment or Imposition of Non-Objective Development Standards

SB 330 prevents the City from imposing or enforcing non-objective design standards that are adopted on or after January 1, 2020 (until January 1, 2025). An "objective design standard" is "a design standard that involve[s] no personal or subjective judgment by a public official and is uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant or proponent and the public official before submittal of an application."

C. No Net Loss of Housing Units

SB 330 creates certain requirements for any Housing Development Project that results in the demolition or removal of a residential unit and submits an application for discretionary action to the Department of City Planning on or after January 1, 2020.

Starting January 1, 2020, no Housing Development Project may be approved that will require the demolition or removal of residential dwelling units unless the project will create at least as many units as will be demolished or removed or that existed in the previous 5-10 years.

This prohibition on approval of discretionary actions that reduces the number of units existing on a site will apply to the approval of new Housing Development Projects through discretionary City Planning actions until 2025.

D. Protected Unit Replacement

SB 330 establishes an additional set of requirements for Housing Development Projects that require demolition or removal of protected units.

Protected units are defined as any of the following:

1. Residential dwelling units that are or were subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of lower or very low income within the past five years.
2. Residential dwelling units that are or were subject to any form of rent or price control through a public entity's valid exercise of its police power within the past five years.
3. Residential dwelling units that are or were occupied by lower or very low income households within the past five years, as determined by HCIDLA.
4. Residential dwelling units that were withdrawn from rent or lease in accordance with Chapter 12.75 (commencing with Section 7060) of Division 7 of Title 1 within the past 10 years.

Pursuant to SB 330, the City may not approve a Housing Development Project that requires the demolition or removal of a protected unit before January 1, 2025, unless the project will replace any existing, demolished or removed protected units. Unit replacement will require a determination by HCIDLA.

The bill requires the proposed Housing Development Project shall provide:

- Any restricted affordable housing units to be replaced on a one-for-one basis at the same income category and of equivalent size, including:
 - At least the same number of units of equivalent size (number of bedrooms) made affordable at the same or lower income category as those existing households at the time the units were occupied.
 - A recorded 55-year affordability covenant for rental units, and equity sharing covenant for for-sale units pursuant to GC 65915(c)(2).

- At least 70% of the units be made lower income restricted affordable units if the income category of the household in occupancy cannot be established, according to the following categories (rounding fractional units up) according to the most current data from HUD's Comprehensive Housing Affordability Strategy (CHAS) database.
 - 51% very low (VL) and 19% low income for Density Bonus projects; or
 - if a Transit-Oriented Communities (TOC) project: 32% extremely low, 19% VL, and 19% low income.
- Any units that are subject to a rent or price control that existed in the past five years (from the date of submittal to HCIDLA) and is/was occupied by an above income tenant shall be replaced with price/rent controlled units. Please note that separate or additional replacement requirements may apply per LAMC 151.28.

The law allows replacement units established pursuant to these requirements to be counted towards any requirement to provide affordable housing (restricted to moderate income or lower) as part of a Density Bonus, TOC, or other locally-established requirement that requires on-site affordable housing as a condition of approval (including the Affordable Housing Linkage Fee exemption). While a lower income category unit may normally be provided in lieu of a higher category unit, if a "protected unit" tenant wishes to exercise their right of return, then the unit may only count toward the income category of the returning tenant.

E. Expanded Rights for Residential Occupants

Any occupants of protected units being demolished or removed must be provided certain allowances, including:

- The ability to live in the units they occupied until six months before construction activities begin;
- The developer agrees to provide relocation benefits as determined by HCIDLA; and
- A "right of first refusal" for a comparable unit available in the new Housing Development Project which is affordable to the household at an affordable rent.

V. PROJECT REVIEW PROCEDURES

A. New Filing Requirements Prior to Deeming Complete a City Planning Application

Before City Planning staff deem complete any application related to a Housing Development Project filed or to be deemed complete after January 1, 2020, a project must have been reviewed by HCIDLA and LADBS (See Diagram A). Prior to deeming complete an application, a HCIDLA Replacement Unit Determination letter will be required. See subsection D below for more information on the Replacement Unit Determination process.

In addition, a LADBS Preliminary Zoning Assessment will be required for all Housing Development Projects related to a City Planning application for a discretionary action filed on or after January 1, 2020 in order to deem complete the application. Housing Development Projects submitted to the Department of City Planning prior to January 1, 2020 but not yet deemed complete as of January 1, 2020 will also require a LADBS Preliminary Zoning Assessment to deem the City Planning application complete, per the

Permit Streamlining Act. To obtain a Preliminary Zoning Assessment from LADBS, the applicant shall submit a Preliminary Zoning Assessment Referral Form along with architectural plans sufficient for showing compliance with local zoning requirements as provided in LADBS Information Bulletin P/GI-2020-31. The Preliminary Zoning Assessment Referral Form will be available at all Los Angeles City Planning public counters and on City Planning's website (planning4la.org) in January 2020.

B. Optional Vesting SB 330 Preliminary Application for Discretionary Housing Development Projects

Project applicants choosing to seek vesting rights through a SB 330 preliminary application may request an appointment through the City Planning Department website (planning4la.org) to file the preliminary application. The preliminary application must be deemed complete by City Planning staff in order to obtain vesting rights. The required information and materials are listed on the Preliminary Application Instructions form (CP-4063) and on the Preliminary Application form (CP-4062). A preliminary application is deemed complete at the time that all required forms, documents and materials are submitted, and the final invoice has been issued and proof of payment is presented to City Planning staff. In addition, a project must meet the following timelines (See Diagram A) and project thresholds in order to retain vesting rights that would be granted through the preliminary application process:

1. The Preliminary Application must be filed with City Planning prior to filing an application requesting approval of any discretionary action.
2. A subsequent application filed with City Planning requesting approval of a discretionary action (not including ministerial administrative reviews) must be filed within 180 days of the date that the Preliminary Application is deemed complete.
3. If the City Planning application is deemed incomplete after filing, the applicant must submit all missing or incomplete items to City Planning within 90 days of being notified in writing by City Planning staff.
4. Construction of the project must commence within two and one-half years following the date that the project receives final approval, including all necessary approvals to be eligible to apply for, and obtain a building permit or permits and all appeal periods or statutes of limitations have been exhausted or resolved in favor of the Housing Development Project.
5. Any change in the residential unit count is limited to less than 20 percent—exclusive of any increase resulting from the receipt of a density bonus, concession, waiver, or similar provision—indicated on the submitted and deemed complete Preliminary Application.
6. Any change in the Building Area is limited to less than 20 percent—exclusive of any increase resulting from the receipt of a density bonus, concession, waiver, or similar provision—indicated on the submitted and deemed-complete Preliminary Application.

C. City Planning Zoning Conformance Review

Once an application for a discretionary action on a Housing Development Project is deemed complete, DCP staff will conduct a zoning conformance review within the period provided by the Housing Accountability Act, California Government Code Section 65589.5(j)(2). Specifically, this review will take place within 30 days from application being deemed complete for Housing Development Projects with 150 or fewer units, and within 60 days from application being deemed complete for Housing Development Projects with more than 150 units. The zoning conformance review will be informed by the completed LADBS Preliminary Zoning Assessment in addition to DCP staff's review of the applicability of any other zoning or land use standard to a Housing Development Project.

D. HCIDLA Protected Unit Removal / Replacement Review

In order for a City Planning application to be deemed complete, all Housing Development Project applicants must receive a determination from HCIDLA regarding the number and type of required replacement units and the number of tenants eligible to exercise the right of first refusal. All discretionary Housing Development Project applicants are required to obtain this determination even if there are no existing residents or residential units. Applicants are strongly encouraged to obtain the HCIDLA determination prior to submitting a vesting SB 330 Preliminary Application and prior to drafting any blueprints or building plans. This determination will also be required to obtain a permit for demolition or removal of a residential unit.

To receive a determination, the project applicant must complete an application for a Replacement Unit Determination with HCIDLA and pay the applicable fee. Once completed, a Land Use Analyst will determine:

- The number of currently occupied protected units and the income level of the tenants;
- The number of protected units that existed in the past five years but are now vacant, demolished, or removed; and
- The number of units that were removed from the rental market within the past 10 years including the number of bedrooms.

In order to assess the income of the tenants, HCIDLA will send a packet to the current occupants requesting income documentation such as employer pay stubs, W2s, tax returns, etc.

Based on the income of the tenants, HCIDLA will require the replacement units to be restricted to the same or lower income category as the tenant as shown in Schedule 6 or 7 of Land Use Rent Incomes on HCIDLA's website (Schedule 7 if a project is receiving Affordable Housing Trust Funds).

If the income of the current tenants is unknown or (in the case of vacant units) if the income of tenants from the past five or ten years is unknown, HCIDLA will make a determination that rental units were last occupied by 51% very low income households and 19% low income households for Density Bonus projects pursuant to the latest U.S. Department of Housing and Urban Development's (HUD) Comprehensive Housing Affordability Strategy (CHAS) database. If the project is using the Transit Oriented Communities (TOC) program, HCIDLA will make a determination that 32% of the units were occupied by extremely low income households, 19% very low income, and 19% low income.

All replacement calculations resulting in fractional units shall be rounded up to the next whole number. The replacement units must be of equal size to the units that were demolished or removed unless otherwise determined by HCIDLA.

E. Relocation and Right of First Return Determination

The amount of relocation for each household occupying a protected unit will be determined by HCIDLA pursuant to applicable law. The relocation procedures will include a requirement to offer the right of first return to any interested and eligible prior occupants.

F. HCIDLA Affordable Housing Covenant

Any Housing Development Project that is required to replace a protected housing unit must apply for a Land Use Covenant with HCIDLA. The completion of a Covenant is a requirement to issuance of the building permit. The fee for the preparation and filing of a Land Use Covenant is \$5,813 per project. Additionally, there is an annual monitoring fee of \$173 per restricted unit upon receipt of the Certificate of Occupancy (all fees are subject to change). Preparing and executing a Covenant takes approximately 8-12 weeks upon receipt of all the required documents, although a complex project may take longer.

VI. QUESTIONS AND CONTACTS

For questions regarding the Replacement Unit Determination, relocation, right of return, and Affordable Housing Covenant requirements, contact the Housing and Community Investment Department at hcidla.SB330@lacity.org.

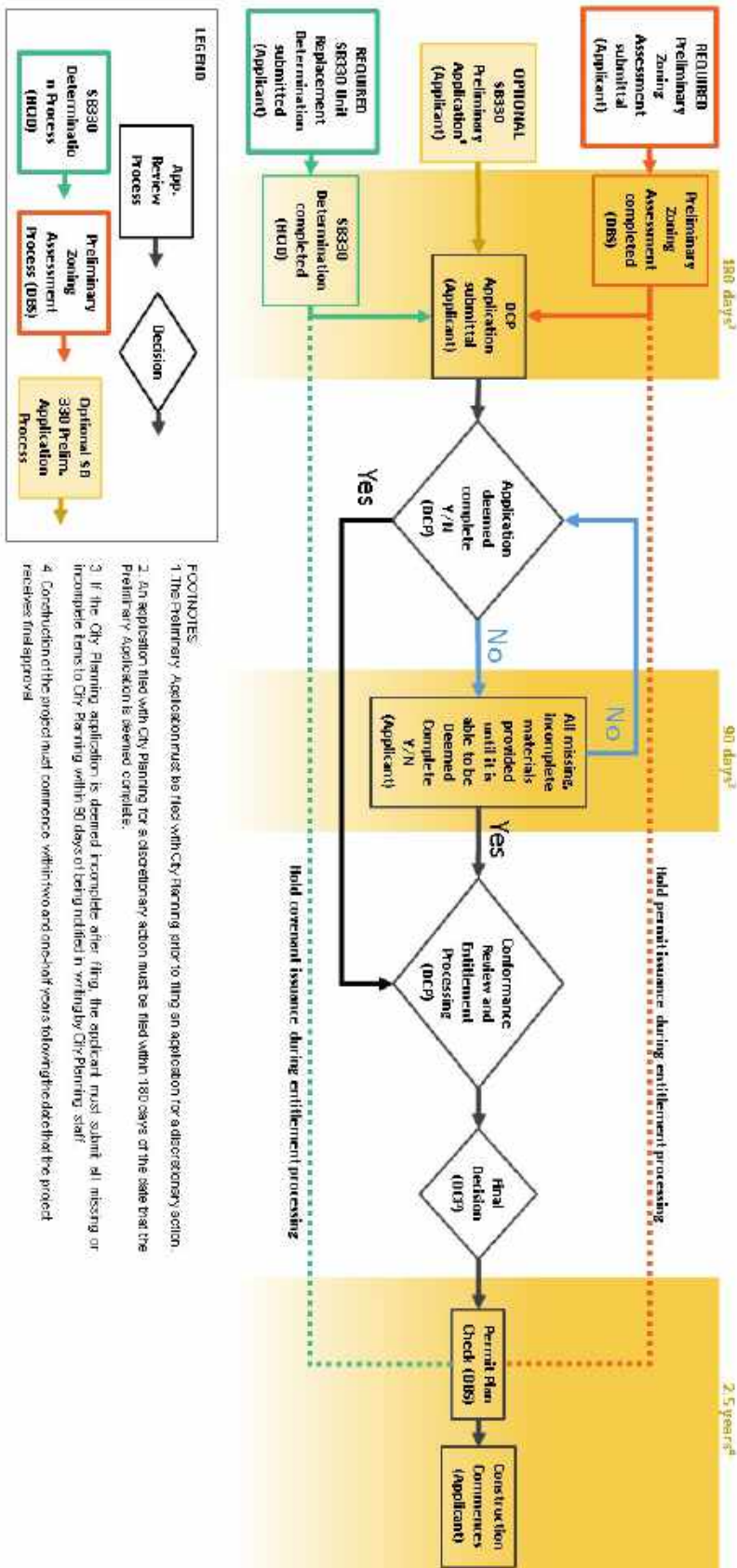
For questions about the Preliminary Zoning Assessment conducted in Plan Check and new clearances relating to the demolition or removal of units and to new Housing Development Projects, contact the Department of Building and Safety at ladbs.ASAP@lacity.org, 3-1-1 (within the City of Los Angeles) or (213) 473-3231. You may also visit their website at ladbs.org.

For questions regarding the optional vesting Preliminary Application, the required zoning review procedures, and other provisions of SB330 relating to discretionary Housing Development Projects in the City of Los Angeles, visit one of the City Planning public counters, contact Planning staff at planning.PARP@lacity.org, or visit the Los Angeles City Planning website for more information:

planning.lacity.org/development-services/preliminary-application-review-program

Discretionary Housing Development Project Work Flow

Diagram A





Azeen Khanmalek <azeen.khanmalek@lacity.org>

RE: Reese Davidson - Public Parking & P3s

11 messages

Allison Riley <ariley@vchcorp.org>

Sun, Apr 26, 2020 at 5:59 PM

To: Blair Miller <blair.miller@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "mandana.khatibshahidi@lacity.org" <mandana.khatibshahidi@lacity.org>
Cc: Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>

Thank you for the call last week to discuss the implementation of a P3 for the public parking lot at the Reese Davidson Community.

You shared a wealth of information and we learned a lot. It was great to hear that you can help gather some additional reference information and data to support this process. So, I just wanted to confirm our understanding (please correct me if I got anything wrong):

Mayor's Office (Azeen):

- Venice Parking Study by Tierra West
- Additional DOT studies (maybe from a couple years ago) referenced by Jaki and Becky, related to automated lots and the Land Use Plan for the Coastal Commission
- DOT's Design Specifications for parking lots

CAO (Jaki, Blair, Mandana):

- Terms sheets/contracts from other projects (e.g. Korean American Museum, Hollywood and Highland, others)
 - Back-end of contract detail
 - contract from 8 to 10 years ago when the City asked 3rd parties to operate city parking lots.
- Research if there are debt obligations to SPRF on the site that could impact how we structure a P3
- Net revenue for the Pacific/Dell lots

We look forward to continuing to work with you on this project.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: 714-475-9236

Email: ariley@vchcorp.org

-----Original Appointment-----

From: Sarah Letts [<mailto:sletts@hollywoodhousing.org>]

Sent: Tuesday, April 21, 2020 5:48 PM

To: Sarah Letts; Blair Miller; azeen.khanmalek@lacity.org; Jacqueline Wagner; Becky Dennison; Allison Riley

Cc: mandana.khatibshahidi@lacity.org

Subject: Reese Davidson - Public Parking & P3s

When: Thursday, April 23, 2020 4:00 PM-5:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: 872-240-3311 code 995-763-285#

Azeen Khanmalek <azeen.khanmalek@lacity.org>

Mon, Apr 27, 2020 at 10:41 AM

To: Allison Riley <ariley@vchcorp.org>

Cc: Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "mandana.khatibshahidi@lacity.org" <mandana.khatibshahidi@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>

Thanks for the helpful summary Allison.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

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Allison Riley <ariley@vchcorp.org>

Wed, May 6, 2020 at 9:29 AM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Cc: Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "mandana.khatibshahidi@lacity.org" <mandana.khatibshahidi@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>

Hi Azeen and CAO team, any update on collecting the information we discussed?

Also, who should be our main point of contact at the CAO's office?

Looking forward to hearing from you.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

[Quoted text hidden]

Blair Miller <blair.miller@lacity.org>

Wed, May 6, 2020 at 11:31 AM

To: Allison Riley <ariley@vchcorp.org>

Cc: Azeen Khanmalek <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "mandana.khatibshahidi@lacity.org" <mandana.khatibshahidi@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>

Allison,

Mandana and I are scheduled to discuss this tomorrow. We will respond after our meeting with your answer regarding the CAO contact.

Thank you,

Blair Miller

Office of the City Administrative Officer | City of Los Angeles

Asset Management

213-473-7598

200 North Main Street Suite 1500, LA 90012

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Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Thu, May 7, 2020 at 2:18 PM

To: Blair Miller <blair.miller@lacity.org>

Cc: Allison Riley <ariley@vchcorp.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>

Hi Allison,

Blair and I are still compiling information and waiting for responses on the items below. We'll let you know as soon as we have everything on our to-do list.

For the time being, please include both Blair and myself as contacts for this project. Eventually, the project will fully transition to me.

Thank you,

Mandana Khatibshahidi | 213.473.9729

Asset Management Group | Office of the City Administrative Officer (CAO)

City Hall East, 15th Floor

[City of Los Angeles](#)

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Allison Riley <ariley@vchcorp.org>

Thu, May 7, 2020 at 3:49 PM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>, Blair Miller <blair.miller@lacity.org>

Cc: Azeen Khanmalek <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>

Sounds good. Thanks.

Feel free to send things as you get them if that's easier. We look forward to hearing from you soon.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile 

Email: ariley@vchcorp.org

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Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Thu, May 14, 2020 at 3:38 PM

To: Allison Riley <ariley@vchcorp.org>

Cc: Blair Miller <blair.miller@lacity.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>

Hi Allison,

Here's our follow-up:

- Contracts from other projects - Here is a [copy](#) of the ground lease agreement between the City and the Korean American National Museum. You may wish to note the following sections for relevance:
 - 1.2.10
 - 1.2.11
 - 1.2.12
 - 1.2.13
 - 1.2.30
 - 4.1.3
 - 4.2
- Debt Obligations - According to our Debt Management Group, there are no debt obligations associated with Venice/Dell lot #731
- Net Revenue - We are working to obtain this information from LADOT. Attached is a copy of the contract with the operator, Modern Parking, Inc. It's expired and currently on a month to month holdover. LADOT is working on amending the contract.

Let us know if you have questions or need anything else.

Thanks,

Mandana Khatibshahidi | 213.473.9729

Asset Management Group | Office of the City Administrative Officer (CAO)

City Hall East, 15th Floor

[City of Los Angeles](#)

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Executed Operating Agreement with MPI_C-124274 (1).pdf
2455K

Allison Riley <ariley@vchcorp.org>

Tue, May 26, 2020 at 4:30 PM

To: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Cc: Blair Miller <blair.miller@lacity.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, Becky Dennison <bdennison@vchcorp.org>, Sarah Letts <sletts@hollywoodhousing.org>, Anup Patel <apatel@vchcorp.org>

Thank you, Mandana, this is helpful. This information, plus having had a few conversations with various parking developers, we have more questions. We would like to setup a meeting with your team, DOT, and the Mayor's office. Do you have a few times that your team is available in the next 2-3 weeks?

Or if it's easier, I've set up this Doodle Poll (<https://doodle.com/poll/q8ei3nsuetmkiwuu>) with the following times:

- Monday, June 1 10am or 3pm
- Tuesday, June 2 4pm
- Thursday, June 4 9am or 10am
- Friday, June 5 10am or 2pm
- Monday, June 8 11am
- Wednesday, June 10 11am or 1pm
- Thursday, June 11 9am
- Friday, June 12 1pm
- Monday, June 15 9:30pm or 3pm

Let us know your availability. Thanks!

[Quoted text hidden]

Allison Riley <ariley@vchcorp.org>

Fri, Jun 5, 2020 at 6:27 PM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Hi Azeen, I hope you are well. I think you're talking with Sarah about the Tierra West Parking study and we'll talk about it on Wednesday.

Have you had any luck finding older DOT studies related to automated lots and the LUP for Coastal Commission?

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

From: Azeen Khanmalek [mailto:azeen.khanmalek@lacity.org]

Sent: Monday, April 27, 2020 10:42 AM

To: Allison Riley <ariley@vchcorp.org>

Cc: Blair Miller <blair.miller@lacity.org>; Jacqueline Wagner <jacqueline.wagner@lacity.org>; mandana.khatibshahidi@lacity.org; Becky Dennison <bdennison@vchcorp.org>; Sarah Letts <sletts@hollywoodhousing.org>

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Azeen Khanmalek <azeen.khanmalek@lacity.org>

Mon, Jun 8, 2020 at 3:33 PM

To: Allison Riley <ariley@vchcorp.org>

Hi Allison,

There was one other report potentially in play, related to the LCP and Venice Community Plan that Planning is working on. However, I checked in with the LCP team and Planning, and they informed me that that report is nowhere near done. So unfortunately, I wouldn't count on being able to rely on that report for the Coastal Commission.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Allison Riley <ariley@vchcorp.org>

Mon, Jun 8, 2020 at 3:40 PM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

OK, thanks. In addition to Coastal, we thought it might have an analysis of automated parking. Maybe we can just keep our eyes on it in case it's useful when it becomes available.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile



Email: ariley@vchcorp.org

From: Azeen Khanmalek [mailto:azeen.khanmalek@lacity.org]

Sent: Monday, June 8, 2020 3:33 PM

To: Allison Riley <ariley@vchcorp.org>

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C-124274

OPERATING AGREEMENT

BETWEEN THE

CITY OF LOS ANGELES

AND

MODERN PARKING INC.

**FOR THE OPERATION, MANAGEMENT AND MAINTENANCE OF THE
HOLLYWOOD GEOGRAPHIC LOT GROUP PARKING FACILITIES and THE WEST
LOS ANGELES GEOGRAPHIC LOT GROUP PARKING FACILITIES**

This OPERATING AGREEMENT is made and entered into by and between the City of Los Angeles, Department of Transportation, a municipal corporation, acting by order of and through its Board of Transportation Commissioners or its designees (hereinafter referred to as "CITY") and Modern Parking Inc. (hereinafter referred to as "OPERATOR") and any Successors in Interest to operate, manage and maintain the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities composed of various City-owned parking facilities located in the Hollywood and West Los Angeles communities.

THE PARTIES AGREE AS FOLLOWS:

Section 1. Parking Facility, Governing Documents, Parties to the Agreement and Coordinating Framework

- 1.1 The CITY hereby provides to the OPERATOR four (4) parking facilities (Lot 649, Lot 670, Lot 702 and Lot 742; total parking spaces of 1,047, per the detailed parking facility information contained in Exhibit A, Parking Facility Geographic Lot Groups, located in various locations in the Hollywood community in the City of Los Angeles, hereinafter referred to as "Hollywood Geographic Lot Group Parking Facilities", for operation as a public parking facility. The OPERATOR hereby undertakes and agrees to perform all the services provided for herein in connection with the operation, management and maintenance of the Hollywood Geographic Lot Group Parking Facilities.
- 1.2 The CITY hereby provides to the OPERATOR five (5) parking facilities (Lot 680, Lot 701, Lot 703, Lot 731 and Lot 740; total parking spaces of 1,068, per the detailed parking facility information contained in Exhibit A, Parking Facility Geographic Lot Groups, located in various

locations in the West Los Angeles community in the City of Los Angeles, hereinafter referred to as "West Los Angeles Geographic Lot Group Parking Facilities", for operation as a public parking facility. The OPERATOR hereby undertakes and agrees to perform all the services provided for herein in connection with the operation, management and maintenance of the West Los Angeles Geographic Lot Group Parking Facilities.

- 1.3 The operation, management and maintenance of the parking facilities shall be in accordance with the terms and conditions of:

1.3.1 This Operating Agreement;

1.3.2 The Request for Proposals (RFP), dated October 2011, and Modern Parking Inc.'s proposal in response to the RFP and incorporated herein by reference, and

1.3.3 City Council File No. 13-0922, attached herein as Exhibit B.

- 1.4 The parties acknowledge City ordinances with respect to the use of monies collected from parking meters and revenue from public off-street parking facilities deposited into the Special Parking Revenue Fund (SPRF) (Ord. Nos. 172,695, 174,054, 176,072, 180,460, 180,723, 181,337, 182,145 and 182,251). Referenced ordinances are herewith attached as Exhibit C, Special Parking Revenue Fund Ordinances; and,

- 1.5 The representatives of the parties to the Operating Agreement are as follows:

- 1.5.1 The representatives of the CITY shall be, unless otherwise stated in this Operating Agreement:

Detrich B. Allen
City of Los Angeles, Department of Transportation
100 South Main Street, 10th Floor
Los Angeles, CA 90012

Rene M. Sagles
City of Los Angeles, Department of Transportation
100 South Main Street, 10th Floor
Los Angeles, CA 90012



Belkis Del Valle
City of Los Angeles
Department of Transportation
100 South Main Street, 10th Floor
Los Angeles, CA 90012

- 1.5.2 The representatives of Modern Parking Inc. shall be, unless otherwise stated in this Operating Agreement:

Gary Pitts, Executive Vice President
Modern Parking Inc.
1200 Wilshire Blvd., Suite 300
Los Angeles, CA 90017

Dolan Islam, Vice President of Operations
Modern Parking Inc.
1200 Wilshire Blvd., Suite 300
Los Angeles, CA 90017

Manuel Rubio, Vice President, Quality & Revenue
Modern Parking Inc.
1200 Wilshire Blvd., Suite 300
Los Angeles, CA 90017

Section 2. Term of Operating Agreement

The term of this Operating Agreement shall be for a period of five (5) years commencing upon the execution by all parties to said Operating Agreement. As part of the consideration for entering into this Operating Agreement, the CITY reserves the right and option to extend said Operating Agreement for one (1) additional term of three (3) years, upon the same terms and conditions, and upon thirty (30) days written notice by the CITY prior to the expiration of the then current term. In the event the OPERATOR is requested to continue operation of the parking facilities after expiration of the term of the Operating Agreement, such continuance shall be construed to be a tenancy from month-to-month, on the same terms and conditions as set forth in this Operating Agreement. The terms and conditions of this Operating Agreement shall be binding on the Successors in Interest of all parties to the Agreement.

Section 3. Compensation to OPERATOR

- 3.1 The CITY shall make a one-time payment to OPERATOR of one thousand eight hundred seventy dollars (\$1,870.00) for the Hollywood Geographic Lot Group Parking Facilities and two thousand dollars (\$2,000.00) for the West Los Angeles Geographic Lot Group Parking Facilities for the OPERATOR'S start-up costs, including staff recruitment, pre-employment background checks,



and training, between the effective date of this Operating Agreement and the commencement of operation of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities, respectively.

- 3.2 From the commencement of operation of the parking facilities through June 30, 2015, the CITY shall pay the OPERATOR a monthly compensation of sixty-five thousand two hundred sixty-seven dollars (\$65,267.00) and fifty thousand eight hundred seventy-four dollars (\$50,874.00) for the operation, management and maintenance of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities, respectively, in accordance with this Operating Agreement. Monthly compensation reflects all costs incurred for the operation, management and maintenance of the parking facilities, including labor, expenses, and profit, as presented in the OPERATOR'S final Form 1-A, Exhibit D, Proposed Compensation to the Parking Operator. Should the commencement of operation of the parking facilities not begin on the first day of the calendar month, the monthly compensation paid to the OPERATOR for the then ending month shall be prorated.
- 3.3 Each year on July 1 throughout the term of this Operating Agreement, the monthly compensation and the cost of supplementary services for each parking facility within the Geographic Lot Group shall be revised annually by an amount calculated on a 12 month average with the most recently published Consumer Price Index (CPI), with the 12 month period to be determined by LADOT and will thereafter become the monthly compensation paid for the next twelve months. As used herein, the defined term 'CPI' shall mean the Consumer Price Index for All Items, Not Seasonally Adjusted, All Urban Consumers for the Los Angeles-Riverside-Orange County, California Area most recently published by the Bureau of Labor Statistics of the U.S. Department of Labor. In no event shall the CPI adjustment exceed six percent (6%) for any such annual increase.
- 3.4 Upon commencement of operation of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities, the OPERATOR will be required to provide the staffing levels approved by the CITY. Whenever the staffing levels required of the OPERATOR are revised by mutual agreement between the CITY and the OPERATOR, the CITY, in consultation with the OPERATOR, will adjust the OPERATOR'S monthly compensation to reflect the change in costs to the OPERATOR.



- 3.5 Upon commencement of operation of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities, the OPERATOR may discover previously undisclosed and/or unobserved conditions that may require adjustment to the OPERATOR'S monthly compensation or that may be classified as a capital expenditure. Any adjustment to the monthly compensation will be revised by mutual agreement between the CITY and the OPERATOR. Any capital expenditure will be subject to the provisions of Section 25 – Other Services, herein.
- 3.6 The CITY may consider, at its sole discretion, the installation of a high-end parking guidance system and/or other new parking equipment technology in the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities. If any such systems are implemented during the term of this Operating Agreement, the daily staffing levels may be revised. In consultation with the OPERATOR, the CITY will adjust the OPERATOR'S monthly compensation to reflect any change in costs to the OPERATOR directly attributable to such installation(s).
- 3.7 The OPERATOR will be paid an annual incentive payment of five percent (5%) of the revenue increase for each of the parking facilities from the established base year as a direct result of revenue enhancements initiated by the OPERATOR, excluding Parking Occupancy Tax and revenue generated by fee increases and service expansion. Service expansion includes, but is not limited to, revenue growth for any parking facility obtained by 1) increasing the hours of operation from the initial hours outlined in the Operating Agreement, 2) expanding the number of parking spaces due to refurbishment, reconstruction or redevelopment, and 3) City organized special events, filming, unique uses or installations. The established base year is Fiscal Year 2011-12 (July 2011 through June 2012) per Exhibit E, with the exception of the newly constructed Vine Street Garage/Lot 702. The base year for Lot 702 will be determined by LADOT after completion of Fiscal Year 2014-2015 and will thereafter become the base year for that facility during the remaining term of this Operating Agreement. The annual incentive will be paid thirty (30) days after the close of the City's Books of Accounts for that fiscal year and is not a billable expense.
- 3.8 The CITY reserves the right to remove or add any parking facility during the term of the Operating Agreement period at its sole discretion and to adjust the monthly compensation to the

OPERATOR accordingly. Any parking facility may be closed temporarily or permanently for any reason, including but not limited to, refurbishment, reconstruction, or redevelopment of any of the parking facility as part of a mixed-use development project. The CITY shall provide reasonable written notice, a minimum of thirty (30) days, to the OPERATOR that a parking facility is to be added or removed or that the scope of services is being modified and the effective date of such changes and a transition plan developed for newly added facility as outlined in Section 4.1.

- 3.9 In case of removal of any parking facility during the term of the Operating Agreement, the CITY will, as a basis of reduction to the current OPERATOR'S monthly compensation, use the OPERATOR'S final Form 1-B, Exhibit F, Proposed Operating Expenses.
- 3.10 In case of addition of a parking facility during the term of the Operating Agreement, the OPERATOR shall submit the monthly cost of operation, management and maintenance of such parking facility using the format of Form 1-B as contained in the City's Request for Proposals. The CITY shall approve the monthly cost of the added parking facility and shall be added to the OPERATOR'S monthly compensation and subject to Section 3.3, thereafter.

Section 4. Operational Transition Plan and Start-Up Penalties

- 4.1 The OPERATOR shall obtain the CITY'S Parking Facilities Division approval of the OPERATOR'S written Transition Plan between the effective date of this Operating Agreement and the commencement of operation of the parking facilities. This written plan shall include a detailed schedule and be designed to identify key administrative and operational tasks and activities necessary to begin operations and shall be based upon the Transition Plan proposed in the OPERATOR'S response to the CITY'S RFP. The CITY'S Parking Facilities Division staff will work jointly with the OPERATOR to determine the best transition strategies and time line.

4.1.1 Per Council File No. 13-0922, CITY shall make placement provisions for displaced CITY staff at facilities impacted by this Operating Agreement. Therefore, Lot 680 and Lot 703 of the West Los Angeles Geographic Lot Group may not be initially included and will be phased in as they become available. Compensation will be adjusted in accordance with Section 3.

- 4.2 The OPERATOR will be required to commence operation of the Hollywood Geographic Lot Group Parking Facilities and the West



Los Angeles Geographic Lot Group Parking Facilities within thirty (30) days of execution of this Operating Agreement, notwithstanding Section 4.1.1. Should the OPERATOR fail to commence operation in compliance with the start-up date, the CITY reserves the right to assess the OPERATOR penalties in the amount of one thousand dollars (\$1,000.00) per parking facility per day.

Section 5. Financial Guarantee

Before the commencement of operation, the OPERATOR shall provide the CITY with an irrevocable standby Letter of Credit, Certificate of Deposit or Surety Performance Bond equal to one hundred forty-five thousand dollars (\$145,000.00) and one hundred thirty thousand dollars (\$130,000.00) for the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities, respectively. It shall be a condition of such Letter of Credit, Certificate of Deposit or Surety Performance Bond that, in case of default in the prompt deposit of gross revenues due the CITY, the CITY shall have the right and option to draw payment from such guarantee, which payment shall be credited against any amounts owed by the OPERATOR to the CITY. The OPERATOR shall, at all times during the term of this Operating Agreement, maintain such guarantee in the amount stated herein. The CITY reserves the right to revise the amount of the Standby Letter of Credit, Certificate of Deposit or Surety Performance Bond should there be a significant change in parking revenues.

Section 6. OPERATOR'S Operations Office

Prior to the commencement of operation of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities, the OPERATOR shall establish a central office and a records retention system for each geographic lot group within the City of Los Angeles to facilitate and conduct daily business with the parking public and the CITY. The Parking Office shall be staffed during regular business hours, 8:00 AM – 5:00 PM, seven days a week, by at least one (1) employee.

The OPERATOR will be required to furnish the Parking Office with adequate equipment, including but not limited to, office furniture, personal computer, printer, telephone, office safe, facsimile machine, photocopy machine, time clock, and any other equipment or supplies necessary to effectively administer the office and related parking operations. Such equipment and supplies shall be purchased by the OPERATOR at its own cost which will remain the property of the OPERATOR following expiration of the Operating Agreement.

Section 7. OPERATOR'S Accounting Plan and Procedures

Within the first month following the execution of this Operating Agreement, the



OPERATOR shall submit to the CITY an Accounting Plan and Procedures for the approval of the CITY, which approval will not be unreasonably withheld or delayed. This Accounting Plan and Procedures shall include but not be limited to record keeping, revenue control, collection and daily deposit of revenue. Any changes or revisions to the plan and procedures shall be mutually agreed upon by the CITY and the OPERATOR.

Section 8. OPERATOR'S Operations and Procedure Manual

Within the second month following the commencement of operation of the parking facilities, the OPERATOR shall develop and submit to the CITY a complete Operations and Procedure Manual for the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities for approval of the CITY, which approval will not be unreasonably withheld or delayed. The Operations and Procedure Manual shall include, as a minimum requirement, the following:

- 8.1 General operating and management policies;
- 8.2 Procedures for cash control, accounting, and auditing revenue collection;
- 8.3 Operating and maintenance procedures for parking access and revenue control equipment systems (PARCS);
- 8.4 Personnel staff schedules and job descriptions;
- 8.5 Personnel performance and quality assurance standards;
- 8.6 Personnel Training Plan;
- 8.7 Customer service standards and Customer Service Quality Control Plan;
- 8.8 Individual parking facility maintenance schedule;
- 8.9 Individual parking facility inspection schedule;
- 8.10 OPERATOR'S corporate and office support staff and their duties;
- 8.11 Company personnel policies;
- 8.12 Procedures for exception tickets (lost ticket, promise-to-pay, etc.), and
- 8.13 Emergency procedures.

Section 9. OPERATOR'S Marketing Plan



The OPERATOR shall submit and obtain the CITY'S approval of the OPERATOR'S Marketing Plan for the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities within sixty (60) days of commencing parking operations. This written program shall be innovatively designed to maximize Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities revenues and occupancy levels and shall be based upon the marketing efforts proposed in the OPERATOR'S response to the City's RFP. The CITY will work jointly with the OPERATOR to determine the best marketing strategies; the cost of implementation shall be the responsibility of the OPERATOR. The Marketing Plan will be evaluated on an annual basis, or at any time the CITY deems it necessary due to a change in the economic climate and other factors affecting the facilities revenues and occupancy levels.

Section 10. Bank Deposit of Revenues and Delinquent Payment Penalties

- 10.1 The OPERATOR shall deposit all gross revenues collected daily from each parking facility each day the parking facility is open for business to the City's bank account, by the close of the next business day. The OPERATOR shall transmit the daily listing of deposits to the Department of Transportation Accounting Division and the Parking Facilities Division electronically every business day.
- 10.2 The OPERATOR is responsible for the safekeeping of parking facility revenues at all times, including overnight and weekends, until they have been deposited into the City's Bank Account. The OPERATOR shall transport revenues via the City-contracted armored transport carrier.
- 10.3 The term 'gross revenues' shall include all revenues generated from the parking facility operations, including but not limited to, parking fees collected by the OPERATOR from the daily parking of automobiles, monthly parking permit revenue, special events, and other revenue as designated by CITY. The OPERATOR shall collect the City's Parking Occupancy Tax and deposit such tax with the gross revenues on a daily basis. The CITY shall be responsible for the remittance of the Parking Occupancy Tax to the City's Office of Finance.
- 10.4 The OPERATOR shall deposit all gross revenues collected daily from the parking facilities to the City's Bank Account by the close of the next business day. The OPERATOR'S deposit of gross revenues due to the City is delinquent if not received by the CITY by the close of the next business day following the day on which the revenues were collected. If the deposit is delinquent, the



OPERATOR shall pay penalties according to the following:

- 10.4.1 If any gross revenues are deposited within one (1) to thirty (30) calendar days after the due date, a penalty may be assessed up to five percent (5%) of the amount of gross revenues due.
- 10.4.2 If any gross revenues are delinquent for over thirty (30) calendar days after the due date, a penalty may be assessed up to ten percent (10%) of the amount of gross revenues due. The CITY shall have the right to attach or garnish the OPERATOR'S Certificate of Deposit, Letter of Credit or Surety Performance Bond to cover the amount due and late payment charges.

The CITY retains the right to waive or reduce such penalties as assessed under this section in its reasonable discretion.

Section 11. Revenue Control Procedures

- 11.1 The OPERATOR shall implement revenue control procedures, which account for fees collected and deposited, vehicles parked at the parking facilities, tickets issued and collected, and lost parking tickets. Daily reports and logs, which contain the name of the parking attendants who open and close the parking facilities, opening and closing ticket numbers, time of opening and closing of parking facilities, time of change of shifts, and list of overnight vehicles with amount due, shall be maintained for each parking facility. Daily audits shall be conducted by the OPERATOR, in addition to monthly reporting, complete audits, and surprise field audits. The OPERATOR shall be required to implement a secure system for collecting and moving cash from the parking booths and/or Automated Pay Machines to the Parking Management Office. The OPERATOR shall ensure that all collected revenues are accurately counted and must provide a safe for each parking facility and security measures that will prevent theft or expose pilferage. The Revenue Control Procedures submitted as part of the OPERATOR'S Proposal is included in this Operating Agreement, herewith attached as Exhibit G, subject to the final review and approval by the CITY'S Parking Facilities Division.
- 11.2 If available, the OPERATOR will be required to accept credit cards as a form of payment at the parking facility. Expenses incurred for credit card acceptance will be considered an operating expense. Such expenses include, but are not limited to, credit card thermal paper and monthly fees for the telephone lines associated with the credit card terminals. Service charges assessed by credit card



companies will be paid directly by the CITY.

- 11.3 The OPERATOR shall assume all responsibility for any losses which may result from its acceptance of checks or counterfeit bills for payment of parking fees when such checks are returned or bills are identified as counterfeit, and for losses resulting from any criminal activity such as theft or robbery of the OPERATOR'S personnel or employee pilferage. The OPERATOR may, at the OPERATOR'S discretion, decline to accept checks, but shall notify the CITY when such a decision has been made for the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities.
- 11.4 The OPERATOR must ensure that the camera surveillance equipment, if applicable, is properly maintained and in good operating condition at all times. The OPERATOR must immediately notify the CITY should the equipment be in need of repair, and arrange for the prompt restoration of the equipment to a good condition of repair, or install temporary equipment if prompt repair is not feasible.
- 11.5 The OPERATOR shall not enter into any agreements concerning non-parking uses of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities without the prior written consent of the City's Parking Facilities Division. Non-parking uses include, but are not limited to, product promotions or commercial advertising on CITY property or on ticket stock. Any revenues generated by such non-parking uses shall be identified and reported each month as part of the total revenue from the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities and deposited to the City's Bank Account according to Section 10, Bank Deposit of Revenues and Delinquent Payment Penalties.

Section 12. Audit Controls

The OPERATOR shall implement and maintain ticket and revenue audit controls and procedures and submit the required written audit reports with the Monthly Summary of Parking Operations Report, as follows:

- 12.1 Daily Deposit Records: The OPERATOR shall retain copies of daily deposit slips and armored transport acknowledgments for the above deposits for a period of not less than five (5) years from the end of this Operating Agreement or upon completion of an audit by the CITY, whichever first occurs. Under no circumstance shall the



OPERATOR permit funds collected in the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities to be taken anywhere off-site by any employee except to a place of deposit in an authorized account.

- 12.2 Cash Audits: The Parking Manager or other designated management employee shall conduct surprise cash audits of each parking facility cashier at least once every month. The audit shall cover proper cash handling procedures and a cash and ticket audit to ensure that all parking fees have been handled and reported accurately. The OPERATOR shall be required to submit a monthly written report to the CITY containing the audit results and pertinent back-up documentation with the OPERATOR'S comments and applicable recommendations, if any.
- 12.3 Parking Ticket Audits: The Parking Manager or other designated management employee shall conduct unannounced audits of the parking ticket inventory at least once every month. The OPERATOR shall be required to submit a monthly written report to the CITY containing the audit results and pertinent back-up documentation with the OPERATOR'S comments and applicable recommendations, if any.
- 12.4 Cash Handling and Parking Operations Audits: The OPERATOR shall retain the services of a reputable independent firm to perform mystery shopping services of parking operations and the performance and appearance of parking facility staff, without personal knowledge or advance warning. The CITY reserves the approval right in the selection and/or replacement of the independent firm conducting the mystery shopping services. The firm will conduct two (2) audits every month for each parking facility. Auditors posing as parking customers will audit cashiers and parking tickets issued, including lost ticket transactions, to ensure that parking revenues have been handled and reported accurately. Auditors will perform audits on parking operations, including but not limited to, maintenance of the parking facilities, employee appearance and attitude, knowledge of parking facility procedures, guidelines, and parking rates, and customer interaction and adherence to the CITY'S high level of customer service standards. The OPERATOR shall be required to submit the independent firm's written report and back-up documentation to CITY containing the audit results and the OPERATOR'S summary with comments and applicable recommendations, if any.
- 12.5 Independent Audits: The OPERATOR shall utilize internal corporate auditors that are not directly affiliated with the parking



operation to conduct an annual audit of the parking operations. The audit will include, but not be limited to, ticket transactions, revenues collected, internal controls, safety issues, parking facility maintenance, and customer service. The OPERATOR shall be required to submit a written report to the CITY containing the audit results and pertinent back-up documentation with comments and applicable recommendations, if any.

Section 13. Monthly Meetings, Statements, and Reporting Requirements

- 13.1 The OPERATOR'S personnel, as identified in the OPERATOR'S response to the City's RFP, shall be available to meet at least monthly with the CITY to discuss problems and all matters with respect to the management and operation of the parking facilities. Monthly meetings shall be held at the Caltrans Building, 100 South Main Street, 10th Floor, Los Angeles, or at another mutually agreed upon site and time.
- 13.2 The OPERATOR shall provide to the CITY (Department of Transportation, Parking Facilities Division, Attention: Belkis Del Valle, 100 South Main Street, 10th Floor, Los Angeles, CA 90012; and to the Department's Accounting Division, Attention: Hope Shaffer, 100 South Main Street, 10th Floor, Los Angeles, CA 90012) a monthly summary report of parking operations for each parking facility in the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities. The monthly statements shall be prepared on the CITY forms provided, herewith attached as Exhibit H, Monthly Summary of Parking Facility Operation Report, and are due no later than 4:00 P.M. on or before the fifteenth (15th) calendar day of the succeeding month. Information to be reported will include, but not be limited to, ticket counts, permitted non-parking uses, daily and monthly parking utilization and associated revenues, equipment problems, daily inspection logs, customer complaints, required audits reports and parking rate recommendations. The OPERATOR will include the monthly compensation invoice with back-up documentation. The CITY reserves the right to change the monthly reporting requirements upon a 30-day written notice to the OPERATOR.
- 13.3 Reports shall include a written summary showing daily, credit card, and monthly gross revenues collected and the resulting payment due the CITY. The reports shall include, but not be limited to, the following items:
- 13.3.1 The parking utilization of each of the parking facilities



including ticket usage and validation sales indicating the beginning and ending sequence numbers, with corresponding revenues, and payment due the CITY;

- 13.3.2 The number of parkers utilizing validations sold to merchants and an accounting of the businesses participating in the Validation Program;
- 13.3.3 Any unusual incidents occurring in any of the parking facilities such as security problems, damage to the parking facility or equipment, parking patron complaints with action taken, or any incident in which a police report is taken and other actions that are noteworthy but not specifically covered in other reports;
- 13.3.4 Personal injuries;
- 13.3.5 Use of parking facilities for other than regular fee parking, e.g. filming activity and community events;
- 13.3.6 Other CITY-approved uses of the parking facilities during the month;
- 13.3.7 Significant management and supervision changes and other key personnel changes of which the CITY should be aware;
- 13.3.8 Monthly Key Card Deposit Account balance;
- 13.3.9 Reconciliation of Hosted Special Event Agreements and/or Plans;
- 13.3.10 Copies of Daily Deposit Slips;
- 13.3.11 Audit Reports according to Section 12, Audit Controls;
- 13.3.12 A complete list, specifying beginning and ending numbers of proximity key cards for all monthly customers, including customer name, monthly rate, date and amount paid, and license plate number, make, model and color of vehicle;
- 13.3.13 Daily Inspection Logs;
- 13.3.14 Incident reports detailing theft, property damage, personal injury, vandalism or other actions that are noteworthy but not specifically covered in other reports, and



13.3.15 Problem/Complaint Abatement and Written Log,
according to Section 15.7.

- 13.4 The OPERATOR shall immediately report to the CITY any occurrences in any of the parking facilities resulting in emergency response including any law enforcement agency personnel and/or fire or medical agency personnel, which immediate report must be followed by the further submission of a full written report within seven (7) calendar days of any such incident.
- 13.5 The OPERATOR will be required to immediately advise the City's Parking Facilities Division, of the nature of any requests for use of any of the parking facilities other than for regular fee parking. For special events or film crew parking, the OPERATOR must obtain the CITY'S approval prior to the event. A sample Special Parking Facility Use Agreement is presented as Exhibit I.

Section 14. Parking Rates

The current parking rates are detailed in Exhibit J.

- 14.1 Variable Parking Rates: The OPERATOR shall not charge parking rates that would violate the requirements of the Los Angeles Municipal Code (LAMC), Chapter 10, Division 8, Section 103.202 (g). This LAMC Section prohibits changing the posted rates during the course of the business day.
- 14.2 Maximum Permissible Rates: The maximum permissible rates to be charged are established by the Board of Transportation Commissioners (BOTC). Requests for subsequent changes in the parking rates, up to the maximum allowed by the BOTC, must be made in writing by the OPERATOR, and may be made only with the written approval of the CITY. The OPERATOR will be expected to conduct market studies and provide revenue forecasts for any proposed future parking rate adjustments.
- 14.3 The OPERATOR shall cause the approved rates and a notice regarding the Parking Occupancy Tax to be clearly posted or displayed in any of the parking facility as required by the Los Angeles Municipal Code, subject to approval of the CITY before installation.

Section 15. Operation of Parking Facilities

- 15.1 Each parking facility shall be operated as a public parking facility on



a first-come first-served basis. The parking facilities shall be operated in accordance with the approved staffing plan, and the terms of this Operating Agreement.

- 15.2 During the currently established operating hours for each of the parking facilities, as indicated in Exhibit J, Parking Rates and Hours of Operation, OPERATOR, at its own expense, shall provide the staffing levels approved by the City, and as may be revised from time to time. At no time shall any of the parking facility be left unattended during hours of operation.
- 15.3 The OPERATOR may be required to operate any of the parking facility during additional hours beyond the regularly scheduled operating hours. After-hours parking may be limited to designated areas of the parking facility (e.g., the uppermost level) wherein signs and/or other devices shall be utilized to direct parking patrons to such designated areas during after-hours operation. The incremental cost for providing an after-hours parking operation will be reimbursed to OPERATOR by the entity (CITY or Interested Party) requesting additional staffing for the month incurred and this cost shall be based upon the cost presented by the OPERATOR in its response to the City's Request for Proposals, herewith attached as Exhibit K, Proposed Cost of Supplementary Services, and revised annually pursuant to Section 3.3, and upon presentation of substantiating invoices.
- 15.4 From time to time, the OPERATOR may make minor staffing schedule adjustments in preparation of addressing increased staffing needs to accommodate multiple, simultaneous special events. Such minor staffing adjustments may not occur without the prior approval of the CITY. This will not constitute a change in compensation paid to the OPERATOR.
- 15.5 Special event sponsors may choose to host guest parking from time to time. The OPERATOR will be responsible for coordinating said special events with event sponsors including the timely notification of the special events to the City's Parking Facilities Division. The OPERATOR will be responsible for the collection of a deposit based on the maximum parking rate and the valet surcharge, if applicable, per expected vehicle of the special event. The special event sponsor shall provide guests a pre-approved special event pass to be provided to the cashier upon exit, in order for the guest to exit the garage without paying the parking charge. The OPERATOR will be required to conduct an accounting and reconciliation of actual parking costs following the event and provide appropriate billing to the event sponsor of monies due or



applicable refund. The OPERATOR will be required to submit a copy of the final billing invoice to the City's Parking Facilities Division for each hosted special event. The OPERATOR shall equally share with the CITY any profit made by providing additional parking staff, for which the CITY'S share will be considered revenue to the CITY.

The CITY intends to review and revise the current special event hosted procedures. The OPERATOR will be expected to coordinate with the CITY to implement any replacement procedures.

- 15.6 Stack parking of cars in any of the parking facility will be permitted once the CITY is provided with proof of insurance by the OPERATOR.
- 15.7 The OPERATOR shall resolve any operational problems and/or patron complaints and accurately report these problems and/or complaints to the CITY within twenty-four (24) hours and follow up with a written report within ten (10) days of the incident. The OPERATOR shall maintain a written log of all complaints, injuries and accidents, security problems, damage to any of the parking facility and equipment, and other unusual incidents occurring in any of the parking facility. The OPERATOR shall note the dates and times, as well as the action taken or the reason for non-action. The log shall be available for inspection by the CITY'S staff at all reasonable times.
- 15.8 Any validation program to be implemented in any of the parking facilities shall be subject to the approval of the CITY.
- Any changes in the validation program, if applicable, will come from the CITY and the OPERATOR will expeditiously coordinate with the CITY to implement.
- 15.9 There are several electrical outlets in the Broxton Parking Garage (Lot 680), Robertson Parking Garage (Lot 703) and the Cherokee Parking Garage (Lot 670) for charging of electric vehicles. The OPERATOR shall monitor their use by parking patrons and shall promptly notify the CITY whenever problems or unusual circumstances regarding these outlets occur.
- 15.10 No spaces shall be reserved for certain patrons, businesses, or for special events without the prior written approval by the CITY.

Section 16. Monthly Parking Program



All parking facilities are to be operated as a public parking facility with the primary focus being the short-term parking needs of the businesses in the vicinity of the parking facility. Monthly parking is permitted to the extent that short-term parking is not negatively impacted.

- 16.1 Monthly Parking Records: The OPERATOR shall provide the CITY with a monthly report of the purchase and disposition of all monthly permits sold. The report shall include, but not be limited to, a listing of monthly customers, proximity key cards issued and/or other monthly passes sold, customer information, revenues collected, deposits collected and disbursed, refunds made, and reconciliation of key cards/passes activated and de-activated.
- 16.2 Monthly Key Card Deposits: Monthly parking customers are provided hang-tags or proximity key cards for parking control purposes. For those parking facilities that use proximity key cards, each monthly permit customer is charged a refundable deposit of an amount set by the CITY. The OPERATOR will be required to maintain a bank account separate from the revenue account, from which timely refunds of the deposit fee may be made. The OPERATOR must maintain records of all key card account transactions and establish procedures to be approved by the CITY for deposits and disbursements from said account. The CITY and the OPERATOR will determine the monetary cap for this account and procedures will be established for the timely deposit to the CITY of those deposits exceeding the mutually agreed-upon cap.

Section 17. Equipment and Facilities

- 17.1 Parking Management Office: The OPERATOR will be required to equip the Parking Management Offices with adequate resources, including but not limited to, office furniture, personal computers, printers, telephones, office safe(s), facsimile machine, photocopy machine, time clock, and any other equipment or materials necessary to effectively administer the offices.
- 17.2 Attendant Booth: The OPERATOR shall maintain LADOT-approved, disabled-accessible attendant booths and/or work areas in compliance with the American with Disabilities Act (ADA).
- 17.3 Business Telephone: The OPERATOR shall be responsible for the provision of appropriate telephone equipment (land-line or cellular) for each parking facility to be operational during business hours. The OPERATOR shall provide an answering service and voicemail to receive calls at all times that the Parking Management Office is closed. The OPERATOR shall monitor calls received on a daily



basis when the Office is closed and shall return calls during business hours no later than the next business day and as soon as reasonably possible if the call is designated urgent. The OPERATOR shall allow CITY staff to use telephones for City business and in emergency situations.

- 17.4 The OPERATOR will be required to obtain two-way radios or similar devices or any other communication devices to facilitate communications between managers, supervisors, and parking staff. Costs associated with these communication devices shall be at the OPERATOR'S sole expense and such equipment will remain the property of the OPERATOR. All telecommunication equipment shall be operational during business hours.
- 17.5 Revenue Control Equipment: The OPERATOR shall be responsible for the maintenance and service of the revenue control equipment systems (existing or newly acquired). The OPERATOR shall set up and oversee the preventative maintenance and service agreement with a reputable parking access and revenue control equipment service company. Maintenance service shall include hardware and software service and support. The OPERATOR is expected to operate and use the equipment properly, monitor its performance, and be sufficiently trained to perform routine maintenance tasks and trouble-shoot equipment operation to ensure the equipment's proper functioning. The OPERATOR will be required to monitor the service and repair of the revenue control equipment, including recording the removal of revenue control equipment parts by the service vendor, and maintaining an accurate spare parts inventory. The OPERATOR'S personnel must be provided training in the proper use of the revenue control equipment and related software and the ability to generate comprehensive usage, revenue, and statistical reports.
- 17.6 Parking Access and Revenue Control Equipment System: During the course of the Operating Agreement(s), the CITY may elect to replace existing or install new state-of-the-art Parking Access and Revenue Control Equipment Systems (PARCS) for certain parking facilities to ensure that the parking facilities are operated and managed in the most efficient manner resulting in a first-class quality parking operation while maximizing parking revenues, improving efficiencies, and lowering operational costs. Should the CITY elect to implement PARCS, the staffing schedule will be changed to effectively and sufficiently support the parking operation and subject to Section 3.4 provision of this agreement. The OPERATOR will purchase and install the PARCS and will be reimbursed, through an amortization schedule mutually agreed



upon by the CITY and OPERATOR, within the term of this agreement by the CITY.

Section 18. Quality of Service to the Public and Customer Service

- 18.1 The OPERATOR shall maintain the highest degree and standards of courtesy on the part of its employees. All employees must perform assigned duties in an orderly and professional manner. Employees must always be respectful of others and not engage in profanity or unsafe or illegal behavior. Employees must be able to communicate effectively in English.
- 18.2 The OPERATOR, in consultation with the CITY, shall implement a comprehensive Customer Service Plan including complaint abatement procedures to provide the highest level of service to each of the parking facility patrons. The Customer Service Plan shall be based upon the OPERATOR'S Customer Service Plan, as detailed in the OPERATOR'S response to the City's RFP.

Section 19. Quality Assurance and Safety Control

The OPERATOR shall establish and maintain a system of quality and safety controls to ensure that the Operating Agreement requirements are met. The quality control measures shall include, but not be limited to, the following:

- 19.1 Maintain all worksites free and clear of hazards to persons and property resulting from the parking operations. The OPERATOR must inspect the parking facilities and parking offices for hazards and maintenance needs and for public safety concerns on a daily basis. Any hazardous condition noted by the OPERATOR shall be immediately corrected. If the responsibility for causing correction not be within the OPERATOR'S scope of work, the hazardous condition should be immediately reported to LADOT.
- 19.2 Furnish and maintain flares and flashlights and flashlight batteries for each of the parking facility. Provide enough working flashlights for each employee to use during power outages and other emergencies. Post procedures in all work stations and the Parking Management Offices, informing employees whom to contact and what to do in the event of emergency.

Section 20. Uniforms and Appearance

The OPERATOR must furnish all employees with uniforms acceptable to the CITY consisting of a jacket, shirt, and full-length pants. Employees must be attired in clean uniforms bearing the OPERATOR'S company name, and be well-groomed at all times



while on duty. Employees shall wear name tags to clearly identify themselves to the public and to the CITY, in accordance with the requirements of L.A.M.C. Section 103.202. Visible body art or tattoos must be entirely covered by uniforms while at work. Extreme jewelry is not permitted.

Section 21. Employee Training and Development

The OPERATOR must provide a formal employee training program for all new hires to develop their knowledge, skills, and abilities for achieving quality work performance. The Program must include classroom and field instruction and employee participation. The Training Program shall include, but not be limited to, cashier training, reporting procedures, parking facility maintenance, ticket transactions, professional conduct, customer service, dispute handling, emergency procedures, and safety and security measures. The OPERATOR shall provide refresher training courses to existing employees every six (6) months and provide written verification of such training courses to the CITY.

Section 22. Staffing Requirements and Job Descriptions

The OPERATOR shall staff the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities with uniformed attendants and appropriate supervision during all hours of operation. In the event of an employee's illness or other emergency necessitating their absence, the OPERATOR shall provide replacement personnel to maintain the required staffing schedule.

Demand for a certain parking facility maybe high on Friday and Saturday evenings and during special events, often times operating at peak or overflow demand. During special events, large numbers of vehicles arrive and exit simultaneously. It is necessary that each of the parking facilities be sufficiently staffed by parking attendants to direct traffic to available parking spaces and to close already-full parking level/facility. The use of attendants allows traffic to flow smoothly, reduces congestion, and helps to alleviate patrons searching for the last few spaces during peak hours.

Upon the commencement of operation of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities, the OPERATOR will be expected to provide staffing for each of the parking facilities according to the City-approved staffing schedule. Should a change in parking conditions or requirements of the Parking Facility necessitate a revision to the initial Approved Staffing Schedule, the monthly compensation due OPERATOR will be increased or decreased in accordance with any applicable increases or decreases to the initial base staffing levels.

The OPERATOR shall ensure that all employees undergo and pass a pre-employment background check upon commencement of the operation of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities. The CITY reserves the right to conduct employee finger-print checks, should



the CITY deem necessary, and the cost of finger print implementation shall be the responsibility of the CITY.

From time to time, the OPERATOR may make minor staffing adjustments, including rescheduling employees, to avoid incurring additional labor costs, to prepare for certain special events. Such minor staffing adjustments may not occur without the prior written approval of CITY. Minor staffing adjustments will not constitute a change in the monthly compensation paid to the OPERATOR.

The OPERATOR shall ensure that all new employees undergo and pass a pre-employment background check prior to the commencement of employment. Should the CITY find any OPERATOR personnel unsatisfactory, the CITY reserves the right to direct the OPERATOR to remove such personnel from the parking facility.

The following are job descriptions of key personnel for the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities:

- 22.1 Corporate Representative: The OPERATOR shall assign a Corporate Representative to represent the OPERATOR at all times, attend meetings with the CITY, and act as a liaison between the OPERATOR and the CITY.
- 22.2 Parking Manager/Supervisor: The OPERATOR will employ one (1) Parking Manager/Supervisor (Manager) for each Geographic Lot Group to oversee the operation, management, and maintenance of the designated parking facilities. The Manager shall be on-duty in each Lot Group during the hours of operation of any and all of the parking facilities. The Manager shall be responsible for overseeing all aspects of the parking operations, including but not limited to, supervising, hiring and dismissing of employees and other required supervisory duties. The Manager shall ensure that each parking facility is staffed while the attendant is on break, at lunch, or absent from work. The Manager shall investigate and respond to customer complaints and resolve complaints to the CITY'S satisfaction within the specified period of time herein in this document. The Manager shall oversee the removal of cash from the attendant booths and the transport of such revenues to the City's bank account via the City-contracted armored transport carrier. The Manager will be responsible for the daily inspection of each parking facility and ensure that all problems are promptly addressed and corrected. The inspections shall be documented in the form of a checklist or log and shall be provided to LADOT for review and comment.



These inspections shall include but not be limited to, vehicle inventory, parking facility cleanliness, safety hazards, proper functioning of revenue control equipment, employee performance, and cash handling and cash accounting audits.

- 22.3 Parking Attendant (Cashier): The OPERATOR will staff each parking facility with a uniformed attendant(s) or cashier(s) whose responsibilities will include, but are not limited to, collecting parking fees from patrons and accurately processing such transactions, maintaining the parking booth in a clean and orderly manner, conducting required maintenance duties, responding courteously and appropriately to patron questions and complaints, notifying the Parking Manager of any unresolved complaints, problems or equipment failures, and filling out Lost Ticket forms for patrons who have misplaced their parking tickets, and obtaining patron signature on Promise-To-Pay forms.
- 22.4 Other Personnel: The OPERATOR will provide other on-site personnel whose responsibilities may include, but are not limited to, providing office administration support, providing security services, troubleshooting and servicing the revenue control equipment, cleaning and maintaining the parking facilities as specified in the RFP, placing traffic cones and barricades to facilitate traffic flow, and directing traffic to unoccupied parking spaces during peak occupancy periods.

The CITY reserves the right to change the operational methodology of any parking facility from a cashiered, pay-at-exit system to another form of operation, including but not limited to an automated, pay-on-foot system or multi-space parking meter system. Upon mutual agreement, the CITY and the OPERATOR will work to revise the staffing plan should there be a change in the operational methodology of the parking facilities, including the change in the OPERATOR'S monthly compensation.

Section 23. Maintenance Services

The OPERATOR shall perform maintenance services on an on-going basis at the parking facilities and shall be required to maintain the parking facilities in a clean and safe condition at all times, as detailed in Exhibit L, Parking Facility Maintenance Schedules. Performance of such services shall be performed with the use of environmentally-friendly cleaning materials.

- 23.1 Localized Sweeping: Daily sweeping of all high traffic areas and other areas that gather debris on a regular basis. Stairs and stairwells are to be swept daily and mopped weekly, or as needed. Stairs and stairwells are to be cleaned and deodorized, as needed.



- 23.2 Trash Removal: Empty all trash receptacles and remove litter and debris on a daily basis. Spot clean and wipe down all trash receptacles on a daily basis. Replace plastic liners as needed. Trash and debris may not be allowed to accumulate. Remove bulky items such as abandoned furniture and construction materials within 24 hours of discovery.
- 23.3 Parking Booth: Sweep the floor, clean the windows, doors, walls, and work surfaces of the attendant booths on a daily basis. The parking booth must be kept clean and presentable to the public at all times.
- 23.4 Parking Management Offices: Vacuum floor, dust, empty trash receptacles, and perform other cleaning on a daily basis. The Offices must be kept clean and presentable to the public at all times.
- 23.5 Restroom: Sweep floors, empty trash receptacles, and refill paper dispensers as needed throughout the day. Restrooms shall be thoroughly cleaned once a week, including mopping floors, and cleaning toilets and sinks.
- 23.6 Power Sweeping: Power sweep the entire parking surface as needed but not less than once every month for surface parking facilities and not less than once every week for parking structures. This includes, but is not limited to, the areas in and around the parking booth, walkways, wheel-stops, and parking facility corners and perimeters.
- 23.7 Pressure Washing: Pressure wash surface parking facilities once every year and pressure wash parking structures every six (6) months, including parking entrances and/or parking ramps. Use of a qualified vendor is required with prior approval from the CITY. The vendor must adhere to the Clean Water Act and Environmental Protection Agency regulations to ensure that all water run-off is directed away from storm drains. The vendor shall ensure that all water is recaptured and disposed of properly according to local regulations. This includes the parking surfaces and drive areas. Oil and grease deposits shall be removed as needed.
- 23.8 Graffiti Removal: Remove graffiti as soon as possible but no later than twenty-four (24) hours from observation or notification by CITY.
- 23.9 Rust Removal: Metal surfaces must be checked on a regular basis for rust with the prompt removal of any rust that is found.



- 23.10 General Deterioration Maintenance: This includes but is not limited to:
- 23.10.1 Touch-up painting to all surfaces and fixtures, including trash receptacles;
 - 23.10.2 Plumbing repair and replacement;
 - 23.10.3 Minor electrical system repairs;
 - 23.10.4 Door hardware and lock repairs and replacement, and
 - 23.10.5 Replacement of anti-skid tape throughout the parking facility stairwells.
- 23.11 Elevator Floor: Sweep and clean elevator floors on a daily basis. Elevator floors shall be mopped weekly. Replace floor tiles as needed.
- 23.12 Signage: Clean, maintain, re-lamp, and repair and/or replace all existing signs, including parking rate signs, directional signs, exit signs, and any other signage related to parking operations.
- 23.13 Electric Vehicle Charging Stations: Monitor the use of electrical vehicle charging stations by eligible parking patrons and promptly notify CITY whenever problems or unusual circumstances regarding these outlets occur.
- 23.14 Handrails: Maintain all handrails in a clean and safe condition at all times.
- 23.15 Landscaping: Landscaping services will be provided by LADOT's landscaping contractor. The OPERATOR is responsible for the removal of trash and debris from all landscaped areas, planters, and tree wells on a daily basis.
- 23.16 Insect and Pest Control: Maintain and oversee the control of insects and pests within each of the parking facilities. Use of a qualified vendor is required with prior approval from the CITY. A copy of the executed contract must be provided to the CITY prior to commencement of parking operations.
- 23.17 Walls/Columns/Pipes: Pressure wash the parking facility walls, columns, overhead pipes, and ceilings once every year. Spot cleaning of the parking facility walls, columns, overhead pipes, and



ceilings shall be conducted on an as-needed basis.

- 23.18 Maintenance Standards: Should any of the parking facility not be properly maintained according to the standards acceptable to the CITY, CITY reserves the right, after reasonable notice and opportunity to cure, to clean the parking facility and/or perform repairs or necessary maintenance activities. The CITY will deduct the cost of these services from the monthly compensation due the OPERATOR.

Section 24. Engineering Services

The OPERATOR shall perform various engineering services at the parking facilities, wherever it is applicable, including but not limited to the following services:

- 24.1 Lighting: Replace burned-out lights and/or fixtures, including exit signs and stairwell lights, as needed due to vandalism, accident, and general wear and tear within the parking facility. Test emergency lights and exit signs on a weekly basis to ensure proper functioning.
- 24.2 Drains: Regular inspection and cleaning of the any parking facility drains, sump pumps, and repair any clogged drains and sump pumps, as needed.
- 24.3 Fire Alarm Monitoring: Maintain and oversee the operation of the fire alarm system. The OPERATOR shall secure a contract with a qualified company for fire alarm monitoring services, and provide a copy of the executed contract to the CITY prior to commencement of parking operations. The company must operate 24-hours per day/seven days per week and be able to contact the OPERATOR and the City of Los Angeles Fire Department immediately in case of alarms.
- 24.4 Fire Equipment Testing/Maintenance: Maintain and oversee the operation of the fire extinguishers and fire sprinklers. The OPERATOR shall secure a contract with a qualified company to conduct annual and five-year City-required testing for the fire extinguishers and the fire sprinkler system to ensure that they remain in working order at all times. The OPERATOR must provide a copy of the executed contract(s) prior to commencement of parking operations. This includes annual recharging of the fire extinguishers and replacement of damaged or stolen fire extinguishers and cabinets. The OPERATOR shall ensure that all necessary repairs are made in a timely manner to mitigate safety issues.



- 24.5 Exhaust System/Carbon Monoxide Sensors: Maintain and oversee the operation of the exhaust system and carbon monoxide sensors to ensure a continuous safe and proper parking operation. The OPERATOR shall secure a contract with a qualified company to conduct quarterly preventative maintenance, routine repairs, and required testing of the exhaust system to ensure that the system remains in working order. The OPERATOR must provide a copy of the executed contract(s) prior to commencement of parking operations. The OPERATOR shall ensure that all necessary repairs are made in a timely manner to mitigate safety issues.
- 24.6 Elevator: Oversee the maintenance and operation of the elevator system. The OPERATOR shall secure a contract with a qualified company to properly service and maintain the elevator system and provide monthly preventative maintenance.

Section 25. Other Services

The CITY reserves the right to request the OPERATOR to perform other services in special circumstances, the initial cost of which shall be assumed by the OPERATOR. The cost for these services will be reimbursed to the OPERATOR for the month incurred within thirty (30) days from receipt of substantiating invoices, provided the OPERATOR obtained prior written approval from the CITY to perform these services at an agreed-upon price. Such services may include, but are not limited to, the purchase of equipment and supplies, the installation of materials and equipment, and the performance of special maintenance activities in connection to the operation, management and maintenance of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities.

Section 26. OPERATOR'S Books and Records/CITY Audits and Inspections

After execution of the Operating Agreement, CITY staff will meet with the OPERATOR to review record keeping methodologies in place and recommend changes, as necessary to ensure adequate reporting to the CITY.

- 26.1 At any time during normal business hours and as often as the CITY may deem necessary, the OPERATOR shall make available to the CITY for examination, all books, ledgers, journals and accounting records which reflect receipts derived from the operation of the parking facilities as well as accounting records pertaining to expenditures relative to the operation and maintenance of the parking facilities. The CITY shall have the authority to audit, examine and make excerpts or transcripts from records, including but not limited to, all contracts, invoices, materials, payrolls, and records of personnel, conditions of employment and other



documents or statistical data relating to the operation, management and maintenance of the Hollywood Geographic Lot Group Parking Facilities and the West Los Angeles Geographic Lot Group Parking Facilities.

- 26.2 The aforementioned records, and all source documents, including, but not limited to tickets/ticket stubs, receipt for monthly parking, logs, validation receipts, daily bank deposit slips, invoices of services and other related records, should be retained by the OPERATOR for a period of no less than five (5) years or until the examination of the source documents are completed and the audit reports are finalized.
- 26.3 In the event that the OPERATOR fails to provide the CITY with the requested documents, including but not limited to books, ledgers, journals, accounting records or source documents during the examination and audit, the OPERATOR shall be fined a penalty of ten thousand dollars (\$10,000.00) and the CITY shall have the right to terminate the Operating Agreement.
- 26.4 In the event that the CITY discovers any unreported revenues during the examination and audit, OPERATOR will pay the CITY the entire unreported amount and a penalty of five hundred dollars (\$500.00) for every incident, and one percent (1%) accrued interest per month from the time the revenue was to be reported. An additional one percent (1%) interest may apply until the requested unreported revenue(s) is/are fully paid. The Operating Agreement may also be terminated as a result of the discovered unreported revenue(s).
- 26.5 The CITY reserves the right to dispatch auditors of its choosing to the parking facilities. The OPERATOR shall provide an adequate private working area for the City's auditor. Such area shall include: a desk, chair, calculator and telephone. The auditor shall have ready access to a photocopy and facsimile machine. The City auditor shall be allowed to interview any employees of the OPERATOR.
- 26.6 The OPERATOR shall agree that examination of the OPERATOR'S books and records are made in accordance with generally accepted auditing standards applicable in the circumstances and that as such, said examination does not require a detailed audit of all transactions. Testing and sampling methods may be used in verifying reports submitted by the OPERATOR. Deficiencies ascertained by the use of such testing and sampling methods, by applying the percentages of error obtained from such testing and



sampling to the entire period under examination, will be binding on the OPERATOR and shall be admissible in court to prove any amounts due the CITY from the OPERATOR. This shall not prevent the OPERATOR from producing all actual records and figures in court to rebut the sampling method. The CITY shall then conduct an audit of all the records for the audit period. In the event the deficiency ascertained is five percent (5%) or more of the amount reported to the CITY, the OPERATOR will agree to pay the CITY for the entire cost of the audit.

- 26.7 The CITY retains the right to waive or reduce such penalties as assessed under this section in its reasonable discretion.

Section 27. Semi-Annual Review of Parking Operations

The City's Parking Facility Division reserves the right to conduct a written review of the OPERATOR'S management and operation of the parking facilities, on a semi-annual basis. A copy of the review will be provided to the OPERATOR to provide suggested methods to improve OPERATOR performance, if appropriate.

Section 28. Performance Penalties

The City's Parking Facilities Division monitors and evaluates the OPERATOR'S service in terms of management abilities and adequacies, cost control, and overall performance. The CITY reserves the right to assess Performance Penalties against the OPERATOR, which will be assessed based on the OPERATOR'S failure to meet the established performance standards as set forth in the Operating Agreement. The CITY reserves the right to deduct fees from the OPERATOR'S monthly compensation based upon the CITY'S inspections or complaints received from project stakeholders or the public in each of the performance categories: 1) Operations, 2) Written Reports, 3) Audits, and 4) Theft/Vandalism.

The assessment of performance penalties will not preclude, minimize, or replace the OPERATOR'S responsibility for ensuring that appropriate corrective actions are taken when necessary.

For the purposes of performance penalties, the "Office Employee" are defined as any individual performing duties as a Manager, Assistant Manager, or Office Clerk. "Field Employee" is defined as any individual performing duties as a Cashier, Parking Ambassador/Traffic Director, Parking Attendant, Valet Driver, or Parking Supervisor. "Paperwork" is defined as any document used by the OPERATOR at the direction of the CITY record daily business activities, including but not limited to, payroll records, incident reports, monthly revenue reports, fee collections, parking validations, over-rings and under-rings, and bank deposits.

28.1 Operations



- 28.1.1 One hundred dollars (\$100.00) will be deducted for the first instance that an Office Employee or Field Employee is absent from an assigned work area for reasons of abandonment or personal, non-emergency interest. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.2 Two hundred dollars (\$200.00) will be deducted for the first instance that an Office Employee or Field Employee rudely interacts with a customer while performing his/her duties. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.3 Two hundred dollars (\$200.00) will be deducted for the first instance that a Field Employee engages in activity that detracts from a professional and alert stance while on duty (including, but not limited to drinking alcohol, sleeping, eating meals, maintaining lengthy personal conversations, or holding non-emergency telephone calls.) Drinking water, cold drinks and hot beverages is acceptable in some instances, but should not be consumed while assisting the parking public. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.4 Two hundred dollars (\$200.00) will be deducted for the first instance that an Office Employee or Field Employee is not well groomed and not attired in a clean uniform acceptable to LADOT while on duty. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.5 Two hundred dollars (\$200.00) will be deducted for the first instance that an Office Employee or Field Employee is unable to effectively communicate in English. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.6 Two hundred fifty dollars (\$250.00) will be deducted for the first instance that an Office Employee or Field Employee fails to conduct the required daily parking facility inspection and maintain the required inspection log. The deduction will be doubled for the second instance



and tripled for the third instance and all instances thereafter.

- 28.1.7 Two hundred fifty dollars (\$250.00) will be deducted for the first instance that an Office Employee or Field Employee fails to ensure that the parking facility is maintained in a clean and safe condition during the hours of operation. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.8 Two hundred fifty dollars (\$250.00) will be deducted for the first instance that an Office Employee or Field Employee is not required to undergo and pass a background investigation prior to beginning work at the parking facility. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.9 Two hundred fifty dollars (\$250.00) will be deducted for the first instance that an Office Employee or Field Employee fails to properly maintain the parking ticket inventory and required procedures and control, including but not limited to, completion of the parking ticket inventory log book. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.10 Two hundred fifty dollars (\$250.00) shall be deducted for the first instance that a Field Employee fails to obtain supervisor approval when processing a parking ticket manually when the parking facility is equipped with a parking access and revenue control equipment system. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.11 Two hundred fifty dollars (\$250) shall be deducted for the first instance that a Field Employee fails to adhere to the 'Lost Ticket' procedures per the direction of LADOT. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.12 Two hundred fifty dollars (\$250.00) will be deducted for the first instance that an Office Employee or Field Employee fails to report hazardous conditions, incidents involving theft, or occurrences of personal injury resulting



from incidents at the parking facility to LADOT and followed by a written report within seven (7) days of such incident. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.

- 28.1.13 Five hundred dollars (\$500.00) will be deducted for the first instance that an Office Employee fails to staff the parking facility in accordance with the required staffing schedule. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.14 Five hundred dollars (\$500.00) will be deducted for the first instance that improvements, structures, facilities, or additions are made in, to, or upon a parking facility by the OPERATOR without receiving prior written authorization from the CITY. In addition, the OPERATOR will be required to return said property to its original condition or better. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.1.15 Five hundred dollars (\$500.00) shall be deducted for the first instance that an Office Employee changes the posted parking rates without notifying the CITY and receiving written approval from the CITY. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.

28.2 Written Reports

- 28.2.1 Fifty dollars (\$50.00) will be deducted for each individual page of paperwork that the OPERATOR fails to submit to the CITY at the direction of the CITY. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.2.2 Fifty dollars (\$50.00) will be deducted for each individual page of paperwork that the OPERATOR submits to the CITY that is not properly completed, missing required information, or contains inaccuracies. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.2.3 Two hundred fifty dollars (\$250.00) shall be deducted for



the first instance that an Office Employee fails to reconcile the daily revenues with the daily revenue summary report. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.

- 28.2.4 Two hundred fifty dollars (\$250.00) will be deducted for the first instance that the OPERATOR fails to provide the required Monthly Summary of Parking Facility Operations Report to the CITY by 4:00 PM on the due date. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.

28.3 Audits

- 28.3.1 Two hundred fifty dollars (\$250.00) shall be deducted for the first instance that an Office or Field Employee fails to audit and approve the Cashier end-of-shift report. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.3.2 Two hundred fifty dollars (\$250.00) shall be deducted for the first instance that an Office or Field Employee fails to conduct the monthly unannounced audit of parking ticket inventory and submit the required written report. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.3.3 Five hundred dollars (\$500.00) shall be deducted for the first instance that an Office Employee fails to conduct a surprise cash audit of each parking facility cashier every month, and submit the required written report monthly surprise cash audit of each parking facility Cashier, and submit the required written report. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.3.4 Five hundred dollars (\$500.00) shall be deducted for the first instance that the OPERATOR fails to retain the services of a reputable independent firm to conduct mystery shopping services to audit parking operations, parking facility maintenance, and the performance of parking facility personnel, without personal knowledge, two times every month for each parking facility, and submit the required written report. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.



- 28.3.5 One thousand dollars (\$1,000.00) shall be deducted for the first instance that the OPERATOR fails to utilize internal corporate auditors that are not directly affiliated with the parking operation to conduct an annual audit of the parking operations and submit the required written report. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.

28.4 Theft/Vandalism

- 28.4.1 Five hundred dollars (\$500.00) will be deducted for the first instance that an Office Employee or Field Employee commits vandalism or deliberately disables or defaces property and/or equipment (including revenue control equipment) belonging to the City. In addition, the Operator will be required to return said damaged property to its original condition or better. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.4.2 Five hundred dollars (\$500.00) will be deducted for the first instance that an Office Employee or Field Employee commits theft of CITY revenues or property. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.
- 28.4.3 Five hundred dollars (\$500.00) will be deducted for the first instance that an Office Employee or Field Employee commits theft of property belonging to the parking public, contractors, visitors, or retail tenant employees. The deduction will be doubled for the second instance and tripled for the third instance and all instances thereafter.

LADOT retains the right to waive or reduce performance penalties in its reasonable discretion

Section 29. Conditions Governing Improvements and Alterations by OPERATOR

- 29.1 No improvements, structures, facilities, alterations or additions shall be made in, to, or upon any of the parking facilities by the OPERATOR without the prior written consent of the General Manager of the Department of Transportation or his/her designee.
- 29.2 Expenses incurred in connection with the repairs or alterations on



any of the parking facilities as directed or mandated by the CITY, shall be the responsibility of the CITY, unless they are caused by the fault or gross negligence of the OPERATOR or its employees, in which case, the OPERATOR is solely liable.

Section 30. Restriction on Use

- 30.1 The OPERATOR, in its operation of the parking facilities, shall be subject to all reasonable orders, directions or conditions issued by the CITY. Other uses, including but not limited to storage of vehicles, film permit related usage, public and private events, and retail or wholesale commercial activities, are permissible only with a written request to, and advance approval by, the CITY. The OPERATOR shall comply with policies issued by the CITY and film permit conditions coordinated through FilmLA for film and television production companies use of operated parking facilities.
- 30.2 For approved non-parking events or activities, the permittee shall be required to provide the CITY special events insurance coverage, unless OPERATOR'S General Liability and Automobile Insurance Policies include contractual coverage.

Section 31. Use of Parking Facilities by CITY

- 31.1 Each of the parking facilities is intended for motor vehicle parking on a transient and monthly basis.
- 31.2 The CITY reserves the right to use any of the parking facilities to erect signs and structures for the purpose of advertising, together with the installation and maintenance of any wiring or equipment necessary to utilize any of the parking facilities for advertising purposes.
- 31.3 The CITY further reserves the right to install public pay telephones, security gates, alarm systems, additional lighting and any other security equipment and personnel or improvements it deems necessary in any of the parking facilities. Such installations or improvements shall be, wherever practical, made in such a manner as not to interfere with parking facility operations.

Section 32. Taxes and Licenses

- 32.1 The Office of the Los Angeles County Assessor may deem that the OPERATOR holds a possessory interest in any of the parking facilities through the award of this Operating Agreement. Should payment be mandated by the County Assessor, the OPERATOR



shall be responsible for the payment of such possessory interest tax based upon the OPERATOR'S interest in any of the parking facilities. Payment of possessory interest tax, if any, shall be at the sole expense of the OPERATOR and will not be considered a reimbursable operating expense.

- 32.2 The OPERATOR shall be responsible for and pay all other taxes which may be levied or charged upon the rights of OPERATOR to perform the service of operating the parking facilities in the City of Los Angeles, and upon the OPERATOR'S improvements, equipment, fixtures, facilities or other property thereon.
- 32.3 The OPERATOR, at its sole expense, shall obtain all licenses and permits which may be required for the conduct of its business within the terms of this Operating Agreement, or for the making of repairs, alterations, improvements or additions as directed by the CITY.

Section 33. Insurance and Bonds

- 33.1 The OPERATOR, at its sole expense, shall obtain and maintain for the term of this Operating Agreement, insurance and bond coverage at levels meeting or exceeding those indicated in Insurance Requirements, Exhibit M. The City of Los Angeles shall be included as "Additionally Insured" under the types of coverage and in the amounts specified in Exhibit M.
- 33.2 Prior to the commencement of this Operating Agreement, the OPERATOR shall submit evidence of such insurance and bonds, in accordance with the requirements detailed in Exhibit M, Insurance Requirements, to the CITY.

Section 34. Amendment

The parties may, by mutual consent, amend this Operating Agreement by a contract amendment, which must be approved by the Mayor and/or City Council.

Section 35. Termination Of Operating Agreement

The OPERATOR'S performance pursuant to the Operating Agreement may be terminated in whole, or in part, by the CITY upon thirty (30) days written notice in the form of a "Notice of Termination" provided to the OPERATOR by the CITY. Upon receipt of such Notice, the OPERATOR shall cease all work immediately or on the date, if any, specified in the said Notice, whichever is later, and thereafter take all reasonable steps not to incur additional costs associated with the Operating Agreement.

Termination may be commenced by the CITY upon the occurrence of any of the



following events:

- 35.1 Cancellation for Default: Whenever the OPERATOR shall default in its performance of the Operating Agreement and fails to cure such default within a period of ten (10) days after receipt from the CITY of a notice specifying the default; or,
- 35.2 Termination for Convenience: Whenever for any reason the CITY shall determine that such termination is at the convenience of, or in the best interest of the CITY. If the CITY elects to terminate the contract for its convenience, such termination shall be effective upon thirty (30) calendar days after delivery of said Notice to the OPERATOR, unless a later date is specified in the same Notice of Termination. The CITY shall, thereafter, pay the OPERATOR for services provided through the date of termination. Thereafter, the OPERATOR shall have no further claims or recourse against the CITY under the Operating Agreement.
- 35.3 Liability, Rights and Remedies: Except as provided for above, the OPERATOR shall have no claims for any other loss, expense, or damages for the termination of the Operating Agreement for the CITY'S convenience.

The OPERATOR shall have the right to terminate this Agreement if the CITY breaches any of its obligations under this Operating Agreement, provided the CITY is first given written notice of the alleged default and then fails to cure the default within ten (10) days of receipt of such notice, if a monetary default, or within thirty (30) days of receipt of such notice, if a non-monetary default.

If this Agreement is terminated for any reason prior to expiration of its full term, then the CITY shall reimburse OPERATOR the unamortized portion of any equipment purchases or capital expenditures undertaken by OPERATOR if such purchases or expenditures were authorized by the CITY.

Section 36. CITY'S Right of Re-Entry

The CITY shall, as an additional remedy, upon giving written notice of termination as provided in Section 35 hereof, have the right of re-entry to any of the parking facilities and every part thereof on or at any time after the effective date of termination without further notice of any kind, and may regain and resume possession either with or without the institution of summary or other legal proceedings or otherwise. Such re-entry or regaining, or resumption of possession, however, shall not in any manner affect, alter or diminish any of the obligations of OPERATOR under this Operating Agreement.

Section 37. Remedies of CITY



If the OPERATOR violates any conditions of this Operating Agreement or fails to perform, the CITY shall give written notice to the OPERATOR to correct or cure such failure to perform or violation. If within ten (10) days from date of receipt by the OPERATOR of such notice, the failure or violation has not been corrected in a manner satisfactory to the CITY, the CITY shall have the right to give the OPERATOR a thirty (30) day Notice of Termination of this Operating Agreement. The CITY also retains the right to terminate this Operating Agreement, at its sole discretion, pursuant to the provisions of Section 35, herein above.

Section 38. Surrender of Possession

The OPERATOR covenants and agrees to return peaceably, promptly, and in good condition and repair to the CITY, possession of the parking facilities and all property thereon belonging to the CITY on the date of the termination of this Operating Agreement, whether such termination be by cancellation, expiration or otherwise. The OPERATOR shall, in case of such termination, have the right to remove its equipment, supplies, furnishings, inventories, removable fixtures and other personal property from the parking facilities. If the OPERATOR fails to remove said personal property on or before the termination of this Operating Agreement, the CITY may remove such property to a public warehouse or retain the same in its possession and sell same at public auction, the proceeds of which shall be applied first to the expense of removal, storage and sale, and second, any sums owed by the OPERATOR to the CITY, with any balance remaining to be paid to the OPERATOR. If the expense of such removal, storage and sale shall exceed the proceeds of sale, then the OPERATOR shall pay such excess to the CITY upon demand.

Section 39. Assignments Prohibited

- 39.1 The OPERATOR shall not assign, mortgage, encumber, pledge or otherwise transfer any interest in this Operating Agreement without the express written consent of the CITY. Absent said written consent, any attempted assignment, mortgage, encumbrance, pledge or other purported transfer shall be null and void and shall confer no right, title or interest in or to this Operating Agreement.
- 39.2 The OPERATOR shall not enter into any subcontract with any entity for the performance or operation of any activity mandated or allowed by this Operating Agreement, without the written permission of the CITY, which permission will not be unreasonably withheld or delayed. Copies of all such contracts shall be provided to the CITY'S Parking Facilities Division.
- 39.3 The terms, conditions, obligations and responsibilities of the OPERATOR as set forth in this Operating Agreement shall be binding upon any and all Successors in Interest of the OPERATOR.



Section 40. Incorporation of Standard Provisions - Order of Document Precedence

- 40.1 Hereby incorporated by reference into this Operating Agreement and made a part thereof are the provisions of the Standard Provisions for City Contracts which is attached hereto as Exhibit N. The OPERATOR shall comply with all City of Los Angeles requirements outlined in the RFP, including the Standard Provisions for City Contracts (Revised 03/09), as amended. The OPERATOR shall complete all required forms attached hereto in the Standard Provisions for City Contracts.
- 40.2 In the event of any inconsistency between this Operating Agreement and the Standard Provisions for City Contracts, the inconsistency shall be resolved by giving precedence to paragraphs of this Operating Agreement.
- 40.3 All persons who do business with or within the City of Los Angeles are required to obtain a Business Tax Registration Certificate (BTRC) from the City Clerk's Office and pay business taxes. The OPERATOR must submit a copy of its City of Los Angeles BTRC and have the Certificate on file with the Office of Finance, City Hall, Room 220, 200 North Spring Street, Los Angeles, CA 90012.
- 40.4 The OPERATOR must have on file with the Office of the City Clerk, City Hall, Room 360, 200 North Spring Street, Los Angeles, CA 90012, a bond or bonds indemnifying parking patrons, on each lot it operates, against loss by reason of theft, or other unlawful taking or damages to such vehicles accepted for parking or storage for which the selected OPERATOR is liable. Said bond(s) must be in the form and amount specified in Section 103.202 of the Los Angeles Municipal Code. The amount of bond(s) shall range between ten thousand dollars (\$10,000.00) and fifty thousand dollars (\$50,000.00), depending on the total number of parking lots operated by the OPERATOR within the City of Los Angeles. Forms of evidence of said bond(s) are available at the Office of the City Attorney, Insurance and Bonds Section, Room 1225 City Hall, 12th Floor, 200 North Spring Street, Los Angeles, CA 90012.
- 40.5 The OPERATOR shall have on file with the Los Angeles Police Commission, 150 N. Los Angeles Street, Los Angeles, CA 90012, a written permit for each parking facility it operates or manages as stated in Section 103.202 of the Los Angeles Municipal Code.
- 40.6 During the term of this Operating Agreement and without limiting the OPERATOR'S indemnification of the CITY, the OPERATOR



shall provide and maintain the insurance requirements indicated in Exhibit N, Standard Provisions for City Contracts. The City of Los Angeles shall be included as "Additionally Insured" under the types of coverage and in the amounts specified in the Insurance Requirements. The OPERATOR will be required to submit evidence of such insurance and bonds prior to the execution of the Operating Agreement and in forms prescribed by the CITY. The OPERATOR shall furnish certificates of renewal at least ten (10) days prior to the expiration of the policy.

Section 41. Miscellaneous

- 41.1 This Operating Agreement shall be construed and enforced according to the laws of the State of California.
- 41.2 Any action brought to enforce or nullify this contract or the provisions hereof must be brought in Los Angeles County, State of California and in no other forum.
- 41.3 No waiver by either party of any breach of any provision of this Operating Agreement shall be deemed for any purpose to be a waiver of any breach of any other provision hereof or of a continuing or subsequent breach of the same provision.
- 41.4 The City's liability under this Operating Agreement shall only be to the extent of the present City appropriation to fund the Operating Agreement. However, if the City shall appropriate funds for any succeeding years, the City's liability shall be extended to the extent of such appropriation, subject to the terms and conditions of the Operating Agreement.
- 41.5 All notices required hereunder shall be in writing and shall be personally delivered or mailed by first class mail, postage prepaid, and addressed to the CITY or the OPERATOR with their respective addresses as herein provided, except for the copies of OPERATOR'S monthly reports specified in Section 13 of this Operating Agreement.

CITY: Rene M. Sagles
City of Los Angeles, Department of Transportation
100 South Main Street, 10th Floor
Los Angeles, CA 90012

Copy to: Belkis Del Valle
City of Los Angeles, Department of Transportation
100 South Main Street, 10th Floor
Los Angeles, CA 90012



OPERATOR: Gary Pitts, Executive Vice President
Modern Parking Inc.
1200 Wilshire Blvd., Suite 300
Los Angeles, CA 90017

Dolan Islam, Vice President of Operations
Modern Parking Inc.
1200 Wilshire Blvd., Suite 300
Los Angeles, CA 90017

Manuel Rubio, Vice President, Quality & Revenue
Modern Parking Inc.
1200 Wilshire Blvd., Suite 300
Los Angeles, CA 90017

Section 42. Severability

In the event any provision of this Operating Agreement is found to be unenforceable, the remainder of Operating Agreement shall not be affected, and any provision found to be invalid shall be enforced to the extent permitted by law. The parties agree that, in the event two different interpretations may be given to any provision hereunder, one of which will render the provision enforceable, the interpretation rendering the provision enforceable shall be adopted.




IN WITNESS WHEREOF, CITY has caused this Operating Agreement to be executed by their duly authorized representatives.

For: THE CITY OF LOS ANGELES
Department of Transportation

For: MODERN PARKING INC.


By: 
Jon Kirk Mukri, General Manager

By: 
Lori R. Pinson, Sr. Vice President

Date: 07/22/2014


Date: 07.18.14

APPROVED AS TO FORM AND LEGALITY:
Michael N. Feuer, City Attorney

By: 
Michael Nagle, Deputy City Attorney

Date: 7/17/14

ATTESTED:
Holly Wolcott, Interim City Clerk

By: 
Deputy City Clerk



Date: 7/25/14

Said Agreement is Number C-124274 of City Contracts



Azeen Khanmalek <azeen.khanmalek@lacity.org>

RE: Reese Davidson Community - P3 for Public Parking

4 messages

Allison Riley <ariley@vchcorp.org>

Wed, Jun 10, 2020 at 11:28 AM

To: Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Eleanor Atkins <eatkins@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Azeen Khanmalek <azeen.khanmalek@lacity.org>, Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>, Blair Miller <blair.miller@lacity.org>, Jacqueline Wagner <jacqueline.wagner@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "eric.bruins@lacity.org" <eric.bruins@lacity.org>, "Krista.Kline@lacity.org" <Krista.Kline@lacity.org>

Please find attached an agenda for our discussion on Friday at 1pm.

Let us know if you have any comments or additions.

We're looking forward to the conversation.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

-----Original Appointment-----

From: Allison Riley

Sent: Wednesday, June 3, 2020 11:55 AM

To: Allison Riley; Sarah Letts; Victoria Senna; Eleanor Atkins; Becky Dennison; Anup Patel; Azeen Khanmalek; Mandana Khatibshahidi; Blair Miller; Jacqueline Wagner; ken.husting@lacity.org; david.cataldo@lacity.org; rauhman.lavergne@lacity.org; eric.bruins@lacity.org; Krista.Kline@lacity.org

Subject: Reese Davidson Community - P3 for Public Parking

When: Friday, June 12, 2020 1:00 PM-2:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: Conference Call: [REDACTED] Pin: [REDACTED]

Thanks to everyone who filled out the doodle poll. Friday, June 12, 2020 at 1pm looked like it worked for everyone so far, so let's plan on talking then.

Please feel free to forward this invitation if I missed anyone on your team that wants to participate.

I'll follow-up with an agenda before the call.

We look forward to moving continuing this conversation.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org



20200612 Agenda Parking Final.docx
22K

Blair Miller <blair.miller@lacity.org>

Thu, Jun 11, 2020 at 10:46 AM

To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Cc: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Hi Azeen!

Have you had a chance to connect with CD 11 regarding the alternative site p[ro]posed by DOT? It might be good to have their input on that before tomorrow's meeting, so they can be prepared if Ken brings it up.

Thank you,

Blair Miller

Office of the City Administrative Officer | City of Los Angeles
Asset Management

213-473-7598

200 North Main Street Suite 1500, LA 90012

[Quoted text hidden]



20200612 Agenda Parking Final.docx
22K

Azeen Khanmalek <azeen.khanmalek@lacity.org>

Thu, Jun 11, 2020 at 5:19 PM

To: Blair Miller <blair.miller@lacity.org>

Cc: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Hi Blair,

I touched base with the developers on this proposal, and at this point in the process, it's not really a feasible alternative. Besides the physical differences in the sites, there is also the issues related to the approval process that would need to begin all over again. They architects would have to redesign the projects, the planning application would need to be withdrawn and started all over again, as would the environmental analysis and all the associated reports that go into it. The developer felt very strongly that both the monetary and temporal resources that have been invested in the project thus far would essentially be wasted should the site change.



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

[Quoted text hidden]

Blair Miller <blair.miller@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>
Cc: Mandana Khatibshahidi <mandana.khatibshahidi@lacity.org>

Thu, Jun 11, 2020 at 6:14 PM

Thank you for checking with them.

Blair Miller
Office of the City Administrative Officer | City of Los Angeles
Asset Management
[213-473-7598](tel:213-473-7598)
[200 North Main Street Suite 1500](#), LA 90012

[Quoted text hidden]

Agenda
Reese Davidson Community – Public-Private Partnership for Public Parking

Friday, June 12, 2020 1pm
Conference Call: [REDACTED] Pin [REDACTED]

1. Introductions **5 Minutes**
2. Reaffirming Goals **15 Minutes**
 - Build 140 Units of Affordable and Supportive Housing
 - Replace 188 existing public parking spaces
 - Balance competing interests, while maximizing long-term DOT income
 - ◇ No debt is owed to Special Partner Revenue Fund (SPRF)
 - ◇ Are there funds available to borrow?
 - Modify our Public Private Partnership
 - ◇ 3rd party parking developer/operator
 - ◇ City funding, if any, timing for confirmation
3. Confirmation of Process **15 Minutes**
 - EOM is architect of record
 - VCH/HCHC should lead selection and negotiations with Parking Developers and seeking confirmation from the city regarding:
 - ◇ We can independently select a partner, no additional formal bid process is required
 - ◇ City participates in final negotiations.
 1. Is the CAO's office? Others?
 - ◇ If the ground lease payment is at or above FMV, decisions could be made at the staff level, avoiding Council approval. True?
 - Temporary parking during construction – underutilized, city-owned, parking lots
4. Potential Key Terms/Current Understanding **15 Minutes**
 - Separate Ground Lease between City and Parking Developer – 50-60 years
 - Operating Agreement – Minimum term to private Return on Investment, with opportunities to renew (approximately 20 - 30 years)
 - ◇ Private developer recoups investment, before income to city
 - Parking rate constraints
 - ◇ Who determines maximum price?
 - ◇ Other limitations on income?
 - Additional Income Opportunities
 - ◇ Internal advertising?

◇ Others?

- Specifications for parking design, including operator office space/needs will be driven by the parking developer.

5. Discuss Timeline **8 Minutes**

6. Other/Next Steps **2 Minutes**

- Schedule a follow-up meeting



Azeen Khanmalek <azeen.khanmalek@lacity.org>

RE: Reese Davidson Community Monthly Check-in

4 messages

Allison Riley <ariley@vchcorp.org>

Thu, Jun 4, 2020 at 3:31 PM

To: Eleanor Atkins <eatkins@hollywoodhousing.org>, Conference Call Number <conferencecallnumber@hollywoodhousing.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>
Cc: "magdalina.zakaryan@lacity.org" <magdalina.zakaryan@lacity.org>, Amy Anderson <amy.anderson@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>

Team, here's our proposed agenda for our discussion next week. Let us know if you have any comments or additions.

We look forward to talking next week.

1. DOT Topics
 - a. Update on Parking Study
 - b. P3 - Potential Partners
 - c. Other Questions/Next Steps
2. Developer Progress Update
 - a. Relocation Plan
 - b. Entitlements
 - c. Proforma Update
3. HCID Progress Update
 - a. City Attorney's response to memo
 - b. Relocation
4. Next Steps
 - a. DDA
 - b. HCID Pipeline Application
5. Miscellaneous

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

-----Original Appointment-----

From: Eleanor Atkins [mailto:eatkins@hollywoodhousing.org]

Sent: Tuesday, March 17, 2020 8:44 AM

To: Eleanor Atkins; Conference Call Number; Sarah Letts; Victoria Senna; Becky Dennison (bdennison@vchcorp.org); Anup Patel; Gohar Paronyan; Rick Tonthat; Helmi Hisserich

Cc: magdalina.zakaryan@lacity.org; Amy Anderson; azeen.khanmalek@lacity.org; Allison Riley

Subject: FW: Reese Davidson Community Monthly Check-in

When: Wednesday, June 10, 2020 9:30 AM-10:30 AM (UTC-08:00) Pacific Time (US & Canada).

Where: call in [REDACTED] access: [REDACTED]

Welcome, Allison!

From: Eleanor Atkins

Sent: Wednesday, September 11, 2019 11:51:45 AM (UTC-08:00) Pacific Time (US & Canada)

To: Conference Call Number; Sarah Letts; Victoria Senna; Becky Dennison (bdennison@vchcorp.org); Anup Patel; Gohar Paronyan; Rick Tonthat; Helmi Hisserich

Cc: magdalina.zakaryan@lacity.org; Amy Anderson; azeen.khanmalek@lacity.org

Subject: Reese Davidson Community Monthly Check-in

When: Occurs every month on the second Wednesday of the month from 9:30 AM to 10:30 AM effective 10/9/2019 until 10/9/2020.

Where: call in: [REDACTED] access: [REDACTED]

Allison Riley <ariley@vchcorp.org>

Tue, Jul 7, 2020 at 2:12 PM

To: Eleanor Atkins <eatkins@hollywoodhousing.org>, Conference Call Number <conferencecallnumber@hollywoodhousing.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>
Cc: Amy Anderson <amy.anderson@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>, "magdalina.zakaryan@lacity.org" <magdalina.zakaryan@lacity.org>

Team, we look forward to catching up tomorrow. Here's our proposed agenda:

1. DOT Topics:
 - a. Parking study – clarifications
 - b. Automated parking study

- c. P3 - Potential Partner Update
 - d. City Attorney assignment for review of P3 proposals
 - e. Talking with CAO office about MICLA Financing Friday (FYI, invite)
 - f. Coastal Commission Meeting (scheduling, invite DOT/HCID)
2. Entitlements Update
 3. HCID Rent Schedule Determination (Schedule VI or VII)
 4. Relocation Plan (Eleanor update from David on holding units vacant)
 5. City Attorney's response to memo
 6. Miscellaneous

Let us know if you have any additions or comments.

Best regards,

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile:



Email: ariley@vchcorp.org

[Quoted text hidden]

Allison Riley <ariley@vchcorp.org>

Thu, Aug 6, 2020 at 5:57 PM

To: Eleanor Atkins <eatkins@hollywoodhousing.org>, Conference Call Number <conferencecallnumber@hollywoodhousing.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>
Cc: "magdalina.zakaryan@lacity.org" <magdalina.zakaryan@lacity.org>, Amy Anderson <amy.anderson@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, "david.cataldo@lacity.org" <david.cataldo@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>

Team, below is an agenda for our discussion next week. Let us know if there are any additional topics to add to the discussion.

Additionally, per last month's call, we reached out to DOT's attorney who suggested that the HCID's City Attorney join a conversation with all of us. Given that our agenda is a little light this month, I wonder if we can merge these meetings? Do you think Anna Didak might be available to join us on Wednesday, June 12th at 9:30am?

We also floated the following times:

- Tuesday 8/11 after 2pm
- Wednesday 8/12 at 2pm
- Thursday 8/13 at 9am

Let us know if any of these times work for you and your attorney. Thanks!

1. DOT Topics:
 - a. Meeting with DOT City Attorney
 - b. P3 - Potential Partner Update
 - c. MICLA Debrief
 - d. Coastal Commission Staff Meeting (scheduling, invite DOT/HCID)
2. Managed Pipeline Update
3. Relocation Plan
4. City Attorney's response to memo
5. Miscellaneous

Allison Riley

Senior Director of Housing Development

Venice Community Housing

200 Lincoln Boulevard

Venice, CA 90291

Office: 424-268-5120

Mobile: [REDACTED]

Email: ariley@vchcorp.org

-----Original Appointment-----

From: Eleanor Atkins [<mailto:eatkins@hollywoodhousing.org>]

Sent: Tuesday, March 17, 2020 8:44 AM

To: Eleanor Atkins; Conference Call Number; Sarah Letts; Victoria Senna; Becky Dennison (bdennison@vchcorp.org); Anup Patel; Gohar Paronyan; Rick Tonthat; Helmi Hisserich

Cc: magdalina.zakaryan@lacity.org; Amy Anderson; azeen.khanmalek@lacity.org; Allison Riley; david.cataldo@lacity.org; rauhman.lavergne@lacity.org; ken.husting@lacity.org

Subject: FW: Reese Davidson Community Monthly Check-in

When: Wednesday, August 12, 2020 4:30 PM-5:30 PM .

Where: call in [REDACTED] access [REDACTED]

Welcome, Allison!

[Quoted text hidden]

David Cataldo <david.cataldo@lacity.org>

Tue, Aug 11, 2020 at 6:32 AM

To: Allison Riley <ariley@vchcorp.org>

Cc: Eleanor Atkins <eatkins@hollywoodhousing.org>, Conference Call Number <conferencecallnumber@hollywoodhousing.org>, Sarah Letts <sletts@hollywoodhousing.org>, Victoria Senna <vsenna@hollywoodhousing.org>, Becky Dennison <bdennison@vchcorp.org>, Anup Patel <apatel@vchcorp.org>, Gohar Paronyan <gohar.paronyan@lacity.org>, Rick Tonthat <rick.tonthat@lacity.org>, Helmi Hisserich <helmi.hisserich@lacity.org>, "magdalina.zakaryan@lacity.org" <magdalina.zakaryan@lacity.org>, Amy Anderson <amy.anderson@lacity.org>, "azeen.khanmalek@lacity.org" <azeen.khanmalek@lacity.org>, "rauhman.lavergne@lacity.org" <rauhman.lavergne@lacity.org>, "ken.husting@lacity.org" <ken.husting@lacity.org>

Allison:

I am available Wednesday, August 12 at 2.





David

[Quoted text hidden]

--

David Cataldo

Senior Management Analyst I
Parking Facilities Division

Los Angeles Department of Transportation
213.972.4938    

LADOT

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Azeen Khanmalek <azeen.khanmalek@lacity.org>

Venice LCP Parking Study

2 messages

Azeen Khanmalek <azeen.khanmalek@lacity.org>
To: Laura MacPherson <laura.macpherson@lacity.org>

Tue, May 12, 2020 at 4:39 PM

Hi Laura,

I heard that the Venice team may have produced a study on parking in Venice at some point or another. Are you familiar with this study? If so could you share it with me?

I hope you're doing well!



Azeen Khanmalek, AICP
Affordable Housing Production Manager
Mayor's Office of City Homelessness Initiatives
200 N. Spring St., room 1725 | Los Angeles, CA 90012
Azeen.Khanmalek@lacity.org | (213) 448-4730

Laura MacPherson <laura.macpherson@lacity.org>
To: Azeen Khanmalek <azeen.khanmalek@lacity.org>

Tue, May 12, 2020 at 8:29 PM

Hi Azeen,

Hope you are enjoying your new position & that you are doing well navigating our changing world...!

You heard correctly! We currently have a draft of the parking study and are working with our Technical Advisory Group towards a last round of revisions.

My team members have been on DSW assignments so our timeline at this point is uncertain, but we would hope to have a final report we could share by end of summer, if not before.

Happy to chat with you about it further. If you have any additional questions don't hesitate to reach out.

Best,
Laura

[Quoted text hidden]
--



Laura MacPherson, AICP
City Planner
Los Angeles City Planning
200 N. Spring St., Room 667
Los Angeles, CA 90012
Planning4LA.org
T: (213) 978-1187



EX. B

Fwd: Public Records Request for ENV-2018-6667-EIR

From: [Christian Wrede <christian_wrede@innercore.net>](mailto:christian_wrede@innercore.net)
To: [Ira Brown <ira.brown@lacity.org>](mailto:ira.brown@lacity.org)
Bcc: [Marjorie Weitzman <marjorieweitzman@gmail.com>](mailto:marjorieweitzman@gmail.com),
[Jamie Hall <Jamie.Hall@ChannelLawGroup.com>](mailto:Jamie.Hall@ChannelLawGroup.com)
Subject: Fwd: Public Records Request for ENV-2018-6667-EIR
Date: Tuesday, January 12, 2021 11:22 AM
Size: 22 KB

Dear Mr. Brown,

The cover email for the production below states that it comprises the entire environmental file ENV-2018-6667-EIR.

Can you confirm that the production contains all contents of the file, including all documents prepared by and all communications with environmental consultants?

Thank you,

Chris

--

Christian Wrede
cwrede@innercore.net

----- Original message -----

From: Bryan Walker <delivery@spaces.hightailmail.com>
To: christian_wrede@innercore.net
Subject: Public Records Request for ENV-2018-6667-EIR
Date: Tuesday, January 12, 2021 8:50 AM



Bryan Walker has shared 4 files.



4 files • 108.5 MB total • Expires 01/19/2021

"Per the request of Ira Brown, please find attached the entire case file material for ENV-2018-6667-EIR for your review.
Thank you. "



Left Side.pdf

4.6 MB



Pocket.pdf

39.2 MB



Right Side.pdf

55.6 MB



Scoping Meeting Folder.pdf

9.2 MB

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From: [Ira Brown <ira.brown@lacity.org>](mailto:ira.brown@lacity.org)
To: [Christian Wrede <christian_wrede@innercore.net>](mailto:christian_wrede@innercore.net)
Subject: Re: Public Records Request for ENV-2018-6667-EIR
Date: Tuesday, January 12, 2021 12:30 PM
Size: 36 KB

Hello Christian

In order to expedite the virtual case file viewing for this application, the attached files do NOT include:

- The Initial Study, which is available online
- Public comment letters on the Initial Study

In addition, the case file does NOT contain:

- all communications with environmental consultants
- draft documents

Lastly, this email is in response to a virtual case file viewing. If there is a separate PRA request, that request is being processed by a different procedure.

Thanks

Ira

On Tue, Jan 12, 2021 at 11:22 AM Christian Wrede <christian_wrede@innercore.net> wrote:

Dear Mr. Brown,

The cover email for the production below states that it comprises the entire environmental file ENV-2018-6667-EIR.

Can you confirm that the production contains all contents of the file, including all documents prepared by and all communications with environmental consultants?

Thank you,

Chris

--

Christian Wrede
cwrede@innercore.net

----- Original message -----

From: Bryan Walker <delivery@spaces.hightailmail.com>

To: christian_wrede@innercore.net

Subject: Public Records Request for ENV-2018-6667-EIR





Date: Tuesday, January 12, 2021 8:50 AM

Bryan Walker has shared 4 files.



4 files • 108.5 MB total • Expires 01/19/2021

"Per the request of Ira Brown, please find attached the entire case file material for ENV-2018-6667-EIR for your review. Thank you. "

| | | |
|---|----------------------------|---------|
|  | Left Side.pdf | 4.6 MB |
|  | Pocket.pdf | 39.2 MB |
|  | Right Side.pdf | 55.6 MB |
|  | Scoping Meeting Folder.pdf | 9.2 MB |

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Ira Brown

City Planning Associate

Los Angeles City Planning

200 N. Spring St., Room 721

Los Angeles, CA 90012

Planning4LA.org

T: (213) 978-1453 | F: (213) 978-4656



Subject: Fwd: Public Records Request for Multiple Cases
Date: Friday, January 08, 2021 5:40 PM
Size: 93 KB

FYI-

Begin forwarded message:

From: Ira Brown <ira.brown@lacity.org>
Subject: Re: Public Records Request for Multiple Cases
Date: January 8, 2021 at 5:28:57 PM PST
To: Marjorie Weitzman <marjorieweitzman@gmail.com>
Cc: "Christian K. Wrede" <christian_wrede@innercore.net>

Hello Marjorie

My intent was to provide you the contents of the environmental case file today. Unfortunately, that goal has shifted to Monday.

Nonetheless, in preparation for the hearing on wednesday, I have uploaded project related files to the Google Drive. Please follow this link:

https://drive.google.com/drive/folders/1T-I5aTON9jp_zqUcpMec0iF4UoBdy7rB

Have a good weekend.

Ira

On Fri, Jan 8, 2021 at 12:25 PM Marjorie Weitzman <marjorieweitzman@gmail.com> wrote:

Hi Ira-

Thanks for your response.

I infer from your response that the City is withholding documents in the environmental file for the Reese Davidson Community -- other than the Initial Study -- based on Section 6254, subdivision (a) of the California Government Code.

Section 6254, subdivision (a), only permits withholding of "preliminary" drafts "that are not retained ... in the ordinary course of business," and even then such documents can only be withheld where "the public interest in withholding those records clearly outweighs the public interest in disclosure."

The City has made no showing that any -- let alone all -- of these black-and-white statutory requirements have been satisfied as to the records that are being withheld. Indeed, you have obviously "retained" the records in question. It seems highly unlikely that none of the records in the environmental file (or otherwise covered by my request) have progressed beyond the "preliminary draft" phase. And I don't see how the public interest in withholding information regarding the environment -- or the impact of proposed development on the environment -- could possibly outweigh the public interest in disclosing such information. I can't think of any public interest in withholding the types records in question, particularly in connection with such a large project and such an environmentally sensitive and risky building site.

Please confirm that the City will make complete production of all documents from the environmental file for the project (and all documents otherwise responsive to my request) immediately and, at a minimum, in advance of the January 13 DAA hearing regarding the Reese-Davidson Community.

The foregoing rationale also applies to the LAPD service letter referenced in the email I sent you on December 21, 2020 at 11:21 AM. The City has not set forth a valid basis for withholding that letter, or any communications or other records relating to that letter, so prompt production is required.

These may be issues that should be discussed with the City Attorney. Timely production goes directly to rights under local, state and federal law, and absent complete production (or, at a minimum, adequate justification as to why production is not required for each document withheld) in a timely manner, we intend to enforce such rights.

Thanks-

Marjorie Weitzman
310-990-3030

On Jan 6, 2021, at 10:48 AM, Ira Brown <ira.brown@lacity.org> wrote:

Hello Marjorie

Happy New Year.

I assume you have access to and have seen the Initial Study, which can be viewed by the following link:

<https://planning.lacity.org/development-services/eir/reese-davidson-community-project>

Since the EIR was shifted to a Statutory Exemption, other documents, besides those contained in the Initial Study, are in draft form and have not been reviewed for completeness or finalized. As such, those documents are not available to the public.

I will be in the office on Friday, January 6th and I will scan the environmental review application and other *final* documents in the case file.

Thanks

Ira

On Tue, Jan 5, 2021 at 4:23 PM Marjorie Weitzman <marjorieweitzman@gmail.com> wrote:

Hi Ira-

Happy New Year. Want to follow up on the environmental file (env-2018-6667). Any thoughts on access during a pandemic? If the file can't be transmitted electronically, I'm willing to pay to have the file copied and arrange for pick up. Coming into your office to view is not a safe option during the current stay at home orders.

Appreciate you getting back to me-

Marjorie Weitzman
310-990-3030

On Dec 22, 2020, at 11:53 AM, Ira Brown <ira.brown@lacity.org> wrote:

Hello Marjorie

Please see my comments in red below:

On Mon, Dec 21, 2020 at 11:21 AM Marjorie Weitzman <marjorieweitzman@gmail.com> wrote:

Hi Ira-

Regarding the files forwarded on 12/15, the VTT-82288_Pocket.pdf file includes Johnny Lee's service request letters. Officer Gibson of the LAPD was emailed on January 2, 2019 (page 12). The response back is not included in these files (all other service responses are included). Page 156 of this file refers to the finished Public Service sections and provides a link for which we have no access. Can you please provide the complete response to this email from the LAPD to City Planning or full access to the link. Jacqueline De La Rocha of eyestone ENVIRONMENTAL also mentions having service letters accessible through a drop box file from other departments including LAPD (Pg.248).

I've attached screenshots of the emails referencing the specific document I'm requesting.

LAPD did not respond to the service request. As such, there is no such document to provide.

The Public Service section referred to in the email exchange between Johnny and Jacqueline were internal drafts, which are not available in a case viewing.

Also, you mentioned the need to visit your office to view the environmental file (env-2018-6667). In light of the current pandemic and alarming rise of Covid cases, would it be possible to pay the city to copy the entire file and we could arrange for pick up? Is there a copying service you may be aware of or other established protocols for this situation?

Let me check-in with the capacity of our admin staff. However, please note our admin staff will be out of the office next week. As such, any scanning, if possible, would have to wait until the new year.

Let me know if you have any questions.

Very much appreciate your help-

Marjorie Weitzman
310-990-3030

<IMG_1653.PNG>

<IMG_1654.PNG>

<IMG_1656.PNG>

<IMG_1657.PNG>

On Dec 15, 2020, at 3:57 PM, Ira Brown <ira.brown@lacity.org> wrote:

Hello Marjorie

These are the links I received. Let me know if you have any issues.

Thanks
Ira

----- Forwarded message -----
From: **Bryan Walker** <delivery@spaces.hightailmail.com>
Date: Tue, Dec 15, 2020 at 3:05 PM
Subject: Public Records Request for Multiple Cases
To: <ira.brown@lacity.org>



Bryan Walker has shared 6 files.



6 files • 376.7 MB total

"Per the request of Ira Brown, please find the attached complete case file material for CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR, and VTT-82288 for your review. Thank you. "

| | | |
|---|-----------------------------|---------|
|  | CPC-2018-7344_Left Side.pdf | 75.3 MB |
|  | CPC-2018-7344_Pocket.pdf | 50.2 MB |



CPC-2018-7344_RightSide.pdf

51.3 MB



VTT-82288_Leftside.pdf

63.9 MB



VTT-82288_Pocket.pdf

73 MB

+ 1 MORE

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Ira Brown
City Planning Associate
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Los Angeles City Planning
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Los Angeles, CA 90012
[Planning4LA.org](#)
T: (213) 978-1453 | F: (213) 978-4656





Exhibit C

Letter Submitted on October 21, 2020 by
Channel Law Group, LLP

Channel Law Group, LLP

8383 Wilshire Blvd.
Suite 750
Beverly Hills, CA 90211

Phone: (310) 347-0050
Fax: (323) 723-3960
www.channellawgroup.com

JULIAN K. QUATTLEBAUM, III *
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**ALSO Admitted in Texas

October 21, 2020

VIA ELECTRONIC MAIL

City of Los Angeles
200 N. Spring Street
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Re: 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 -
2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-82288; CPC-
2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-
6667-SE

Honorable Members of the Deputy Advisory Agency and City Hearing Officer:

This firm represents Venice Vision. This letter provides substantial evidence documenting why the Reese Davidson Community (proposed project)¹ is not eligible for a statutory exemption from the requirements of the California Environmental Quality Act (CEQA) under California Public Resources Code (PRC) Section 21080.27(b)(1) and that it has the potential to result in significant environmental impacts necessitating the preparation of an Environmental Impact Report (EIR). In addition, due to the nature of the project and its potential environmental impacts, the City cannot make the required findings for some of the discretionary permits required for the project.

A. INTRODUCTION

The applicant for the proposed project is the Hollywood Community Housing Corporation (HCHC) and the Venice Community Housing Corporation (VCHC). As noted in the notice for the October 22, 2020 Public Hearing for the project:

The project involves the demolition of an existing surface parking lot (LADOT Lots 701 and 731) containing 196 vehicular parking spaces

¹ Detailed project information is available at: <https://www.vchcorp.org/new-developments/reese-davidson-community-2/>

(bisected by Grand Canal) and a two-story, four-unit residential structure and the construction, use and maintenance of a 104,140-square foot, mixed-use, 100 percent affordable housing development (a 36,340 square-foot structure west of Grand Canal and a 67,800 square-foot, structure east of Grand Canal) consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supporting (social service) office uses, 2,255 square feet of retail uses, 810 square feet of restaurant uses with 500 square feet of outdoor Service Floor area, and 3,155 square feet of community arts center/art studio uses (philanthropic uses).

The structure west of Grand Canal (West Site) is three-stories and 35 feet in height with a 59-foot tall architectural campanile located at the northwest corner of the subject site with a roof access structure resulting in a structure with a maximum of 67 feet in height and five stories. The structure east of Grand Canal (East Site) is three-stories and 35 feet in height. The project will provide a total of 360 on-site automobile parking spaces comprising of 61 residential spaces, 42 commercial spaces, 196 public spaces (replacement), 23 Beach Impact Zone (BIZ) spaces and 38 non-required spaces; and 136 bicycle parking spaces (19 short-term and 117 long-term).

The project also includes the export 9,100 cubic yards of building material and soil; the removal of 24 non-protected on-site trees and 11 non-protected street trees; and improvements to the canal access boat ramp.

Figure 1 shows the site plan for the proposed project. As shown on the site plan the project includes two separate parking structures with residential, restaurant/retail and art studio uses wrapped around the two parking structures. The project site is located between two one-way streets: North Venice Boulevard and South Venice Boulevard. North Venice Boulevard is one-way from east to west along the northern edge of the Project site. South Venice Boulevard is one-way heading from west to east along the southern edge of the Project site.

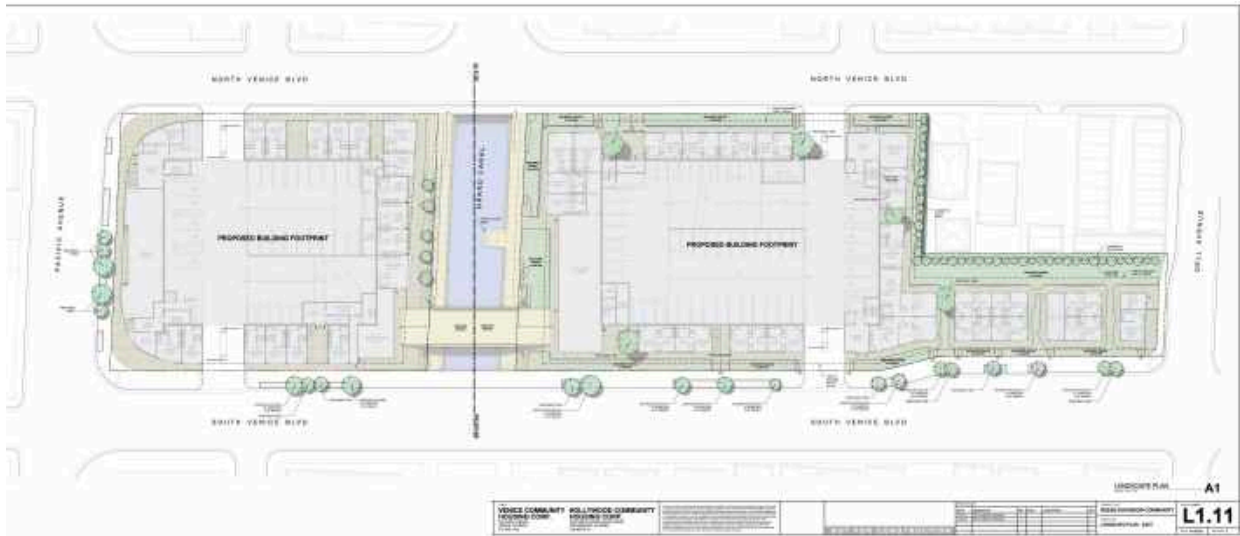


FIGURE 1 – PROJECT SITE PLAN

The parking structure on the east would be used for beach and replacement parking (252 spaces) and the west parking structure would provide parking for project uses (108 spaces) as follows:²

| AUTOMOBILE PARKING PROVIDED (BY SITE) | | | |
|---------------------------------------|-------------|-------------|----------------|
| TYPE | WEST GARAGE | EAST GARAGE | TOTAL PROVIDED |
| Manager Residential Unit | 6 | - | 6 |
| Special Needs Residential Unit | 21 | - | 21 |
| Affordable Residential Unit | 34 | - | 34 |
| Residential Subtotal | 61 | - | 61 |
| Art Studio | 6 | - | 6 |
| Retail | 10 | - | 10 |
| Restaurant | 16 | - | 16 |
| Outdoor Restaurant Service Area | 10 | - | 10 |
| Commercial Subtotal | 42 | - | 42 |
| Guest Parking | - | - | - |
| Beach Impact Parking | - | 23 | 23 |
| Replacement Parking | - | 188 | 188 |
| Non-Required Parking (surplus) | 5 | 41 | 46 |
| Total Parking Provided | 108 | 252 | 360 |

According the Venice Community Housing Corporation (VCHC), the City of Los Angeles would own, operate and construct the eastern structure.³ Venice Housing Corporation would enter into a 99 year lease for its portion of the project site.

As shown on **Figure 1**, a segment of the Grand Canal bisects the Project Site. The banks of the Grand Canal would feature new hardscape and landscape to increase access to the canal

² Source: current project plans, sheet G0.01.
³ Community Meeting, 4:30 PM. October 14, 2020. VCHC is hopeful they will manage construction “since the two projects are so intertwined.”

and provide outdoor amenities to the Project residents and the public. Page A-12 of the Initial Study describes the project changes to the Grand Canal area as follows:

A minimum setback of 15 feet would be maintained to provide public open space along the eastern and western banks of the Grand Canal and would include terraced seating, landscaping, and plaza areas. Within the public right-of-way, the existing concrete sidewalks would remain, the existing pipe railings would be replaced, and the existing boat launch would be altered to be level with the sidewalk. The Project would also involve the removal of the approach slabs to the Short Line Bridge; however, the existing wing walls would remain. The existing vehicular bridge would be maintained and converted to a pedestrian bridge that would overlook the Grand Canal and connect the east and west portions of the Project Site. The converted pedestrian bridge would no longer be used for vehicular circulation.

As noted in the Project Application, the project consists of Assessor's Parcel numbers 4238-024-900, 902, 903, and 905 thru 911. The total lot area is approximately 155,674 square feet.⁴ The project site is located less than 0.25 miles east of the Pacific Ocean.

According to the Tentative Tract Map⁵ for the project and Zimas, the project site is zoned OS-1XL-O and has a land use designation of Open Space.⁶ The 1XL designation indicates the project site currently has a building height limitation of 30 feet and two stories. The O designation indicates that it is in an Oil Drilling District. **Figure 2** shows the project location and the existing zoning of the project parcels. The project site is within the Venice Canals and North Venice Subareas of the Venice Coastal Zone Specific Plan, the Venice Community Plan, and the Certified Venice Local Coastal Program Land Use Plan. As proposed, the project is inconsistent with site zoning and all three of these existing Plans.

⁴ Revised application dated January 2020, available at: <https://www.vchcorp.org/wp-content/uploads/2020/02/RDC-LADCP-Application-REVISED-FINAL-1-23-2020-1.pdf>

⁵ <https://www.vchcorp.org/wp-content/uploads/2020/09/RDC-Project-VTT-Map-No-82288-Shts-1-4-Stamped-by-LADBS-LADCP-As-Filed.pdf>

⁶ Zimas



FIGURE 2 – ZONING ON PROJECT SITE (OS-1XL-O)

City is claiming that the project is statutorily exempt from CEQA pursuant to PRC Section 21080.27(b)(1) which was added by AB 1197, despite the fact that the project: is not consistent with the existing zoning, the General Plan designation for the site, the Venice Community Plan, the Venice Coastal Zone Specific Plan or the Certified Venice Local Coastal Program Land Use Plan (LUP); requires a General Plan Amendment, Specific Plan Amendment, LUP Amendment, and zone change; includes uses other than supportive housing; includes a separate parking structure that will be owned and operated by the City; and, requires a number of other discretionary approvals with potential environmental consequences. The required discretionary approvals include:

1. VTT-82288:

- Pursuant to Los Angeles Municipal Code (LAMC) Sections 17.03, 17.06, and 17.15, a Vesting Tentative Tract Map, VTT No. 82288, for the merger and re-subdivision of 40 existing lots into two master ground lots and seven airspace lots; and
- Pursuant to Los Angeles Municipal Code Section 17.53-D, a Waiver of Dedication and/or Improvements to waive the requirement to:
 - a. Dedicate 20.5 feet to complete a 43-foot half right-of-way along Pacific Avenue;

- b. Dedicate a 15-foot by 15-foot corner cut at the intersection of South Venice Boulevard and Pacific Avenue;
- c. Dedicate a 15-foot by 15-foot corner cut at the intersection of North Venice Boulevard and Pacific Avenue;
- d. Dedicate a 15-foot by 15-foot corner cut at the intersection of South Venice Boulevard and Dell Avenue; and
- e. Dedicate 10 feet to complete a 30-foot half right-of-way along Dell Avenue.

2. **CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP:**

- Pursuant to Los Angeles City Charter Section 555 and LAMC Section 11.5.6, a General Plan Amendment to the:
 - a. Venice Community Plan General Plan Land Use Map to amend the land use designation of the subject site from Open Space and Low Medium II Multiple Family Residential⁷ to Neighborhood Commercial;
 - b. Certified Venice Local Coastal Program Land Use Plan (LUP) maps to amend the land use designation of the subject site from Open Space and Low Medium II Multiple Family Residential to Neighborhood Commercial; and
 - c. Certified Venice Local Coastal Program Land Use Plan (LUP) text pertaining to the proposed development;
- Pursuant to LAMC Section 12.32 F, a Vesting Zone Change and Height District Change from OS-1XL-O to (T)(Q)C2- 1L-O and pursuant to LAMC Section 11.5.11(e) and California Government Code 65915(k), three Developer Incentives to permit:
 - a. Reduced residential parking pursuant to AB744;
 - b. The required residential parking for the building on the East Site to be located in the building on the West Site; and
 - c. RAS3 side and rear yard requirements per LAMC 12.10.5 in lieu of the yard requirements in the proposed C2 zone;

⁷ Based on a review of the Zimas records for the project parcels, none of the parcels is currently zoned Medium II Multiple Family Residential. See for example: <https://planning.lacity.org/odocument/68a0ab80-79e8-4749-8f72-d454a199be7a/venplanmap.pdf>

- Pursuant to LAMC Section 11.5.7 G, a Specific Plan Amendment to the Venice Coastal Zone Specific Plan to:
 1. Create a new subarea “Subarea A” to permit a Permanent Supportive Housing project that includes Restricted Affordable housing units with supportive services and establishes Land Use Regulations and Development Standards; and
 2. Amend the Map Exhibits to add the new subarea and change the zoning from OS-1XL and RD1.5 to C2-1L- O for the new subarea;
- Pursuant to LAMC Section 11.5.7 C, a Project Permit Compliance Review for a project within the Venice Coastal Zone Specific Plan;
- Pursuant to LAMC Section 12.20.2, a Coastal Development Permit for a Project located within the Dual Permit Jurisdiction of the California Coastal Zone;
- Pursuant to Government Code Sections 65590 and 65590.1 and the City of Los Angeles Interim Mello Act Compliance Administrative Procedures, a Mello Act Compliance Review for demolition of four Residential Units and the construction of 140 Residential Units in the Coastal Zone; and
- Pursuant to LAMC Section 16.05, Site Plan Review for a Project which creates or results in an increase of 50 or more dwelling units.

The City has failed to disclose to the public, the specifics of the proposed changes to the text of the Certified Venice Local Coastal Program Land Use Plan (LUP) pertaining to the proposed development. In addition, the City has failed to fully identify all of the discretionary permits which may be required for the proposed project. Alteration of the existing boat launch and Short Line Bridge and construction activities in close proximity to the Venice Canal system is likely to trigger the need for federal permits under the Clean Water Act and/or from the Army Corps of Engineers.

The proposed project has the potential to result in a number of significant environmental impacts. Prior to the passage of AB 1197, the City was in the process of preparing an EIR for the project. The Initial Study⁸ for the project, which is incorporated herein by reference, identified the following potentially significant environment impacts that needed to be addressed in the EIR for the project:

- Aesthetic
- Air Quality

⁸ Initial Study Reese Davidson Community Project. Case Number: ENV-2018-6667-EIR. State Clearinghouse Number: 2018121045. Prepared for the City of Los Angeles by Eyestone Environmental, December 2018. That Initial Study and the project file is incorporated herein by reference and is available for review in the Planning Department of the City of Los Angeles and at: <https://planning.lacity.org/development-services/eir/reese-davidson-community-project>

- Biological Resources
- Cultural Resources
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Noise
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities/Service Systems
- Mandatory Findings of Significance

Comment letters received on the Initial Study identified the potential for additional impacts and further detailed the project's potential to result in significant impacts. Those letters are also incorporated herein by reference.⁹

This letter demonstrates why the project cannot be approved without the preparation of the Environmental Impact Report or significant redesign and modification, and why the necessary findings for approval of a Vesting Tentative Tract (VTT) cannot be made. It is organized as follows:

- A. Introduction
- B. Why The Project Does Not Meet The Requirements For A PRC Section 21080.27 Statutory Exemption
- C. The Project's Potential To Result In A Number Of Significant Environmental Impacts
- D. Why The Project Does Not Meet The Findings Requirements Necessary For Some Of The Discretionary Permits Required By The Project
- E. Conclusion

B. THE PROJECT DOES NOT MEET THE REQUIREMENTS FOR A PRC SECTION 21080.27 STATUTORY EXEMPTION

The proposed project includes uses that do not meet the definition of supportive housing and are thus not eligible for the Section 21080.27 exemption. These uses include:

- 2,255 square feet of retail uses,
- 810 square feet of restaurant uses with 500 square feet of outdoor Service Floor area,
- 3,155 square feet of community arts center/art studio uses (philanthropic uses).

⁹ Comment Letters on the Initial Study Reese Davidson Community Project. Case Number: ENV-2018-6667-EIR. State Clearinghouse Number: 2018121045. The comment letters and the file are incorporated herein by reference and is available for review in the Planning Department of the City of Los Angeles.

- Parking in excess of the 61 residential spaces, including: 42 commercial spaces, 196 public spaces (replacement), 23 Beach Impact Zone (BIZ) spaces and 38 non-required spaces; and 136 bicycle parking spaces (19 short-term and 117 long-term).

Just because these uses share a site with a supportive housing functions does not make them exempt from CEQA evaluation. If they were located off-site, they would be clearly subject to CEQA review.

PRC SECTION 20180.27

The City is claiming that the project is exempt under PRC Section 20180.27(b)(1) which exempts from CEQA¹⁰ supportive housing as follows:

(b) (1) This division does not apply to any activity approved by or carried out by the City of Los Angeles in furtherance of providing emergency shelters or supportive housing in the City of Los Angeles.

PRC Section 21080.27(a)(3) defines supportive housings for purposes of this division as follows:

(3) "Supportive housing" means supportive housing, as defined in Section 50675.14 of the Health and Safety Code, that meets the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division I of Title 7 of the Government Code or the eligibility requirements for qualified supportive housing or qualified permanent supportive housing set forth in Ordinance No. 185,489 or 185,492, and is funded, in whole or in part, by any of the following:

1. (A) The No Place Like Home Program (Part 3.9 (commencing with Section 5849.1) of Division 5 of the Welfare and Institutions Code).
2. (B) The Building Homes and Jobs Trust Fund established pursuant to Section 50470 of the Health and Safety Code.
3. (C) Measure H sales tax proceeds approved by the voters on the March 7, 2017, special election in the County of Los Angeles.
4. (D) General bond obligations issued pursuant to Proposition HHH, approved by the voters of the City of Los Angeles at the November 8, 2016, statewide general election.
5. (E) The City of Los Angeles Housing Impact Trust Fund.

The project applicant has indicated that project funding “has not yet been secured but will include a combination of local and state funding, as well as low income housing tax credits.”¹¹ The project therefore does not currently meet the funding-based requirements for supportive

¹⁰ PRC division 21000 et. Seq. and the CEQA Guidelines.

¹¹ Mia Lopez-Zubiri, Development Associate, Venice Community Housing (VCH), October 15, 2020.

housing that is eligible for a PRC Section 21080.27 exemption. The proposed project does not qualify for this exemption on the basis of the funding requirements alone.

ASPECTS OF THE PROJECT DO NOT MEET THE DEFINITION OF SUPPORTIVE HOUSING IN HEALTH AND SAFETY CODE SECTION 50675.14

Health and Safety Code Section 50675.14 defines supportive housing as follows (emphasis added):

(a) This section shall apply only to projects funded with funds appropriated for supportive housing projects.

(b) For purposes of this section the following terms have the following meanings:

(1) “May restrict occupancy to persons with veteran status” means that the sponsor may limit occupancy to persons meeting the criteria of paragraphs (1) and (2) of subdivision (j) with respect to either of the following:

(A) Any unit in the development that has not been previously occupied.

(B) Any unit in the development that subsequently becomes vacant, for a period of not more than 120 days following the vacancy.

(2) “Supportive housing” means housing with no limit on length of stay, that is occupied by the target population, and that is linked to onsite or offsite services that assist the supportive housing resident in retaining the housing, improving their health status, and maximizing their ability to live and, when possible, work in the community.

(3) (A) “Target population” means persons, including persons with disabilities, and families who are “homeless,” as that term is defined by Section 11302 of Title 42 of the United States Code, or who are “homeless youth,” as that term is defined by paragraph (2) of subdivision (e) of Section 12957 of the Government Code.

(B) Individuals and families currently residing in supportive housing meet the definition of “target population” if the individual or family was “homeless,” as that term is defined by Section 11302 of Title 42 of the United States Code, when approved for tenancy in the supportive housing project in which they currently reside.

(c) (1) The department shall ensure that at least 40 percent of the units in each development funded under the supportive housing program are targeted to one or more of the following populations:

(A) Individuals or families experiencing “chronic homelessness,” as defined by the United States Department of Housing and Urban Development’s Super Notice of Funding Availability for Continuum of Care or Collaborative Applicant Program.

(B) “Homeless youth,” as that term is defined by paragraph (2) of subdivision (e) of Section 12957 of the Government Code.

(C) Individuals exiting institutional settings, including, but not limited to, jails, hospitals, prisons, and institutes of mental disease, who were homeless when entering the institutional setting, who have a disability, and who resided in that setting for a period of not less than 15 days.

(2) The department may decrease the number of units required to meet the criteria identified in paragraph (1) if the department determines that the program is undersubscribed after issuing at least one Notice of Funding Availability.

(3) Individuals and families currently residing in supportive housing meet the qualifications under this subdivision if the individual or family met any of the criteria specified in subparagraph (A), (B), or (C) of paragraph (1) when approved for tenancy in the supportive housing project in which they currently reside.

(d) Supportive housing projects shall provide or demonstrate collaboration with programs that provide services that meet the needs of the supportive housing residents.

(e) The criteria, established by the department, for selecting supportive housing projects shall give priority to supportive housing projects that include a focus on measurable outcomes and a plan for evaluation, which evaluation shall be submitted by the borrowers, annually, to the department.

(f) The department may provide higher per-unit loan limits as reasonably necessary to provide and maintain rents that are affordable to the target population.

(g) In an evaluation or ranking of a borrower’s development and ownership experience, the department shall consider experience acquired in the prior 10 years.

(h) (1) A borrower shall, beginning the second year after supportive housing project occupancy, include the following data in their annual report to the department. However, a borrower who submits an annual evaluation pursuant to subdivision (e) may, instead, include this information in the evaluation:

(A) The length of occupancy by each supportive housing resident for the period covered by the report and, if the resident has moved, the reason for the move and the type of housing to which the resident moved, if known.

(B) Changes in each supportive housing resident's employment status during the previous year.

(C) Changes in each supportive housing resident's source and amount of income during the previous year.

(D) The tenant's housing status prior to occupancy, including the term of the tenant's homelessness.

(2) The department shall include aggregate data with respect to the supportive housing projects described in this section in the report that it submits to the Legislature pursuant to Section 50675.12.

(i) The department shall consider, commencing in the second year of the funding, the feasibility and appropriateness of modifying its regulations to increase the use of funds by small projects. In doing this, the department shall consider its operational needs and prior history of funding supportive housing facilities.

(j) Notwithstanding any other provision of law, the sponsor of a supportive housing development may restrict occupancy to persons with veteran status if all the following conditions apply:

(1) The veterans possess significant barriers to social reintegration and employment that require specialized treatment and services that are due to a physical or mental disability, substance abuse, or the effects of long-term homelessness.

(2) The veterans are otherwise eligible to reside in an assisted unit.

(3) The sponsor also provides, or assists in providing, the specialized treatment and services. (*Amended by Stats. 2019, Ch. 507, Sec. 2. (SB 623) Effective January 1, 2020.*)

The City has failed to provide the public with the following information to document compliance with the requirements of Health and Safety Code Section 50675.14:

- That the project is funded with funds appropriated for supportive housing projects. The City needs to provide the public with a copy of the funding plan for each component of the project, including both the supportive housing component and the uses that are not supportive housing, such as: the project's 2,255 square feet of retail uses; 810 square feet of restaurant uses with 500 square feet of outdoor Service Floor area; 3,155 square feet of community arts center/art studio uses (philanthropic uses); and non-residential

parking in excess of the 61 residential spaces, which should not be paid for with housing funds.

Elements of the project that are not funded with eligible housing funds and do not constitute supportive housing for the target population are essentially separate projects that do not meet the requirements of Health and Safety Code Section 50675.14(a), are not supportive housing, and thus are not eligible for a PRC Section 20180.27 exemption.

- The City has not demonstrated to the public that the supportive housing project provides collaboration with programs that provide services that meet the needs of the supportive housing residents. The City needs to detail the supportive services that are consistent with Government Code Section 65582 that will be provided to residents and which demonstrate the housing component of the project's compliance with Health and Safety Code Section 50675.14(d). This is required by Government Code Section 65652, which specifies:

A developer of supportive housing subject to this article shall provide the planning agency with a plan for providing supportive services, with documentation demonstrating that supportive services will be provided onsite to residents in the project, as required by Section 65651, and describing those services, which shall include all of the following:

- (a) The name of the proposed entity or entities that will provide supportive services.
- (b) The proposed funding source or sources for the provided onsite supportive services.
- (c) Proposed staffing levels.

(Added by Stats. 2018, Ch. 753, Sec. 3. (AB 2162) Effective January 1, 2019.)

In the absence of compliance with this requirement, no portion of the project is eligible for a Section 20180.27 exemption. This information should be provided to the public in advance of any hearing on the project to allow for public review and comment. In the absence of public disclosure of this information, any exemption is not supported by substantial evidence.

- The City needs to specify the measurable outcomes and plan for evaluation, which evaluation shall be submitted by the borrowers, annually, to the department for review and comment by members of the public and to demonstrate the housing component of the project's compliance with Health and Safety Code Section 50675.14(e)

THE PROJECT DOES NOT MEET THE ELIGIBILITY REQUIREMENTS OF ARTICLE 11 (COMMENCING WITH SECTION 65650) OF CHAPTER 3 OF DIVISION I OF TITLE 7 OF THE GOVERNMENT CODE

To be eligible for a Section 20180.27 exemption from CEQA, the project must meet the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division

I of Title 7 of the Government Code or the eligibility requirements for qualified supportive housing or qualified permanent supportive housing set forth in Ordinance No. 185,489 or 185,492.

Government Code 65650 et. seq. sets out various requirements that a project must meet to be considered a “supportive housing” project. Gov. Code 65651 essentially provides a compliance checklist. As demonstrated in the following analysis, the proposed project is not a by right development, and fails to satisfy all of the requirements of Government Code Section 65651.

| THE PROJECT IS NOT IN COMPLIANCE WITH GOVERNMENT CODE SECTION 65651 | |
|---|--|
| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| (a) Supportive housing shall be a use by right in zones where multifamily and mixed uses are permitted, including nonresidential zones permitting multifamily uses, if the proposed housing development satisfies all of the following requirements: | <p>The project site is zoned OS-1XL-O and has a land use designation of Open Space. /1/</p> <p>Multifamily housing is not a permitted use within the OS zone./2/</p> <p>The project does not meet the requirements of Government Code Section 65651(a) for a use by right. Supportive housing is therefore not a use by right in this zone. The project’s compliance with (a)(1)–(6) is irrelevant given the zoning on the project site, something the applicant ignored in their analysis of compliance with Government Code Section 65651 (see /3/).</p> |
| (1) Units within the development are subject to a recorded affordability restriction for 55 years. | <p>The applicant’s attorney has represented that:</p> <p>All of the affordable units within the development will be subject to a covenant that reserves and maintains the units as restricted affordable for at least 55 years, consistent with this requirement. The covenant will be recorded after the Project closes on its construction financing, and before the certificate of occupancy is issued.” /3/</p> |
| (2) One hundred percent of the units, excluding managers’ units, within the development are restricted to lower income households and are or will be receiving public funding to ensure affordability of the housing to lower income Californians. For purposes of this | <p>The applicant’s attorney has represented that:</p> <p>The Project is 100-percent affordable housing and plans to provide a total of 140 residential units, which will consist of up to 136 affordable and permanent supportive housing units, along with up to four units for on-site property management staff.</p> <p>The 136 affordable units will meet the eligibility requirements for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as these units will be restricted to those whose income does not exceed the qualifying limits for low, very</p> |

| THE PROJECT IS NOT IN COMPLIANCE WITH GOVERNMENT CODE SECTION 65651 | |
|---|--|
| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| paragraph, “lower income households” has the same meaning as defined in Section 50079.5 of the Health and Safety Code. | <p>low, and extremely low income households. 68 of the units will be reserved for formerly homeless households with an area median income (AMI) of 30 percent, while the remaining 68 affordable units will be reserved for households with an AMI of 60 percent. In the event the number of residential units change from the totals provided herein, the Project will still dedicate all of the units to lower income households, consistent with this requirement. /3/</p> <p>The applicant’s representative has failed to demonstrate that the lower income households are, or will be, receiving public funding to ensure affordability of the housing to lower income Californians. In the absence of this information, compliance with this Section (a)(2) has not been demonstrated. Specific information on project and housing funding must be made available to the public for review prior to action on the proposed project. The mere assumption that project residents will receive Section 8 rental assistance is not sufficient.</p> |
| (3) At least 25 percent of the units in the development or 12 units, whichever is greater, are restricted to residents in supportive housing who meet criteria of the target population. If the development consists of fewer than 12 units, then 100 percent of the units, excluding managers’ units, in the development shall be restricted to residents in supportive housing. | <p>The applicant’s attorney has represented that:</p> <p>The Project will reserve 68 of the 136 non-manager residential units (50 percent) for low-income formerly homeless households, which is above the minimum requirement of 25 percent of the total units. These formerly homeless households meet the criteria of the target population, which includes individuals and households who are homeless, or who were homeless when approved for tenancy in the supportive housing project in which they currently reside, consistent with both the California and U.S. Department of Housing and Urban Development definitions of “homeless.”¹ In the event that the number of units change from the totals provided herein, the Project will restrict at least 25 percent of the units to low-income formerly homeless households, consistent with this requirement. /3/</p> |
| <p>(4) The developer provides the planning agency with the information required by Section 65652.</p> <p>Section 65652 states:</p> <p>A developer of supportive housing subject to this article shall provide the planning agency with a plan for providing supportive services, with documentation demonstrating that supportive services will be provided onsite to residents in the project,</p> | <p>The applicant’s attorney has represented that:</p> <p>The supportive services to be provided by the Project will satisfy the requirements of the Measure H funding program. Such supportive services will include, among others: conducting comprehensive psychosocial assessments; developing individualized case management plans; helping residents to access temporary housing, food, clothes, and other basic necessities; helping residents to obtain health, mental health, and substance abuse services, as well as medication and treatment; and helping residents to obtain income and establish healthcare benefits. These supportive services will be provided by an approved Intensive Case Management Services (“ICMS”) provider and funded with Measure H funds. The proposed staffing for the services to be provided by the Project includes four case managers, one for every 17 supportive housing units, which satisfies the Measure H requirements for staffing (i.e., a required range of one case manager for every 15 households to one case manager for every 20</p> |

| THE PROJECT IS NOT IN COMPLIANCE WITH GOVERNMENT CODE SECTION 65651 | |
|--|---|
| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| <p>as required by Section 65651, and describing those services, which shall include all of the following:</p> <p>(a) The name of the proposed entity or entities that will provide supportive services.</p> <p>(b) The proposed funding source or sources for the provided onsite supportive services.</p> <p>(c) Proposed staffing levels.</p> | <p>households). This information will be provided to the planning agency, as required by Gov. Code Section 65651(4). /3/</p> <p>The project applicant has failed to fully provide the Plan as required by Section 65652. The name of the proposed entity or entities has not been provided. The Plan should be made available to the public prior to any action on the project. In the absence of this information, compliance with this Section (a)(4) has not been demonstrated.</p> |
| <p>(5) Nonresidential floor area shall be used for onsite supportive services in the following amounts:</p> <p>(A) For a development with 20 or fewer total units, at least 90 square feet shall be provided for onsite supportive services.</p> <p>(B) For a development with more than 20 units, at least 3 percent of the total nonresidential floor area shall be provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens.</p> | <p>The applicant's attorney has represented that:</p> <p>The total nonresidential floor area of the Project is estimated to be 6,905 square feet, with 685 square feet dedicated to onsite supportive services that are limited to tenant use (i.e., 9.9 percent of the total nonresidential floor area). This amount is above the 3 percent of total nonresidential floor area required under Section 65651(5). The planned 685 square feet of supportive services will be limited to tenant use, and include areas dedicated to conducting tenant assessments and helping tenants obtain access to other benefits and services.</p> <p>The Project also plans to include 3,155 square feet of community arts/community meeting spaces, which are anticipated to be available to both the Project's tenants and the public. In the event any of the square footage allocations change from the calculations provided herein, the Project's onsite supportive services will stay above the 3 percent nonresidential floor area threshold consistent with this requirement. /3/</p> <p>The applicant's calculation does not appear to be correct. The proposed project includes a number of uses that are not limited to tenant use including: retail (2,225 sf), restaurant (810 sf), and art studio (3,155 sf). /4/ If covered alcoves (5,045 sf) and areas under the building overhangs (8,730 sf) are intended for use and occupancy, then the 685 square feet dedicated to supportive services would represent only 2.62% of the non-residential floor area. /5/ It is unclear that the project meets this criterion, as shown in the following table:</p> |

| THE PROJECT IS NOT IN COMPLIANCE WITH GOVERNMENT CODE SECTION 65651 | | | | |
|--|--|--|---------------------------------|--|
| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold | | | |
| | | All Uses With SF Provided On Plans | Without Exterior Walkways | Without Walkways and Architectural Projections |
| | Parcel SF | 115,674 | 115,674 | 115,674 |
| | Residential | | | |
| | Live/Work | 13,640 | 13,640 | 13,640 |
| | Studio | 16,675 | 16,675 | 16,675 |
| | 1 Bed | 13,375 | 13,375 | 13,375 |
| | 2 Bed | 20,590 | 20,590 | 20,590 |
| | Non-Residential | | | |
| | Common Area | 5,465 | 5,465 | 5,465 |
| | Supporting Office | 685 | 685 | 685 |
| | Retail | 2,225 | 2,225 | 2,225 |
| | Restaurant | 810 | 810 | 810 |
| | Art Studio | 3,155 | 3,155 | 3,155 |
| | Exterior Walkways | 13,815 | | |
| | Covered Alcoves | 5,045 | 5,045 | |
| | Area Under Building Overhangs | 8,730 | 8,730 | |
| | Total | 104,210 | 90,395 | 76,620 |
| | Total Non-Residential | 39,930 | 26,115 | 12,340 |
| | Percent Non-Residential | | | |
| | Supportive Services | 1.72% | 2.62% | 5.55% |
| (6) The developer replaces any dwelling units on the site of the supportive housing development in the manner provided in paragraph (3) of subdivision (c) of Section 65915. | <p>The applicant's attorney has represented that:</p> <p>The Project Site is currently developed with a two- story, 1,970-square-foot residential building containing four dwelling units deemed "affordable" by the City at their current rent levels. The Project will restrict all units to low, very low, and extremely low income households, and provide at least four units of equivalent size to households in the same or lower income category as the four households currently on the Project Site. /3/</p> | | | |
| (7) Units within the development, excluding managers' units, include at least one bathroom and a kitchen or other cooking facilities, including, at minimum, a stovetop, a sink, and a refrigerator. | <p>The applicant's attorney has represented that:</p> <p>Each unit within the Project will include at least one bathroom and a kitchen or other cooking facilities, including, at a minimum, a stovetop, a sink, and a refrigerator. /3/</p> | | | |

| THE PROJECT IS NOT IN COMPLIANCE WITH GOVERNMENT CODE SECTION 65651 | |
|---|--|
| Gov. Code Section 65651 Requirements | Project Compliance With Gov. Code Section 65651 Requirements – Non-Compliance Noted In Bold |
| <p>Sources:</p> <p>/1/ https://www.vchcorp.org/wp-content/uploads/2020/09/RDC-Project-VTT-Map-No-82288-Shts-1-4-Stamped-by-LADBS-LADCP-As-Filed.pdf</p> <p>/2/ https://planning.lacity.org/odocument/eacdb225-a16b-4ce6-bc94-c915408c2b04/Zoning_Code_Summary.pdf</p> <p>/3/ Latham & Watkins LLP letter dated April 21, 2020.</p> <p>/4/ Square footages are per the Architectural Plans for the project dated 01/07/20 available at: https://www.vchcorp.org/wp-content/uploads/2020/02/RDC-Entitlement-Set-R2-1-7-2020.pdf</p> <p>/5/ Per LADBS Info Bulletin DOCUMENT NO. P/BC 2002-021 : Calculating Floor Area: “When applying either Sec. 12.03 or 12.21.1 A 5, architectural projections not intended for regular use or occupancy shall not be counted as floor area. Areas under projections intended for use and occupancy shall be included as floor area in accordance with the guidelines below. For all Building Code applications, the area under architectural projections exceeding 5 feet (1524 mm) in width, as defined in Sec. 91.3204.1, shall be included in the floor area calculation.”</p> | |

The project is not eligible for an exemption from CEQA for three primary reasons. First, the project does not currently meet the funding requirements for a PRC Section 21080.27 CEQA exemption. Second, the proposed project includes uses that do not meet the definition of supportive housing and are thus not eligible for the Section 21080.27 exemption. In addition, the project does not fully comply with Government Code requirements for supportive housing. The project as proposed is, therefore, not exempt from CEQA.

C. THE PROJECT HAS THE POTENTIAL TO RESULT IN A NUMBER OF SIGNIFICANT ENVIRONMENTAL IMPACTS

Because an EIR for the project has not been prepared, even though the City has identified the project’s potential to result in significant environmental impacts, appropriate mitigation measures to reduce impacts to a level considered less than significant have not been identified. The project will therefore result in substantial environmental damage.

In addition, as detailed in this section, the project site is not physically suitable for the proposed use as it contains physical hazards which render residential uses inappropriate. These include location within: a methane zone¹², a liquefaction zone, and a tsunami inundation zone.¹³ The project site is also anticipated to be subject to flood risk due to sea level rise.¹⁴ The project

¹² Zimas and <https://www.geoforward.com/wp-content/uploads/Methane-Zone-Map-Los-Angeles-by-Geo-Forward-Inc.-1.pdf>

See Division 71 of the Los Angeles Building Codes for mitigation and testing requirements for projects in the methane zone: https://up.codes/viewer/los_angeles/ca-building-code-2016/chapter/new_71/methane-see-page-regulations#new_91.7103

or City Ordinance No. 17590: https://ladbs.org/docs/default-source/publications/ordinances/methane-code---ordinance-no-17590.pdf?sfvrsn=d8eeb53_10

¹³ Zimas.

¹⁴ Pacific Institute: https://pacinst.org/reports/sea_level_rise/hazmaps/Venice.pdf See also Venice Sea Level Rise Vulnerability Assessment by Moffat & Nicol (May 2018): https://planning.lacity.org/odocument/83cf6597-25f1-4fd7-8124-dcd015000d82/venice_coastal_zone_slr_vulnerability_assessment_-_nov._2018_copy.pdf

site is also unsuitable due to the hazards presented by left-turn only site access/egress necessitated by the one-way street system adjacent to the project site.

Finally, as detailed in this section, a screening-level Health Risk Assessment prepared by SWAPE, and included in **Attachment A**, indicates that the project will result in an excess cancer risk to adults, children, infants, and during the 3rd trimester of pregnancy at the MEIR located approximately 100 meters away

AIR QUALITY

Page B-7 to B-9 of the City's Initial Study for the project identified the following potential air quality impacts of the proposed project:

III. Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|-------------------------------------|--|-------------------------------------|--------------------------|
| a. Conflict with or obstruct implementation of the applicable air quality plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Expose sensitive receptors to substantial pollutant concentrations? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project.

d) Would the Project expose sensitive receptors to substantial pollutant concentrations?

SWAPE has prepared a screening-level Health Risk Assessment (HRA). That analysis is included as **Attachment A**. SWAPE analyzed the potential health risk posed by Project construction and operation to nearby, existing sensitive receptors utilizing site-specific emissions estimates, and prepared a simple screening-level HRA based on SWAPE's CalEEMod model, which calculated the risk to the maximally exposed individual resident (MEIR). The results of SWAPE's assessment demonstrates that the proposed Project may result in a significant impact not previously identified or addressed. As detailed more fully in SWAPE's report:

The excess cancer risk to adults, children, infants, and during the 3rd trimester of pregnancy at the MEIR located approximately 100 meters away, over the course of Project construction and operation, utilizing age sensitivity factors, are approximately 42, 380, 180, and 6.4 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years), utilizing age sensitivity factors, is approximately 600 in one million. The infant, child, adult, and lifetime cancer risks all exceed the SCAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified.

In the absence of substantial evidence to the contrary, the proposed project will result in a significant impact in the form of a health risk to sensitive receptors (residents) in the project vicinity.

BIOLOGICAL RESOURCES

Pages B-10 to B-12 of the Initial Study for the project identified the potential biological resources impacts of the proposed project:

| IV. Biological Resources | | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--------------------------|---|--------------------------------------|--|------------------------------------|--------------------------|
| Would the project: | | | | | |
| a. | 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. | 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. | 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial

environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project:

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?

A segment of the Venice Grand Canal traverses the project site. The Grand Canal, including the segment that bisects the Project Site, is designated as Environmentally Sensitive Habitat Area in the Venice Local Coastal Program Land Use.¹⁵ As noted on page V-1 of the Venice Local Coastal Land Use Plan:

The Venice Canals, along with the adjacent Ballona Lagoon, support some of the last remaining pockets of coastal wetland habitat in Los Angeles County. The Venice Canals are part of the Ballona Lagoon sea water system and are connected with Ballona Lagoon via Grand Canal. For sixty years the canals waterways had been subject to bank erosion, runoff and stagnant water conditions. The Venice Canals Rehabilitation Project was completed in 1993 to rectify these conditions. In September 1986, a supplemental environmental impact report was prepared for the Venice Canals Rehabilitation Project (City of Los Angeles, Department of Public Works). According to this report, six species of fish were present in the canal system: topsmelt, California killifish, arrow goby, bay pipefish, longjaw mudsucker and diamond turbot. According to the same study, a great array of bird species have been identified in the immediate vicinity of the canal system. Most of these species are observed in the southern portion of Ballona Lagoon. The majority of the bird utilization of the Venice Canals is by domestic birds such as ducks and geese. Yet, occasionally individual California Least Terns are observed in the canal area.

As further explained on page V-2 of the Venice Local Coastal Program Land Use Plan (LUP), a Federal-and-State-listed endangered species makes use of the canal system:

The California Least Tern (*Sterna albifrons browni*), is a Federal-and-State- listed endangered bird species. Although the Least Tern formerly nested on upper beaches at numerous locations along the California coast, breeding is now limited to a small number of managed sites in Southern California and around San Francisco Bay. Least Terns forage for small

¹⁵ City of Los Angeles, Venice Local Coastal Program Land Use Plan, Exhibit 22b, Environmentally Sensitive Habitat Areas, p. V-7. <https://planning.lacity.org/odocument/d0a7f30b-87c1-430e-8415-5b5e30d230e7/venluptxt.pdf> This document is incorporated herein by reference.

fish in the marina, Ballona Creek, Ballona Lagoon and the canals, and nest on a State- owned portion of Venice Beach just north of the Marina Del Rey main channel from late April to August. The Least Tern is afforded Federal and State protection under the Endangered Species Act of 1973 and the U.S. Fish and Wildlife Coordination Act of 1976.

Policy IV.D.1 on page V-11 of the LUP specifies the following protective measure to address threats to this endangered species:

Policy IV.D.1. Venice Canals Habitat. The Venice Canals have been identified by the Least Tern Recovery Team as a foraging habitat for the Least Tern. Development within or adjacent to the canals that might affect this foraging habitat shall not be permitted.

The proposed project is thus contrary to adopted policies aimed at protecting this endangered species.

In addition, potential changes in water quality associated with the project discussed later in this letter, has the potential to impact Least Tern habitat in Ballona Lagoon and the Canal system. In addition, the proposed project may reduce the extent of the range of the Least Tern habitat through the introduction of a land use which is inconsistent with LUP protection policies (see discussion under f below) or through exposure Least Terns to garbage or other pollutants associated with the project (see discussion under Water Quality). In the absence of substantial evidence to the contrary, the proposed project will significantly impact a protected species.

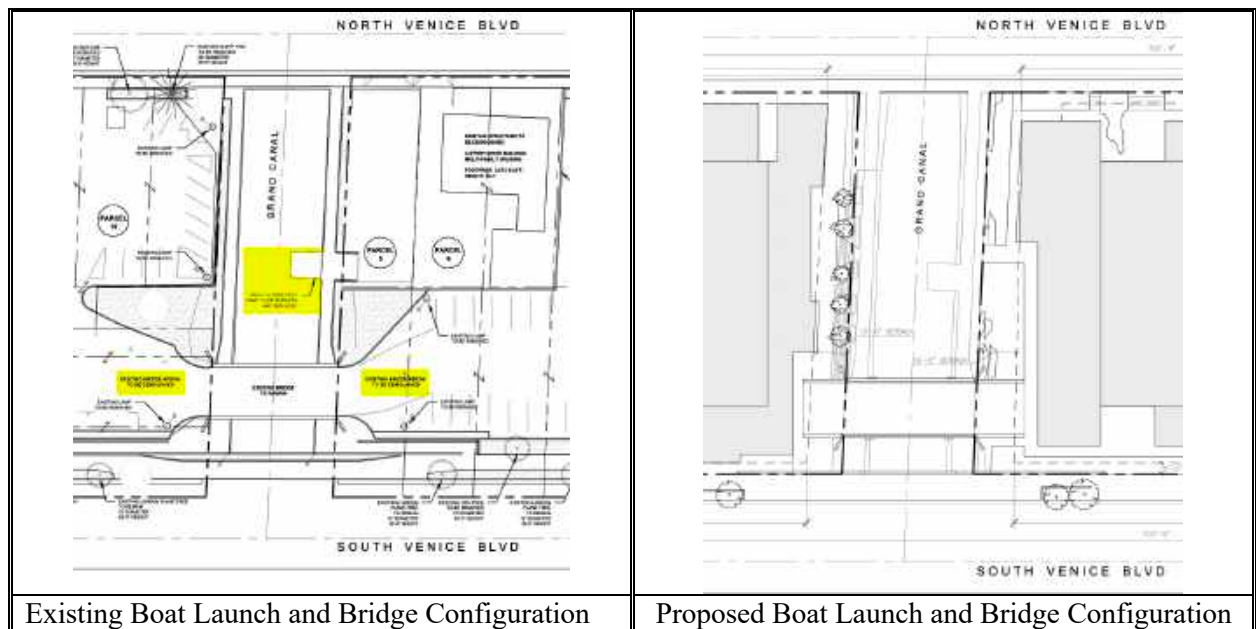
c) Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As noted on page V-1 of the Venice Local Coastal Program Land Use Plan, the Venice Canals support some of the last remaining pockets of coastal wetland habitat in the County:

The environmentally sensitive habitat areas in the Venice Coastal Zone include Ballona Lagoon and Grand Canal south of Washington Boulevard, Venice Canals north of Washington Boulevard, habitat buffer areas on the east and west banks of Ballona Lagoon, and the California Least Tern nesting areas, as identified on the Environmentally Sensitive Habitat Area Map (Exhibits 22 a, b and c). The existing and potential sensitive values in these areas shall be protected, enhanced, and where feasible, restored.

The Venice Canals, along with the adjacent Ballona Lagoon, support some of the last remaining pockets of coastal wetland habitat in Los Angeles County. The Venice Canals are part of the Ballona Lagoon sea water system and are connected with Ballona Lagoon via Grand Canal.

As shown in **Figure 3**, the proposed project includes alteration of the existing boat launch in the Venice Grand Canal, and removal of the approach slabs to the Short Line Bridge over the Canal and conversion of the bridge from vehicular to pedestrian use.



Source: Project Plan Set 01/07/20

FIGURE 3 – LOCATION OF BOAT LAUNCH AND BRIDGE MODIFICATIONS

As shown in **Figure 4**, the existing boat launch is a permanent built-in structure used for boat access and for maintenance crew to clear algae and garbage out of the canals. The current ramp is a cement structure that slopes into the canal, built to support significant weight. Under the proposed project this ramp would be altered to be level with the sidewalk. The specific nature of the work has not been defined or detailed in documents made available to the public, but it is clear that this would require work within the canal to rebuild and/or replace the existing facility.



FIGURE 4 – EXISTING BOAT LAUNCH RAMP

As previously noted, the Grand Canal is home to six species of fish and provides a biological resource to avian species, including the endangered Least Tern, and to terrestrial species. Construction activities in the Canal, and in close proximity to the Venice Canal system, including the replacement/reconstruction of the boat launch, export 9,100 cubic yards of building material and soil and construction of 104,140-square feet of new uses will likely trigger the need for federal permits under Sections 401 and 404 of the Clean Water Act and from the Army Corps of Engineers under Section 1602 of the California Fish and Game Code, as there is the potential for hydrological interruption and new fill material to be introduced into the Canal in the project vicinity. This could affect not only the Canal system, but downstream Ballona Lagoon, affecting wetlands resources. In the absence of substantial evidence to the contrary, the proposed project will significantly impact wetlands resources.

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?

As previously noted, “there are six species of fish were present in the canal system: topsmelt, California killifish, arrow goby, bay pipefish, longjaw mudsucker and diamond turbot. A great array of bird species has been identified in the immediate vicinity of the canal system. Most of these species are observed in the southern portion of Ballona Lagoon. The majority of the bird utilization of the Venice Canals is by domestic birds such as ducks and geese. Yet, occasionally individual California Least Terns are observed in the canal area.” The proposed project includes the removal and replacement of the existing boat launch area. Replacement activities may alter the movement of species using the canal. In addition, the proposed project would replace open space and introduce a large multi-use project on parcels currently zoned for open space specifically to protect biological resources in the Canal system, with a project that

exceeds allowable heights within the LUP area.¹⁶ Project design may thus also interfere with the movement of native resident or migratory species. It may also serve to reduce the extent of the Grand Canal's function as a wildlife corridor. In the absence of substantial evidence to the contrary, the proposed project will significantly impact an important wildlife corridor and wildlife movement.

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?

The Grand Canal which bisects project site is part of the Environmentally Sensitive Habitat Areas designated in the LUP.¹⁷ The proposed project is within the North Venice / Venice Canal subarea. The LUP is intended to implement the provisions and policies of the California Coastal Act at the local level. The proposed project is in conflict with a number of the policies in the LUP aimed at protecting biological resources. Specifically, the project conflicts with the following provisions of the LUP:

Policy I. D. 1. Canals and Ballona Lagoon Waterways. The Venice estuaries and wetlands including the Ballona Lagoon, Venice Canals, and Grand Canal south of Washington Boulevard, are designated in the Land Use Plan as natural and coastal recreational resources, and are rezoned to the "Open Space" designation. Adjacent Use/Development: The only permitted development adjacent to the canals and lagoon shall be habitat restoration, single-family dwellings, public parks and walkways, subterranean or surface public parking lots, maintenance activities and emergency repairs. Surface public parking lots shall be permitted only where sufficient access and roadway capacity exists to accommodate such parking. New construction along the Canals, and Ballona Lagoon shall comply with standards for setbacks, noise barriers, landscape plan, pervious surfacing with drainage control measures to filter storm run-off and direct it away from environmentally sensitive habitat areas, buffer areas in permanent open space, land dedication for erosion control, and wetland restoration including off-site drainage improvements. For more details refer to the provisions contained in Policy Group I.A., Residential Land Use and Development Standards, and Policies IV.C.1 and IV.C.2, Stormwater Runoff and Circulation.

The proposed project is contrary to this policy as it seeks to change the project site's LUP land use designation from Open Space to Neighborhood Commercial and would introduce a mix of uses adjacent to the Grand Canal including a 140-unit multi-family residential component, retail/restaurant, office, additional parking and community arts center/art studio uses, replacing the allowable surface parking. This is contrary to the limited uses the LUP intended for such an area in order to protect environmentally sensitive habitat areas and maintain appropriate drainage.

¹⁶ See LUP Exhibit 10b, and Exhibits 13 to 16.

¹⁷ See LUP Exhibit 22b.

Policy I. E. 2. Scale. New development within the Venice Coastal Zone shall respect the scale and character of community development. Buildings which are of a scale compatible with the community (with respect to bulk, height, buffer and setback) shall be encouraged. All new development and renovations should respect the scale, massing, and landscape of existing residential neighborhoods. Lot consolidations shall be restricted to protect the scale of existing neighborhoods. Roof access structures shall be limited to the minimum size necessary to reduce visual impacts while providing access for fire safety. In visually sensitive areas, roof access structures shall be set back from public recreation areas, public walkways, and all water areas so that the roof access structure does not result in a visible increase in bulk or height of the roof line as seen from a public recreation area, public walkway, or water area. No roof access structure shall exceed the height limit by more than ten (10') feet. Roof deck enclosures (e.g. railings and parapet walls) shall not exceed the height limit by more than 42 inches and shall be constructed of railings or transparent materials. Notwithstanding other policies of this LUP, chimneys, exhaust ducts, ventilation shafts and other similar devices essential for building function may exceed the specified height limit in a residential zone by five feet.

The proposed project is contrary to LUP policies limiting lot consolidation as it involves the merger and re-subdivision of 40 existing lots into two master ground lots and seven airspace lots, in violation of this LUP policy. It is also contrary to the height and scale limitations in the LUP which are aimed at protecting visual and biological resources. The scale and mass of the proposed project are contrary to protective policies in the LUP.

Policy IV. A. 2. Permitted Uses. Uses permitted in or adjacent to the canals shall be implemented in a manner to protect the biological productivity of marine resources and maintain healthy populations of marine organisms. Such uses as open space, habitat management, controlled nature study and interpretation, and passive public recreation use of walkways for birdwatching, photography, and strolling shall be encouraged and promoted.

The proposed project contains uses other than those encouraged and permitted in area adjacent to the Canal system in the LUP.

Policy IV. A. 3. Venice Canals Landscape Buffer. To protect the marine habitat, a one and one-half to two-foot-wide safety landscape buffer strip shall continue to be provided and maintained between the canal banks and sidewalks. Landscaping in the buffer strip shall consist of native coastal strand marshland or wetland vegetation as specified in the Venice Canals Rehabilitation Plan approved by Coastal Commission Coastal Development Permit 5-91-584.

The Plan set provided by the applicant to the public, including the Landscape Plan¹⁸ does not provide sufficient detail to demonstrate compliance with this policy. Photo renderings of the project do not appear to show the required landscape buffer strip and no information is provided regarding the plant pallet (see **Figure 26**).

Policy IV. A. 4. Venice Canals Setback and Yard Area. In order to provide a setback for access, to protect visual quality and the biological productivity of the canals, and to limit water runoff, a setback with an average depth of 15 feet (and a minimum depth at any point of 10 feet) shall be provided and maintained in the front yard areas of private residences (adjacent to the canal property line). This setback shall provide a permeable yard with an area at least 15 feet times the width of the lot line at the canal side. (See also Policy I.A.4a for details).

The project's failure to comply with existing zoning and introduction of uses other than those anticipated in the LUP in proximity to the Canals, and lack of information on the project plans regarding the permeability of landscape and paving materials proposed for use along the canal makes it difficult to determine whether the project complies with the spirit of the setback and yard requirements. However, the project clearly does not comply with the letter of this policy and policies for uses in proximity to the Canal system contained in the LUP.

Policy IV.D.1 Venice Canals Habitat. The Venice Canals have been identified by the Least Tern Recovery Team as a foraging habitat for the Least Tern. Development within or adjacent to the canals that might affect this foraging habitat shall not be permitted.

Implementation Strategies

The California Department of Fish and Game and the U.S. Fish and Wildlife Service shall make the final determination as to whether or not there is an adverse impact to the habitat in accordance with the Endangered Species Act of 1973 and the U.S. Fish and Wildlife Coordination Act of 1976.

The City shall seek funding from various sources to implement the Ballona Lagoon Enhancement plan proposals which would enhance foraging habitat values.

The LUP contains appropriate development and activity regulations (e.g. setback requirements, restrictions on boating, etc.) for those areas adjacent to the Least Tern critical habitat.

The project applicants have not demonstrated that they have obtained a determination by the California Department of Fish and Game and the U.S. Fish and Wildlife Service that the

¹⁸ Plan Sheets L1.10 and L1.11. Detailed project information is available at: <https://www.vchcorp.org/new-developments/reese-davidson-community-2/>

project will not have an adverse impact to the habitat in accordance with the Endangered Species Act of 1973 and the U.S. Fish and Wildlife Coordination Act of 1976. In the absence of such a determination, substantial evidence supports the conclusion that the project will have a significant impact to the habitat of an endangered species. In addition, in the absence of substantial evidence and a finding by the Coastal Commission to the contrary, the proposed project conflicts with an adopted conservation plan. This is a significant project impact.

CULTURAL RESOURCES

Page B-13 to B-14 of the City's Initial Study for the project identified the following potential cultural resource impacts of the proposed project:

V. Cultural Resources

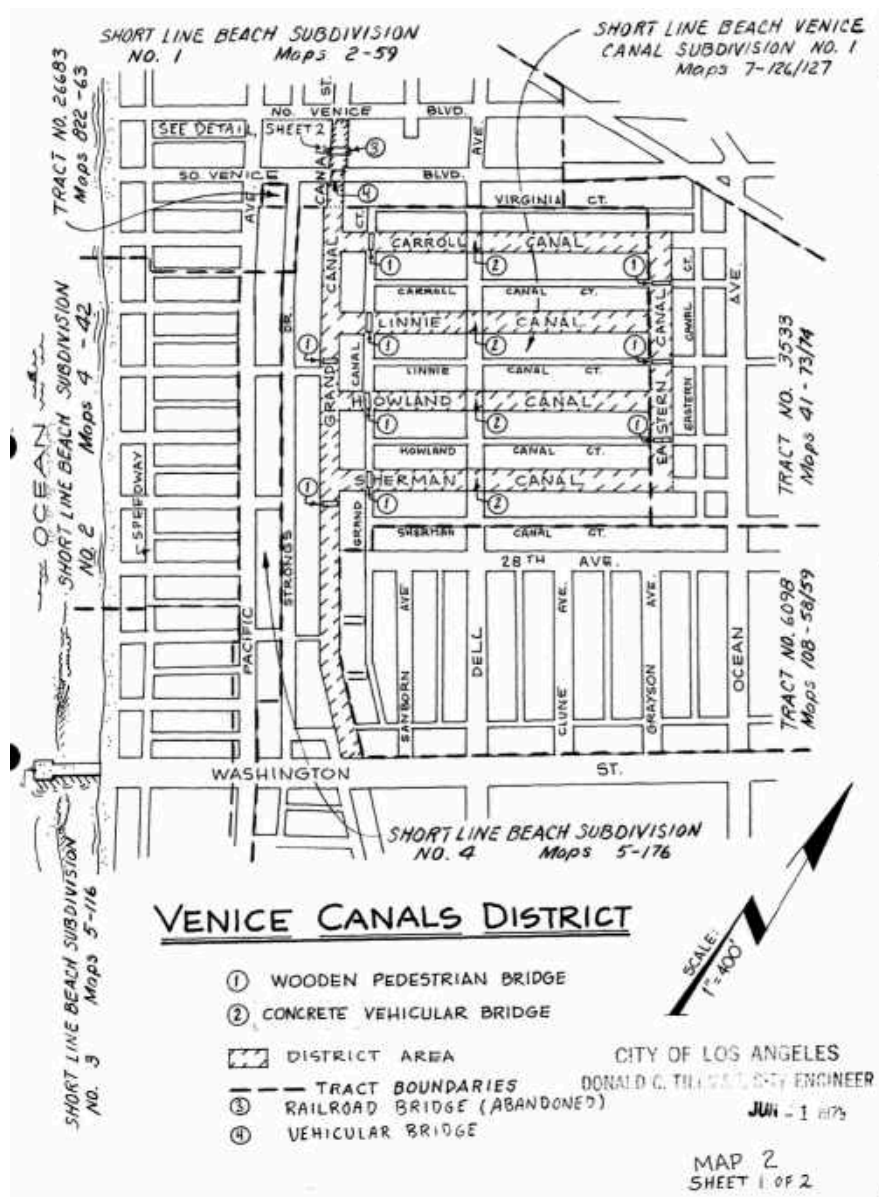
| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|-------------------------------------|--|------------------------------|--------------------------|
| a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Disturb any human remains, including those interred outside of dedicated cemeteries? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project:

a) Would the Project cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines §15064.5?

The portions of the project site are within the boundaries of the Venice Canal Historic District¹⁹ which is listed in the National Register of Historic Place, as shown on **Figure 5**. The Venice Short Line Bridge is included as a resource within the Historic District.

¹⁹ National Register Reference Number 82002193, listed 8/30/1982. Nomination form available at: <https://catalog.archives.gov/id/123859591>



Source: National Register Nomination Form

FIGURE 5 – BOUNDRIES OF THE VENICE CANAL HISTORIC DISTRICT

In addition, the Pacific Electric Venice Short Line Bridge and Grand Canal in the project area has also been found to be an historical resource by the City.²⁰ The City found these resources “significant for physical design or construction including architecture, landscape architecture, engineering and artwork.” The City assigned these resources the following California Historic Resources Status Codes: 5S3 - appears to be individually eligible for local listing or designation through SurveyLA or other survey evaluation; 3CS – appears eligible for California Register as an individual property through SurveyLA or other survey evaluation; and,

²⁰ See Historic Places LA listing at: <http://www.historicplacesla.org/reports/096c1dae-bed3-41d8-ac4b-ffd71775f582>

3S - appears eligible for National Register as an individually property through SurveyLA or other survey evaluation. The City thus issued the following statement of significance:

"Excellent and rare remaining example of infrastructure associated with the Venice Short Line in Venice and the original Venice canal system established by Venice founder Abbott Kinney. This Pacific Electric streetcar bridge over the Grand Canal brought the P.E. ""red cars"" to Venice in 1904, linking the new town to the larger Los Angeles region. The bridge spans the Grand Canal, which linked Kinney's original canal system (no longer extant) with a second canal system to the south. Today, the bridge and remnant portion of the Grand Canal is situated in the middle of a surface parking lot."

SurveyLA includes the photos of the Short Line Bridge as part of the documentation of this resource, reproduced herein as **Figure 6**:



Source: Historic Resources Group/Historic Places LA

FIGURE 6 - PACIFIC ELECTRIC VENICE SHORT LINE BRIDGE AND GRAND CANAL

The proposed project would result in alteration of both the Grand Canal segment bisecting the project site, and the Venice Short Line Bridge²¹ and would alter the setting of the bridge, converting it to a pedestrian bridge connecting the two parts of a large scale project, and eliminating any sense of the bridge as a former Short Line rail bridge. As noted on page A-12 of the Initial Study for the proposed project:

. . . the existing pipe railings would be replaced, and the existing boat launch would be altered to be level with the sidewalk. The Project would also involve the removal of the approach slabs to the Short Line Bridge; however, the existing wing walls would remain. The existing vehicular bridge would be maintained and converted to a pedestrian bridge that would overlook the Grand Canal and connect the east and west portions of the Project Site. The converted pedestrian bridge would no longer be used for vehicular circulation.

Modification of these resources would also be contrary to preservation policies contained in the LUP, such as LUP:

Policy I. F. 3. Venice Canals. The historic integrity of the Venice Canals shall be preserved. The canals are deemed to be significant as an early example of community recreational planning in a coastal marshlands area. Included in the historic district are the six canals, their associated sidewalks and a number of pedestrian and vehicular bridges. The Venice Canals are listed on the National Register of Historic Places as an historic district (August 30, 1982). Additionally, the City of Los Angeles Cultural Heritage Commission declared the Venice Canal System a Los Angeles City Historic-Cultural Monument (HCM No. 270, August 2, 1983).

In the absence of an Historical Resources Impact Assessment to the contrary, prepared by a researcher meeting the Secretary of the Interior's Professional Standards, and a more detailed description of the modifications to these resources, existing evidence indicates that these modifications have the potential to result in significant impacts to both the historic district and to individual historic resources.

b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines §15064.5?

Venice LUP Policy I.F.6 requires a preliminary cultural resources records search prior to the issuance of any development permit within the Venice portion of the coastal zone, as follows:

Policy I. F. 6. Archaeological Resources. Significant archaeological resources shall be protected from permanent loss. A preliminary cultural

²¹ See: **FIGURE 3** – Location Of Boat Launch And Bridge Modifications

resources record search to determine the existence of significant archeological sites shall be required for developments which require more than minimal grading. Mitigation plans for the protection of such resources shall be required. If, during construction, any archaeological resources are discovered, work shall be stopped to prevent further disturbance of the resources, and the proper authorities shall be immediately notified.

Implementation Strategy

Prior to the issuance of coastal development permits, grading, demolition, or building permits, applicants of all projects located in the Venice Coastal Zone which propose to grade more than one cubic yard of material shall submit a preliminary cultural resources record search from the South Central Coast Archeological Information Center. If this search reveals that cultural resources may be located on the site, the applicant shall file an Environmental Assessment Form (EAF) with the Planning Department and be subject to the applicable provisions of the California Environmental Quality Act

In the absence of such a records search or substantial evidence to the contrary, the LUP policies support the conclusion that the project will result in significant archeological resource impacts.

GEOLOGY AND SOILS

Page B-15 to B-19 of the City's Initial Study for the project identified the following potential geology and soils impacts of the proposed project:

VI. Geology and Soils

In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District* (CBIA v. BAAQMD), held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of the project. The revised thresholds are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the CBIA v. BAAQMD decision, the project would have a significant impact related to geology and soils if it would result in any of the following impacts.

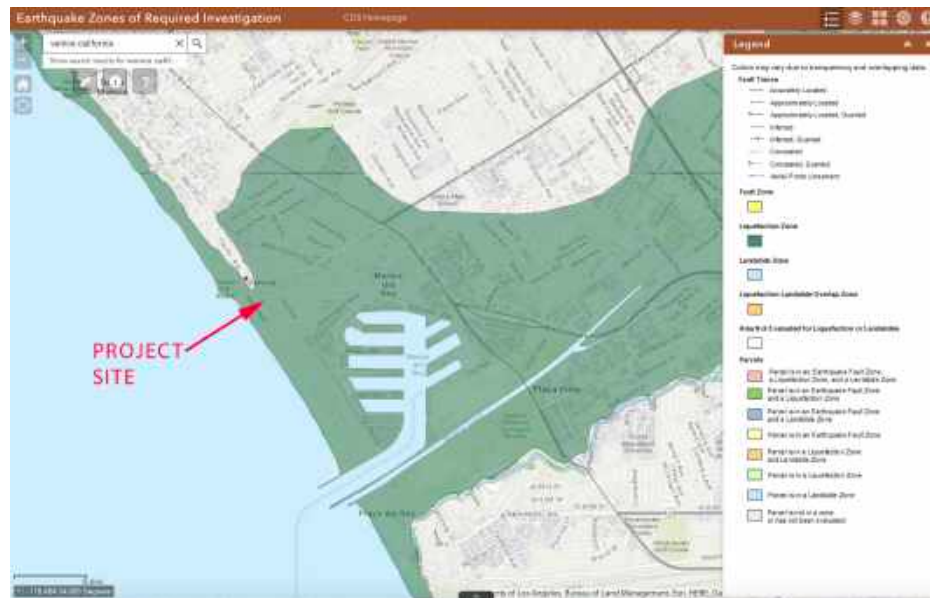
| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|-------------------------------------|--|-------------------------------------|-------------------------------------|
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, 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 substantial evidence of a known fault, caused in whole or in part by the project's exacerbation of the existing environmental conditions? Refer to Division of Mines and Geology Special Publication 42. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. Strong seismic ground shaking caused in whole or in part by the project's exacerbation of the existing environmental conditions? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii. Seismic-related ground failure, including liquefaction, caused in whole or in part by the project's exacerbation of the existing environmental conditions? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv. Landslides, caused in whole or in part by the project's exacerbation of the existing environmental conditions? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Be located on a geologic unit 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, caused in whole or in part by the project's exacerbation of the existing environmental conditions? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property caused in whole or in part by the project's exacerbation of the existing environmental conditions? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project:

a) Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: iii) Seismic-related ground failure, including

liquefaction, caused in whole or in part by the project's exacerbation of the existing environmental conditions?

As shown in **Figure 7**, the California Geological Survey mapping shows that the project site is located within an area subject to liquefaction and is located in a liquefaction zone subject to required investigation.²²



Source: California Geological Survey

FIGURE 7 – PROJECT SITE’S LOCATION IN A LIQUEFACTION ZONE

The project would exacerbate existing risk by introducing residential uses on parcels within the liquefaction zone. Despite flood risk (see discussion under hydrology), and proximity to a water body (Pacific Ocean and Venice Canal system), the project would result in excavation of up to 10 feet below grade²³ and would locate building structures 8 feet 2 inches below existing ground level, as shown on the East Section diagram from the project plans (see **Figure 8**).²⁴ This would introduce uses in closer proximity to the water table. Proposed structures would be in excess of height limits for the area. The project site is located in Height District 1XL which specifies a building height limit of 30 feet. The proposed parking structures and other project buildings would reach a maximum height of 35 feet. A 59-foot architectural campanile is also proposed. The extra height is likely to result in increased building contact pressure, which is a factor in liquefaction-induced building settlement.²⁵ The combination of excess height and

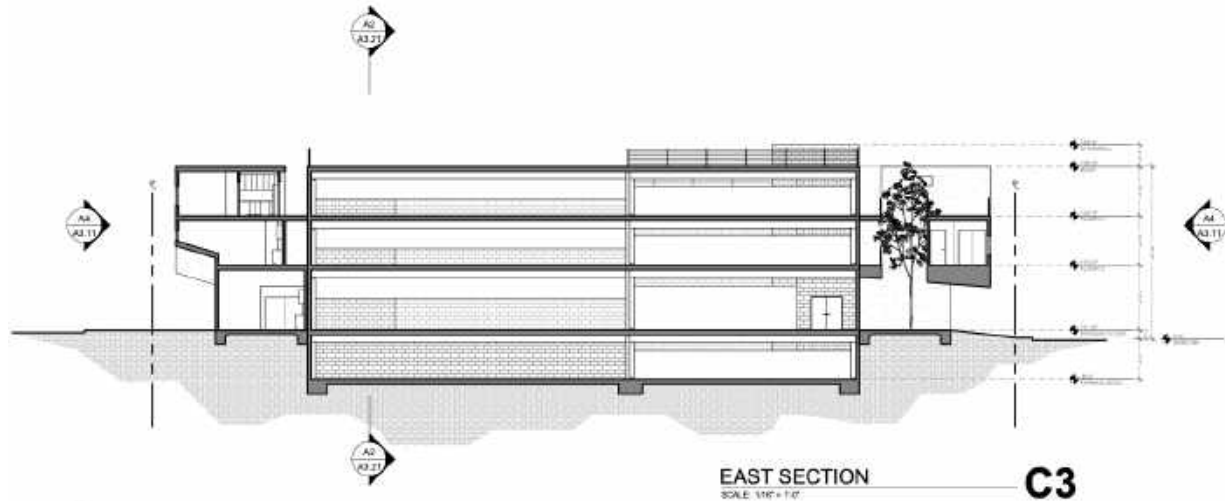
²² <https://maps.conservation.ca.gov/cgs/EQZApp/app/>

²³ Initial Study, page A-18.

²⁴ Plan Sheet A3.21, dated 01/07/20. Detailed project information including the current project plans is available at: <https://www.vchcorp.org/new-developments/reese-davidson-community-2/>

²⁵ According to “Key Trends in Liquefaction-Induced Building Settlement, Journal of Geotechnical and Geoenvironmental Engineering, November 2018 by Jorge Macedo, SM.ASCE and Jonathan D. Bray, F.ASCE: “Building contact pressure is an important structural factor to consider when evaluating liquefaction-induced building settlement. However, there is a point wherein the magnitude of liquefaction-induced settlement does not continue to increase for increasing values of the applied building pressure. This result, which has also been observed

excavation would likely increase liquefaction risk at the site.



Source: Plan Sheet A3.21, 01/07/20, Eric Own Moss Architects

FIGURE 8 - EAST SECTION PROJECT PLANS SHOWING PARKING DECK AT -8'2" BELOW EXISTING GRADE

The project site is not physically suitable for the proposed use as it contains physical hazards which render residential uses inappropriate. These include location within a liquefaction zone. The project, with its failure to comply with existing zoning and location in an area which is inappropriate for its mass and scale, will exacerbate existing risk. In the absence of substantial evidence to the contrary, the proposed project will result in a significant liquefaction risk impact.

GREENHOUSE GAS EMISSIONS

Page B-19 to B-20 of the City's Initial Study for the project identified the following potential greenhouse gas emissions impacts of the proposed project:

VII. Greenhouse Gas Emissions

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|-------------------------------------|--|------------------------------|--------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

in centrifuge experiments, is likely due the higher confinement of a heavy building. The width of the building is also an important structural parameter. Building height is a potentially important parameter but its effect on settlement for the cases studied is correlated with building contact pressure, which captures the key aspects of the building performance better. A low post- liquefaction bearing capacity factor of safety indicates when large building settlements are possible.”

https://www.researchgate.net/publication/327394855_Key_Trends_in_Liquefaction-Induced_Building_Settlement

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?



In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project:

The Initial Study for the project acknowledges the project's potential to result in significant Greenhouse Gas impacts. SWAPE has prepared a screening-level Greenhouse Gas Analysis which is included in **Attachment A**. According to that analysis applicable thresholds and site-specific modeling demonstrate that the proposed Project would result in a significant GHG impact not previously addressed or identified. When dividing the Project's GHG emissions (amortized construction + operational) by a service population value of 364 people, SWAPE found that the Project would emit approximately 7.2 MT CO₂e per service population per year ("MT CO₂e/SP/year").²⁶ As demonstrated in SWAPE's report included in **Attachment A**, the service population efficiency value of 7.2 MT CO₂e/SP/year exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year,²⁷ thus resulting in a significant GHG impact not previously identified or addressed. In the absence of substantial evidence to the contrary, the proposed project will result in a significant greenhouse gas emissions impact.

HAZARDS AND HAZARDOUS MATERIALS

Page B-20 to B-24 of the Initial Study for the project identified the following potential hazards and hazardous materials impacts of the proposed project:

²⁶ Calculated: (2,619.84 MT CO₂e/year) / (364 service population) = (7.20 MT CO₂e/SP/year).

²⁷ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|-----------|
|--|--------------------------------------|--|------------------------------------|-----------|

Would the project:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

| | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
- 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?

| | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------------------------------------|--------------------------|--------------------------|--------------------------|
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

| | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
- 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 create a significant hazard to the public or the environment caused in whole or in part from the project's exacerbation of existing environmental conditions?

| | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------------------------------------|--------------------------|--------------------------|--------------------------|
- 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 for people residing or working in the project area?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

| | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------------------------------------|--------------------------|--------------------------|--------------------------|
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including, where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, caused in whole or in part from the project's exacerbation of existing environmental conditions?

| | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project:

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?

A Phase I Environmental Site Assessment (ESA) has not been prepared for the Project site. The preparation of a Phase I ESA is a common practice in CEQA and real estate to identify hazardous materials issues that may pose a risk to the public, workers, or the environment, and which may require further investigation through the conduct of a Phase II ESA. As noted by SWAPE in their report included as **Attachment A**, the “preparation of a Phase I ESA for the Project site is especially important because historic aerial photography and Sanborn Fire Insurance Maps show the Project site to be along the alignment of the Pacific Electric Railway.” Railways can be found to be a Recognized Environmental Condition (RECs)

because of the use and release of oils, lubricants, fuel and solvents used as degreasers. These compounds can be long lasting in the subsurface and may pose risks to workers during earth moving activities during Project construction. Railroad-related compounds may also pose risks to future residents living atop any unmitigated contamination which may move from a vapor phase in soils below into indoor air.” In the absence of substantial evidence to the contrary, the proposed project will result in significant impacts associated with contaminated soil on the project site.

As noted on page B-22 of the Initial Study for the proposed Project, “the Project Site is located within a designated Methane Zone as mapped by the City.” The Zimas listing for each project parcel indicates their location in a Methane Zone as does the City’s Methane Zone Map, as shown in **Figure 9**.²⁸ It is therefore odd that the Planning Department Staff Report for the Vesting Tentative Tract (VTT) approval for the project states that: “the Project Site is not located within a Methane Zone and would not be subject to the requirements of the City Methane Requirements.”²⁹ The Staff Report and the proposed findings for the VTT approval are therefore inaccurate.

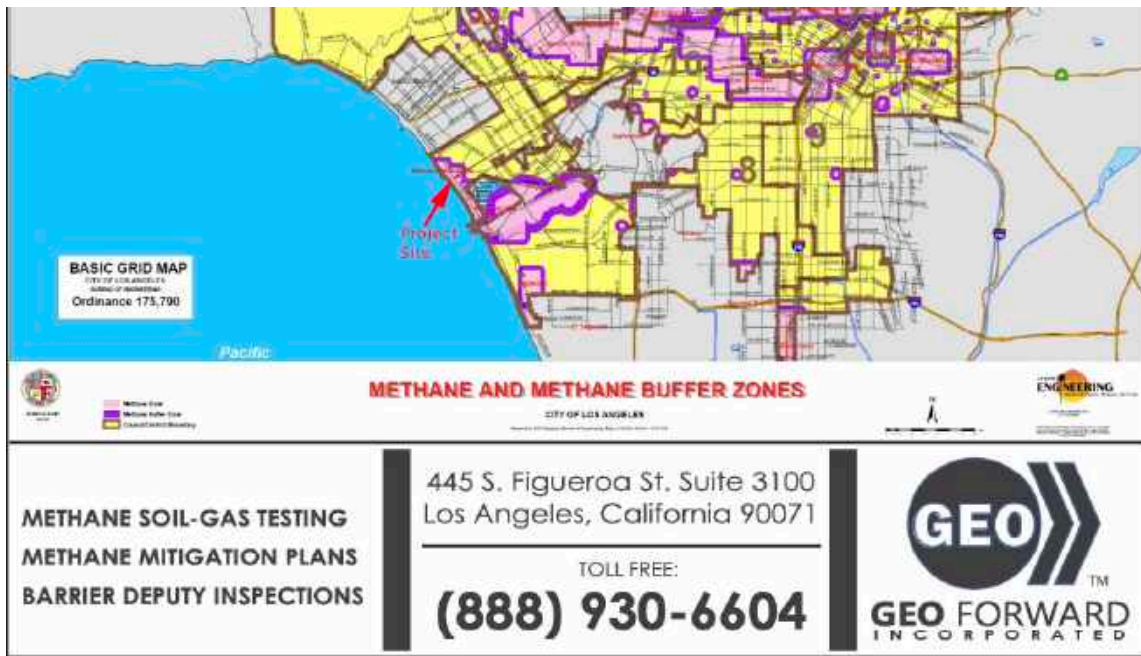


FIGURE 9 - PROJECT’S LOCATION IN THE METHANE ZONE

City Ordinance 175,790,³⁰ in part, requires a project in the methane zone or methane buffer zone to engage in both site testing and installation of a methane mitigation system:

²⁸ <https://www.geoforward.com/wp-content/uploads/Methane-Zone-Map-Los-Angeles-by-Geo-Forward-Inc.-1.pdf>

²⁹ See for example, pages 22 and 24. Staff Report Available at: <https://planning.lacity.org/odocument/e652f536-9194-40a4-9994-90b9f5d45d92/VTT-82288.pdf>

³⁰ https://ladbs.org/docs/default-source/publications/ordinances/methane-code---ordinance-no-175790.pdf?sfvrsn=d8eeb53_10

91.7104.1. Site Testing. Site testing of subsurface geological formations shall be conducted in accordance with the Methane Mitigation Standards. The site testing shall be conducted under the supervision of a licensed Architect or registered Engineer or Geologist and shall be performed by a testing agency approved by the Department.

The licensed Architect, registered Engineer or Geologist shall indicate in a report to the Department, the testing procedure, the testing instruments used to measure the concentration and pressure of the methane gas. The measurements of the concentration and pressure of the methane gas shall be used to determine the Design Methane Concentration and the Design Methane Pressure. The Design Methane Concentration and the Design Methane Pressure shall determine the Site Design Level of Table 71.

EXCEPTION: Site testing is not required for buildings designed to the requirements of Site Design Level V as described in Table 71, or for buildings designed using the exceptions set forth in Sections 91.7104.3.2 or 91.7104.3.3.

91.7104.2. Methane Mitigation Systems. All buildings located in the Methane Zone and Methane Buffer Zone shall provide a methane mitigation system as required by Table 71 based on the appropriate Site Design Level. The Superintendent of Building may approve an equivalent methane mitigation system designed by an Architect, Engineer or Geologist.

Table 71 prescribes the minimum methane mitigation systems, such as, the passive, active and miscellaneous systems, depending on the concentration and pressure of the methane present at the site. Each component of the passive, active and miscellaneous systems shall be constructed of an approved material and shall be installed in accordance with the Methane Mitigation Standards.

Public records obtained in response to records requests for this project did not include information on methane site testing and mitigation recommendations. Given that the Staff Report for the VTT mistakenly states that the project site is not within the Methane Zone, and there is no evidence of requirements for a methane mitigation system in the Conditions of Approval, the project is likely to expose project residents and visitors to a significant release of hazardous materials.

g) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

As noted on page B-23 of the Initial Study for the project: “According to the Safety Element of the City of Los Angeles General Plan, the nearest disaster route to the Project Site is

Pacific Avenue, which is directly adjacent to the project site.³¹ Construction and operation of the Project would generate vehicular traffic that would utilize this street.

The proposed project is located in a tsunami hazards zone. In Venice, the tsunami evacuation routes follow major east-west thoroughfares. These include Rose Avenue, Brooks Avenue, Venice Boulevard and Washington Boulevard. Abbot Kinney and Ocean Avenue are also part of the evacuation route, despite running parallel to the coast.³² Access/egress from the proposed project is via Venice Boulevard. The project site is located between North Venice Boulevard and South Venice Boulevard. “North Venice Boulevard is a westbound one-way street and South Venice is an eastbound one-way street. All four of the driveways are two-way traffic, providing ingress/egress access. Two driveways will serve the west parcel and the other two driveways will serve the east parcel. All the four driveways will have left-turn in and left-turn out only on North Venice Boulevard, and left-turn in and left-turn out only on South Venice Boulevard as well.”³³ This means that in the event of a tsunami evacuation order, drivers exiting the project’s two parking structures would turn left out of the parking structure onto South Venice Boulevard from unsignalized driveways and attempt to merge with eastbound South Venice Boulevard traffic leaving the beach area. The project is located less than 0.25 miles from the Pacific Ocean, a major recreational resource and beach parking area. There are approximately 355 parking spaces at the public beach parking lot, on Venice Beach, located one block away from the proposed development at the official entrance to Venice Beach and the Venice Beach Boardwalk. As shown **Figure 10**, the entrance to this lot dead-ends off Venice Blvd. North. The only exit out of this lot is via one-way Venice Blvd. South.

³¹ Los Angeles General Plan Safety Element, November 1996, Exhibit H, Critical Facilities and Lifeline Systems, p. 61. https://planning.lacity.org/odocument/31b07c9a-7eea-4694-9899-f00265b2dc0d/Safety_Element.pdf

³² As described in: <https://yovenice.com/2018/04/18/preparing-for-tsunami/>
For a map of tsunami evacuation routes see: https://www.google.com/maps/d/viewer?mid=1X0mvv2p-NLfWy_PYSqogjGOMt9s&hl=en&ie=UTF8&msa=0&ll=33.98550207335685%2C-118.45639219055175&spn=0.064053%2C0.102825&z=13&source=embed

³³ Page 21, Traffic Impact Study Reese Davidson Community Project, November 13, 2019 available at: <https://www.vchcorp.org/wp-content/uploads/2020/02/RDC-Traffic-Study-Findings.pdf>

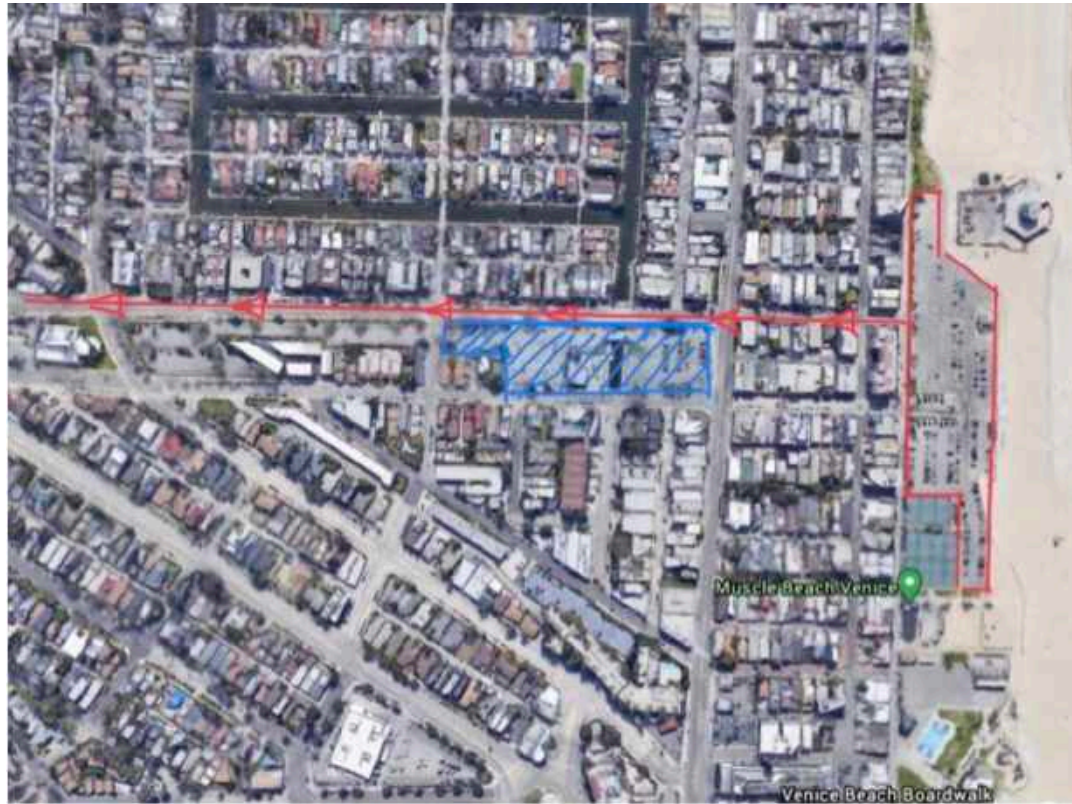


FIGURE 10 – LOCATION OF PROPOSED PROJECT IN RELATION TO EVACUATION ROUTE

[Outlined beach parking lot with 355 parking spaces in red. Marked Tsunami route leads away from the beach on Venice Blvd. South past the proposed Reese Davidson Community (marked in blue)]

In the event of a tsunami, earthquake or other natural disaster calling for immediate evacuation, all 355 vehicles from the beach parking lot will be forced to use Venice Blvd. South. In addition, every vehicle in the development, 360 in total, would need to turn left to exit the parking structures onto Venice Blvd. South, to head inland as directed by multiple Tsunami Escape Route signs placed along the beach and the street declaring this as the dedicated “evacuation route”. (See **Figure 11**). Project site traffic would be required to make left turns out of the project’s two parking structures, and try to merge with traffic from beach areas, as they try to exit onto Venice Blvd. South. Vehicles within the “Texas Donut Style” parking structure of the new development would likely be unable to easily and safely exit onto the crowded escape route.



FIGURE 11: EVACUATION ROUTE AND HAZARD SIGNS IN PROJECT VICINITY

The additional traffic from the proposed development in combination with anticipated beach traffic and background traffic, and the one-way street configuration, would result in a significant cumulative impact which would impair implementation of the emergency evacuation plan in this location. In the absence of substantial evidence to the contrary, the proposed project would result in a significant impact to implementation of an adopted emergency response plan.

The project site is not physically suitable for the proposed use as it contains physical hazards which render residential uses inappropriate. These include location within a tsunami inundation zone and left turn only project site access/egress necessitated by the one-way street system adjacent to the site.³⁴

HYDROLOGY AND WATER QUALITY

Page B-24 to B-27 of the City's Initial Study for the project identified the following potential hydrology and water quality impacts of the proposed project:

³⁴ Zimas.

IX. Hydrology and Water Quality

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|-------------------------------------|--|-------------------------------------|-------------------------------------|
| a. Violate any water quality standards or waste discharge requirements? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Otherwise substantially degrade water quality? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| j. Inundation by seiche, tsunami, or mudflow? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project.

f) Would the Project otherwise substantially degrade water quality?

The proposed project would introduce supportive housing, retail/restaurant and community use in close proximity to a segment of the Venice Grand Canal. The Venice Canals are part of the Ballona Lagoon sea water system and are connected with Ballona Lagoon via the Grand Canal. Ballona Creek currently has a bacteria TMDL rating of “improvement needed”³⁵

³⁵https://www.waterboards.ca.gov/about_us/performance_report_1516/plan_assess/docs/fy1314/11112_r4_ballonacreek_bacteria.pdf

due to elevated densities of fecal-indicating bacteria. While trash conditions in the Ballona Creek watershed are improving, reported trash reduction still is below required trash reduction levels.³⁶

As shown in **Figure 12**, uses would be located in close proximity to the Grand Canal, with little separation between visitors, residents and the Canal. Railings currently provide some restriction on proximity to the Canal, as shown in **Figure 4** (Boat Launch Ramp). The project design would remove those railings and provide no barriers between users and the Grand Canal.



Grand Canal

Source: VHCorp.org³⁷

FIGURE 12 – ARTIST RENDERING PROPOSED PROJECT

Both the project design and the nature of project residents increases the likelihood of additional pollutants being introduced into the canal system.³⁸ It is estimated that 27% of the homeless in 2020 had a substance use disorder and 25.1% had a serious mental illness. In total 41 percent of the homeless population had a substance use disorder and/or a serious mental illness.³⁹ Project users are thus less likely to be careful about introducing trash and other pollutants into the waterway. To the degree that residents formerly lived in homeless encampments, some of the behaviors which have been shown to result in environmental harm and impacts to water quality may persist.⁴⁰ In the absence of substantial evidence to the contrary, the proposed project will significantly impact on water quality.

³⁶ https://www.waterboards.ca.gov/about_us/performance_report_1516/plan_assess/docs/fy1415/r4_ballona_creek_watershed_trash.pdf

³⁷ <https://www.vhcorp.org/wp-content/uploads/2020/07/RDC-Renderings.8.2020.pdf>

³⁸ In addition, it is possible that the presence of supportive services may attract additional homeless to the project area. Quality research on the impact of permanent supportive housing on the density of homeless in areas where PSH is available, is not readily available, although some research does indicate a tendency for homeless to cluster and form encampments or hot zones.

³⁹ Page 19 - <https://www.lahsa.org/documents?id=4558-2020-greater-los-angeles-homeless-count-presentation.pdf>

⁴⁰ See: Courtenay White, *Environmental Impacts of Homeless Encampments in the Guadalupe River Riparian Zone*, School of Environment and Sustainability, Royal Roads University (Jan. 9, 2014). Available at: http://www.sawpa.org/wp-content/uploads/2018/05/SAWPAComm_Handouts_051518.pdf

- g) Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? and,
- i) Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The proposed project is located within the tidally influenced Venice canal system, which is mechanically controlled via a tide gate system, which is hydrologically connected to Ballona Lagoon by the Grand Canal. As a result, there is a risk of flooding at the project site due to: (1) potential failure of the tidal gate system; (2) storm events; and, (3) anticipated sea level rise (SLR) as a result of changing weather conditions over the life of the project.

Flood Risk Due to Potential Failure of the Tidal Gate System – The project site is located at the northern end of the Venice Canal system. As explained in the City’s Venice Sea Level Rise Vulnerability Assessment prepared by Moffat & Nichol (May 2018) included as **Attachment B:**

The Venice Canals District and nearby low-lying areas are protected from tidal flooding through a dual tide gate system. The first line of defense is the Marina del Rey tide gate (Figure 3.5), which is located on the northern Marina del Rey jetty and directly connects the Ballona Lagoon to the Pacific Ocean. The second tide gate is located at Washington Boulevard and directly connects the Venice Canals to the Grand Canal, which opens to Ballona Lagoon. Both tide gates are owned by the City of Los Angeles and serve to mute the lower and upper limits of the ocean tidal range. This reduction in tide range allows for increased stormwater drainage capacity and prevents flooding that would otherwise occur during astronomical high tides.

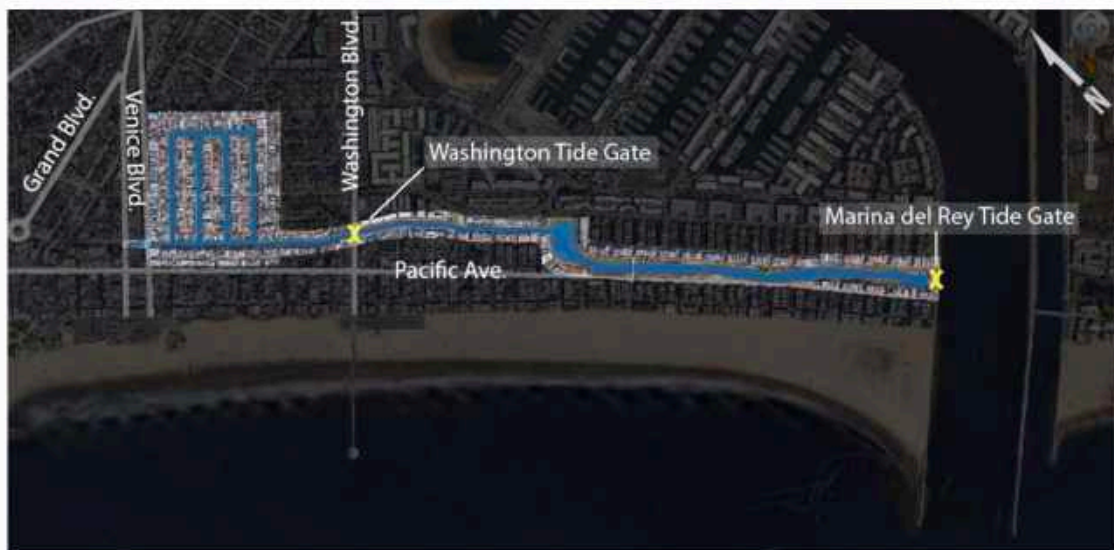


Figure 3.5: Plan View of Tide Gate System

Figure 3.5: Plan View of Tide Gate System⁴¹

The two tide gates operate on separate schedules. The Marina del Rey tide gate has two modes: dry mode and wet mode. These modes are based on seasonal precipitation according to a 2007 report by Phillip Williams and Associates (PWA). During a dry mode, the Marina del Rey gate is closed when the following conditions are met:

- Marina water level exceeds 2.25 feet mean sea level (MSL)
- Marina water level is more than 0.25 feet higher than Ballona Lagoon water level

During a wet mode, the Marina del Rey tide gate reduces the upper tide range by closing when the following conditions are met:

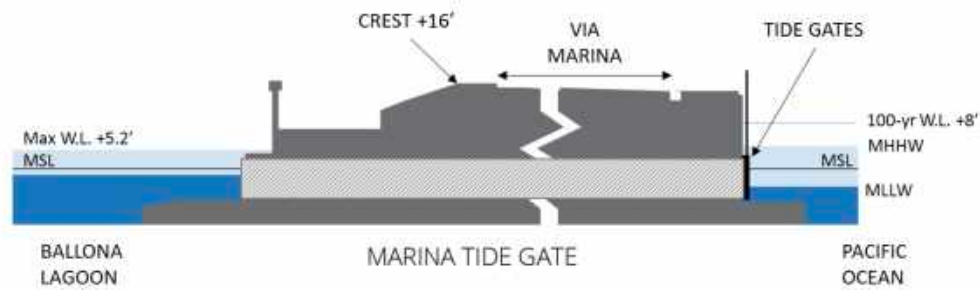
- Marina water level exceeds 0.0 feet MSL
- Marina water level is more than 0.25 feet higher than Ballona Lagoon water level

The Washington Boulevard tide gate is opened during a low tide for 2-6 hours approximately twice a week (PWA, 2007).

Neither tide gate is certified by the Federal Emergency Management Agency (FEMA) as a flood control infrastructure, impacting the 2017 Preliminary Flood Insurance Rate Map (PFIRM) analysis, and resulting base flood elevation (BFE) for the low-lying areas. As important flood prevention infrastructure for the coastal zone area, any failure in the operation of both tide gates can result in flooding.

The barriers that allow the tide gates to close the Ballona Lagoon and Canals from the ocean are also important when considering SLR. The existing grade above the MR tide gate has a relatively high crest elevation of approximately 16 feet (NAVD88) (see Figure 3.6) and is sheltered from direct ocean waves due to the Marina del Rey breakwater. Note, this crest elevation provides roughly 8 feet of freeboard above the current 100-year BFE. Washington Boulevard, which separates Ballona Lagoon from the canals, has a relatively lower elevation of 6.9 feet (NAVD88).

⁴¹ Venice Sea Level Rise Vulnerability Assessment



*Figure 3.6: Diagram of Marina del Rey Tide Gate
(Based off 2007 as-built drawings)*

As partially documented in **Attachment C**, there has been a history of leak issues with the canal in the vicinity of the Washington Boulevard gate and the nature and cause of the leak has yet to be definitively diagnosed. Since the tide gates limit the potential for flooding and regulate tidal flushing (with seawater) in the Ballona Lagoon, Grand Canal, and Venice Canals, any failure of the systems would affect flood risk in the communities within the Venice Canals area which are low-lying and flood prone under existing conditions. A failure of the operation of either tide gates or a problem with the canal structure could expose project residents to flooding hazards.

Existing Flood Risk From Storm Events - The Our Coast Our Future (OCOF) model⁴² which, like the City's Venice Sea Level Rise Vulnerability Assessment, uses Coastal Storm Modeling System data, shows that the project site is one of approximately 4,000 parcels, including the surrounding walk streets and canal bridges, which are anticipated to flood particularly from exceedances of stormwater. As shown in **Figure 13**, even without a rise in sea level, the project site is subject to flooding during an annual storm event. **Figure 14** shows the potential for flooding during a 100-year storm event under existing sea level conditions. It should be noted that the lease for the project is proposed to run for 99 years.

⁴² See: <https://data.pointblue.org/apps/ocof/cms/index.php?page=flood-map>

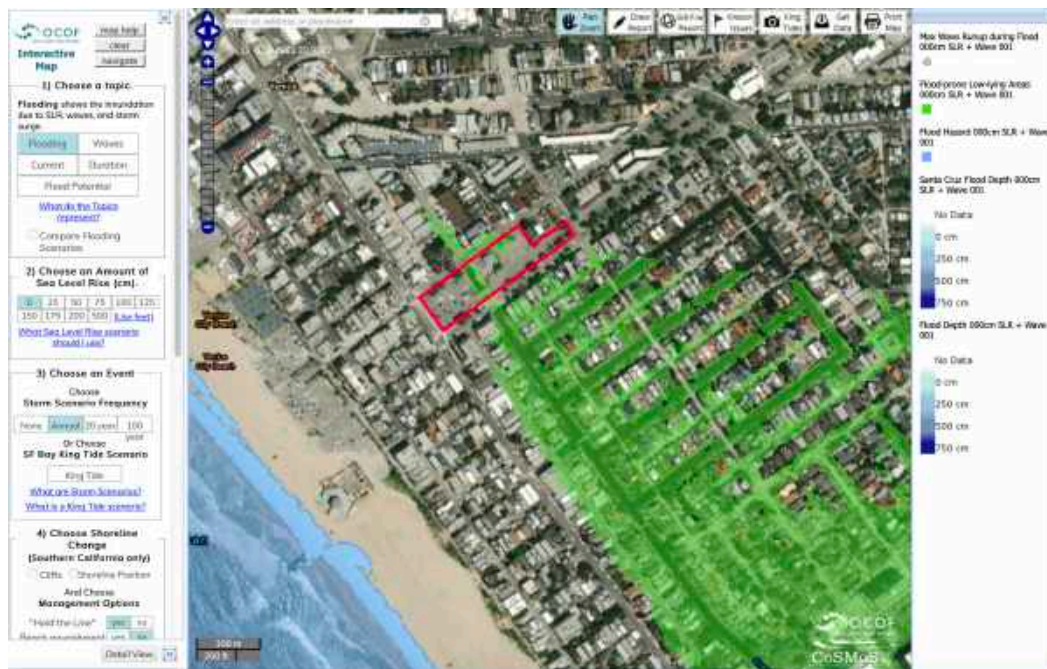
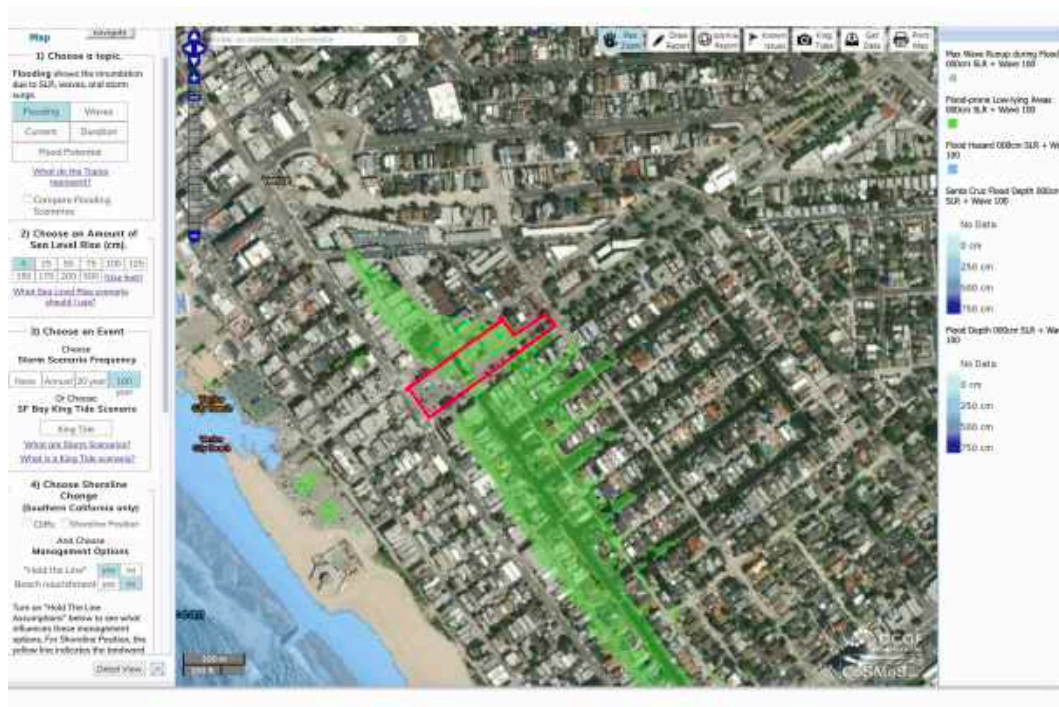


FIGURE 13 – POTENTIAL FOR FLOODING WITH AN ANNUAL STORM EVENT UNDER EXISTING CONDITIONS



Source: OCOF

FIGURE 14 – POTENTIAL FOR FLOODING WITH AN 100-YEAR STORM EVENT UNDER EXISTING CONDITIONS

Flooding Anticipated Sea Level Rise (SLR) As A Result Of Changing Weather Conditions Over The Life Of The Project - According to the Venice Sea Level Rise Vulnerability Assessment, sea level is anticipated to rise over time. Table 4.1 from the study, reproduced below shows the timeframe for the anticipated rise, with levels increasing by 1.6 feet or 50 centimeters in the year 2040 to 2080 timeframe. **Figure 15** shows anticipated flooding on the project site during a typical annual storm event, with a 50 cm sea level rise (SLR). **Figure 16** shows anticipated flooding on the project site during a 100-year storm event, with a 50 cm sea level rise (SLR).

Table 4.1: Venice Vulnerability Assessment Sea Level Rise Scenarios

| Scenario | Sea Level Rise, ft | Sea Level Rise, cm | Approximate Time Horizon for Sea Level Rise Projection* | Justification |
|----------|--------------------|--------------------|---|--|
| 1 | 0 | 0 | Current | Establish existing (baseline) conditions |
| 2 | 1.6 | 50 | 2040 to 2080 | Identify vulnerabilities within LCP planning horizon |
| 3 | 3.3 | 100 | 2060 to 2100+ | Potential threshold for inland flooding & coastal recreation |
| 4 | 4.9 | 150 | 2080 to 2100+ | Consistent with upper range of projections in 2100 |
| 5 | 6.6 | 200 | 2090 to 2100+ | Characterize vulnerabilities from extreme SLR |

**Time horizon from ourcoastourfuture.org using OPC's An Update on Sea Level Rise Science for California (Griggs, et al. 2017) RCP 8.5 projections, ranges are conservative due to uncertainty of H++ timing*

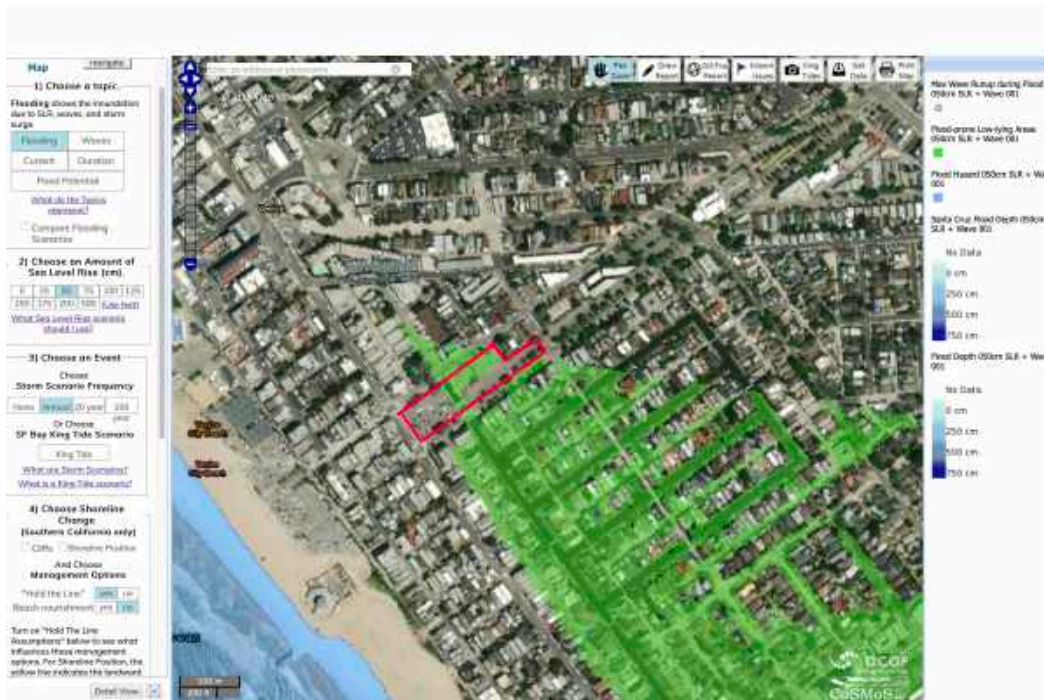
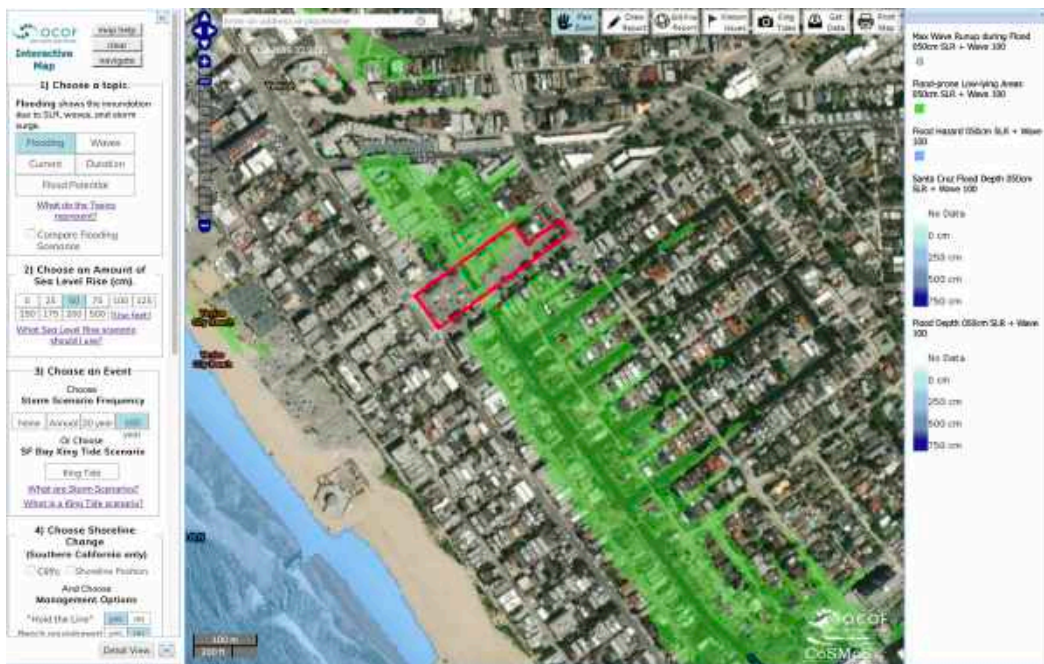


FIGURE 15 – POTENTIAL FOR FLOODING WITH AN ANNUAL STORM EVENT AND 50 CM RISE IN SEA LEVEL



Source: OCOF

FIGURE 16 – POTENTIAL FOR FLOODING WITH AN 100-YEAR STORM EVENT AND 50 CM RISE IN SEA LEVEL

Finally, **Figure 17** shows the flooding that would occur on the project site with a 100 cm rise in sea level (year 2060 – 2100) given a typical annual storm event.

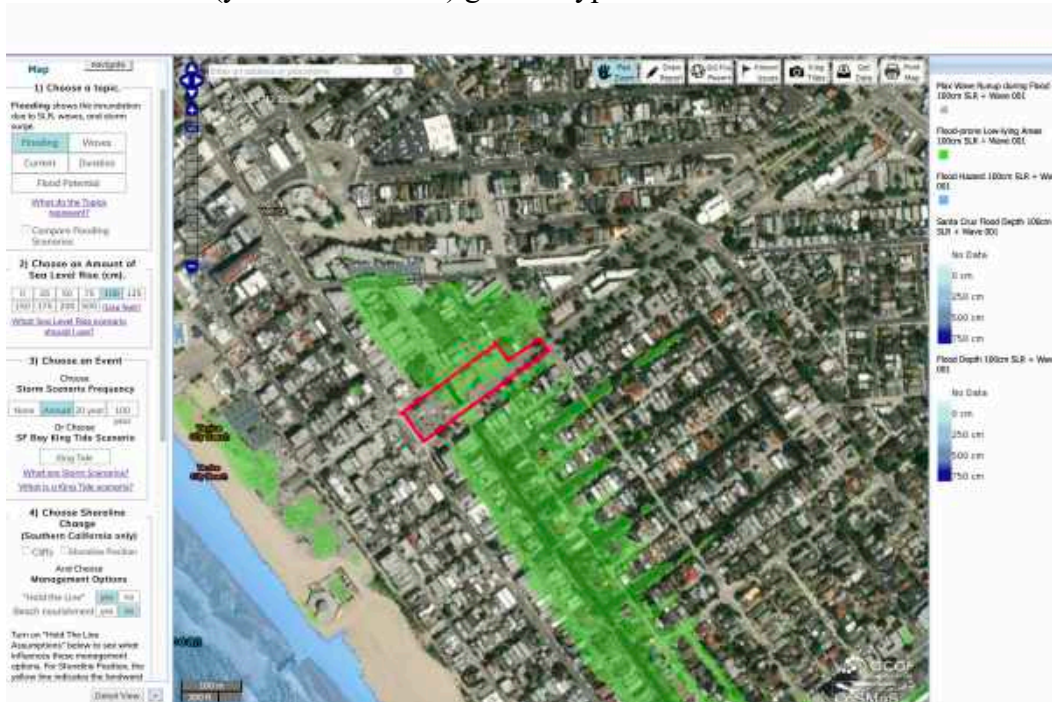


FIGURE 17 – POTENTIAL FOR FLOODING WITH AN ANNUAL STORM EVENT AND 100 CM RISE IN SEA LEVEL

The project site is thus susceptible to flooding as a result of storm events and sea level rise. Based on the project elevations, it does not appear that flood risk has been accounted for in project design and that the project is inconsistent with applicable flood-related policies in the LUP. The LUP includes the following policies related to flood hazards in the vicinity of the Grand Canal:

Policy IV. G. 1. Flood Setback. Potential flood hazard to residents along the west bank of the Ballona Lagoon and the east bank of the Grand Canal shall be alleviated by increasing the development setback in the Silver Strand area and along the banks of the Grand Canal and Ballona Lagoon (see Policies I.A.4 and 7), and by controlling erosion along the banks by the use of native flora.

Implementation Strategies

Regulations regarding the use of native flora, setbacks, and higher floor and driveway elevations to mitigate potential for erosion and flooding, and to provide for habitat protection, shall be consistent with the Venice Canals Rehabilitation Plan approved by Coastal Commission Coastal Development Permit 5-91-584, and the Ballona Lagoon Enhancement Plan approved by Coastal

Commission Coastal Development Permit 5-95-152 and amendments.

Policy IV. G. 2. Hazard Mitigation for New Construction. Special development standards shall be developed for those areas within the Venice Coastal Zone which present potential flood and liquefaction hazards.

In the absence of substantial evidence to the contrary, the proposed project will significant flood hazard impacts to project residents and visitors.

j) Inundation by seiche, tsunami, or mudflow?

As shown on **Figure 18**, according to the State of California, the project site located less than 0.25 miles from the Pacific Ocean and is within a mapped tsunami inundation area. The project site is thus within an officially mapped hazards zone.

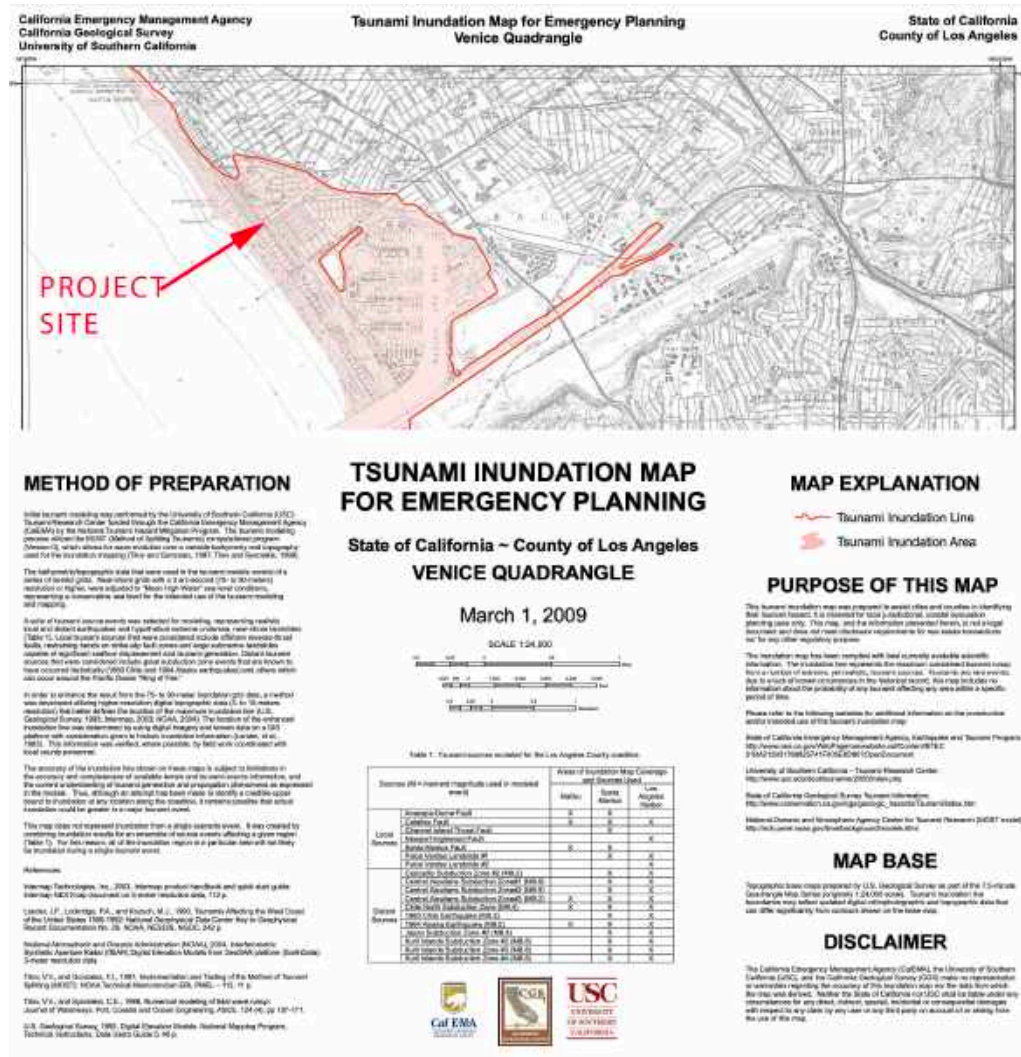


FIGURE 18 – PROJECT’S LOCATION IN AN TSUNAMI INNUDATION AREA

The project site is not physically suitable for the proposed use as it contains physical hazards which render residential uses inappropriate. This includes location on a site that would be subject to flood risk due to sea level rise.⁴³

LAND USE AND PLANNING

Page B-28 to B-29 of the City's Initial Study for the project identified the following land use impacts of the proposed project:

X. Land Use and Planning

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|-------------------------------------|--|-------------------------------------|--------------------------|
| a. Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project.

b) Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project is not consistent with the existing zoning, the existing General Plan designation for the site, the existing Venice Community Plan, the existing Venice Coastal Zone Specific Plan or the existing Certified Venice Local Coastal Program Land Use Plan (LUP). The proposed project is thus inconstant with three plans and their associated policies aimed at avoiding or mitigating anticipated environmental effects in the plan area. This would be a significant land use impact of the proposed project.

⁴³ Pacific Institute: https://pacinst.org/reports/sea_level_rise/hazmaps/Venice.pdf See also Venice Sea Level Rise Vulnerability Assessment by Moffat & Nicol (May 2018): https://planning.lacity.org/odocument/83cf6597-25f1-4fd7-8124-dcd015000d82/venice_coastal_zone_slr_vulnerability_assessment_-_nov._2018_copy.pdf

c) Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?

As previously detailed under Biological Resources, the proposed project is inconsistent with policies contained in the LUP to protect the designated Environmentally Sensitive Habitat Area in which the project site is located. This is a significant land use impact of the proposed project.

NOISE

Page B-30 to B-32 of the City's Initial Study for the project identified the following potential noise impacts of the proposed project:

XII. Noise

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project result in: | | | | |
| a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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 expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage.

PUBLIC SERVICES

Page B-35 to B-37 of the City's Initial Study for the project identified the following potential public services impacts of the proposed project:

XIV. Public Services

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| 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: | | | | |
| a. Fire protection? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Police protection? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Schools? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Parks? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Other public facilities? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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:

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage.

RECREATION

Page B-37 to B-38 of the City's Initial Study for the project identified the following potential recreation impacts of the proposed project:

XV. Recreation

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage.

TRANSPORTATION / TRAFFIC

Page B-38 to B-40 of the City's Initial Study for the project identified the following potential transportation and traffic impacts of the proposed project:

XVI. Transportation/Traffic

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|-------------------------------------|--|-------------------------------------|-------------------------------------|
| a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project.

d) Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project site is located between North Venice Boulevard and South Venice Boulevard. "North Venice Boulevard is a westbound one-way street and South Venice is an eastbound one-way street. All four of the driveways are proposed to have two-way traffic providing ingress/egress access. Two driveways will serve the west parcel and the other two driveways will serve the east parcel. All the four driveways will have left-turn in and left-turn out only on North

Venice Boulevard, and left-turn in and left-turn out only on South Venice Boulevard as well.”⁴⁴ The West Garage would contain 108 parking spaces and the east garage would contain 252 parking spaces for a total of 360 parking spaces. The Traffic Impact Study for the project anticipates a total of 878 daily weekday trips and 960 weekend trips after accounting for internal trip capture, without accounting for public parking spaces, as shown in Table 9, reproduced from the Traffic Impact Study:

| Table 9 – Project Trip Generation | | | | | | | | | | | | | | |
|--|---------|-----------|--------|---------------------------|---------|-----|-----|---------|-----|-----|----------------------------|--------------|-----|-----|
| Land Use | Rates | Intensity | Units | Weekday Daily Total | AM Peak | | | PM Peak | | | Saturday Daily Total | Mid-day Peak | | |
| | | | | | Total | In | Out | Total | In | Out | | Total | In | Out |
| Trip Generation Rates | | | | | | | | | | | | | | |
| Affordable Apartments ¹ | LADOT | - | DU | 4.08 | 0.5 | 40% | 60% | 0.34 | 55% | 45% | 4.91 | 0.44 | 50% | 50% |
| Shopping Center ² | ITE 820 | - | KSF | 37.75 | 0.94 | 62% | 38% | 14.6 | 48% | 52% | 46.12 | 4.5 | 52% | 48% |
| High Turn-over (Sit-Down) Restaurant ³ | ITE 932 | - | KSF | 112.18 | 9.94 | 55% | 45% | 10.9 | 62% | 38% | 122.40 | 11.19 | 51% | 49% |
| Recreational Community Center | ITE 495 | - | KSF | 28.82 | 1.76 | 66% | 34% | 2.31 | 47% | 53% | 9.10 | 1.07 | 54% | 46% |
| Public Parking ⁴ | N/A | - | SPACES | N/A | 0.14 | 54% | 46% | 0.42 | 47% | 53% | N/A | 0.50 | 63% | 37% |
| Trip Generation Estimates or Proposed Land Use | | | | | | | | | | | | | | |
| Affordable Apartments | LADOT | 140 | DU | 571 | 70 | 28 | 42 | 48 | 26 | 22 | 687 | 62 | 31 | 31 |
| Commercial Retails | ITE 820 | 2.255 | KSF | 85 | 2 | 1 | 1 | 33 | 16 | 17 | 104 | 10 | 5 | 5 |
| Café | ITE 932 | 1.310 | KSF | 147 | 13 | 7 | 6 | 14 | 9 | 5 | 160 | 15 | 8 | 7 |
| Community Art Space | ITE 495 | 3.155 | KSF | 91 | 6 | 4 | 2 | 7 | 3 | 4 | 29 | 3 | 2 | 1 |
| Public Parking | N/A | 105 | SPACES | - | 15 | 8 | 7 | 44 | 21 | 23 | - | 53 | 33 | 20 |
| Subtotal | | | | 894 | 106 | 48 | 58 | 146 | 75 | 71 | 980 | 143 | 79 | 64 |
| Credits | | | | | | | | | | | | | | |
| Existing Affordable Housing | LADOT | 4 | DU | (16) | (2) | (1) | (1) | (1) | (1) | 0 | (20) | (2) | (1) | (1) |
| Internal Trip Capture ⁵ - Commercial ⁶ | | | | - | (3) | (1) | (2) | (13) | (4) | (9) | - | (7) | (4) | (3) |
| Internal Trip Capture - Café ⁷ | | | | - | (3) | (2) | (1) | (7) | (4) | (3) | - | (7) | (3) | (4) |
| Internal Trip Capture - Residential ⁸ | | | | - | (3) | (1) | (2) | (11) | (7) | (4) | - | (5) | (3) | (2) |
| Transit Reduction - 10% | | | | - | (2) | (1) | (1) | (3) | (2) | (1) | - | (2) | (1) | (1) |
| Total | | | | 878 | 93 | 42 | 51 | 111 | 57 | 54 | 960 | 120 | 67 | 53 |

Source: Trip generation rates were from ITE Trip Generation Manual, 10th Edition unless otherwise noted.

Note 1: The weekday peak hour rates for affordable apartments is based on the LADOT Transportation Impact Study Guidelines, December 2016 (LADOT Guidelines). The LADOT Guidelines do not include Saturday daily or peak hour rates for affordable apartments. For purposes of establishing daily and peak hour rates for affordable housing, this trip generation table utilizes ITE 221 Saturday daily and peak hour rates for mid-rise multifamily housing.

Note 2: The PM trip generation rate is according to the Coastal Transportation Corridor Specific Plan.

Note 3: The PM trip generation rate is according to the Venice Coastal Zone Specific Plan.

Note 4: The rates were based on the existing parking demand survey of the existing 188 public spaces conducted on-site for two consecutive weekdays and Saturdays.

Note 5: Internal trip capture credits were based on the NCHRP 684 Internal Trip Capture Estimation Tool as described in the ITE Trip Generation Handbook, 3rd Edition. Daily and weekend trips credited were not provided in the handbook, and the data were available for AM and PM peak period only. To be conservative, Saturday mid-day internal trip credits were based on the data from the weekday PM peak period.

Note 6: Commercial credits - AM (29% in and 50% out), PM (22% in and 41% out), Saturday Mid-day (50% in and 50% out)

Note 7: Café credits - AM (30% in and 13% out), PM (46% in and 57% out), Saturday Mid-day (36% in and 60% out)

Note 8: Residential credits - AM (3% in and 5% out), PM (25% in and 16% out), Saturday Mid-day (9% in and 7% out)

The Traffic Study does not calculate the number of daily trips resulting from these additional public parking spaces.⁴⁵ The total number of trips into and out of the parking structures would be higher once public parking use of properly accounted for in the trip counts. Page 9 of the Traffic Impact Study does indicate that:

Currently, the Project site provides 188 existing public parking spaces, which will be replaced by the an above-ground parking garage on the East

⁴⁴ Page 21, Traffic Impact Study Reese Davidson Community Project, November 13, 2019 available at: <https://www.vchcorp.org/wp-content/uploads/2020/02/RDC-Traffic-Study-Findings.pdf>

⁴⁵ See pages 19-20, Traffic Impact Study.

Site of the proposed Project. The Project proposes to provide 105 additional public parking spaces beyond the existing amount. According to the parking surveys conducted at the existing parking spaces on a typical weekday, a combined total of 256 trips were generated from 7:00 a.m. to 10:00 a.m. and from 3:00 p.m. to 6:00 p.m. The average hourly trip generation rate is calculated as follows:

$$345 \text{ trips}/6 \text{ hours}/188 \text{ spaces} = 0.306 \text{ trips}/\text{hour}/\text{space}$$

On a typical Saturday when the parking demand survey was taken, the existing parking spaces generated a total of 416 trips from 1:00 p.m. to 6:00 p.m. The average hourly trip generation rate is calculated as follows:

$$416 \text{ trips}/5 \text{ hours}/188 \text{ spaces} = 0.443 \text{ trips}/\text{hour}/\text{space}$$

To be conservative, using the Saturday hourly trip generation rate and assuming 12 hours a day for active parking trips, the 105 additional public parking spaces will generate the following daily trips:

$$0.443 \text{ trips}/\text{hour}/\text{space} * 12 \text{ hours} * 105 \text{ spaces} = 558 \text{ trips.}$$

Adding the 558 estimated daily trips on Saturday associated with public parking to the 960 daily trips after accounting for trip credits, yields an estimated 1,518 inbound and outbound trips into the parking structures on Saturdays. If one divides 1,518 by 12 hours, this provides an estimate of 126 hourly trips, or 63 inbound and 63 outbound trips per hour associated with Saturday public parking. This is roughly consistent with Table 9, which indicates that there would be at least 57 inbound and 54 outbound turning movements into the parking structures during the weekday peak hour and 67 inbound and 53 outbound movements per hour during the Saturday mid-day peak hour.⁴⁶

The Traffic Impact Study did not contain an analysis of potential circulation-related hazards resulting from project design. As shown in **Figure 19**, the left-turn in and left-turn out site access proposed for the project presents vehicular turning movement hazards for cars ingressing and egressing the two project garages.⁴⁷

⁴⁶ It should be noted that the number of parking spaces listed in the Traffic Study is not the same as the number listed on the plan sheets dated 01/07/20. The project description is not stable when it comes to the description of parking facilities.

⁴⁷ Note position of entrance/exit access arms indicating the circulation has been designed for left-turn crossing movements. See **Figure 19**. If instead “English” traffic movements, where traffic keeps to the left instead of the right is intended, then safety hazard issues associated with within-Garage movements needs to be addressed. As noted in the “Recommended Parking Ramp Design Guidelines” guidance provided to a number of cities by SRF Consulting Group and Kimley Horn: “Cross-traffic at entry/exits should be minimized and preferably eliminated. When placing vehicle entries and exits together on one-way streets it is preferable to avoid “English” traffic conditions where traffic keeps to the left instead of to the right. Pedestrian/vehicular conflicts should be minimized by providing a pedestrian walkway adjacent to entry/exit lanes. Stair/elevator towers should be located so pedestrians do not have to cross drive aisles on their way to primary destinations.” The proposed project has not complied with this safety guidance.



Source: Plan Sheets A2.10 and A2.20; Google Earth

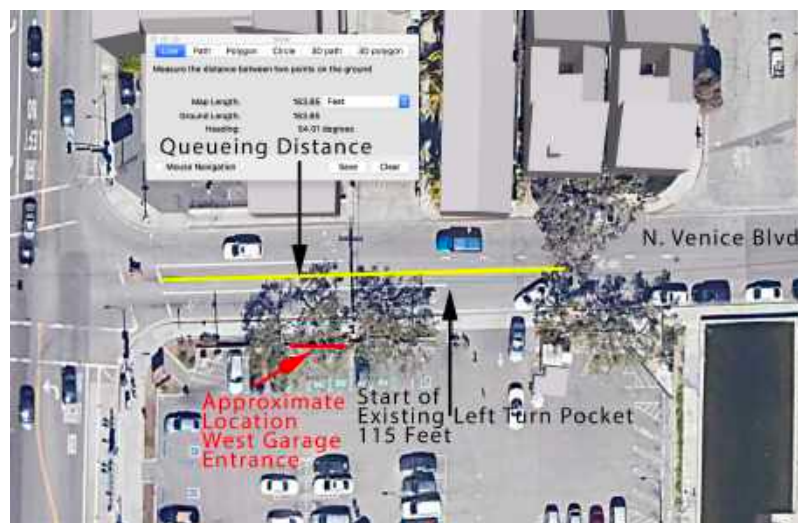
FIGURE 19 – UNSAFE PROJECT VEHICLE/VEHICLE AND PEDESTRIAN/VEHICLE MOVEMENT CONFLICTS

When it comes to the West Garage, this hazard is further compounded by existing and future queuing at the intersection of Pacific and North Venice Boulevard. The Traffic Impact Study included a queuing analysis at this intersection, but did not address how the observed and projected queue would affect operations of the West Garage. As shown on Table 16, which is excerpted from the Traffic Impact Study, the existing left turn pocket on North Venice Boulevard at this intersection is 115 feet long. The entrance to the West Garage would be located less than 70 feet from the intersection, interrupting stacking in the left turn lane. As shown in Table 16, the westbound left turn movement at the Pacific Avenue and North Venice Boulevard intersection exceeded the design storage length under existing conditions. The longest queuing occurred during the weekday PM peak hour. Assuming approximately 25 feet per vehicle, a maximum queue of 164 feet is anticipated to result in the future with project. **Figure 20** shows this queuing distance superimposed on the Google Earth aerial of the western project site as well as the existing 115-foot-long left turn pocket. A comparison of **Figure 19** and **Figure 20**, using the blue car on North Venice Boulevard in both figures as a reference point, shows that westbound left turn queuing on North Venice Boulevard would extend well past the entrance to the West Garage thereby interfering with ingress and egress to/from the West Garage, and further exacerbating the likely hazards resulting from the location and design of West Garage access.⁴⁸ **Figure 20** also shows that the West Garage entrance location would interfere with the operation of the Pacific Avenue/North Venice Boulevard intersection, by interrupting left turn movements.

⁴⁸ Base on Plan Sheet A2.10, the West Garage entrance is located less than 70 feet from the corner of Pacific Avenue and Venice Boulevard. (Precise measurements were not possible as we were working with a PDF of the Plan Sheets.)

Table 16 – Vehicle Queuing Summary

| Movement | Peak Hour | Storage Length (Feet) | Table 20 - Vehicle Queuing Summary | | | | | | | |
|------------------------------------|------------|-----------------------|------------------------------------|--------------------------------|-----------------------|--------------------------------|-----------------------|--------------------------------|-----------------------|--------------------------------|
| | | | Existing | | Existing with Project | | Future No Project | | Future with Project | |
| | | | Storage Length (Feet) | # Vehicles queued past storage | Storage Length (Feet) | # Vehicles queued past storage | Storage Length (Feet) | # Vehicles queued past storage | Storage Length (Feet) | # Vehicles queued past storage |
| #3 PACIFIC AVE / NORTH VENICE BLVD | | | | | | | | | | |
| WBL | Weekday AM | 115 | 73 | - | 78 | - | 76 | - | 81 | - |
| | Weekday PM | | 146 | 2 | 155 | 2 | 155 | 2 | 164 | 2 |
| | Sat MD | | 123 | 1 | 130 | 1 | 128 | 1 | 134 | 1 |
| WBT | Weekday AM | 705 | 28 | - | 28 | - | 29 | - | 29 | - |
| | Weekday PM | | 42 | - | 42 | - | 43 | - | 43 | - |
| | Sat MD | | 96 | - | 98 | - | 99 | - | 99 | - |
| NBL | Weekday AM | 25 | 6 | - | 6 | - | 6 | - | 4 | - |
| | Weekday PM | | 10 | - | 10 | - | 8 | - | 8 | - |
| | Sat MD | | 23 | - | 23 | - | 22 | - | 21 | - |
| NBT | Weekday AM | 163 | 68 | - | 47 | - | 96 | - | 96 | - |
| | Weekday PM | | 55 | - | 55 | - | 56 | - | 57 | - |
| | Sat MD | | 78 | - | 72 | - | 69 | - | 68 | - |
| SBT | Weekday AM | 630 | 263 | - | 262 | - | 295 | - | 299 | - |
| | Weekday PM | | 573 | - | 616 | - | 699 | 3 | 708 | 4 |
| | Sat MD | | 243 | - | 285 | - | 330 | - | 338 | - |



Source: Table 16 Traffic Impact Study, Google Earth, Plan Sheet A2.10

FIGURE 20 – PROJECTED WITH-PROJECT QUEUING DISTANCE – NORTH VENICE BOULEVARD WESTBOUND LEFT TURN

In addition, the project parking access poses a hazard for pedestrians. The eastern parking structure will provide what is essentially 252 beach parking spaces (23 beach impact spaces, 188 replacement parking spaces, and 41 non-required surplus parking spaces). As shown in **Figure 19**, the location of beach parking in the eastern parking structure combined with the one-way street pattern and the project’s design, as shown in **Figure 19**, will result in increased hazards to pedestrians walking (shown in blue on **Figure 19**) to and from the eastern parking structure to the beach. Beach visitors parking in the East Garage will have to walk past either the southern or northern driveway for the West Garage on their way to the beach, resulting in a pedestrian hazard from left turn movements that is further exacerbated by the mass of the proposed project. As shown in **Figure 21**, cars would exit from the darkness of the garage into

bright sun, making it difficult to detect pedestrians while trying to time a left turn exit to avoid conflicts with inbound vehicles turning left into the parking structure and cars on the street.

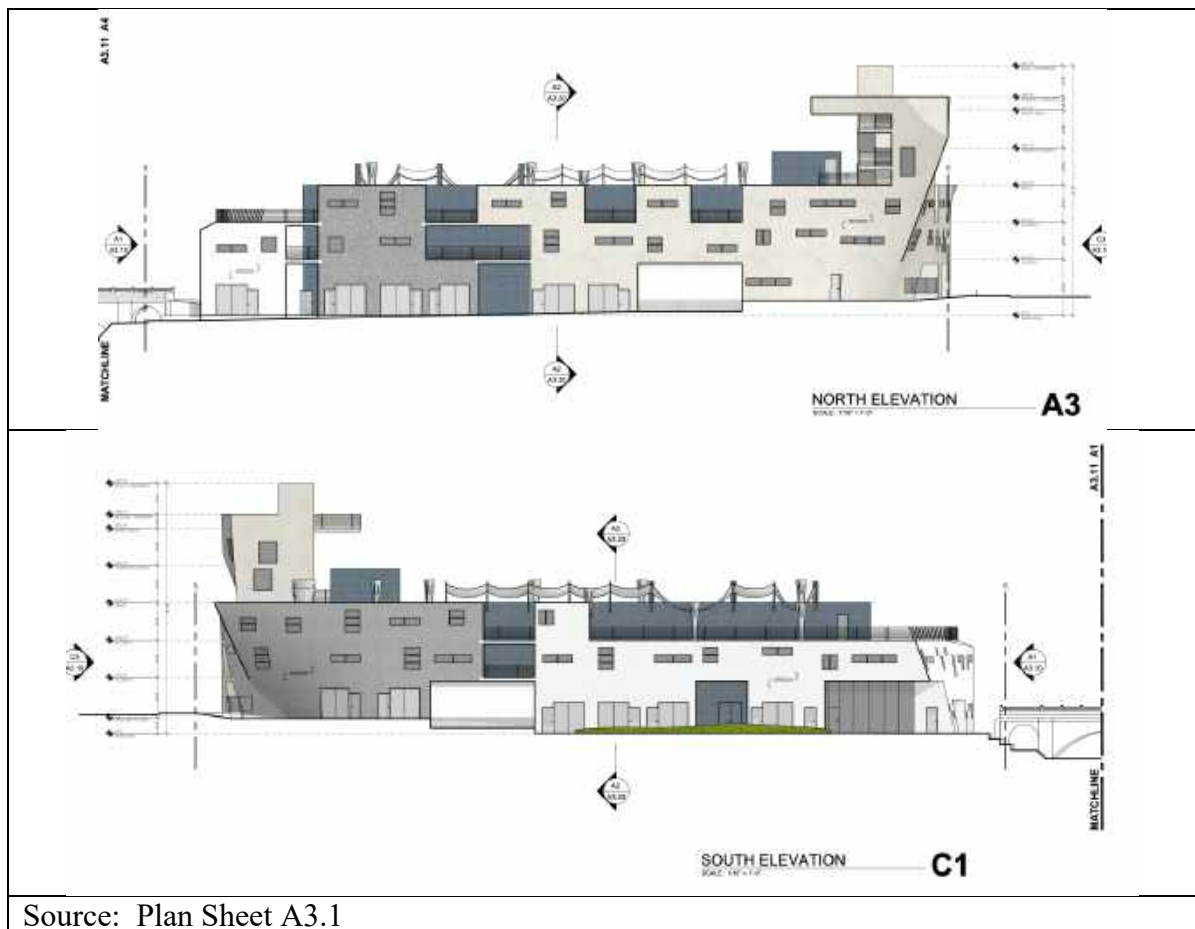


FIGURE 21 – ELEVATIONS FOR EASTERN PORTION OF PROJECT, INCLUDING EAST GARAGE

Similarly, project access and egress left-turn movements would pose a hazard to bicyclists making use of bike lanes in the project vicinity. According to page 12 of the Traffic Impact Study, bicycle lanes are provided on both North Venice Boulevard, east of Ocean Avenue and South Venice Boulevard, east of Pacific Avenue. The Traffic Impact Study did not address the project's potential to pose hazards to safe bicycle operations in the project vicinity.

In the absence of substantial evidence to the contrary, the proposed project will result in significant impacts to project residents, visitors, pedestrians and bicyclists as a result of a substantially increase in vehicular hazards due to the design of site access.

TRIBAL CULTURAL RESOURCES

Page B-40 to B-42 of the City's Initial Study for the project identified the following potential tribal cultural resource impacts of the proposed project:

XVII. Tribal Cultural Resources

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| 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: | | | | |
| i. 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 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage. We provide the following additional information to further document the nature of the substantial environmental damage that will result from the project.

The letter submitted by counsel for the Gabrieleno Band of Mission Indians, outlining the project's impacts to cultural resources is incorporated herein by reference. As noted by the tribe's attorney, the Project is not exempt from CEQA and the City has failed to comply with the consultation requirements mandated by AB 52. In the absence of substantial evidence to the contrary, the proposed project will result in significant impacts to tribal cultural resources.

UTILITIES AND SERVICE SYSTEMS

Page B-42 to B-48 of the City's Initial Study for the project identified the following potential utilities and service systems impacts of the proposed project:

XVIII. Utilities and Service Systems

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|-------------------------------------|--------------------------|
| Would the project: | | | | |
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage.

MANDATORY FINDINGS OF SIGNIFICANCE

Page B-48 to B-50 of the City's Initial Study for the project identified the following mandatory findings of significance for the proposed project:

XIX. Mandatory Findings of Significance

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------------------|
| Does the project: | | | | |
| a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? ☒ ☐ ☐ ☐
- c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ☒ ☐ ☐ ☐

In the absence of substantial evidence to the contrary, and documentation that mitigation measures or conditions of approval will reduce impacts to a level considered to be less than significant, the administrative record documents that the project will result in substantial environmental damage.

CONCLUSION REGARDING POTENTIAL FOR ENVIRONMENTAL IMPACTS

Because an EIR for the project has not been prepared, even though the City has identified the project's potential to result in significant environmental impacts, appropriate mitigation measures to reduce impacts to a level considered less than significant have not been identified. The project will therefore result in substantial environmental damage.

In addition, as detailed in this section, the project site is not physically suitable for the proposed use as it contains physical hazards which render residential uses inappropriate. These include location within: a methane zone⁴⁹, a liquefaction area, and a tsunami inundation zone.⁵⁰ The project site is also anticipated to be subject to flood risk due to sea level rise.⁵¹ The project site is also unsuitable due to the hazards presented by left-turn only site access/egress necessitated by the one-way street system adjacent to the project site.

Finally, as detailed in this section, the screening Health Risk Assessment prepared by SWAPE indicates that the project will result in an excess cancer risk to adults, children, infants, and during the 3rd trimester of pregnancy at the MEIR located approximately 100 meters away

⁴⁹ Zimas and <https://www.geoforward.com/wp-content/uploads/Methane-Zone-Map-Los-Angeles-by-Geo-Forward-Inc.-1.pdf>

See Division 71 of the Los Angeles Building Codes for mitigation and testing requirements for projects in the methane zone: https://up.codes/viewer/los_angeles/ca-building-code-2016/chapter/new_71/methane-seepage-regulations#new_91.7103

or City Ordinance No. 17590: https://ladbs.org/docs/default-source/publications/ordinances/methane-code---ordinance-no-175790.pdf?sfvrsn=d8eeb53_10

⁵⁰ Zimas.

⁵¹ Pacific Institute: https://pacinst.org/reports/sea_level_rise/hazmaps/Venice.pdf See also Venice Sea Level Rise Vulnerability Assessment by Moffat & Nicol (May 2018): https://planning.lacity.org/odocument/83cf6597-25f1-4fd7-8124-dcd015000d82/venice_coastal_zone_slr_vulnerability_assessment_-_nov._2018_copy.pdf

THE CITY FAILED TO GIVE CONSTITUTIONALLY REQUIRED HEARING NOTICE FOR THE ADVISORY AGENCY HEARING BY SENDING NOTICE TO ALL PERSONS WITH RESERVED MINERAL RIGHTS ON THE PROJECT SITE.

The City is constitutionally required to give notice and a right to be heard before taking action adverse to persons with protected property interests. In this case, numerous lots that would compose the Project site have been deeded with an express reservation of mineral rights. The current land use designation of open space and use as a parking lot does not impair the prior owners' deed reservation of mineral rights. The record is devoid of evidence that the underlying mineral rights owners have been given mailed notice of the advisory agency hearing. They would be constitutionally entitled to notice unless their mineral extraction rights were terminated pursuant to the lawful process, or if they recorded their interests and they have not otherwise expired. This Project proposes to erect structures that would make it impossible for the mineral rights owners to obtain the benefit of their reservation of mineral extraction rights.

Presumably the City issued the hearing notice under authority of Government Code Section 66474.64 that states:

“In cities having a population of more than 2,800,000, if the legislative body authorizes the advisory agency to report its action directly to the subdivider, the advisory agency shall, prior to making its report to the subdivider upon a subdivision as defined in this chapter, give notice of hearing in such manner as may be prescribed by local ordinance to the subdivider and to all property owners within 300 feet of the proposed subdivision and pursuant thereto shall conduct a public hearing at which time all persons interested in or affected by such proposed subdivision shall be heard.”

This statutory notice, written specially for the City of Los Angeles, and its implementing municipal code provision, LAMC section 17.06(A)(1), is unconstitutional as applied in this case in its failure to require due process of law notice and hearing for persons with recorded mineral interests in the Project site.

The State Planning Code expressly recognizes the right of constitutional notice to mineral rights holders whose interests are recorded in accordance with law. The notice required if the land lies in a jurisdiction subject to the general notice provisions of the Subdivision Map Act (other than Los Angeles) is provided in Government Code section 66451.3. It provides notice of hearing is required under Government Code section 65090 and 65091. Under section 65091(a)(2), “[w]hen the Subdivision Map Act (Division 2 (commencing with Section 66410) of Title 7) requires notice of a public hearing to be given pursuant to this section, **notice shall also be given to any owner of a mineral right pertaining to the subject real property who has recorded a notice of intent to preserve the mineral right** pursuant to Section 883.230 of the Civil Code.” (Emphasis added.)

Other than neglectful drafting of the provisions of the Subdivision Map Act applicable to Los Angeles, there is no rational basis for state law to guarantee mailed notice to mineral rights

owners in every jurisdiction except Los Angeles. The failure of state law to also require constitutional due process to mineral rights holders while guaranteeing it in all other jurisdictions is both a violation of equal protection of the law, and a violation of due process right to notice.

Since the record fails to show whether the Applicant or City has determined if persons who reserved mineral rights in the deeds for Project's site have ongoing enforceable mineral rights, and therefore a constitutional right to actual notice of the Advisory Agency hearing, there is no basis to proceed with the Advisory Agency hearing until such time that underlying mineral rights have been determined, and all persons entitled to notice have been notified.

ADDITIONALLY THE HEARING NOTICE INCORRECTLY DESCRIBES THE PROJECT.

The hearing notice for the hearing on October 22, 2020 is defective. The City repeatedly informs the public that Project sites land use designation is Open Space and Low Medium II Multiple Family Residential, when in fact the entire Project site is Open Space.⁵²

The hearing notice similarly inaccurately describes the proposed changes as:

- a. Venice Community Plan General Plan Land Use Map to amend the land use designation of the subject site from Open Space and Low Medium II Multiple Family Residential to Neighborhood Commercial;
- b. Certified Venice Local Coastal Program Land Use Plan (LUP) maps to amend the land use designation of the subject site from Open Space and Low Medium II Multiple Family Residential to Neighborhood Commercial.

On this additional ground, the City has failed to give lawful notice of the actual proposed Project.

THE CITY'S YEARS OF FLAWED HOUSING POLICY AGGRAVATED HOMELESSNESS IN LOS ANGELES, AND YET THE CITY COUNCIL OFFICE PROPOSES TO TAKE AWAY SPECIAL PURPOSE OPEN SPACE FROM THE VENICE COMMUNITY WITHOUT CONSULTATION.

The Venice Vision community does not accept the presumption of the Council District office that it can dictate such a significant shift in policy regarding the use and disposition of land held by the City in trust for the people.

This Project places front and center a question that the people of Los Angeles have a legally enforceable right to consider objectively based upon all the facts: how does the need to providing safe housing opportunities for homeless individuals balance on the scales of policy making against numerous other policy priorities of the people of the City – many of which are themselves so basic and fundamental that they are already enacted into law?

⁵² <https://planning.lacity.org/odocument/68a0ab80-79e8-4749-8f72-d454a199be7a/venplanmap.pdf>

Does the fact that the Project will house formerly homeless individuals constitute the only policy factor our elected officials should consider in evaluating its merits? Does meeting the needs of formerly homeless individuals come as a zero sum game, an all-or-nothing analysis? Is every other fundamental public policy trumped no matter what the financial cost?

The current place where City leaders find themselves,⁵³ with a rapidly expanding human and public health crisis in the streets, was predictable based upon what has gone on before. Our City institutions are under attack with the corrupting influence of money that apparently knows almost no limit at City Hall. One need look no further than the ongoing federal Department of Justice and FBI investigation of bribery, wire fraud, mail fraud, and perjury at Los Angeles City Hall to know that something there is terribly broken.⁵⁴ More than a half a dozen individuals have pled guilty to or will face charges of public corruption for which they will likely be sentenced to prison.

And in each of those cases there were large international real estate developers entering the Los Angeles market with a willingness, indeed eagerness, to shower City officials with gifts and bribes. These were given in exchange for bending the City's laws to the real estate developer's own financial benefit, and to the detriment of the public's interest. U.S. Attorney Nick Hanna, who leads the City Hall corruption scandal, observed City Hall suffered a: "Pay-to-Play' Scheme in Which Real Estate Developers Funneled Cash and Other Benefits to Secure Favorable Treatment".⁵⁵ Our City's decisionmaking processes are not working for the people they are supposed to serve.

Even absent this open bribery activity, pay-to-play exists in the form of generous legal campaign contributions and use of lobbyists with existing relationships with City officials. Real estate conglomerates have insinuated themselves with politicians using these strategies. They have created a self-reinforcing and dysfunctional information bubble where the politicians cite a perceived "housing crisis," without really striving to understand its dynamics, but rather use it as some kind of talismanic incantation prior to approving another luxury housing project to gentrify the City.

City Hall "logic" is as simplistic as: "If we build more of all kinds of housing, the power of the marketplace will drive down rents." This fairy tale, promulgated by the real estate industry and non-profits and academics it generously funds, fails to account for the threatening, monopolistic market power of these real estate conglomerates. They don't have to lower the rent

⁵³ Los Angeles Times Editorial, "Homelessness in LA: A National Disgrace" March 3, 2018 <https://www.latimes.com/la-ol-opinion-newsletter-homelessness-la-20180303-htlstory.html>

⁵⁴ Laist Running Timeline of City Hall Corruption Investigation by Federal Officials (Last updated July 20, 2020) <https://laist.com/2020/05/18/los-angeles-city-hall-fbi-corruption-investigation-timeline-englander-huizar.php#footnote>

Press release of US Department of Justice, July 30, 2020 "Los Angeles City Councilman Jose Huizar Charged in 34-Count Indictment Alleging Wide-Ranging Political Corruption", <https://www.justice.gov/usao-cdca/pr/los-angeles-city-councilman-jose-huizar-charged-34-count-indictment-alleging-wide>

⁵⁵ Press Release of US Department of Justice, June 23, 2020 <https://www.justice.gov/usao-cdca/pr/los-angeles-city-councilman-jose-huizar-arrested-federal-rico-charge-alleges-he-agreed>

when they sit on large piles of cash, and possess market power in the relevant market. As researchers confirmed: “developers have a very strong impact on the boom bust cycle, because they can create the impression that housing is a scarce good, while they have enough housing on stock to satisfy demand. This directly adds to the price increase during an upswing. On the other hand, developers have enough equity to hold on to a significant stock of unsold housing during the price decline, whereby they keep prices high.”⁵⁶

So for years, this dance of campaign contributions, lobbying, and information bubble created a toxic environment where the politicians have become content to accept approval of projects that tore down older affordable housing in Los Angeles and evicted some of the City’s most vulnerable, only to replace these with unaffordable luxury units, much of which are merely investment vehicles of foreign investors.⁵⁷ A portion of the evicted tenants have suffer homelessness, yet some of these luxury units sit vacant at rates exceeding 15% of building units. And many are unoccupied because corporate landlords can afford to take losses to maintain artificially high rents – a mark of monopolistic power. Even during the pandemic, rents have not been driven down so much as to avoid the continuing and ongoing humanitarian crisis of homelessness.

All across the City, including in Council District 11, real estate development interests have obtained special favors of spot zoning to wildly boost the size and impacts of their projects to the detriment of surrounding property owners. Such spot zones, often achieved with a complete amendment of every applicable plan or zoning law, conferred multi-million dollar increases in property value upon the developers. With extraordinary profit margins and an unquenchable thirst for more lucrative projects, internationally financed real estate interests and hedge funds are buying into Los Angeles real estate for speculation because the word it out that the City will spot zone almost anything.

Given the homelessness problem, City officials have been pressured to look at the conversion of City assets to address the crisis they have spent years creating within the uncritical information bubble peddled by the real estate development industry. The real estate moguls have been content to shift the growing cost of homelessness onto local government and the taxpayers. And unsurprisingly, it has been pressure from advocacy front groups for the real estate industry that pushed and supported the idea that City officials ought to identify public open space assets of the City. These identified assets were targeted as temporary and permanent to homeless housing centers, but without any public consultation.

⁵⁶ Critical Housing Analysis, “Monopolistic competition and price discrimination company strategy in the primary housing market,” Dec. 31, 2016, p. 9. <http://housing-critical.com/home-page-1/monopolistic-competition-and-price-discriminati>

⁵⁷ The Vacancy Report – How Los Angeles Leaves Homes Empty and People Unhoused, ACCE Institute, October, 2020 https://d3n8a8pro7vhmx.cloudfront.net/acceinstitute/pages/1322/attachments/original/1600360400/TheVacancyReport_compressed_%281%29.pdf?1600360400
LA Weekly, “Hollywood’s Urban Cleansing,” January 3, 2013, <https://www.laweekly.com/hollywoods-urban-cleansing/>

GOVERNMENT CODE SECTION 65351 MANDATES A GOOD FAITH PUBLIC EDUCATION AND PARTICIPATION PROCESS TO AMEND A GENERAL PLAN.

The City Planning Department proposes to conduct its first public hearing on the general plan amendment on October 22, 2020, before it has fulfilled its public participation duties under state law. The foregoing analysis of City policies that exacerbated homelessness strongly suggests before the City proposes to approve a Project that will forever foreclose alternative public interest uses of the Project site. Before it does through a general plan amendment, the City has an absolute statutory duty to conduct a substantial, meaningful and good faith public participation process.

Government Code Section 65351 provides:

“During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens, California Native American Indian tribes, public agencies, public utility companies, and civic, education, and other community groups, through public hearings and any other means the planning agency deems appropriate.”

While the decisionmaking public hearings will be the end of the general plan amendment process, the plain language imposes a greater duty than just issuing a public hearing notice. There is a mandatory outreach duty to a wide variety of government, utility, and civic groups to give them notice that a significant change in the planning agency’s general plan is under consideration, educate them on the policy options, and actively solicit their input as the amendment is considered. The phrase “and any other means” demonstrates that the public engagement process requires more than a hearing at the City Planning Commission and City Council.

The public engagement obligation must occur before the decisionmaking hearing process. The record here is devoid of any effort on the part of the City to undertake a good faith public notification of the proposed nature of the general plan amendment, why it is being proposed, what opportunities the change would foreclose on previously designated public open space, and the policy options other than the proposed amendment. The City Planning Department has done no general planning activity. It simply transferred the requested general plan amendment wording from the Project application to the hearing notice. That is not public engagement as mandated by Government Code Section 65351.

Equally significant is that the proposed general plan amendment constitutes the City’s appropriation of public assets to enable a private project that pursues one public goal while short circuiting the right of the public to fully comprehend and participate in such a fundamental change of the underlying general plan. The proposal to convert an important City of Los Angeles public asset, a public parking facility for residents and tourists to access the culturally significant Venice Beach, means that for all practical purposes under the proposed 99-year lease, the City

will foreclose any other public use of its dwindling open space lands. This is a fundamental policy decision.

Therefore, the City will fail to proceed in accordance with law if it goes to hearing without first complying with its education and outreach obligation. However, this is the political/legal framework under which the proposed Project is rolled out. The most substantial decision appears to have already been made: the Council District 11 office has unilaterally identified the Venice Boulevard Median open space parking area for irrevocable commitment to a homeless housing project without any public input or voice in the decision.

In order to carry out its unilateral decision, the Council District 11 office proposes to permit the applicant to request an extraordinary set of modifications to fundamental planning, zoning, and coastal protection laws in order to insert into the community a land use wholly inconsistent with fundamental policies enshrined in law.

UNDER GOVERNMENT CODE SECTION 66474.61 THE CITY ADVISORY AGENCY IS REQUIRED TO DENY THE PROPOSED TRACT MAP

The proposed Project's tract map approval is fatally flawed as set forth herein.

- A. **The Proposed Map Is Not Consistent With Applicable General And Specific Plans As Specified In Section 65451; and**
- B. **The Design Or Improvement Of The Proposed Subdivision Is Not Consistent With Applicable General And Specific Plans.**

The City's draft tract map approval at pp. 19 & 21 states that the Open Space land use designation and zoning of OS-1XL-O do not permit the development of any kind of housing project, including a Supportive Housing project on the subject parcels of land. Thus, the City concedes in its draft tract map approval that at this time the Advisory Agency is required to deny the tract map because the map and the project's land use and proposed improvement cannot be found consistent with applicable general plan and specific plans.

The list of requested entitlements is an admission of what City laws the Applicant seeks to modify to force the City's planning process to conform to the Applicant's preferences. In other words, the Applicant seeks extraordinary modifications of basic planning and zoning laws instead of proposing a development that already complies with the basic general plan and zoning requirements.

We incorporate the foregoing consistency analysis as well as detailed examples of inconsistency set forth in other comment letters, including by our client organization, Venice Vision. For the purposes of the tract map evaluation, we focus on those matters that are central and fundamental plan requirements, none of which the Project meets.

Having conceded that the project as proposed cannot be found to be consistent with applicable general plans and specific plans, the Advisory Agency proposes to approve the tract map anyway, asserting that it may rely on the fact that the Applicant has filed case number CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-SPR-PHP "in conjunction with the requested

tract map.” But the City has the process exactly backwards. The Applicant is required to first apply for this large list of discretionary legislative changes to the City’s fundamental plans, and as outlined above, the City is mandated by state law to conduct a good faith public outreach and public participation in conjunction with the general plan amendment planning process. If and only if the City Council exercises its legislative powers to make all of the requested changes, taking account the general plan amendment outreach and participation, would it be appropriate for the Applicant to seek a hearing on a tract map proposed to be consistent with the legislative decisions made by City Council.

The City and Applicant presume that by merely asking for all of these major changes to the City General Plans and implementing Specific Plans, that the tract map approval of the Advisory Agency may presume the City Council will approve all the requested changes. This process improperly purports to foreclose the City Council from approving anything other than the Applicant’s requested general plan and specific plan changes.

The Subdivision Map Act provisions applicable to the City of Los Angeles do not contain any authority to approve a tract map first, conditioned on the Applicant receiving all of the requested modifications of general plans and specific plans. For other jurisdictions, Government Code 66498.3 expressly authorizes an advisory agency to condition a tract map approval on an applicant later obtaining a zoning change. The absence of a similar provision in the Map Act authorizing an advisory agency to conditionally approve a tract map premised on a general plan amendment, means the City’s proposed conditional approval of a presumed general plan amendment is *ultra vires*. The Legislature’s strongly worded language mandating an advisory agency deny a tract map that does not comply with the general plan and specific plan, combined with no express authorization to conditionally approve premised on a general plan amendment, establishes how the City of Los Angeles is conducting an unlawful tract map hearing proceeding.

The Project is not consistent with the current General Plan in numerous ways. It is not consistent with the land use designation for the site as Open Space, or the Venice Community Plan, or the Venice Coastal Land Use Plan. All of these plans do not permit the Project as proposed. This designation was enacted into the Venice Community Plan Map for a reason. It preserves a vital public facility that supports local and regional recreation opportunities at the Pacific Ocean and Venice Beach. The land use designation of Open Space is one of the most restrictive land use designations in the City. The land use designation is intended to avoid the precise thing the Council Office and the Applicant propose to do: hand the beneficial use of an Open Space public facility over to a private firm. Thus, the Project proposed is fundamentally inconsistent with the General Plan land use designation, and no authority exists for the City to approve a tract map until there is a lawful general plan amendment process that would change the City’s fundamental planning policies to permit this currently illegal project.

In order to force the City’s fundamental planning documents to conform to the extremely inconsistent project proposed, the Applicant and Council Office propose to simply amend the City’s General Plan in numerous places to simply authorize the project anyway. In essence, the Applicant and Council Office seek to authorize a spot zone where inconsistent land uses, unit density, floor area, building height and intensity, deficient parking, and substandard beach access facilities will be inflicted upon the public.

But the City of Los Angeles lacks the authority to process a single project general plan amendment. Therefore, even if the City wanted to process a single project general plan amendment, it lacks the authority to do so.

Los Angeles City Charter, Section 555 provides:

“The General Plan may be amended in its entirety, by subject elements or parts of subject elements, or by geographic areas, provided that the part or area involved has significant social, economic or physical identity.” (Emphasis added.)

A City Charter permits all municipal power except those expressly limited. *Domar Electric, Inc. v. City of Los Angeles* (1994) 9 Cal.4th 161, 170. The requirement that the geographic area involved in a proposed general plan amendment be one of “significant social, economic or physical identity” is an express limitation on the City’s power to initiate a general plan amendment. It is an instruction that the amendment process, while not including the entire City, must include a significant chunk of the City to avoid piecemeal planning and spot zoning. In other words, the City Charter limitation expressly prohibits that which the Applicant purports to apply for.

Charter Section 557 expounds the meaning of the restricting language in Section 555. Section 557 provides:

“For the purpose of reviewing or amending the General Plan, the City Planning Commission shall make its recommendations to the Council relative to the division of the entire City into areas and the Council, after considering the recommendations of the City Planning Commission, shall adopt a resolution providing for those General Plan areas. To the extent feasible, general plan areas shall be drawn to keep areas geographically compact, to keep neighborhoods and communities intact, and to utilize natural boundaries and street lines.” (Emphasis added.)

Following the City Charter’s requirement that amendments were limited to geographically defined areas that had the characteristic of encompassing a neighborhood and community, and respecting natural boundaries between them, after the 1969 approval by voters, the City Planning Commission and City Council drew those General Plan Areas which are the minimum size area allowed for considering an amendment in the City. These General Plan areas are known as the Community Plans.

This division of the City into large chunks less than the entire City but more than a single project was intended to act as an anti-corruption prevention program. In 1967, it was revealed that a Los Angeles City Councilmember, Thomas Shepard, had accepted an \$11,000 bribe from a real estate developer in order to obtain a favorable modification of the City’s master plan, and dramatic increase in zoning density for his Canoga Park subdivision proposal. Mr. Shepard was found guilty of bribery and sentenced to prison for his crimes. Many other Planning Commission and City staff resigned from their positions under scrutiny for conflicts of interest and other inappropriate selling of the public interest. City Hall, under intense scrutiny by the Los

Angeles Times, appointed a blue ribbon committee to study and recommend changes to reform the City's planning and zoning processes in response to the bribery scandal.

The Citizen's Committee on Zoning Practices and Procedures, headed by former Los Angeles Mayor Fletcher Bowron, issued a ground-breaking series of reports after conducting 14 months of hearings funded and staffed by the City. This official City committee recommended a series of City Charter amendments and zoning changes to insulate elected officials from the temptation to demand pay to play (quid pro quo) favors from real estate developers in exchange for plan changes and unplanned up-zoning.

The most important reform was a strict one: That the City would have a General Plan that was legally enforceable, requiring consistency by the subordinate zoning rules, and that the City would be divided into significant geographic areas for future consideration of amendments to the General Plan. Within a year, the Legislature followed Los Angeles reforms by enacting State Planning Code requirements for all cities, including charter cities, to prepare General Plans. However, unlike Los Angeles, which stands alone with its charter restriction barring piecemeal general plan amendments, the Legislature allowed general law cities and counties to process amendments to their general plans up to 4 times per year. Los Angeles is not subject to the 4 times per year amendment rule, rather it was required to frequently undergo periodic reviews of its community plans (the General Plan Areas created under Charter Section 557).

Over the past few decade or more, the City Council grossly underfunded the City Planning Department to perform the required frequent planning updates. At some point, someone at City Hall simply decided to start processing general plan amendments by quietly ignoring the City Charter limitation on authority to process anything less than an amendment for a General Plan Area created under Section 557. Eventually, members of the public began to notice the efforts of the City purporting to process general plan amendments for individual projects, which is legally barred by the Charter. A legal challenge to the City's reinterpretation was rejected in the case of *Westsidiers Opposed to Overdevelopment v. City of Los Angeles et al.* (2018) 27 Cal.App.5th 1079, to the delight of City Council members and the real estate development community which seeks to maximize profit by seeking single project general plan amendments and re-zoning – just like in 1967 Canoga Park.

After the *Westsidiers* case, the City Council continued to allow real estate developers to propose general plan amendments to allow completely overhaul of the planning and zoning controls for their properties. These changes always resulted in substantial increases in permitted density, height and floor area, transferring from the people of Los Angeles to the developer millions of dollars of additional value. Then, just as Los Angeles suffered in 1967, the corruption festering beneath the surface under the current City administration broke out with the FBI's raid of the offices of Councilmember Jose Huizar, and the offices of the City Attorney.

For a second time, because the local courts were unwilling to enforce the people-voted anti-corruption limit on general plan amendments, the people of Los Angeles now suffer from a corrupted planning process and Planning Department that continues to process general plan amendments in violation of the strict limit placed in the City Charter to halt bribery and other unlawful conduct. *Westsidiers* was wrongly decided because it incorrectly deferred to a corrupt City administration's self-interest in continuing pay to play. For this reason if the City persists in

utilizing an unlawful general plan amendment process to enable this severely inconsistent Project, Venice will seek to challenge *Westside's* improper endorsement of the same practices that people of Los Angeles thought they snuffed out in the 1969 election approving reforms. Apparently, Los Angeles embodies the old adage that: "He (or she) who fails to learn history, is doomed to repeat it."

C. The Project is Likely to Cause Substantial Damage and Cause Serious Public Health Problems Mandating Denial under the Subdivision Map Act.

The Subdivision Map Act mandates denial of a tentative map if the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat." Govt. Code Section 66474(e). As explained above, the Project is not exempt from CEQA. Moreover, even if it was, an exemption from CEQA does not relieve a public agency from conducting an environmental review as part of the approval of the tentative tract map.

In *Topanga Ass'n for a Scenic Community v. County of Los Angeles* (1989) 214 Cal.App.3d 1348, the court ruled that Government Code Section 66474(e), which requires a governmental agency to deny a map application if the agency finds that subdivision design or improvements are likely to cause substantial environmental damage, provides for an environmental review separate from and independent of CEQA. The court stated as follows: "Appellants argue that elimination of their CEQA causes of action does not foreclose an environmental challenge to the approval of the project because the Subdivision Map Act, in Government Code section 66474, subdivision (e), provides for environmental impact review separate from and independent of the requirements [of the CEQA. We agree. "[T]he finding required by section 66474, subdivision (e) is in addition to the requirements for the preparation of an environmental impact report" or a [*1356] negative declaration pursuant to the CEQA. (59 Ops.Cal.Atty.Gen. 129, 130 (1976).) *Topanga Ass'n for a Scenic Cmty. v. County of L.A.* (1989) 214 Cal.App.3d 1348, 1355-1356

The City has failed to conduct the environmental review that would be required by Government Code Section 66474(e). Further, the evidence already part of the Record (and outlined above) demonstrates that the Project will cause substantial environmental damage and serious public health problems). Therefore the tentative tract map must be denied under Government Code Section 66474(e) and (f).

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D. CONCLUSIONS

The City should deny this costly project and instead make more cost-effective use of funds to address the homeless problem. As explained by Venice Community Housing Corporation at their October 14, 2020 zoom community meeting on the project, the proposed project is anticipated to cost approximately \$525,000 per unit. As noted by LA Alliance for Human Rights on pages 32-34 of their recent complaint:⁵⁸

In 2016, City residents voted overwhelmingly to increase their property taxes and issue general obligation bonds to generate a total of \$1.2 billion over a ten-year period with the claimed goal of building 10,000 units of Permanent Supportive Housing (“PSH”).⁷⁸ The City of Los Angeles has now allocated nearly all of that \$1.2 billion, for a slated total of “5,873 supportive units for homeless residents and another 1,767 affordable units” presumably for low-income (but not yet homeless) persons.⁷⁹ While permanent housing is certainly a valuable piece of the puzzle, the median cost of HHH housing is now an astonishing \$531,000 per unit, greater than many market-rate homes for sale in Los Angeles County. “An unusually high 35 to 40 percent of costs are so-called ‘soft costs’ (development fees, consultants, financing, etc.) compared to just 11 percent for actual land costs.”⁸⁰ Part of the high cost is due to the “elongated approval and construction timelines”—three to six years—which is “plainly out of step with the City’s urgent need to bring tens of thousands of people off the streets and into housing.”⁸¹ The purpose of HHH was to provide a significant solution to address the increasing homelessness crisis. Yet for less than a quarter of the \$1.2 billion price tag, the City of Los Angeles

⁵⁸<https://spertuslaw.sharefile.com/share/view/s914ce06aa64487b8>

Footnotes:

⁷⁸ The Proposition HHH ballot described it thus:

To provide safe, clean affordable housing for those in danger of becoming homeless, such as battered women and their children, veterans, seniors, foster youth, and the disabled; and provide facilities to increase access to mental health care, drug and alcohol treatment, and other services; shall the City of Los Angeles issue \$1,200,000,000 in general obligation bonds, with citizen oversight and annual financial audits?

City of Los Angeles, City Clerk, Voter Information Pamphlet at 7 (Nov. 8, 2016), http://clerk.cityofla.acsitefactory.com/sites/g/files/wph606/f/2016%20November%20County%20WEB_English.pdf.

⁷⁹ Ron Galperin, LA Controller, *High Cost of Homeless Housing: Review of Proposition HHH*, (Oct. 8, 2019), https://lacontroller.org/wp-content/uploads/2019/10/The-High-Cost-of-Homeless-Housing_Review-of-Prop-HHH_10.8.19.pdf.

⁸⁰ *Id.*

⁸¹ *Id.*

could provide a bed for every unsheltered Angeleno.⁸² Instead, year after year, the point-in-time count has increased and to date, over three years since Proposition HHH was passed, only 46 PSH units have been opened. In focusing almost exclusively on PSH, a solution which is laudable but alone takes too long, is too expensive, and provides less than 20 percent of the beds actually needed, the City has wasted its best opportunity to address this crisis and failed to accomplish its stated goal as promised to the voters in 2016.

The proposed project meets neither the conditions for a statutory exemption from CEQA, or the required findings for issuance of a Vesting Tentative Tract. The City should deny the application for the Vesting Tentative Tract and should deny the requested waivers.

I may be contacted at 310-982-1760 or at jamie.hall@channellawgroup.com if you have any questions, comments or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jamie T. Hall', with a stylized, cursive script.

Jamie T. Hall

ATTACHMENTS:

- A. SWAPE Comments on the Reese Davidson Community Project, October 19, 2020 and Attachment
- B. Venice Sea Level Rise Vulnerability Assessment (2018), prepared by Moffat & Nichol
- C. Emails Providing Evidence of Canal Leaks
- D. Venice Canal Historic District Nomination Form



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October 19, 2020

Jamie T. Hall
Channel Law Group, LLP
8383 Wilshire Blvd., Suite 750
Beverly Hills, CA 90211

Subject: Comments on the Reese Davidson Community Project

Dear Mr. Hall,

We have reviewed the August 2020 Public Hearing Notice ("PHN"), as well as the December 2018 Initial Study ("IS"), for the Reese Davidson Community Project ("Project") located in the City of Los Angeles ("City"). The Project proposes to demolish the existing surface parking lot and two-story residential building, as well as construct 140 residential units, 685-SF of affordable resident services, 3,155-SF of community arts/meeting space, 4,565-SF of retail/restaurant space, 500-SF of outdoor seating, and 436 parking spaces on the 115,674-SF Project site.

Our review concludes that the Project's hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts have not been evaluated whatsoever. As a result, emissions associated with construction and operation of the proposed Project, as well as their impact on the surrounding environment, are inadequately addressed. An environmental analysis should be prepared to adequately assess the potential hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts that the Project may have on the surrounding environment.

Hazards and Hazardous Materials

Inadequate Analysis of Impacts

A Phase I Environmental Site Assessment (ESA) has not been prepared for the Project site. The preparation of a Phase I ESA is a common practice in CEQA matters to identify hazardous materials issues that may pose a risk to the public, workers, or the environment, and which may require further investigation through the conduct of a Phase II ESA.

Standards for performing a Phase I ESA have been established by the US EPA and ASTM International. Phase I ESAs are conducted to identify conditions indicative of releases of hazardous substances and include:

- a review of all known sites in the vicinity of the subject property that are on regulatory agency databases undergoing assessment or cleanup activities;
- an inspection;
- interviews with people knowledgeable about the property; and
- recommendations for further actions to address potential hazards.

Phase I ESAs conclude with the identification of any “recognized environmental conditions” (RECs) and recommendations to address such conditions. A REC, as defined by ASTM International, means “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”¹ If RECs are identified, then a Phase II ESA generally follows, which includes the collection of soil, soil vapor and groundwater samples, as necessary, to identify the extent of contamination and the need for cleanup to reduce exposure potential to the public.

The preparation of a Phase I ESA for the Project site is especially important because historic aerial photography and Sanborn Fire Insurance Maps (Attachment 1) show the Project site to be along the alignment of the Pacific Electric Railway (see representative image below) .

¹ <https://www.astm.org/Standards/E2247.htm>



1927 Aerial Image of Project Site

Railways can be found to be RECs because of the use and release of oils, lubricants, fuel and solvents used as degreasers. These compounds can be long lasting in the subsurface and may pose risks to workers during earth moving activities during Project construction. Railroad-related compounds may also pose risks to future residents living atop any unmitigated contamination which may move from a vapor phase in soils below into indoor air.

Consistent with professional due diligence procedures commonly used in CEQA proceedings, a Phase I ESA, completed by a licensed environmental professional is necessary for inclusion in an EIR to identify recognized environmental conditions, if any, at the proposed Project site. If a REC is identified, a Phase II should be conducted to sample for potential contaminants in soil (including pesticides), soil vapor and groundwater. Any contamination that is identified above regulatory screening levels, including California Office of Environmental Health Hazard Assessment's Soil Screening Numbers², should be

² <http://oehha.ca.gov/risk/chhsltable.html>

further evaluated and cleaned up, if necessary, in coordination with the Regional Water Quality Control Board and the California Department of Toxics Substances Control.

Air Quality & Greenhouse Gases

Failure to Evaluate Environmental Impacts

According to the PHN, the Project requires a Vesting Tentative Tract Map ("VTT"). Specifically, the PHN states:

"The Advisory Agency shall consider:

1. Pursuant to Los Angeles Municipal Code (LAMC) Sections 17.03, 17.06, and 17.15, a Vesting Tentative Tract Map, VTT No. 82288, for the merger and re-subdivision of 40 existing lots into two master ground lots and seven airspace lots" (p. 2).

Thus, pursuant to Government Code 66474(3), the VTT request should not be approved if the proposed land uses are likely to cause substantial environmental damage. Specifically, Government Code 66474(e) states:

"A legislative body of a city or county shall deny approval of a tentative map, or a parcel map for which a tentative map was not required, if it makes any of the following findings:

- (a) That the proposed map is not consistent with applicable general and specific plans as specified in Section 65451.
- (b) That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.
- (c) That the site is not physically suitable for the type of development.
- (d) That the site is not physically suitable for the proposed density of development.
- (e) That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.
- (f) That the design of the subdivision or type of improvements is likely to cause serious public health problems
- (g) That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the governing body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction and no authority is hereby granted to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision" (emphasis added).

As you can see in the excerpt above, pursuant to Government Code 66474(e), the VTT request should not be approved if the proposed land uses are likely to result in substantial environmental damage.

Here, however, the Project fails to prepare any environmental analysis, as it claims an exemption pursuant to Assembly Bill (“AB”) 1197. Specifically, the PHN states:

“Pursuant to Assembly Bill 1197 in furtherance of providing Supportive Housing under Public Resources Code Section 21080.27(b)(1), that based on the whole of the administrative record as supported by the justification prepared and found in the environmental case file, the project is statutorily exempt from the California Environmental Quality Act” (p. 2).

As you can see in the excerpt above, the Project claims an exemption pursuant to AB 1197. As a result, no environmental analysis has been conducted or disclosed regarding the Project’s potential impacts whatsoever, and we cannot verify that the Project would not be likely to result in substantial environmental damage.

Environmental analysis is especially important here, as the IS indicates that the proposed Project would have potentially significant impacts with respect to criteria air pollutants, toxic air contaminants (“TACs”) and associated health risk impacts, and greenhouse gases (“GHGs”) (p. B-8, B-20). Specifically, regarding the Project’s construction and operational criteria air pollutants, the IS states:

“[I]mplementation of the Project could potentially contribute to air quality impacts, which could cause a cumulative impact in the Basin. The EIR will provide further analysis of cumulative air pollutant emissions associated with the Project” (emphasis added) (p. B-8).

Furthermore, regarding construction-related and operational TAC emissions and associated health risk impacts, the IS states:

“[T]he Project would result in increased short- and long-term air pollutant emissions from the Project Site during construction (short-term) and operation (long-term). Sensitive receptors located in the vicinity of the Project Site include residential uses. Therefore, the Project could expose sensitive receptors to substantial pollutant concentrations and the EIR will provide further analysis of the Project’s potential to result in substantial adverse impacts to sensitive receptors” (emphasis added) (p. B-8).

Finally, regarding GHG emissions, the IS states:

“Activities associated with the Project, including construction and operational activities, could result in greenhouse gas emissions that may have a significant impact on the environment. Therefore, the EIR will provide furthermore analysis of the Project’s greenhouse gas emissions” (emphasis added) (p. B-20).

As you can see in the excerpts above, the IS indicates that the Project could potentially result in significant environmental impacts with respect to criteria air pollutants, TACs and associated health risk impacts, and GHGs. Therefore, it should not be assumed that the Project would not be likely to cause substantial environmental damage. Thus, the VTT request should not be approved until adequate environmental analysis is prepared demonstrating that the Project would not result in substantial environmental damage pursuant to Government Code 66474(e).

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

As discussed above, the PHN claims that the proposed Project is exempt from CEQA environmental review pursuant to AB 1197. As a result, the PHN fails to evaluate the proposed Project's potential health risk impacts. However, this is incorrect for two (2) reasons.

First, by failing to prepare a construction and operational HRA for existing sensitive receptors, the Project is inconsistent with recommendations set forth by the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing recommendations for health risk assessments in California. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.³ This guidance document describes the types of projects that warrant the preparation of an HRA. Construction of the Project will produce emissions of diesel particulate matter ("DPM"), a human carcinogen, through the exhaust stacks of construction equipment. The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.⁴ As the IS indicates that Project construction will begin in 2020 and end in 2023, the Project should be evaluated for cancer risks pursuant to OEHHA guidance (p. A-18). Furthermore, once construction of the Project is complete, the Project will operate for a long period of time. During operation, the Project will generate vehicle and truck trips, which will produce additional exhaust emissions, thus continuing to expose nearby sensitive receptors to emissions. The OEHHA document recommends that exposure from projects lasting more than six months should be evaluated for the duration of the project, and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").⁵ Even though the Project documents fail to provide the expected lifetime of the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration exceeds the 2-month and 6-month requirements set forth by OEHHA. Therefore, per OEHHA guidelines, we recommend that health risk impacts from Project construction and operation be evaluated in an environmental analysis for the proposed Project.

Second, the Project fails to compare the excess health risk to the SCAQMD's specific numeric threshold of 10 in one million.⁶ Thus, it cannot be assumed that the Project would not be likely to cause substantial environmental damage without quantifying the Project's construction and operational cancer risk to compare to the proper threshold, as recommended by the lead agency for the Project.

³ OEHHA (February 2015) Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, <http://bit.ly/2sAKySW>.

⁴ OEHHA (February 2015) Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, <http://bit.ly/2sAKySW>, p. 8-18.

⁵ OEHHA (February 2015) Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, <http://bit.ly/2sAKySW>, p. 8-6, 8-15

⁶ "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, available at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.

Screening-Level Assessment Indicates Significant Health Risk Impacts

In an effort to demonstrate the potential health risk posed by Project construction and operation to nearby, existing sensitive receptors utilizing a site-specific emissions estimates, we prepared a simple screening-level HRA based on SWAPE's CalEEMod model. The results of our assessment as described below, demonstrate that the proposed Project may result in a significant impact not previously identified or addressed.

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.⁷ The model replaced SCREEN3, and AERSCREEN is included in the OEHHA⁸ and the California Air Pollution Control Officers Associated ("CAPCOA")⁹ guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's construction and operational health-related impact to residential sensitive receptors using the annual PM₁₀ exhaust estimates from the SWAPE CalEEMod output files (Attachment 2). Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life. SWAPE's CalEEMod model indicates that Project construction activities will generate approximately 299 pounds of DPM over the 733-day construction period. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

$$\text{Emission Rate } \left(\frac{\text{grams}}{\text{second}} \right) = \frac{298.8 \text{ lbs}}{733 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.00214 \text{ g/s}}$$

Using this equation, we estimated a construction emission rate of 0.00214 grams per second ("g/s"). Subtracting the 733-day construction period from the total residential duration of 30 years, we assumed that after construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 27.99 years, approximately. The Project's operational CalEEMod emissions indicate that operational activities will generate approximately 330 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

⁷ U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

⁸ "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

⁹ CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

$$\text{Emission Rate } \left(\frac{\text{grams}}{\text{second}} \right) = \frac{329.6 \text{ lbs}}{365 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.004741 \text{ g/s}}$$

Using this equation, we estimated an operational emission rate of 0.004741 g/s. Construction and operational activity was simulated as a 2.66-acre rectangular area source in AERSCREEN with dimensions of 215 by 50 meters. A release height of three meters was selected to represent the height of exhaust stacks on operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10%.¹⁰ Review of Google Earth demonstrates that the nearest sensitive receptors are located immediately adjacent to the Project site. However, review of the AERSCREEN output files (Attachment 3) demonstrates that the *maximally* exposed individual resident (“MEIR”) is located approximately 100 meters from the Project site. Thus, the single-hour concentration estimated by AERSCREEN for Project construction is approximately 4.694 µg/m³ DPM at approximately 100 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.4694 µg/m³ for Project construction at the MEIR. For Project operation, the single-hour concentration estimated by AERSCREEN is 10.4 µg/m³ DPM at approximately 100 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 1.04 µg/m³ for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the IS’s proposed construction period, beginning in 2021 and ending in 2023, the annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years) and the first 1.76 years of the infantile stage of life (0 – 2 years) (p. A-18). The annualized average concentration for Project operation was used for the remainder of the 30-year exposure period, which makes up the remaining 0.24 years of the infantile stage of life, the entire child stage of life (2 – 16 years), and the entire the adult stage of life (16 – 30 years).

Consistent with OEHHA, as recommended by the SCAQMD, BAAQMD, and SJVAPCD guidance, we used Age Sensitivity Factors (“ASF”) to account for the heightened susceptibility of young children to the

¹⁰ “Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised.” EPA, 1992, *available at*: http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf; *see also* “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, *available at*: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf> p. 4-36.

carcinogenic toxicity of air pollution.^{11, 12, 13} According to this guidance, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant) as well as multiplied by a factor of three during the child stage of life (2 – 16 years). We also included the quantified cancer risk without adjusting for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution in accordance with older OEHHA guidance from 2003. This guidance utilizes a less health protective scenario than what is currently recommended by SCAQMD, the air quality district with jurisdiction over the City, and several other air districts in the state. Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.¹⁴ Finally, according to SCAQMD guidance, we used a Fraction of Time At Home (“FAH”) Value of 1 for the 3rd trimester and infant receptors.¹⁵ We used a cancer potency factor of 1.1 (mg/kg-day)⁻¹ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

| Activity | Duration (years) | Concentration (ug/m3) | Breathing Rate (L/kg-day) | Cancer Risk without ASFs* | ASF | Cancer Risk with ASFs* |
|---------------------------------|------------------|-----------------------|---------------------------|---------------------------|-------------------------------|------------------------|
| Construction | 0.25 | 0.4694 | 361 | 6.4E-07 | 10 | 6.4E-06 |
| 3rd Trimester Duration | 0.25 | | | 6.4E-07 | 3rd Trimester Exposure | 6.4E-06 |
| Construction | 1.76 | 0.4694 | 1090 | 1.4E-05 | 10 | 1.4E-04 |
| Operation | 0.24 | 1.04 | 1090 | 4.1E-06 | 10 | 4.1E-05 |
| Infant Exposure Duration | 2.00 | | | 1.8E-05 | Infant Exposure | 1.8E-04 |
| Operation | 14.00 | 1.04 | 572 | 1.3E-04 | 3 | 3.8E-04 |

¹¹ “Draft Environmental Impact Report (DEIR) for the Proposed The Exchange (SCH No. 2018071058).” SCAQMD, March 2019, available at: <http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/march/RVC190115-03.pdf?sfvrsn=8>, p. 4.

¹² “California Environmental Quality Act Air Quality Guidelines.” BAAQMD, May 2017, available at: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, p. 56; see also “Recommended Methods for Screening and Modeling Local Risks and Hazards.” BAAQMD, May 2011, available at: <http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20Modeling%20Approach.ashx>, p. 65, 86.

¹³ “Update to District’s Risk Management Policy to Address OEHHA’s Revised Risk Assessment Guidance Document.” SJVAPCD, May 2015, available at: <https://www.valleyair.org/busind/pto/staff-report-5-28-15.pdf>, p. 8, 20, 24.

¹⁴ “Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics ‘Hot Spots’ Information and Assessment Act,” July 2018, available at: <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf>, p. 16.

“Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>

¹⁵ “Risk Assessment Procedures for Rules 1401, 1401.1, and 212.” SCAQMD, August 2017, available at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

| | | | | | | |
|-----------------------------------|--------------|------|-----|----------------|--------------------------|----------------|
| Child Exposure Duration | 14.00 | | | 1.3E-04 | Child Exposure | 3.8E-04 |
| Operation | 14.00 | 1.04 | 261 | 4.2E-05 | 1 | 4.2E-05 |
| Adult Exposure Duration | 14.00 | | | 4.2E-05 | Adult Exposure | 4.2E-05 |
| Lifetime Exposure Duration | 30.00 | | | 1.9E-04 | Lifetime Exposure | 6.0E-04 |

* We, along with CARB and SCAQMD, recommend using the more updated and health protective 2015 OEHHA guidance, which includes ASFs.

As demonstrated in the table above, the excess cancer risk to adults, children, infants, and during the 3rd trimester of pregnancy at the MEIR located approximately 100 meters away, over the course of Project construction and operation, utilizing age sensitivity factors, are approximately 42, 380, 180, and 6.4 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years), utilizing age sensitivity factors, is approximately 600 in one million. The infant, child, adult, and lifetime cancer risks all exceed the SCAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified. Utilizing age sensitivity factors is the most conservative, health-protective analysis according to the most recent guidance by OEHHA and reflects recommendations from the air district. Results without age sensitivity factors are presented in the table above, although we **do not** recommend utilizing these values for health risk analysis. Regardless, the excess cancer risk to adults, children, infants, and during the 3rd trimester of pregnancy at the MEIR located approximately 100 meters away, over the course of Project construction and operation, without age sensitivity factors, are approximately 42, 130, 18, and 0.64 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years), without age sensitivity factors, is approximately 190 in one million. The infant, child, adult, and lifetime cancer risks all exceed the SCAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified. As such, while we recommend the use of age sensitivity factors, health risk impacts exceed the SCAQMD threshold regardless.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection.¹⁶ The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level HRA indicates a potentially significant impact, the City should prepare a Project-specific environmental analysis with an HRA, which makes a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors, as well as evaluates whether or not the Project would be likely to cause substantial environmental damage.

¹⁶ "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 1-5

Screening-Level Assessment Indicates Significant Greenhouse Gas Impacts

Applicable thresholds and site-specific modeling demonstrate that the proposed Project would result in a significant GHG impact not previously addressed or identified. The CalEEMod output files, modeled by SWAPE with Project-specific information, disclose the Project's mitigated emissions, which include approximately 1,185 metric tons of carbon dioxide equivalents ("MT CO₂e") of total construction emissions (sum of 2020, 2021, 2022, and 2023) and approximately 2,580 MT CO₂e per year ("MT CO₂e/year") of net annual operational emissions (sum of area, energy, mobile, waste, and water-related emissions), for net annual GHG emissions of 2,620 MT CO₂e/year. Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."¹⁷ The IS indicates that the Project would house 330 residents and employ 34 workers (p. B-34). As such, we estimate a service population of 364 people.¹⁸ When dividing the Project's GHG emissions (amortized construction + operational) by a service population value of 364 people, we find that the Project would emit approximately 7.2 MT CO₂e per service population per year ("MT CO₂e/SP/year").¹⁹ As demonstrated in the table below, the service population efficiency value of 7.2 MT CO₂e/SP/year exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year (see table below).²⁰

| SWAPE Service Population Efficiency | |
|--|--|
| Project Phase | Proposed Project (MT CO ₂ e/year) |
| Construction (amortized over 30 years) | 39.50 |
| Area | 47.28 |
| Energy | 707.57 |
| Mobile | 1683.09 |
| Waste | 62.73 |
| Water | 79.67 |
| Total | 2,619.84 |
| Service Population | 364 |
| Service Population Efficiency | 7.20 |
| Threshold | 3.0 |
| Exceed? | Yes |

As the above table indicates, the Project's service population efficiency exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, thus resulting in a significant GHG impact not previously identified or addressed. Therefore, since our quantitative GHG analysis indicates a potentially significant

¹⁷ CAPCOA (Jan. 2008) *CEQA & Climate Change*, p. 71-72, <http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf>.

¹⁸ Calculated: 330 residents + 34 employees = 364 service population.

¹⁹ Calculated: (2,619.84 MT CO₂e/year) / (364 service population) = (7.20 MT CO₂e/SP/year).

²⁰ "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

impact, the City should prepare a Project-specific environmental analysis evaluating whether or not the Project would be likely to cause substantial environmental damage.

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matt Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink, appearing to read "Paul Rosenfeld".

Paul E. Rosenfeld, Ph.D.



Historical Aerial Photo Report | 2020

Order Number: 46236

Report Generated: 10/19/2020

Project Name:

Project Number:

Project Site

Pacific Ave, N Venice Blvd, S Venice
Blvd, S Canal Street
Los Angeles, CA, 90291

2 Corporate Dr

Suite 450

Shelton, CT 06484

Toll Free: 866-211-2028

www.envirositecorp.com

Envirosite's Historical Aerial Photo Report is designed to assist in evaluating a subject property resulting from past activities. EnviroSite's Historical Aerial Photo Report includes a search of available historical aerial photographs, dating back to the 1930s, or earliest available photographs.

ENVIROSITE SEARCHED SOURCES

SUBJECT PROPERTY:

Project Site
Pacific Ave, N Venice Blvd, S Venice Blvd, S Canal Street
Los Angeles, CA, 90291

| <u>YEAR:</u> | <u>SCALE:</u> | <u>SOURCE:</u> |
|---------------------|----------------------|-----------------------|
| 1927 | 1" = 500' | U.S.D.A |
| 1928 | 1" = 500' | U.S.D.A |
| 1938 | 1" = 500' | U.S.D.A |
| 1947 | 1" = 500' | U.S.D.A |
| 1952 | 1" = 500' | U.S.D.A |
| 1956 | 1" = 500' | U.S.D.A |
| 1958 | 1" = 500' | U.S.D.A |
| 1960 | 1" = 500' | U.S.D.A |
| 1963 | 1" = 500' | U.S.G.S |
| 1965 | 1" = 500' | U.S.D.A |
| 1967 | 1" = 500' | U.S.D.A |
| 1969 | 1" = 500' | U.S.D.A |
| 1972 | 1" = 500' | U.S.G.S |
| 1974 | 1" = 500' | U.S.D.A |
| 1975 | 1" = 500' | U.S.D.A |
| 1977 | 1" = 500' | U.S.D.A |
| 1979 | 1" = 500' | U.S.D.A |
| 1981 | 1" = 500' | U.S.D.A |
| 1983 | 1" = 500' | U.S.D.A |
| 1985 | 1" = 500' | NHAP |
| 1986 | 1" = 500' | U.S.D.A |
| 1989 | 1" = 500' | U.S.D.A |
| 1994 | 1" = 500' | DOQ |
| 2001 | 1" = 500' | U.S.D.A |
| 2002 | 1" = 1,000' | NAPP |
| 2005 | 1" = 500' | NAIP |
| 2007 | 1" = 500' | U.S.D.A |
| 2009 | 1" = 500' | NAIP |
| 2010 | 1" = 500' | NAIP |
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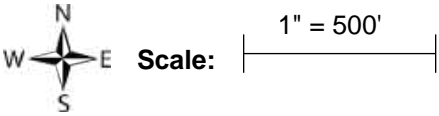
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1927



FLIGHT YEAR:
1928



FLIGHT YEAR:
1938

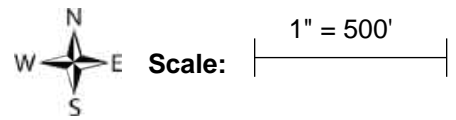
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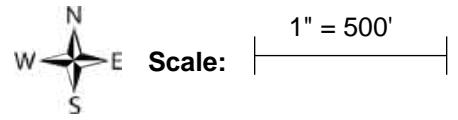
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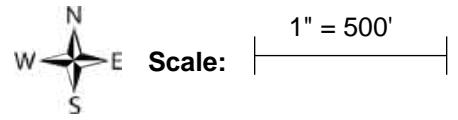
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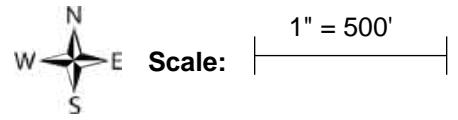
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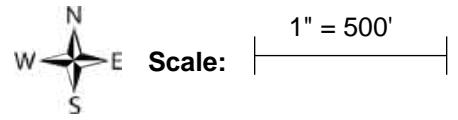
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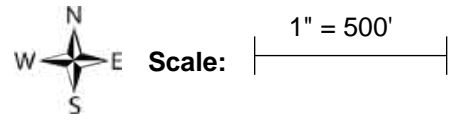
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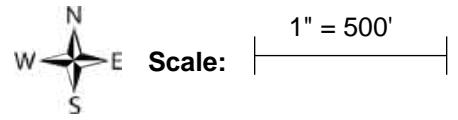
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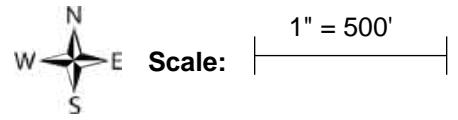
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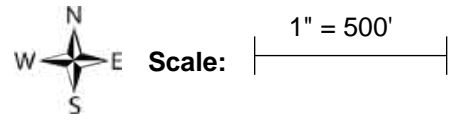
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FLIGHT YEAR:
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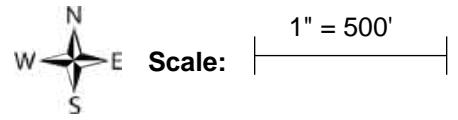
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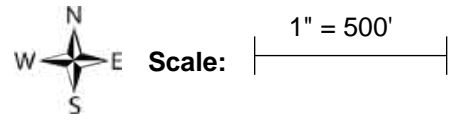
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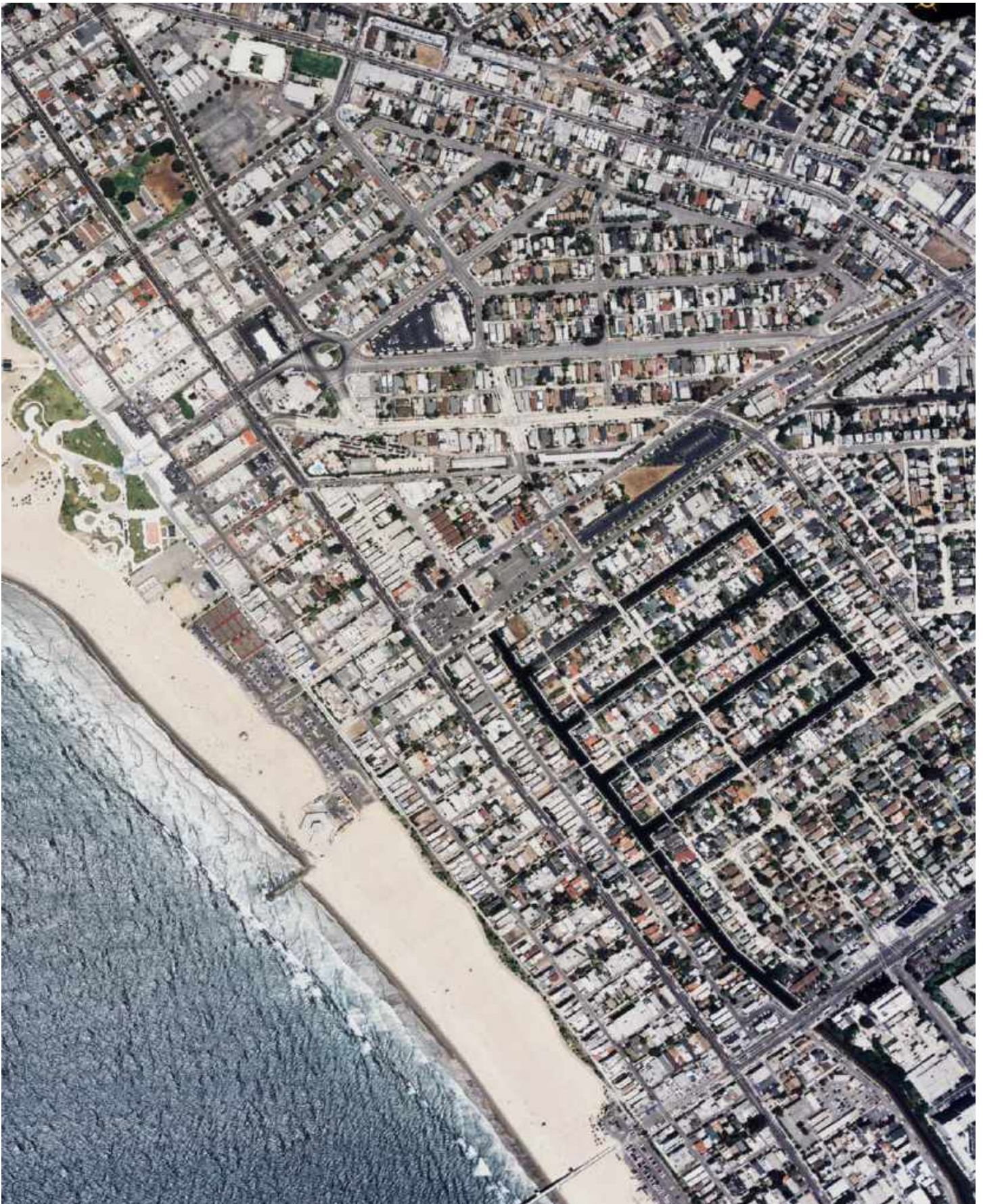
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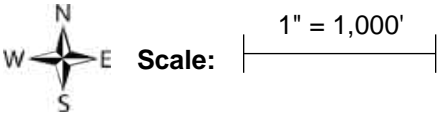
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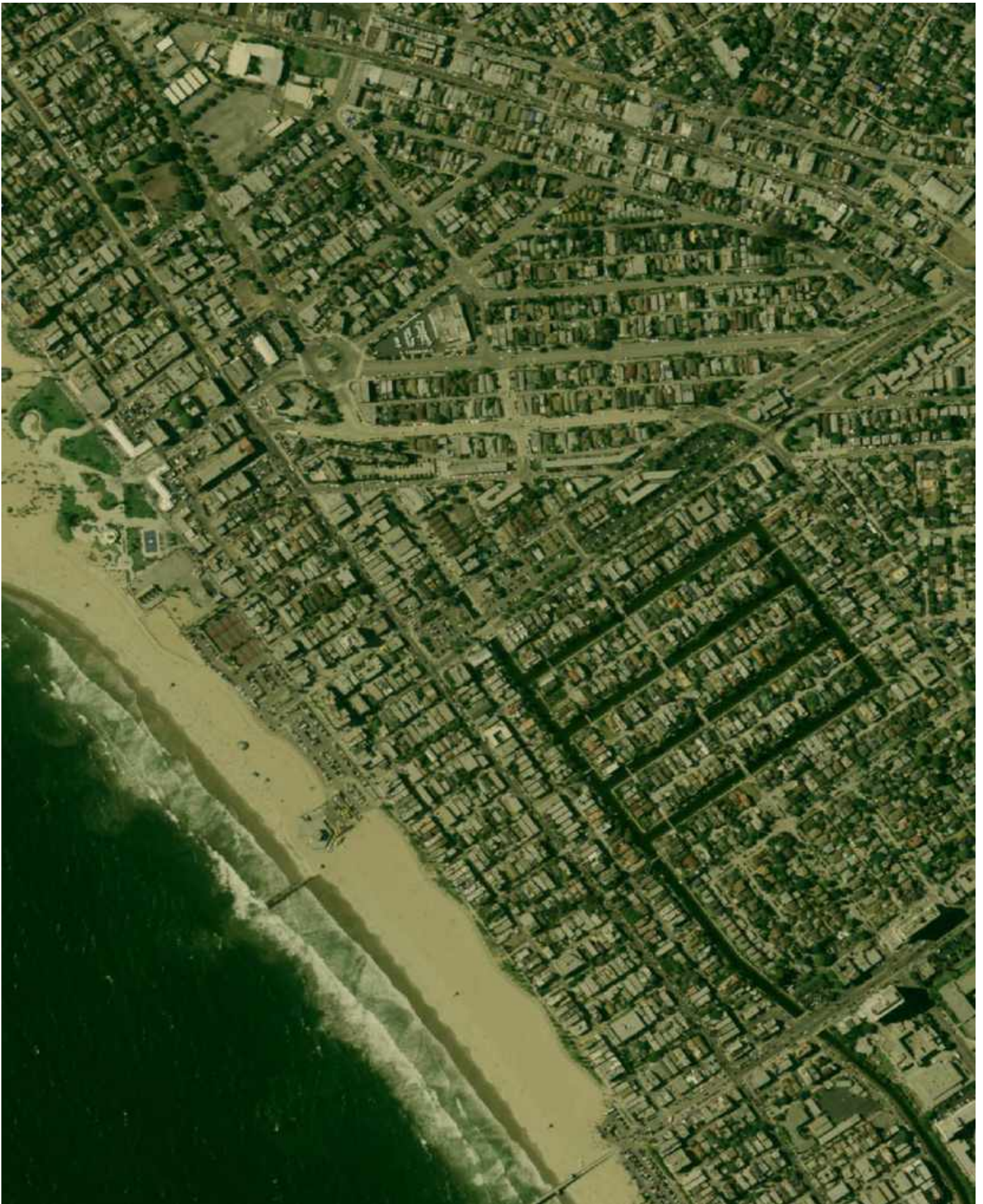
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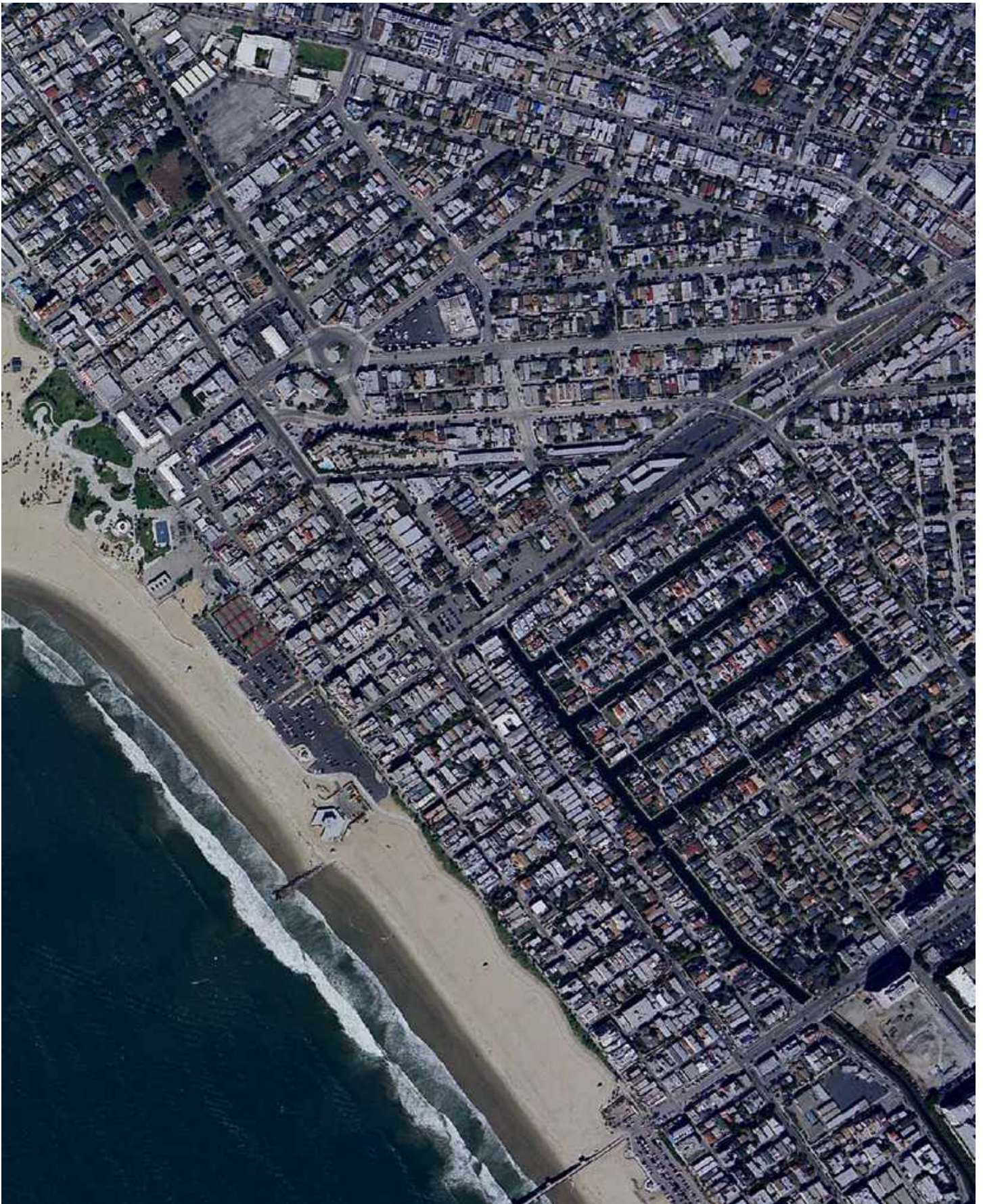
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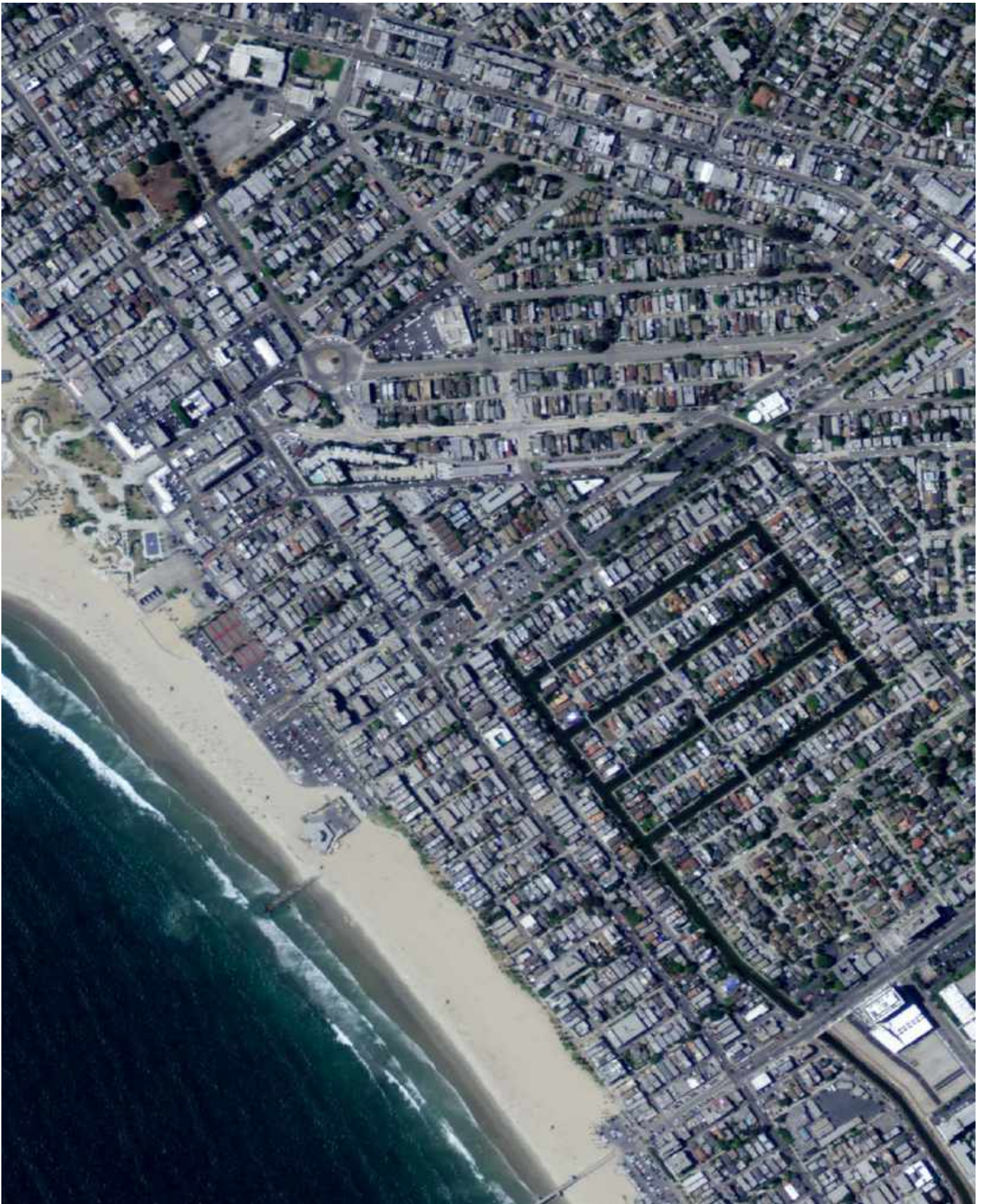
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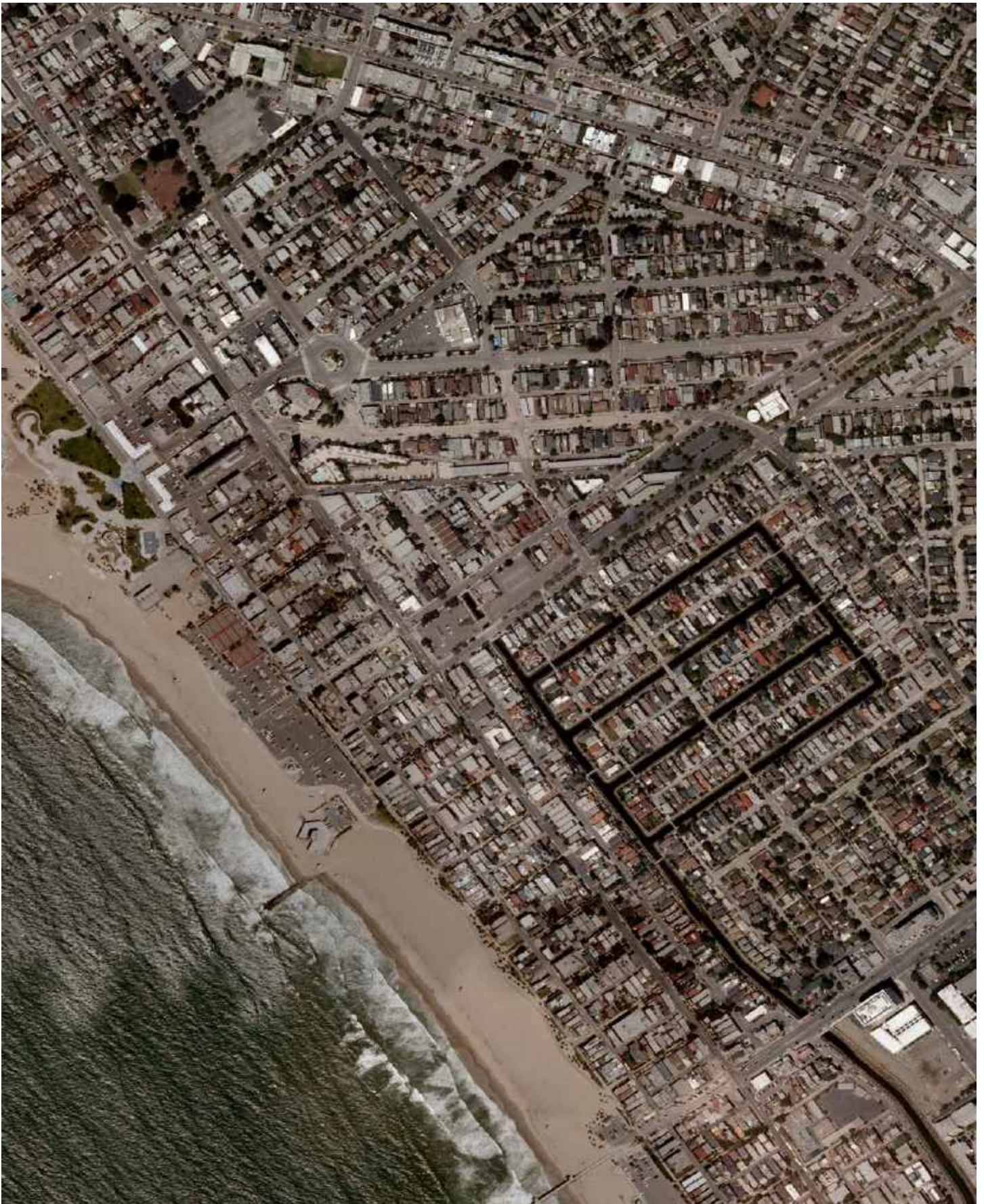
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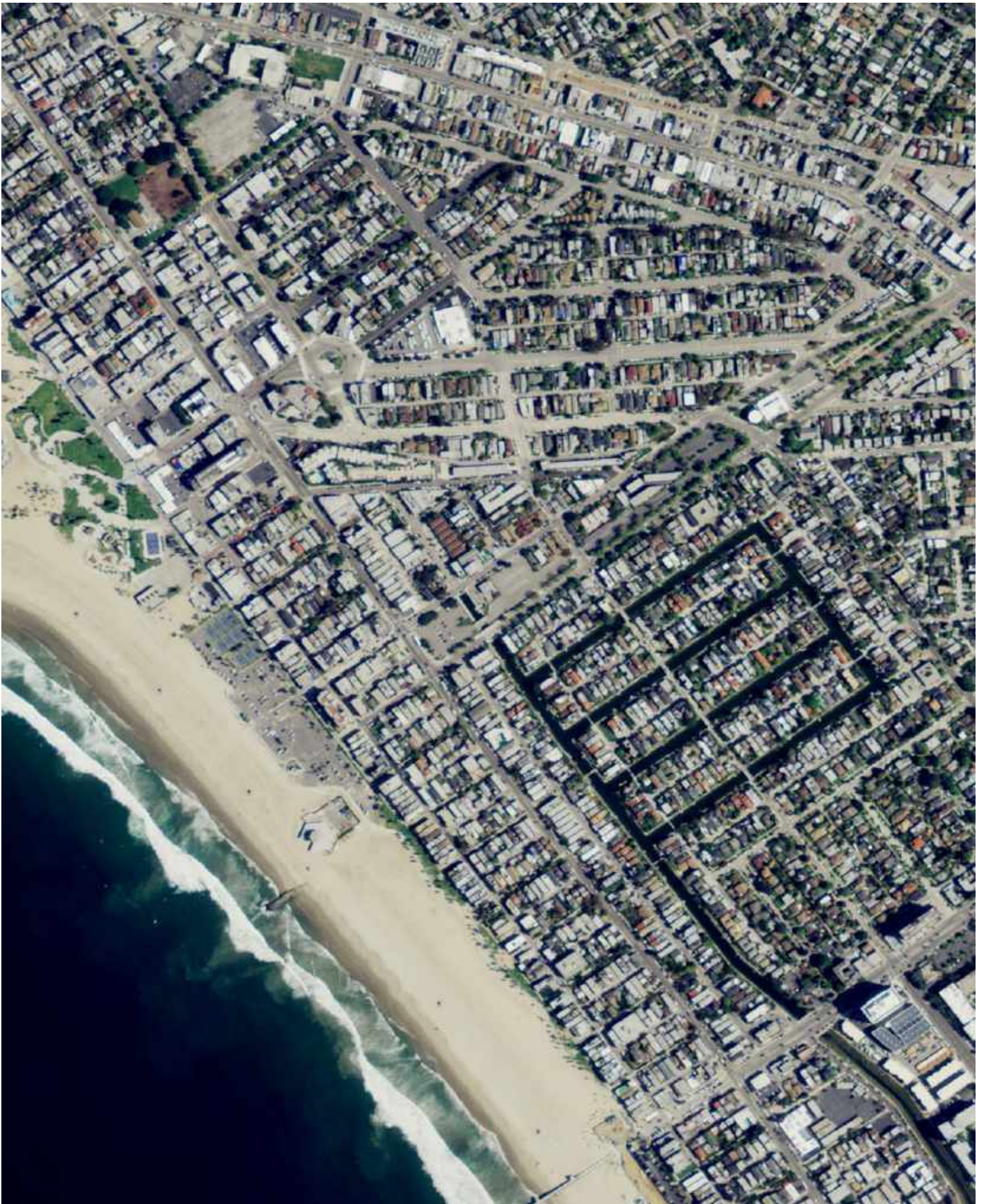
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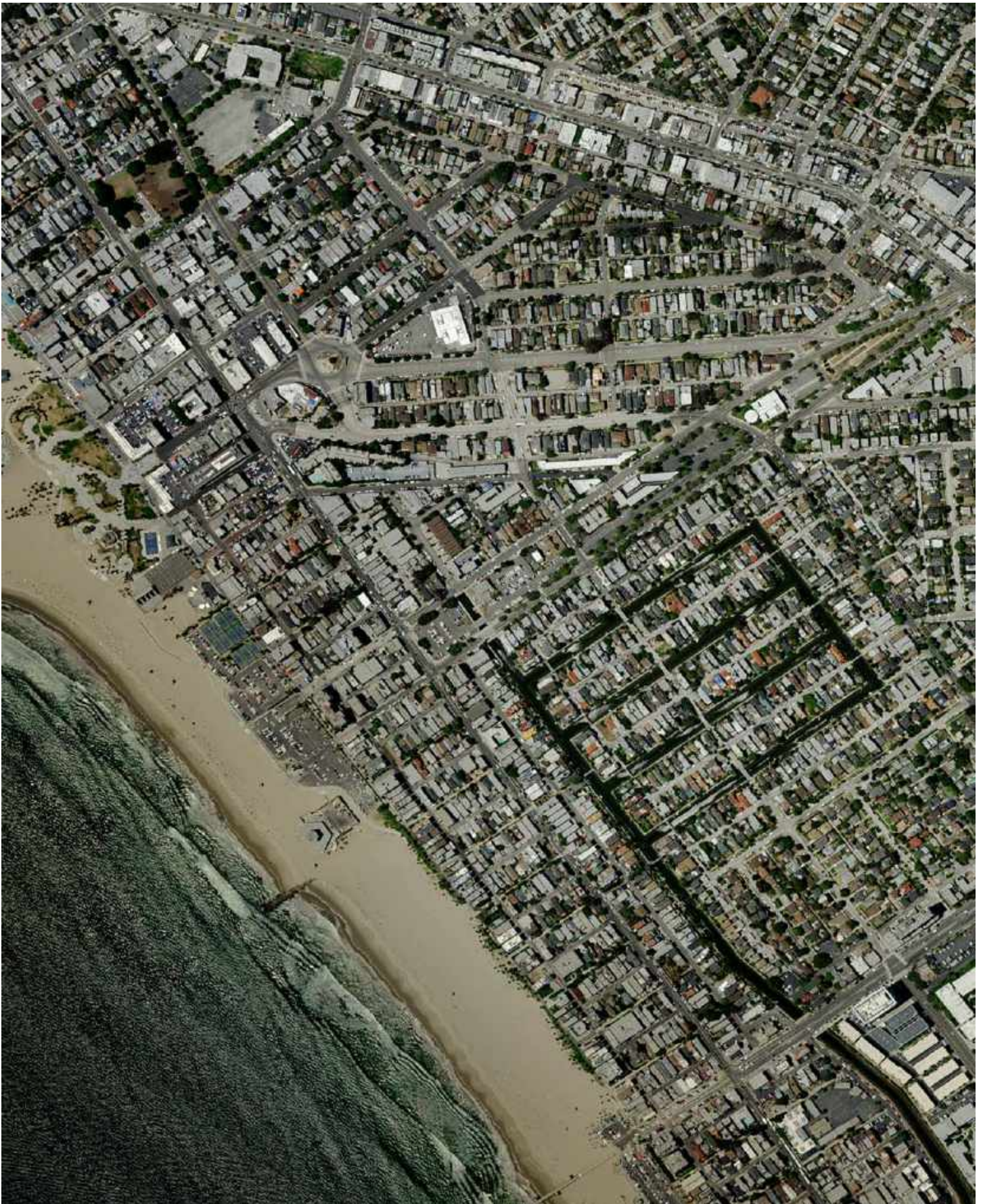
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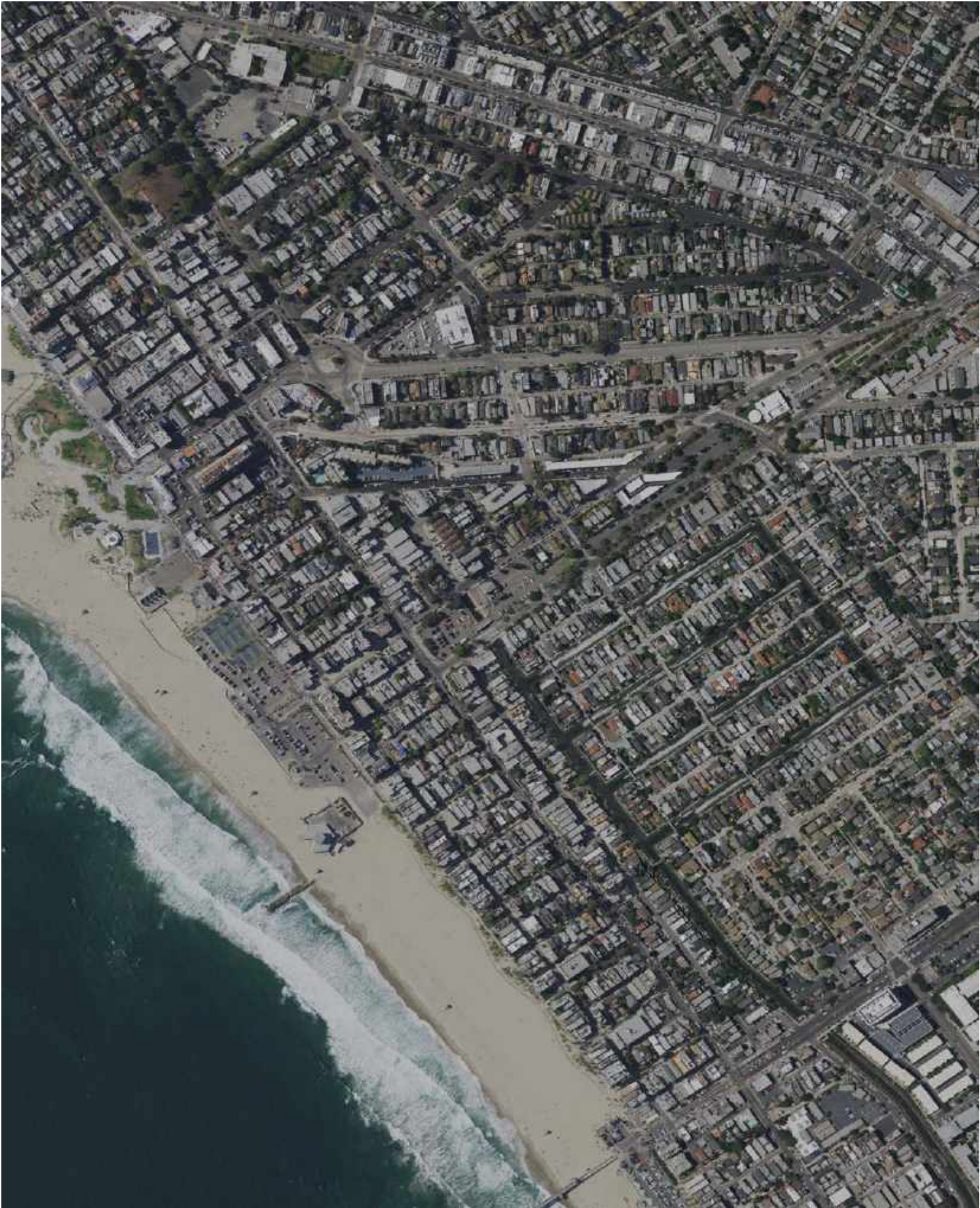
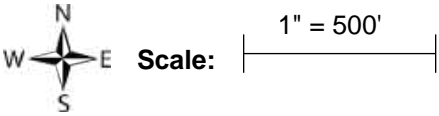
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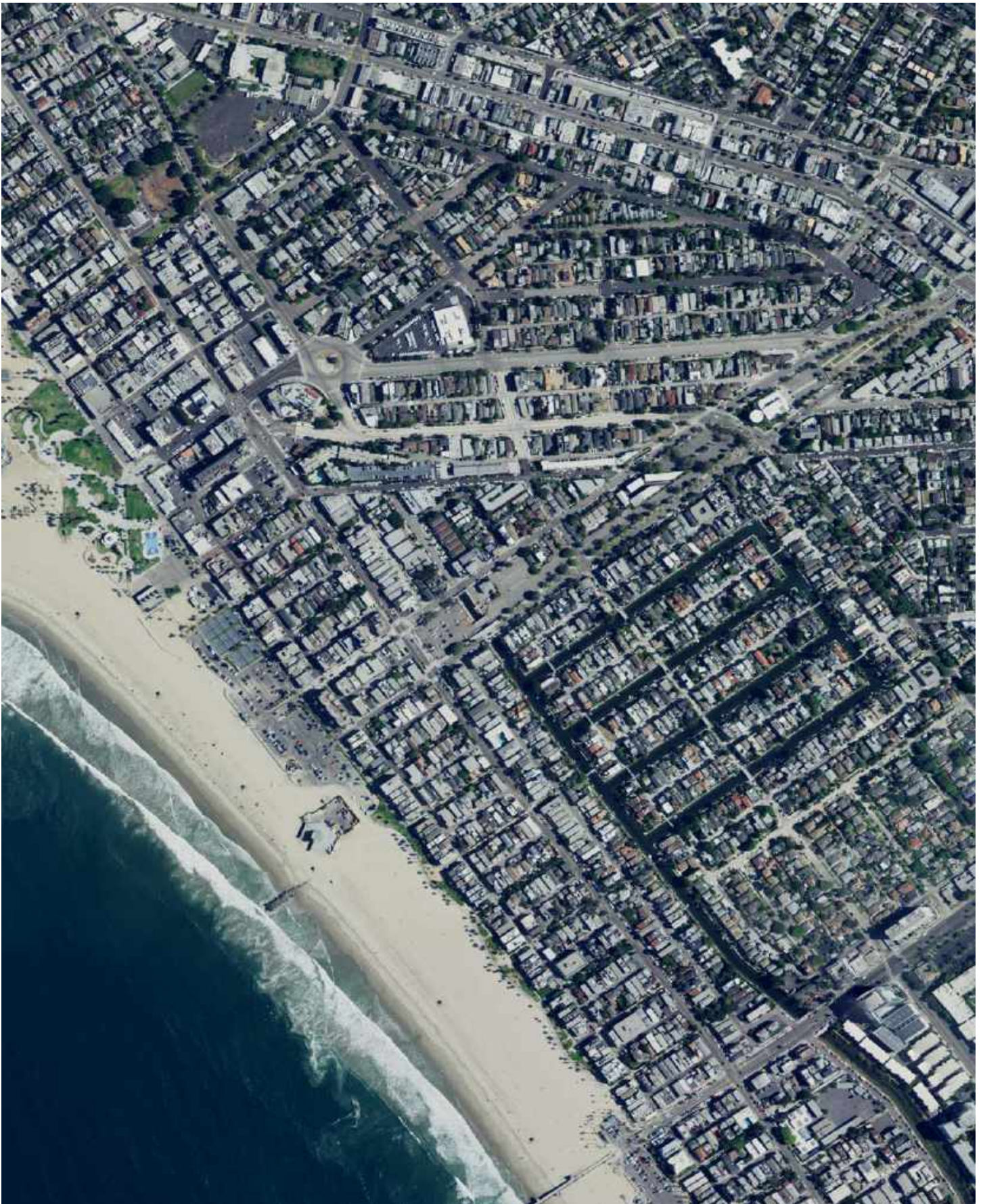
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FLIGHT YEAR:
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FLIGHT YEAR:
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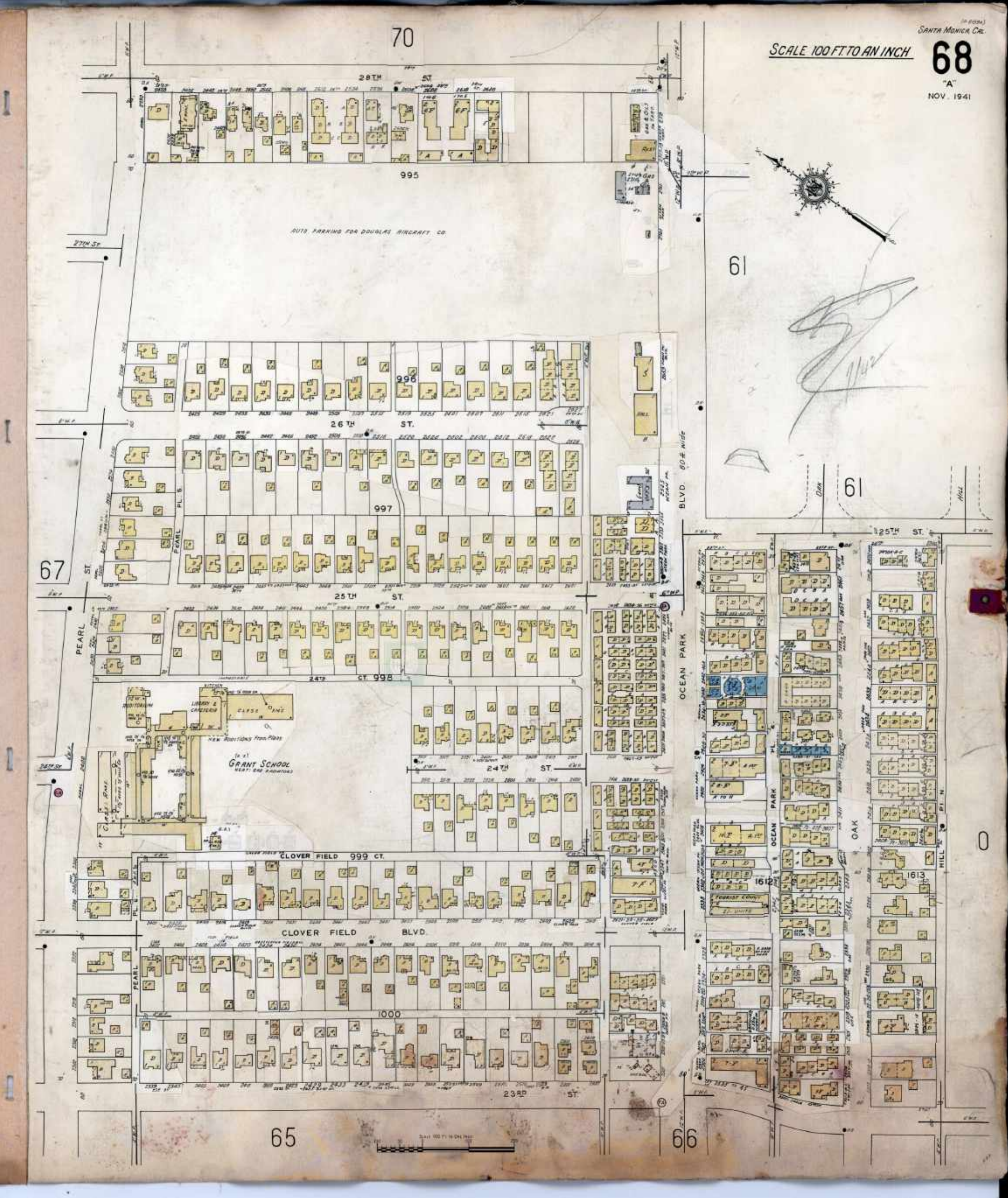
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Republished Date:
Sheet Number: 67

1963

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Project Site
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HIG Project # 2042390 www.historicalinfo.com





Map Type: Fire Insurance
Publisher: Sanborn Map Co.
Publication Name: Santa Monica, CA
Base Map Date: 1918
Revised Date: 1963
Republished Date:
Sheet Number: 68

1963

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Project Site
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Map Type: Fire Insurance
 Publisher: Sanborn Map Co.
 Publication Name: Los Angeles, CA Vol. Venice District
 Base Map Date: 1918
 Revised Date: March 1950
 Republished Date:
 Sheet Number: 67

1950

Requested by: Envirosite Corporation

Project Site
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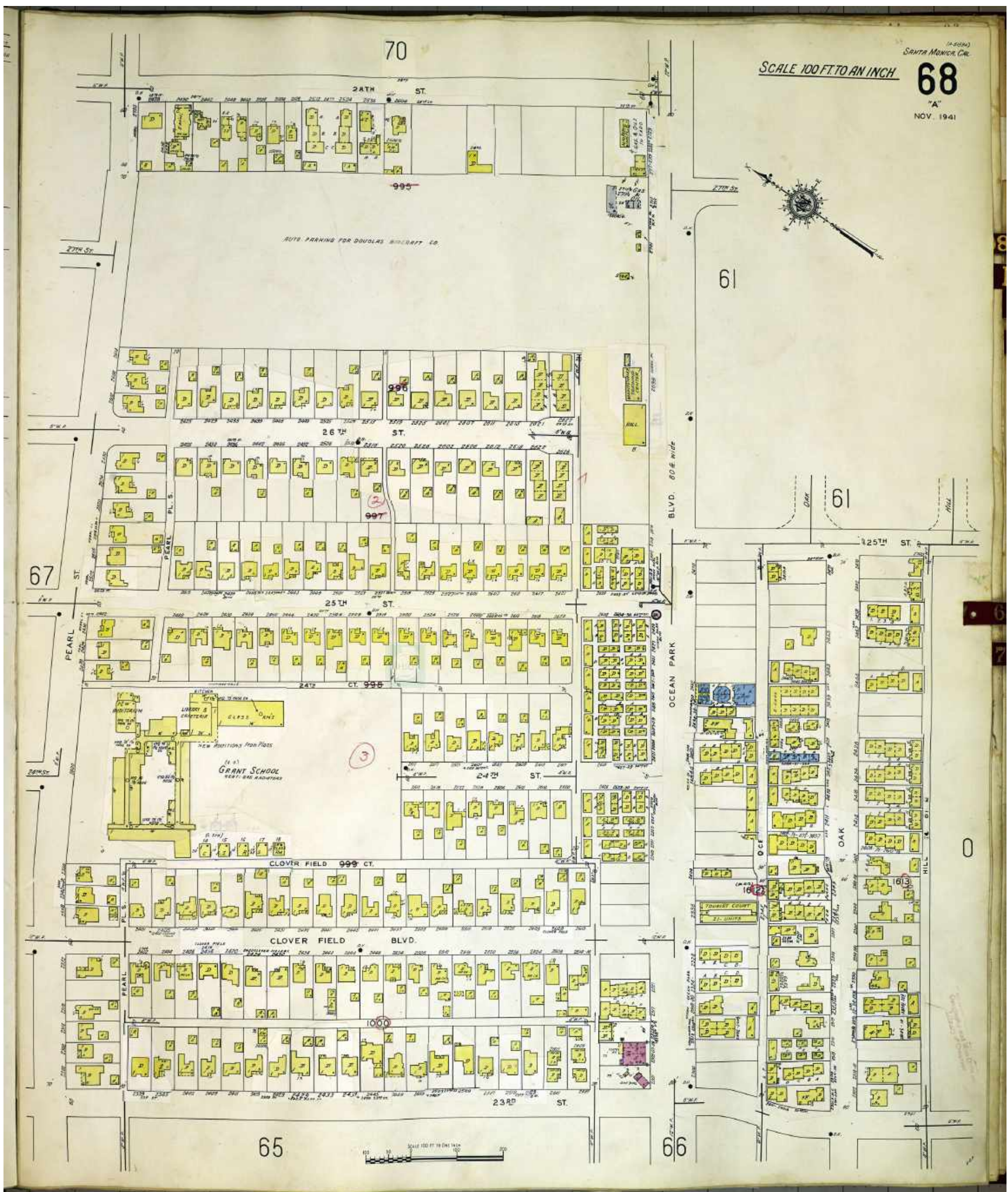
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Republished Date:
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1950

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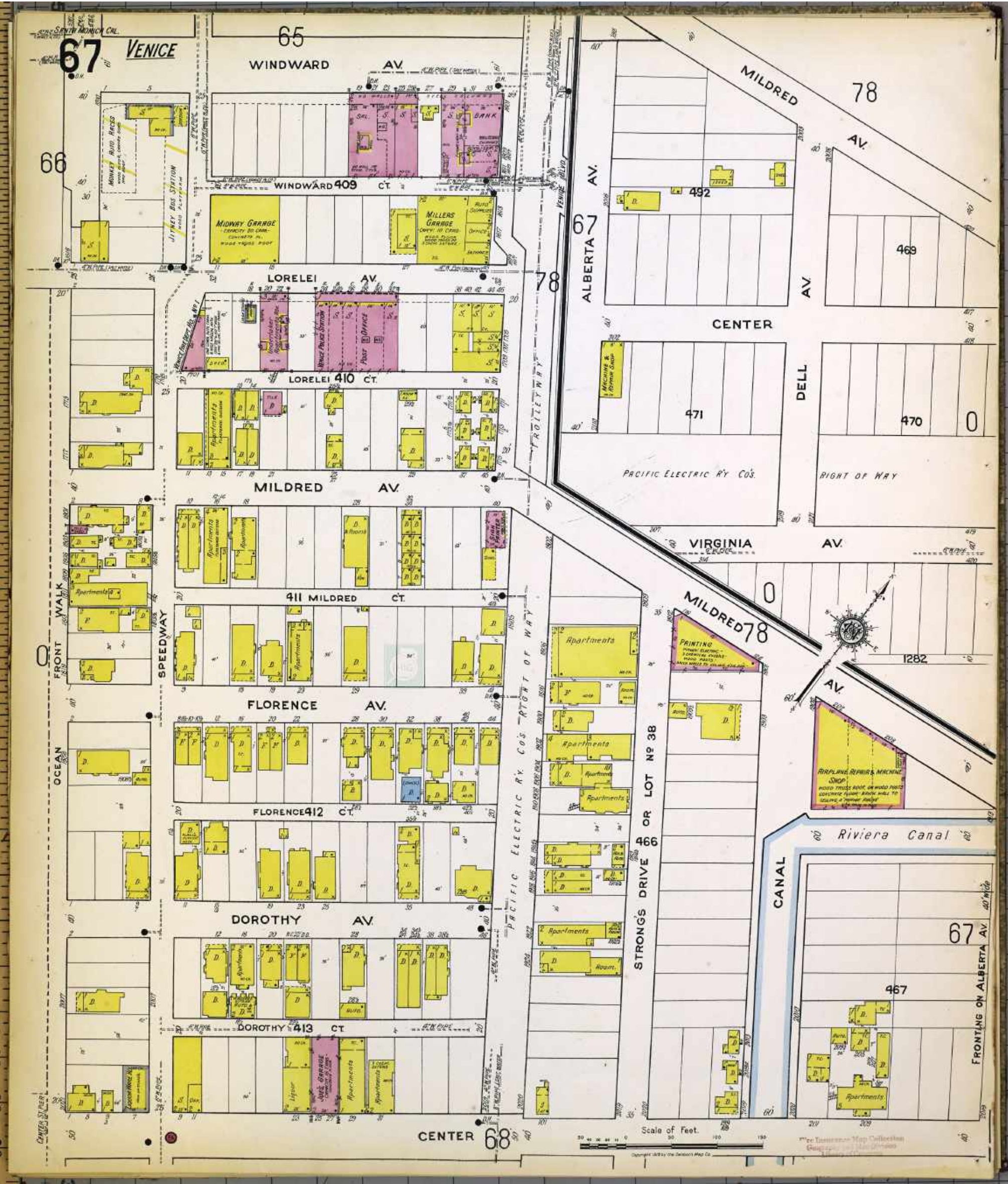
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1950

Project Site
Pacific Ave, N Venice Blvd, S Venice Blvd, S Canal Street
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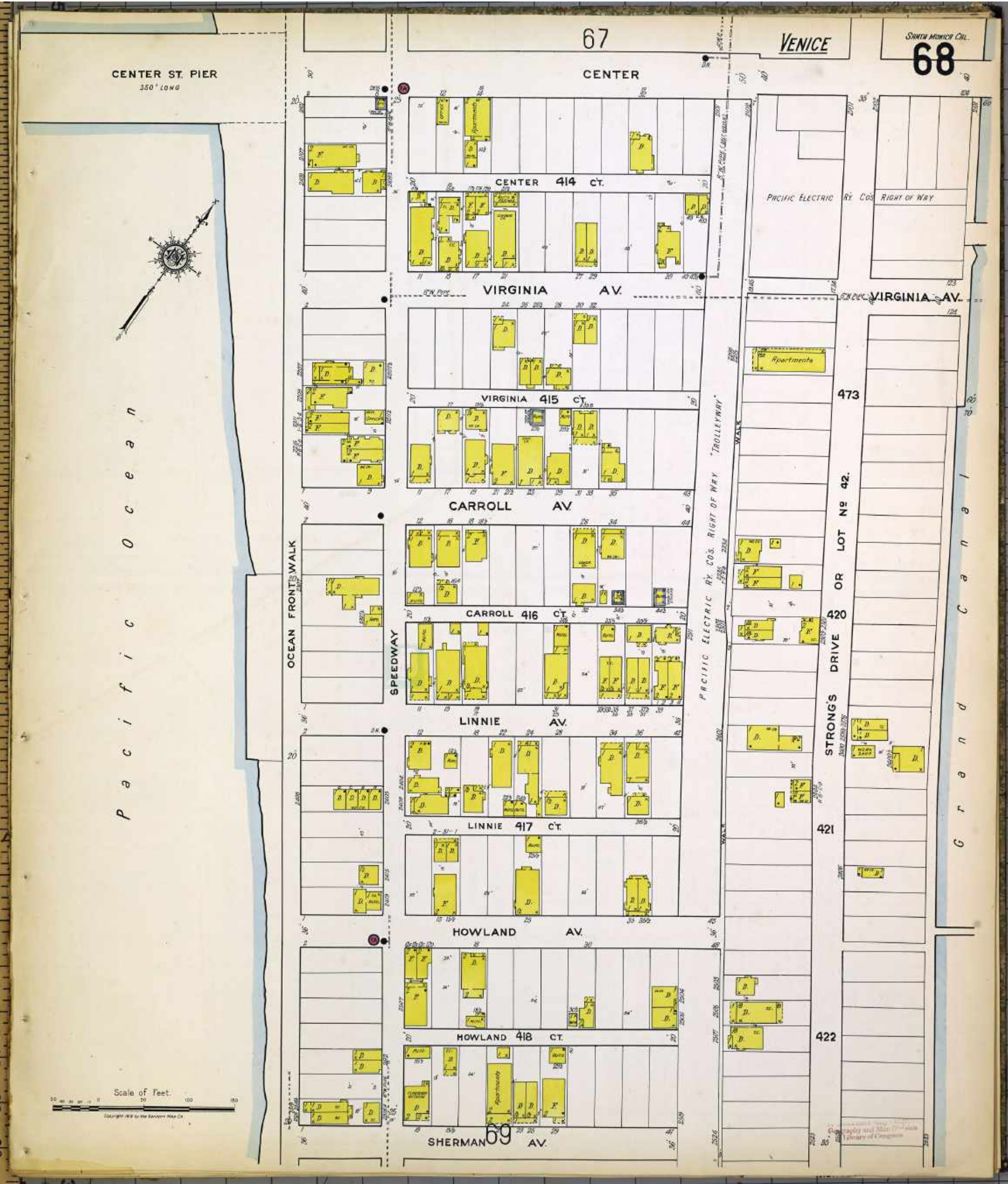
Map Type: Fire Insurance
Publisher: Sanborn Map Co.
Publication Name: Santa Monica, CA
Base Map Date: 1918
Revised Date:
Republished Date:
Sheet Number: 67

1918

Requested by: Envirosite Corporation

Project Site
Pacific Ave, N Venice Blvd, S Venice Blvd, S Canal Street
Los Angeles, CA 90291
Client Project # 46236
HIG Project # 2042390 www.historicalinfo.com





Map Type: Fire Insurance
Publisher: Sanborn Map Co.
Publication Name: Santa Monica, CA
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1918

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Project Site
Pacific Ave, N Venice Blvd, S Venice Blvd, S Canal Street
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Attachment 2

CalEEMod Version: CalEEMod.2016.3.2

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Date: 10/13/2020 2:30 PM

Reese Davidson Community Project - Los Angeles-South Coast County, Annual

Reese Davidson Community Project Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 140.00 | Dwelling Unit | 3.68 | 143,840.00 | 400 |
| High Turnover (Sit Down Restaurant) | 5.07 | 1000sqft | 0.12 | 5,065.00 | 0 |
| Enclosed Parking with Elevator | 436.00 | Space | 3.92 | 174,400.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|-------------------------|----------------------------|-------------------------|-------|---------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 33 |
| Climate Zone | 11 | | | Operational Year | 2023 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MWhr) | 702.44 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 140,000-SF default land use space for 140 units + 685-SF of associated affordable resident services + 3,155-SF of community arts/meeting space = 143,840-SF of "Apartments Mid Rise." 4,565-SF of retail/restaurant + 500-SF of outdoor seating = 5,065-SF of "High Turnover (Sit Down Restaurant)."

Construction Phase - Consistent with IS's proposed schedule (2021 - 2023).

Grading - Includes 9,100 cy of building material and soil export.

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| Table Name | Column Name | Default Value | New Value |
|----------------------|-------------------|---------------|------------|
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 230.00 | 376.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 10.00 | 16.00 |
| tblConstructionPhase | PhaseEndDate | 3/23/2022 | 1/3/2023 |
| tblConstructionPhase | PhaseEndDate | 1/26/2022 | 10/3/2022 |
| tblConstructionPhase | PhaseEndDate | 1/27/2021 | 2/15/2021 |
| tblConstructionPhase | PhaseEndDate | 3/10/2021 | 4/23/2021 |
| tblConstructionPhase | PhaseEndDate | 2/23/2022 | 11/17/2022 |
| tblConstructionPhase | PhaseEndDate | 2/10/2021 | 3/9/2021 |
| tblConstructionPhase | PhaseStartDate | 2/24/2022 | 11/18/2022 |
| tblConstructionPhase | PhaseStartDate | 3/11/2021 | 4/24/2021 |
| tblConstructionPhase | PhaseStartDate | 2/11/2021 | 3/10/2021 |
| tblConstructionPhase | PhaseStartDate | 1/27/2022 | 10/4/2022 |
| tblConstructionPhase | PhaseStartDate | 1/28/2021 | 2/16/2021 |
| tblGrading | MaterialExported | 0.00 | 9,100.00 |
| tblLandUse | LandUseSquareFeet | 140,000.00 | 143,840.00 |

2.0 Emissions Summary

Reese Davidson Community Project - Los Angeles-South Coast County, Annual

2.1 Overall Construction**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|----------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 1.6900e-003 | 0.0166 | 0.0112 | 2.0000e-005 | 8.0000e-005 | 8.3000e-004 | 9.1000e-004 | 2.0000e-005 | 7.7000e-004 | 7.9000e-004 | 0.0000 | 1.7765 | 1.7765 | 4.8000e-004 | 0.0000 | 1.7886 |
| 2021 | 0.3786 | 3.4076 | 3.0333 | 7.0900e-003 | 0.4684 | 0.1494 | 0.6177 | 0.1929 | 0.1394 | 0.3323 | 0.0000 | 636.4888 | 636.4888 | 0.1020 | 0.0000 | 639.0376 |
| 2022 | 0.7415 | 2.1946 | 2.6100 | 6.0500e-003 | 0.2248 | 0.0923 | 0.3171 | 0.0603 | 0.0867 | 0.1470 | 0.0000 | 541.5600 | 541.5600 | 0.0764 | 0.0000 | 543.4695 |
| 2023 | 0.0305 | 1.4000e-003 | 2.9300e-003 | 1.0000e-005 | 3.8000e-004 | 7.0000e-005 | 4.6000e-004 | 1.0000e-004 | 7.0000e-005 | 1.8000e-004 | 0.0000 | 0.5771 | 0.5771 | 2.0000e-005 | 0.0000 | 0.5777 |
| Maximum | 0.7415 | 3.4076 | 3.0333 | 7.0900e-003 | 0.4684 | 0.1494 | 0.6177 | 0.1929 | 0.1394 | 0.3323 | 0.0000 | 636.4888 | 636.4888 | 0.1020 | 0.0000 | 639.0376 |

Reese Davidson Community Project - Los Angeles-South Coast County, Annual

2.1 Overall Construction**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|----------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 1.6900e-003 | 0.0166 | 0.0112 | 2.0000e-005 | 8.0000e-005 | 8.3000e-004 | 9.1000e-004 | 2.0000e-005 | 7.7000e-004 | 7.9000e-004 | 0.0000 | 1.7765 | 1.7765 | 4.8000e-004 | 0.0000 | 1.7886 |
| 2021 | 0.3786 | 3.4076 | 3.0333 | 7.0900e-003 | 0.4684 | 0.1494 | 0.6177 | 0.1929 | 0.1394 | 0.3323 | 0.0000 | 636.4884 | 636.4884 | 0.1020 | 0.0000 | 639.0372 |
| 2022 | 0.7415 | 2.1946 | 2.6100 | 6.0500e-003 | 0.2248 | 0.0923 | 0.3171 | 0.0603 | 0.0867 | 0.1470 | 0.0000 | 541.5596 | 541.5596 | 0.0764 | 0.0000 | 543.4692 |
| 2023 | 0.0305 | 1.4000e-003 | 2.9300e-003 | 1.0000e-005 | 3.8000e-004 | 7.0000e-005 | 4.6000e-004 | 1.0000e-004 | 7.0000e-005 | 1.8000e-004 | 0.0000 | 0.5771 | 0.5771 | 2.0000e-005 | 0.0000 | 0.5777 |
| Maximum | 0.7415 | 3.4076 | 3.0333 | 7.0900e-003 | 0.4684 | 0.1494 | 0.6177 | 0.1929 | 0.1394 | 0.3323 | 0.0000 | 636.4884 | 636.4884 | 0.1020 | 0.0000 | 639.0372 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|------------|--|--|
| 1 | 12-31-2020 | 3-30-2021 | 1.2095 | 1.2095 |
| 2 | 3-31-2021 | 6-29-2021 | 0.9129 | 0.9129 |
| 3 | 6-30-2021 | 9-29-2021 | 0.8218 | 0.8218 |
| 4 | 9-30-2021 | 12-30-2021 | 0.8263 | 0.8263 |
| 5 | 12-31-2021 | 3-30-2022 | 0.7341 | 0.7341 |
| 6 | 3-31-2022 | 6-29-2022 | 0.7373 | 0.7373 |
| 7 | 6-30-2022 | 9-29-2022 | 0.7454 | 0.7454 |
| 8 | 9-30-2022 | 12-30-2022 | 0.7229 | 0.7229 |

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| | | | | |
|---|------------|-----------|--------|--------|
| 9 | 12-31-2022 | 3-30-2023 | 0.0456 | 0.0456 |
| | | Highest | 1.2095 | 1.2095 |

2.2 Overall Operational**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|---------------|-------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 1.1017 | 0.0530 | 2.3397 | 2.3500e-003 | | 0.1417 | 0.1417 | | 0.1417 | 0.1417 | 14.8707 | 30.9456 | 45.8163 | 0.0466 | 1.0100e-003 | 47.2832 |
| Energy | 0.0133 | 0.1168 | 0.0734 | 7.2000e-004 | | 9.1600e-003 | 9.1600e-003 | | 9.1600e-003 | 9.1600e-003 | 0.0000 | 704.7379 | 704.7379 | 0.0262 | 7.3000e-003 | 707.5695 |
| Mobile | 0.3954 | 1.7580 | 4.9502 | 0.0182 | 1.5268 | 0.0139 | 1.5407 | 0.4092 | 0.0130 | 0.4222 | 0.0000 | 1,680.9747 | 1,680.9747 | 0.0845 | 0.0000 | 1,683.0871 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 25.3191 | 0.0000 | 25.3191 | 1.4963 | 0.0000 | 62.7269 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.3821 | 64.9319 | 68.3140 | 0.3501 | 8.7600e-003 | 79.6748 |
| Total | 1.5104 | 1.9277 | 7.3633 | 0.0213 | 1.5268 | 0.1648 | 1.6915 | 0.4092 | 0.1638 | 0.5730 | 43.5718 | 2,481.5901 | 2,525.1619 | 2.0037 | 0.0171 | 2,580.3415 |

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2.2 Overall Operational**Mitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|---------------|-------------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 1.1017 | 0.0530 | 2.3397 | 2.3500e-003 | | 0.1417 | 0.1417 | | 0.1417 | 0.1417 | 14.8707 | 30.9456 | 45.8163 | 0.0466 | 1.0100e-003 | 47.2832 |
| Energy | 0.0133 | 0.1168 | 0.0734 | 7.2000e-004 | | 9.1600e-003 | 9.1600e-003 | | 9.1600e-003 | 9.1600e-003 | 0.0000 | 704.7379 | 704.7379 | 0.0262 | 7.3000e-003 | 707.5695 |
| Mobile | 0.3954 | 1.7580 | 4.9502 | 0.0182 | 1.5268 | 0.0139 | 1.5407 | 0.4092 | 0.0130 | 0.4222 | 0.0000 | 1,680.9747 | 1,680.9747 | 0.0845 | 0.0000 | 1,683.0871 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 25.3191 | 0.0000 | 25.3191 | 1.4963 | 0.0000 | 62.7269 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.3821 | 64.9319 | 68.3140 | 0.3501 | 8.7600e-003 | 79.6748 |
| Total | 1.5104 | 1.9277 | 7.3633 | 0.0213 | 1.5268 | 0.1648 | 1.6915 | 0.4092 | 0.1638 | 0.5730 | 43.5718 | 2,481.5901 | 2,525.1619 | 2.0037 | 0.0171 | 2,580.3415 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail**Construction Phase**

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| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 12/31/2020 | 2/15/2021 | 5 | 33 | |
| 2 | Site Preparation | Site Preparation | 2/16/2021 | 3/9/2021 | 5 | 16 | |
| 3 | Grading | Grading | 3/10/2021 | 4/23/2021 | 5 | 33 | |
| 4 | Building Construction | Building Construction | 4/24/2021 | 10/3/2022 | 5 | 376 | |
| 5 | Paving | Paving | 10/4/2022 | 11/17/2022 | 5 | 33 | |
| 6 | Architectural Coating | Architectural Coating | 11/18/2022 | 1/3/2023 | 5 | 33 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16.5

Acres of Paving: 3.92

Residential Indoor: 291,276; Residential Outdoor: 97,092; Non-Residential Indoor: 7,598; Non-Residential Outdoor: 2,533; Striped Parking Area: 10,464 (Architectural Coating – sqft)

OffRoad Equipment

Reese Davidson Community Project - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

Trips and VMT

Reese Davidson Community Project - Los Angeles-South Coast County, Annual

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 1,138.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 176.00 | 44.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 35.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.6600e-003 | 0.0166 | 0.0109 | 2.0000e-005 | | 8.3000e-004 | 8.3000e-004 | | 7.7000e-004 | 7.7000e-004 | 0.0000 | 1.6999 | 1.6999 | 4.8000e-004 | 0.0000 | 1.7119 |
| Total | 1.6600e-003 | 0.0166 | 0.0109 | 2.0000e-005 | | 8.3000e-004 | 8.3000e-004 | | 7.7000e-004 | 7.7000e-004 | 0.0000 | 1.6999 | 1.6999 | 4.8000e-004 | 0.0000 | 1.7119 |

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3.2 Demolition - 2020**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.0000e-005 | 3.0000e-005 | 3.1000e-004 | 0.0000 | 8.0000e-005 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0766 | 0.0766 | 0.0000 | 0.0000 | 0.0767 |
| Total | 3.0000e-005 | 3.0000e-005 | 3.1000e-004 | 0.0000 | 8.0000e-005 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0766 | 0.0766 | 0.0000 | 0.0000 | 0.0767 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.6600e-003 | 0.0166 | 0.0109 | 2.0000e-005 | | 8.3000e-004 | 8.3000e-004 | | 7.7000e-004 | 7.7000e-004 | 0.0000 | 1.6999 | 1.6999 | 4.8000e-004 | 0.0000 | 1.7119 |
| Total | 1.6600e-003 | 0.0166 | 0.0109 | 2.0000e-005 | | 8.3000e-004 | 8.3000e-004 | | 7.7000e-004 | 7.7000e-004 | 0.0000 | 1.6999 | 1.6999 | 4.8000e-004 | 0.0000 | 1.7119 |

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3.2 Demolition - 2020**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.0000e-005 | 3.0000e-005 | 3.1000e-004 | 0.0000 | 8.0000e-005 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0766 | 0.0766 | 0.0000 | 0.0000 | 0.0767 |
| Total | 3.0000e-005 | 3.0000e-005 | 3.1000e-004 | 0.0000 | 8.0000e-005 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0766 | 0.0766 | 0.0000 | 0.0000 | 0.0767 |

3.2 Demolition - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0506 | 0.5031 | 0.3450 | 6.2000e-004 | | 0.0248 | 0.0248 | | 0.0231 | 0.0231 | 0.0000 | 54.4013 | 54.4013 | 0.0153 | 0.0000 | 54.7841 |
| Total | 0.0506 | 0.5031 | 0.3450 | 6.2000e-004 | | 0.0248 | 0.0248 | | 0.0231 | 0.0231 | 0.0000 | 54.4013 | 54.4013 | 0.0153 | 0.0000 | 54.7841 |

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3.2 Demolition - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0300e-003 | 8.0000e-004 | 9.0800e-003 | 3.0000e-005 | 2.6300e-003 | 2.0000e-005 | 2.6500e-003 | 7.0000e-004 | 2.0000e-005 | 7.2000e-004 | 0.0000 | 2.3734 | 2.3734 | 7.0000e-005 | 0.0000 | 2.3752 |
| Total | 1.0300e-003 | 8.0000e-004 | 9.0800e-003 | 3.0000e-005 | 2.6300e-003 | 2.0000e-005 | 2.6500e-003 | 7.0000e-004 | 2.0000e-005 | 7.2000e-004 | 0.0000 | 2.3734 | 2.3734 | 7.0000e-005 | 0.0000 | 2.3752 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0506 | 0.5031 | 0.3450 | 6.2000e-004 | | 0.0248 | 0.0248 | | 0.0231 | 0.0231 | 0.0000 | 54.4012 | 54.4012 | 0.0153 | 0.0000 | 54.7840 |
| Total | 0.0506 | 0.5031 | 0.3450 | 6.2000e-004 | | 0.0248 | 0.0248 | | 0.0231 | 0.0231 | 0.0000 | 54.4012 | 54.4012 | 0.0153 | 0.0000 | 54.7840 |

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3.2 Demolition - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0300e-003 | 8.0000e-004 | 9.0800e-003 | 3.0000e-005 | 2.6300e-003 | 2.0000e-005 | 2.6500e-003 | 7.0000e-004 | 2.0000e-005 | 7.2000e-004 | 0.0000 | 2.3734 | 2.3734 | 7.0000e-005 | 0.0000 | 2.3752 |
| Total | 1.0300e-003 | 8.0000e-004 | 9.0800e-003 | 3.0000e-005 | 2.6300e-003 | 2.0000e-005 | 2.6500e-003 | 7.0000e-004 | 2.0000e-005 | 7.2000e-004 | 0.0000 | 2.3734 | 2.3734 | 7.0000e-005 | 0.0000 | 2.3752 |

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1445 | 0.0000 | 0.1445 | 0.0795 | 0.0000 | 0.0795 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0311 | 0.3240 | 0.1692 | 3.0000e-004 | | 0.0164 | 0.0164 | | 0.0151 | 0.0151 | 0.0000 | 26.7486 | 26.7486 | 8.6500e-003 | 0.0000 | 26.9649 |
| Total | 0.0311 | 0.3240 | 0.1692 | 3.0000e-004 | 0.1445 | 0.0164 | 0.1609 | 0.0795 | 0.0151 | 0.0945 | 0.0000 | 26.7486 | 26.7486 | 8.6500e-003 | 0.0000 | 26.9649 |

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3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.2000e-004 | 4.8000e-004 | 5.4500e-003 | 2.0000e-005 | 1.5800e-003 | 1.0000e-005 | 1.5900e-003 | 4.2000e-004 | 1.0000e-005 | 4.3000e-004 | 0.0000 | 1.4240 | 1.4240 | 4.0000e-005 | 0.0000 | 1.4251 |
| Total | 6.2000e-004 | 4.8000e-004 | 5.4500e-003 | 2.0000e-005 | 1.5800e-003 | 1.0000e-005 | 1.5900e-003 | 4.2000e-004 | 1.0000e-005 | 4.3000e-004 | 0.0000 | 1.4240 | 1.4240 | 4.0000e-005 | 0.0000 | 1.4251 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1445 | 0.0000 | 0.1445 | 0.0795 | 0.0000 | 0.0795 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0311 | 0.3240 | 0.1692 | 3.0000e-004 | | 0.0164 | 0.0164 | | 0.0151 | 0.0151 | 0.0000 | 26.7485 | 26.7485 | 8.6500e-003 | 0.0000 | 26.9648 |
| Total | 0.0311 | 0.3240 | 0.1692 | 3.0000e-004 | 0.1445 | 0.0164 | 0.1609 | 0.0795 | 0.0151 | 0.0945 | 0.0000 | 26.7485 | 26.7485 | 8.6500e-003 | 0.0000 | 26.9648 |

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3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.2000e-004 | 4.8000e-004 | 5.4500e-003 | 2.0000e-005 | 1.5800e-003 | 1.0000e-005 | 1.5900e-003 | 4.2000e-004 | 1.0000e-005 | 4.3000e-004 | 0.0000 | 1.4240 | 1.4240 | 4.0000e-005 | 0.0000 | 1.4251 |
| Total | 6.2000e-004 | 4.8000e-004 | 5.4500e-003 | 2.0000e-005 | 1.5800e-003 | 1.0000e-005 | 1.5900e-003 | 4.2000e-004 | 1.0000e-005 | 4.3000e-004 | 0.0000 | 1.4240 | 1.4240 | 4.0000e-005 | 0.0000 | 1.4251 |

3.4 Grading - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1086 | 0.0000 | 0.1086 | 0.0556 | 0.0000 | 0.0556 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0378 | 0.4082 | 0.2617 | 4.9000e-004 | | 0.0191 | 0.0191 | | 0.0176 | 0.0176 | 0.0000 | 42.9886 | 42.9886 | 0.0139 | 0.0000 | 43.3362 |
| Total | 0.0378 | 0.4082 | 0.2617 | 4.9000e-004 | 0.1086 | 0.0191 | 0.1278 | 0.0556 | 0.0176 | 0.0733 | 0.0000 | 42.9886 | 42.9886 | 0.0139 | 0.0000 | 43.3362 |

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3.4 Grading - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 4.7900e-003 | 0.1575 | 0.0367 | 4.4000e-004 | 9.7800e-003 | 4.7000e-004 | 0.0103 | 2.6900e-003 | 4.5000e-004 | 3.1400e-003 | 0.0000 | 43.3747 | 43.3747 | 3.0100e-003 | 0.0000 | 43.4499 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0600e-003 | 8.3000e-004 | 9.3600e-003 | 3.0000e-005 | 2.7100e-003 | 2.0000e-005 | 2.7300e-003 | 7.2000e-004 | 2.0000e-005 | 7.4000e-004 | 0.0000 | 2.4476 | 2.4476 | 7.0000e-005 | 0.0000 | 2.4494 |
| Total | 5.8500e-003 | 0.1583 | 0.0461 | 4.7000e-004 | 0.0125 | 4.9000e-004 | 0.0130 | 3.4100e-003 | 4.7000e-004 | 3.8800e-003 | 0.0000 | 45.8222 | 45.8222 | 3.0800e-003 | 0.0000 | 45.8993 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.1086 | 0.0000 | 0.1086 | 0.0556 | 0.0000 | 0.0556 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0378 | 0.4082 | 0.2617 | 4.9000e-004 | | 0.0191 | 0.0191 | | 0.0176 | 0.0176 | 0.0000 | 42.9886 | 42.9886 | 0.0139 | 0.0000 | 43.3361 |
| Total | 0.0378 | 0.4082 | 0.2617 | 4.9000e-004 | 0.1086 | 0.0191 | 0.1278 | 0.0556 | 0.0176 | 0.0733 | 0.0000 | 42.9886 | 42.9886 | 0.0139 | 0.0000 | 43.3361 |

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3.4 Grading - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 4.7900e-003 | 0.1575 | 0.0367 | 4.4000e-004 | 9.7800e-003 | 4.7000e-004 | 0.0103 | 2.6900e-003 | 4.5000e-004 | 3.1400e-003 | 0.0000 | 43.3747 | 43.3747 | 3.0100e-003 | 0.0000 | 43.4499 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0600e-003 | 8.3000e-004 | 9.3600e-003 | 3.0000e-005 | 2.7100e-003 | 2.0000e-005 | 2.7300e-003 | 7.2000e-004 | 2.0000e-005 | 7.4000e-004 | 0.0000 | 2.4476 | 2.4476 | 7.0000e-005 | 0.0000 | 2.4494 |
| Total | 5.8500e-003 | 0.1583 | 0.0461 | 4.7000e-004 | 0.0125 | 4.9000e-004 | 0.0130 | 3.4100e-003 | 4.7000e-004 | 3.8800e-003 | 0.0000 | 45.8222 | 45.8222 | 3.0800e-003 | 0.0000 | 45.8993 |

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1711 | 1.5689 | 1.4918 | 2.4200e-003 | | 0.0863 | 0.0863 | | 0.0811 | 0.0811 | 0.0000 | 208.4736 | 208.4736 | 0.0503 | 0.0000 | 209.7309 |
| Total | 0.1711 | 1.5689 | 1.4918 | 2.4200e-003 | | 0.0863 | 0.0863 | | 0.0811 | 0.0811 | 0.0000 | 208.4736 | 208.4736 | 0.0503 | 0.0000 | 209.7309 |

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3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0123 | 0.3908 | 0.1060 | 1.0100e-003 | 0.0249 | 8.0000e-004 | 0.0257 | 7.2000e-003 | 7.6000e-004 | 7.9600e-003 | 0.0000 | 97.6126 | 97.6126 | 5.9900e-003 | 0.0000 | 97.7623 |
| Worker | 0.0682 | 0.0531 | 0.5990 | 1.7300e-003 | 0.1736 | 1.4300e-003 | 0.1750 | 0.0461 | 1.3200e-003 | 0.0474 | 0.0000 | 156.6445 | 156.6445 | 4.6100e-003 | 0.0000 | 156.7597 |
| Total | 0.0805 | 0.4439 | 0.7050 | 2.7400e-003 | 0.1985 | 2.2300e-003 | 0.2008 | 0.0533 | 2.0800e-003 | 0.0554 | 0.0000 | 254.2571 | 254.2571 | 0.0106 | 0.0000 | 254.5220 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1711 | 1.5689 | 1.4918 | 2.4200e-003 | | 0.0863 | 0.0863 | | 0.0811 | 0.0811 | 0.0000 | 208.4733 | 208.4733 | 0.0503 | 0.0000 | 209.7307 |
| Total | 0.1711 | 1.5689 | 1.4918 | 2.4200e-003 | | 0.0863 | 0.0863 | | 0.0811 | 0.0811 | 0.0000 | 208.4733 | 208.4733 | 0.0503 | 0.0000 | 209.7307 |

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3.5 Building Construction - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0123 | 0.3908 | 0.1060 | 1.0100e-003 | 0.0249 | 8.0000e-004 | 0.0257 | 7.2000e-003 | 7.6000e-004 | 7.9600e-003 | 0.0000 | 97.6126 | 97.6126 | 5.9900e-003 | 0.0000 | 97.7623 |
| Worker | 0.0682 | 0.0531 | 0.5990 | 1.7300e-003 | 0.1736 | 1.4300e-003 | 0.1750 | 0.0461 | 1.3200e-003 | 0.0474 | 0.0000 | 156.6445 | 156.6445 | 4.6100e-003 | 0.0000 | 156.7597 |
| Total | 0.0805 | 0.4439 | 0.7050 | 2.7400e-003 | 0.1985 | 2.2300e-003 | 0.2008 | 0.0533 | 2.0800e-003 | 0.0554 | 0.0000 | 254.2571 | 254.2571 | 0.0106 | 0.0000 | 254.5220 |

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1672 | 1.5303 | 1.6036 | 2.6400e-003 | | 0.0793 | 0.0793 | | 0.0746 | 0.0746 | 0.0000 | 227.0907 | 227.0907 | 0.0544 | 0.0000 | 228.4509 |
| Total | 0.1672 | 1.5303 | 1.6036 | 2.6400e-003 | | 0.0793 | 0.0793 | | 0.0746 | 0.0746 | 0.0000 | 227.0907 | 227.0907 | 0.0544 | 0.0000 | 228.4509 |

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3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0126 | 0.4043 | 0.1092 | 1.0900e-003 | 0.0272 | 7.6000e-004 | 0.0279 | 7.8400e-003 | 7.3000e-004 | 8.5600e-003 | 0.0000 | 105.3558 | 105.3558 | 6.2900e-003 | 0.0000 | 105.5131 |
| Worker | 0.0696 | 0.0522 | 0.6010 | 1.8200e-003 | 0.1890 | 1.5100e-003 | 0.1905 | 0.0502 | 1.3900e-003 | 0.0516 | 0.0000 | 164.5726 | 164.5726 | 4.5300e-003 | 0.0000 | 164.6859 |
| Total | 0.0822 | 0.4565 | 0.7101 | 2.9100e-003 | 0.2162 | 2.2700e-003 | 0.2184 | 0.0580 | 2.1200e-003 | 0.0602 | 0.0000 | 269.9284 | 269.9284 | 0.0108 | 0.0000 | 270.1990 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1672 | 1.5303 | 1.6036 | 2.6400e-003 | | 0.0793 | 0.0793 | | 0.0746 | 0.0746 | 0.0000 | 227.0905 | 227.0905 | 0.0544 | 0.0000 | 228.4506 |
| Total | 0.1672 | 1.5303 | 1.6036 | 2.6400e-003 | | 0.0793 | 0.0793 | | 0.0746 | 0.0746 | 0.0000 | 227.0905 | 227.0905 | 0.0544 | 0.0000 | 228.4506 |

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3.5 Building Construction - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0126 | 0.4043 | 0.1092 | 1.0900e-003 | 0.0272 | 7.6000e-004 | 0.0279 | 7.8400e-003 | 7.3000e-004 | 8.5600e-003 | 0.0000 | 105.3558 | 105.3558 | 6.2900e-003 | 0.0000 | 105.5131 |
| Worker | 0.0696 | 0.0522 | 0.6010 | 1.8200e-003 | 0.1890 | 1.5100e-003 | 0.1905 | 0.0502 | 1.3900e-003 | 0.0516 | 0.0000 | 164.5726 | 164.5726 | 4.5300e-003 | 0.0000 | 164.6859 |
| Total | 0.0822 | 0.4565 | 0.7101 | 2.9100e-003 | 0.2162 | 2.2700e-003 | 0.2184 | 0.0580 | 2.1200e-003 | 0.0602 | 0.0000 | 269.9284 | 269.9284 | 0.0108 | 0.0000 | 270.1990 |

3.6 Paving - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0182 | 0.1836 | 0.2406 | 3.8000e-004 | | 9.3700e-003 | 9.3700e-003 | | 8.6200e-003 | 8.6200e-003 | 0.0000 | 33.0455 | 33.0455 | 0.0107 | 0.0000 | 33.3127 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0182 | 0.1836 | 0.2406 | 3.8000e-004 | | 9.3700e-003 | 9.3700e-003 | | 8.6200e-003 | 8.6200e-003 | 0.0000 | 33.0455 | 33.0455 | 0.0107 | 0.0000 | 33.3127 |

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3.6 Paving - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0000e-003 | 7.5000e-004 | 8.6200e-003 | 3.0000e-005 | 2.7100e-003 | 2.0000e-005 | 2.7300e-003 | 7.2000e-004 | 2.0000e-005 | 7.4000e-004 | 0.0000 | 2.3615 | 2.3615 | 7.0000e-005 | 0.0000 | 2.3632 |
| Total | 1.0000e-003 | 7.5000e-004 | 8.6200e-003 | 3.0000e-005 | 2.7100e-003 | 2.0000e-005 | 2.7300e-003 | 7.2000e-004 | 2.0000e-005 | 7.4000e-004 | 0.0000 | 2.3615 | 2.3615 | 7.0000e-005 | 0.0000 | 2.3632 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0182 | 0.1836 | 0.2406 | 3.8000e-004 | | 9.3700e-003 | 9.3700e-003 | | 8.6200e-003 | 8.6200e-003 | 0.0000 | 33.0454 | 33.0454 | 0.0107 | 0.0000 | 33.3126 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0182 | 0.1836 | 0.2406 | 3.8000e-004 | | 9.3700e-003 | 9.3700e-003 | | 8.6200e-003 | 8.6200e-003 | 0.0000 | 33.0454 | 33.0454 | 0.0107 | 0.0000 | 33.3126 |

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3.6 Paving - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0000e-003 | 7.5000e-004 | 8.6200e-003 | 3.0000e-005 | 2.7100e-003 | 2.0000e-005 | 2.7300e-003 | 7.2000e-004 | 2.0000e-005 | 7.4000e-004 | 0.0000 | 2.3615 | 2.3615 | 7.0000e-005 | 0.0000 | 2.3632 |
| Total | 1.0000e-003 | 7.5000e-004 | 8.6200e-003 | 3.0000e-005 | 2.7100e-003 | 2.0000e-005 | 2.7300e-003 | 7.2000e-004 | 2.0000e-005 | 7.4000e-004 | 0.0000 | 2.3615 | 2.3615 | 7.0000e-005 | 0.0000 | 2.3632 |

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4676 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1700e-003 | 0.0218 | 0.0281 | 5.0000e-005 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 3.9575 | 3.9575 | 2.6000e-004 | 0.0000 | 3.9640 |
| Total | 0.4708 | 0.0218 | 0.0281 | 5.0000e-005 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 3.9575 | 3.9575 | 2.6000e-004 | 0.0000 | 3.9640 |

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3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1900e-003 | 1.6400e-003 | 0.0189 | 6.0000e-005 | 5.9400e-003 | 5.0000e-005 | 5.9900e-003 | 1.5800e-003 | 4.0000e-005 | 1.6200e-003 | 0.0000 | 5.1763 | 5.1763 | 1.4000e-004 | 0.0000 | 5.1799 |
| Total | 2.1900e-003 | 1.6400e-003 | 0.0189 | 6.0000e-005 | 5.9400e-003 | 5.0000e-005 | 5.9900e-003 | 1.5800e-003 | 4.0000e-005 | 1.6200e-003 | 0.0000 | 5.1763 | 5.1763 | 1.4000e-004 | 0.0000 | 5.1799 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4676 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.1700e-003 | 0.0218 | 0.0281 | 5.0000e-005 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 3.9575 | 3.9575 | 2.6000e-004 | 0.0000 | 3.9640 |
| Total | 0.4708 | 0.0218 | 0.0281 | 5.0000e-005 | | 1.2700e-003 | 1.2700e-003 | | 1.2700e-003 | 1.2700e-003 | 0.0000 | 3.9575 | 3.9575 | 2.6000e-004 | 0.0000 | 3.9640 |

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3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.1900e-003 | 1.6400e-003 | 0.0189 | 6.0000e-005 | 5.9400e-003 | 5.0000e-005 | 5.9900e-003 | 1.5800e-003 | 4.0000e-005 | 1.6200e-003 | 0.0000 | 5.1763 | 5.1763 | 1.4000e-004 | 0.0000 | 5.1799 |
| Total | 2.1900e-003 | 1.6400e-003 | 0.0189 | 6.0000e-005 | 5.9400e-003 | 5.0000e-005 | 5.9900e-003 | 1.5800e-003 | 4.0000e-005 | 1.6200e-003 | 0.0000 | 5.1763 | 5.1763 | 1.4000e-004 | 0.0000 | 5.1799 |

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0302 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.9000e-004 | 1.3000e-003 | 1.8100e-003 | 0.0000 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.2553 | 0.2553 | 2.0000e-005 | 0.0000 | 0.2557 |
| Total | 0.0304 | 1.3000e-003 | 1.8100e-003 | 0.0000 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.2553 | 0.2553 | 2.0000e-005 | 0.0000 | 0.2557 |

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3.7 Architectural Coating - 2023**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.3000e-004 | 1.0000e-004 | 1.1200e-003 | 0.0000 | 3.8000e-004 | 0.0000 | 3.9000e-004 | 1.0000e-004 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3217 | 0.3217 | 1.0000e-005 | 0.0000 | 0.3219 |
| Total | 1.3000e-004 | 1.0000e-004 | 1.1200e-003 | 0.0000 | 3.8000e-004 | 0.0000 | 3.9000e-004 | 1.0000e-004 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3217 | 0.3217 | 1.0000e-005 | 0.0000 | 0.3219 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0302 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.9000e-004 | 1.3000e-003 | 1.8100e-003 | 0.0000 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.2553 | 0.2553 | 2.0000e-005 | 0.0000 | 0.2557 |
| Total | 0.0304 | 1.3000e-003 | 1.8100e-003 | 0.0000 | | 7.0000e-005 | 7.0000e-005 | | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.2553 | 0.2553 | 2.0000e-005 | 0.0000 | 0.2557 |

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3.7 Architectural Coating - 2023**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.3000e-004 | 1.0000e-004 | 1.1200e-003 | 0.0000 | 3.8000e-004 | 0.0000 | 3.9000e-004 | 1.0000e-004 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3217 | 0.3217 | 1.0000e-005 | 0.0000 | 0.3219 |
| Total | 1.3000e-004 | 1.0000e-004 | 1.1200e-003 | 0.0000 | 3.8000e-004 | 0.0000 | 3.9000e-004 | 1.0000e-004 | 0.0000 | 1.0000e-004 | 0.0000 | 0.3217 | 0.3217 | 1.0000e-005 | 0.0000 | 0.3219 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.3954 | 1.7580 | 4.9502 | 0.0182 | 1.5268 | 0.0139 | 1.5407 | 0.4092 | 0.0130 | 0.4222 | 0.0000 | 1,680.974 7 | 1,680.974 7 | 0.0845 | 0.0000 | 1,683.087 1 |
| Unmitigated | 0.3954 | 1.7580 | 4.9502 | 0.0182 | 1.5268 | 0.0139 | 1.5407 | 0.4092 | 0.0130 | 0.4222 | 0.0000 | 1,680.974 7 | 1,680.974 7 | 0.0845 | 0.0000 | 1,683.087 1 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|-------------------------------------|-------------------------|----------|----------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 931.00 | 894.60 | 820.40 | 3,109,608 | 3,109,608 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | | |
| High Turnover (Sit Down Restaurant) | 644.01 | 802.14 | 667.77 | 913,094 | 913,094 |
| Total | 1,575.01 | 1,696.74 | 1,488.17 | 4,022,702 | 4,022,702 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Enclosed Parking with Elevator | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| High Turnover (Sit Down) | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |

4.4 Fleet Mix

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| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |
| Enclosed Parking with Elevator | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |
| High Turnover (Sit Down Restaurant) | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 573.5072 | 573.5072 | 0.0237 | 4.9000e-003 | 575.5589 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 573.5072 | 573.5072 | 0.0237 | 4.9000e-003 | 575.5589 |
| NaturalGas Mitigated | 0.0133 | 0.1168 | 0.0734 | 7.2000e-004 | | 9.1600e-003 | 9.1600e-003 | | 9.1600e-003 | 9.1600e-003 | 0.0000 | 131.2307 | 131.2307 | 2.5200e-003 | 2.4100e-003 | 132.0106 |
| NaturalGas Unmitigated | 0.0133 | 0.1168 | 0.0734 | 7.2000e-004 | | 9.1600e-003 | 9.1600e-003 | | 9.1600e-003 | 9.1600e-003 | 0.0000 | 131.2307 | 131.2307 | 2.5200e-003 | 2.4100e-003 | 132.0106 |

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Mid Rise | 1.29037e+006 | 6.9600e-003 | 0.0595 | 0.0253 | 3.8000e-004 | | 4.8100e-003 | 4.8100e-003 | | 4.8100e-003 | 4.8100e-003 | 0.0000 | 68.8591 | 68.8591 | 1.3200e-003 | 1.2600e-003 | 69.2683 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 1.1688e+006 | 6.3000e-003 | 0.0573 | 0.0481 | 3.4000e-004 | | 4.3500e-003 | 4.3500e-003 | | 4.3500e-003 | 4.3500e-003 | 0.0000 | 62.3716 | 62.3716 | 1.2000e-003 | 1.1400e-003 | 62.7422 |
| Total | | 0.0133 | 0.1168 | 0.0734 | 7.2000e-004 | | 9.1600e-003 | 9.1600e-003 | | 9.1600e-003 | 9.1600e-003 | 0.0000 | 131.2307 | 131.2307 | 2.5200e-003 | 2.4000e-003 | 132.0106 |

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Apartments Mid Rise | 1.29037e+006 | 6.9600e-003 | 0.0595 | 0.0253 | 3.8000e-004 | | 4.8100e-003 | 4.8100e-003 | | 4.8100e-003 | 4.8100e-003 | 0.0000 | 68.8591 | 68.8591 | 1.3200e-003 | 1.2600e-003 | 69.2683 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 1.1688e+006 | 6.3000e-003 | 0.0573 | 0.0481 | 3.4000e-004 | | 4.3500e-003 | 4.3500e-003 | | 4.3500e-003 | 4.3500e-003 | 0.0000 | 62.3716 | 62.3716 | 1.2000e-003 | 1.1400e-003 | 62.7422 |
| Total | | 0.0133 | 0.1168 | 0.0734 | 7.2000e-004 | | 9.1600e-003 | 9.1600e-003 | | 9.1600e-003 | 9.1600e-003 | 0.0000 | 131.2307 | 131.2307 | 2.5200e-003 | 2.4000e-003 | 132.0106 |

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5.3 Energy by Land Use - Electricity**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 554411 | 176.6473 | 7.2900e-003 | 1.5100e-003 | 177.2793 |
| Enclosed Parking with Elevator | 1.02198e+006 | 325.6260 | 0.0134 | 2.7800e-003 | 326.7909 |
| High Turnover (Sit Down Restaurant) | 223569 | 71.2339 | 2.9400e-003 | 6.1000e-004 | 71.4888 |
| Total | | 573.5072 | 0.0237 | 4.9000e-003 | 575.5589 |

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 554411 | 176.6473 | 7.2900e-003 | 1.5100e-003 | 177.2793 |
| Enclosed Parking with Elevator | 1.02198e+006 | 325.6260 | 0.0134 | 2.7800e-003 | 326.7909 |
| High Turnover (Sit Down Restaurant) | 223569 | 71.2339 | 2.9400e-003 | 6.1000e-004 | 71.4888 |
| Total | | 573.5072 | 0.0237 | 4.9000e-003 | 575.5589 |

6.0 Area Detail

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6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-------------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.1017 | 0.0530 | 2.3397 | 2.3500e-003 | | 0.1417 | 0.1417 | | 0.1417 | 0.1417 | 14.8707 | 30.9456 | 45.8163 | 0.0466 | 1.0100e-003 | 47.2832 |
| Unmitigated | 1.1017 | 0.0530 | 2.3397 | 2.3500e-003 | | 0.1417 | 0.1417 | | 0.1417 | 0.1417 | 14.8707 | 30.9456 | 45.8163 | 0.0466 | 1.0100e-003 | 47.2832 |

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6.2 Area by SubCategory**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|----------------|----------------|---------------|--------------------|----------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0498 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.5493 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.4586 | 0.0363 | 0.8900 | 2.2700e-003 | | 0.1337 | 0.1337 | | 0.1337 | 0.1337 | 14.8707 | 28.5763 | 43.4470 | 0.0444 | 1.0100e-003 | 44.8565 |
| Landscaping | 0.0440 | 0.0167 | 1.4497 | 8.0000e-005 | | 8.0100e-003 | 8.0100e-003 | | 8.0100e-003 | 8.0100e-003 | 0.0000 | 2.3693 | 2.3693 | 2.3000e-003 | 0.0000 | 2.4267 |
| Total | 1.1017 | 0.0530 | 2.3397 | 2.3500e-003 | | 0.1417 | 0.1417 | | 0.1417 | 0.1417 | 14.8707 | 30.9456 | 45.8163 | 0.0467 | 1.0100e-003 | 47.2832 |

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6.2 Area by SubCategory**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|----------------|----------------|---------------|--------------------|----------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0498 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.5493 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 0.4586 | 0.0363 | 0.8900 | 2.2700e-003 | | 0.1337 | 0.1337 | | 0.1337 | 0.1337 | 14.8707 | 28.5763 | 43.4470 | 0.0444 | 1.0100e-003 | 44.8565 |
| Landscaping | 0.0440 | 0.0167 | 1.4497 | 8.0000e-005 | | 8.0100e-003 | 8.0100e-003 | | 8.0100e-003 | 8.0100e-003 | 0.0000 | 2.3693 | 2.3693 | 2.3000e-003 | 0.0000 | 2.4267 |
| Total | 1.1017 | 0.0530 | 2.3397 | 2.3500e-003 | | 0.1417 | 0.1417 | | 0.1417 | 0.1417 | 14.8707 | 30.9456 | 45.8163 | 0.0467 | 1.0100e-003 | 47.2832 |

7.0 Water Detail**7.1 Mitigation Measures Water**

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| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|-------------|---------|
| Category | MT/yr | | | |
| Mitigated | 68.3140 | 0.3501 | 8.7600e-003 | 79.6748 |
| Unmitigated | 68.3140 | 0.3501 | 8.7600e-003 | 79.6748 |

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|---------------------|----------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 9.12156 / 5.75055 | 61.0934 | 0.2996 | 7.5200e-003 | 70.8237 |
| Enclosed Parking with Elevator | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 1.53892 / 0.0982287 | 7.2206 | 0.0504 | 1.2400e-003 | 8.8511 |
| Total | | 68.3140 | 0.3501 | 8.7600e-003 | 79.6748 |

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7.2 Water by Land Use**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|---------------------|----------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 9.12156 / 5.75055 | 61.0934 | 0.2996 | 7.5200e-003 | 70.8237 |
| Enclosed Parking with Elevator | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 1.53892 / 0.0982287 | 7.2206 | 0.0504 | 1.2400e-003 | 8.8511 |
| Total | | 68.3140 | 0.3501 | 8.7600e-003 | 79.6748 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|---------|
| | MT/yr | | | |
| Mitigated | 25.3191 | 1.4963 | 0.0000 | 62.7269 |
| Unmitigated | 25.3191 | 1.4963 | 0.0000 | 62.7269 |

8.2 Waste by Land Use**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 64.4 | 13.0726 | 0.7726 | 0.0000 | 32.3869 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 60.33 | 12.2464 | 0.7237 | 0.0000 | 30.3401 |
| Total | | 25.3191 | 1.4963 | 0.0000 | 62.7269 |

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8.2 Waste by Land Use**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 64.4 | 13.0726 | 0.7726 | 0.0000 | 32.3869 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 60.33 | 12.2464 | 0.7237 | 0.0000 | 30.3401 |
| Total | | 25.3191 | 1.4963 | 0.0000 | 62.7269 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

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11.0 Vegetation

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

Reese Davidson Community Project

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 140.00 | Dwelling Unit | 3.68 | 143,840.00 | 400 |
| High Turnover (Sit Down Restaurant) | 5.07 | 1000sqft | 0.12 | 5,065.00 | 0 |
| Enclosed Parking with Elevator | 436.00 | Space | 3.92 | 174,400.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 33 |
| Climate Zone | 11 | | | Operational Year | 2023 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MW hr) | 702.44 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 140,000-SF default land use space for 140 units + 685-SF of associated affordable resident services + 3,155-SF of community arts/meeting space = 143,840-SF of "Apartments Mid Rise." 4,565-SF of retail/restaurant + 500-SF of outdoor seating = 5,065-SF of "High Turnover (Sit Down Restaurant)."

Construction Phase - Consistent with IS's proposed schedule (2021 - 2023).

Grading - Includes 9,100 cy of building material and soil export.

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

| Table Name | Column Name | Default Value | New Value |
|----------------------|-------------------|---------------|------------|
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 230.00 | 376.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 10.00 | 16.00 |
| tblConstructionPhase | PhaseEndDate | 3/23/2022 | 1/3/2023 |
| tblConstructionPhase | PhaseEndDate | 1/26/2022 | 10/3/2022 |
| tblConstructionPhase | PhaseEndDate | 1/27/2021 | 2/15/2021 |
| tblConstructionPhase | PhaseEndDate | 3/10/2021 | 4/23/2021 |
| tblConstructionPhase | PhaseEndDate | 2/23/2022 | 11/17/2022 |
| tblConstructionPhase | PhaseEndDate | 2/10/2021 | 3/9/2021 |
| tblConstructionPhase | PhaseStartDate | 2/24/2022 | 11/18/2022 |
| tblConstructionPhase | PhaseStartDate | 3/11/2021 | 4/24/2021 |
| tblConstructionPhase | PhaseStartDate | 2/11/2021 | 3/10/2021 |
| tblConstructionPhase | PhaseStartDate | 1/27/2022 | 10/4/2022 |
| tblConstructionPhase | PhaseStartDate | 1/28/2021 | 2/16/2021 |
| tblGrading | MaterialExported | 0.00 | 9,100.00 |
| tblLandUse | LandUseSquareFeet | 140,000.00 | 143,840.00 |

2.0 Emissions Summary

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|---------|---------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 3.3812 | 33.2501 | 22.4100 | 0.0406 | 0.1677 | 1.6601 | 1.8278 | 0.0445 | 1.5431 | 1.5876 | 0.0000 | 3,924.121 9 | 3,924.121 9 | 1.0635 | 0.0000 | 3,950.709 6 |
| 2021 | 3.9653 | 40.5501 | 24.7808 | 0.0584 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,961.701 1 | 5,961.701 1 | 1.1981 | 0.0000 | 5,990.000 2 |
| 2022 | 30.5118 | 20.1466 | 23.9603 | 0.0576 | 2.2490 | 0.8321 | 3.0810 | 0.6028 | 0.7826 | 1.3855 | 0.0000 | 5,687.005 2 | 5,687.005 2 | 0.7341 | 0.0000 | 5,705.358 2 |
| 2023 | 30.4903 | 1.3873 | 3.0089 | 6.6900e-003 | 0.3912 | 0.0738 | 0.4650 | 0.1038 | 0.0736 | 0.1773 | 0.0000 | 651.9168 | 651.9168 | 0.0264 | 0.0000 | 652.5770 |
| Maximum | 30.5118 | 40.5501 | 24.7808 | 0.0584 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,961.701 1 | 5,961.701 1 | 1.1981 | 0.0000 | 5,990.000 2 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|---------|---------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 3.3812 | 33.2501 | 22.4100 | 0.0406 | 0.1677 | 1.6601 | 1.8278 | 0.0445 | 1.5431 | 1.5876 | 0.0000 | 3,924.1219 | 3,924.1219 | 1.0635 | 0.0000 | 3,950.7096 |
| 2021 | 3.9653 | 40.5501 | 24.7808 | 0.0584 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,961.7011 | 5,961.7011 | 1.1981 | 0.0000 | 5,990.0002 |
| 2022 | 30.5118 | 20.1466 | 23.9603 | 0.0576 | 2.2490 | 0.8321 | 3.0810 | 0.6028 | 0.7826 | 1.3855 | 0.0000 | 5,687.0052 | 5,687.0052 | 0.7341 | 0.0000 | 5,705.3582 |
| 2023 | 30.4903 | 1.3873 | 3.0089 | 6.6900e-003 | 0.3912 | 0.0738 | 0.4650 | 0.1038 | 0.0736 | 0.1773 | 0.0000 | 651.9168 | 651.9168 | 0.0264 | 0.0000 | 652.5770 |
| Maximum | 30.5118 | 40.5501 | 24.7808 | 0.0584 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,961.7011 | 5,961.7011 | 1.1981 | 0.0000 | 5,990.0002 |

[illegible]

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

2.2 Overall Operational**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|----------------|-----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|--------------------|--------------------|---------------|---------------|--------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.3686 | 2,540.8939 | 3,852.2624 | 3.9310 | 0.0890 | 3,977.0615 |
| Energy | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |
| Mobile | 2.4997 | 10.0690 | 30.0033 | 0.1102 | 9.0895 | 0.0815 | 9.1710 | 2.4324 | 0.0758 | 2.5082 | | 11,233.0102 | 11,233.0102 | 0.5492 | | 11,246.7402 |
| Total | 42.8924 | 13.7471 | 113.2007 | 0.2964 | 9.0895 | 10.8902 | 19.9797 | 2.4324 | 10.8845 | 13.3169 | 1,311.3686 | 14,566.5458 | 15,877.9144 | 4.4954 | 0.1035 | 16,021.1537 |

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|----------------|-----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|--------------------|--------------------|---------------|---------------|--------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.3686 | 2,540.8939 | 3,852.2624 | 3.9310 | 0.0890 | 3,977.0615 |
| Energy | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |
| Mobile | 2.4997 | 10.0690 | 30.0033 | 0.1102 | 9.0895 | 0.0815 | 9.1710 | 2.4324 | 0.0758 | 2.5082 | | 11,233.0102 | 11,233.0102 | 0.5492 | | 11,246.7402 |
| Total | 42.8924 | 13.7471 | 113.2007 | 0.2964 | 9.0895 | 10.8902 | 19.9797 | 2.4324 | 10.8845 | 13.3169 | 1,311.3686 | 14,566.5458 | 15,877.9144 | 4.4954 | 0.1035 | 16,021.1537 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 12/31/2020 | 2/15/2021 | 5 | 33 | |
| 2 | Site Preparation | Site Preparation | 2/16/2021 | 3/9/2021 | 5 | 16 | |
| 3 | Grading | Grading | 3/10/2021 | 4/23/2021 | 5 | 33 | |
| 4 | Building Construction | Building Construction | 4/24/2021 | 10/3/2022 | 5 | 376 | |
| 5 | Paving | Paving | 10/4/2022 | 11/17/2022 | 5 | 33 | |
| 6 | Architectural Coating | Architectural Coating | 11/18/2022 | 1/3/2023 | 5 | 33 | |

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 16.5****Acres of Paving: 3.92****Residential Indoor: 291,276; Residential Outdoor: 97,092; Non-Residential Indoor: 7,598; Non-Residential Outdoor: 2,533; Striped Parking Area: 10,464 (Architectural Coating – sqft)****OffRoad Equipment**

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

Trips and VMT

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 1,138.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 176.00 | 44.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 35.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |
| Total | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |

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3.2 Demolition - 2020**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0690 | 0.0491 | 0.6568 | 1.7700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 176.4169 | 176.4169 | 5.5600e-003 | | 176.5560 |
| Total | 0.0690 | 0.0491 | 0.6568 | 1.7700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 176.4169 | 176.4169 | 5.5600e-003 | | 176.5560 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | 0.0000 | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |
| Total | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | 0.0000 | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.2 Demolition - 2020**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0690 | 0.0491 | 0.6568 | 1.7700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 176.4169 | 176.4169 | 5.5600e-003 | | 176.5560 |
| Total | 0.0690 | 0.0491 | 0.6568 | 1.7700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 176.4169 | 176.4169 | 5.5600e-003 | | 176.5560 |

3.2 Demolition - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| Total | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| Total | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| Total | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| Total | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| Total | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663 | 2.0445 | 20.1107 | 9.9307 | 1.8809 | 11.8116 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| Total | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| Total | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663 | 2.0445 | 20.1107 | 9.9307 | 1.8809 | 11.8116 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |
| Total | 0.0772 | 0.0530 | 0.7250 | 2.0600e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 204.9786 | 204.9786 | 6.0400e-003 | | 205.1296 |

3.4 Grading - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.5835 | 0.0000 | 6.5835 | 3.3722 | 0.0000 | 3.3722 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.2903 | 24.7367 | 15.8575 | 0.0296 | | 1.1599 | 1.1599 | | 1.0671 | 1.0671 | | 2,871.9285 | 2,871.9285 | 0.9288 | | 2,895,1495 |
| Total | 2.2903 | 24.7367 | 15.8575 | 0.0296 | 6.5835 | 1.1599 | 7.7434 | 3.3722 | 1.0671 | 4.4393 | | 2,871.9285 | 2,871.9285 | 0.9288 | | 2,895,1495 |

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3.4 Grading - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.2875 | 9.2503 | 2.1689 | 0.0269 | 0.6030 | 0.0284 | 0.6314 | 0.1653 | 0.0272 | 0.1925 | | 2,918.957 1 | 2,918.957 1 | 0.1981 | | 2,923.909 4 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| Total | 0.3518 | 9.2945 | 2.7731 | 0.0286 | 0.7706 | 0.0297 | 0.8004 | 0.2098 | 0.0284 | 0.2382 | | 3,089.772 6 | 3,089.772 6 | 0.2031 | | 3,094.850 7 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.5835 | 0.0000 | 6.5835 | 3.3722 | 0.0000 | 3.3722 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.2903 | 24.7367 | 15.8575 | 0.0296 | | 1.1599 | 1.1599 | | 1.0671 | 1.0671 | 0.0000 | 2,871.928 5 | 2,871.928 5 | 0.9288 | | 2,895.149 5 |
| Total | 2.2903 | 24.7367 | 15.8575 | 0.0296 | 6.5835 | 1.1599 | 7.7434 | 3.3722 | 1.0671 | 4.4393 | 0.0000 | 2,871.928 5 | 2,871.928 5 | 0.9288 | | 2,895.149 5 |

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3.4 Grading - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.2875 | 9.2503 | 2.1689 | 0.0269 | 0.6030 | 0.0284 | 0.6314 | 0.1653 | 0.0272 | 0.1925 | | 2,918.957 1 | 2,918.957 1 | 0.1981 | | 2,923.909 4 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| Total | 0.3518 | 9.2945 | 2.7731 | 0.0286 | 0.7706 | 0.0297 | 0.8004 | 0.2098 | 0.0284 | 0.2382 | | 3,089.772 6 | 3,089.772 6 | 0.2031 | | 3,094.850 7 |

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | | 2,553.363 9 | 2,553.363 9 | 0.6160 | | 2,568.764 3 |
| Total | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | | 2,553.363 9 | 2,553.363 9 | 0.6160 | | 2,568.764 3 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1337 | 4.2719 | 1.1168 | 0.0113 | 0.2817 | 8.7400e-003 | 0.2904 | 0.0811 | 8.3500e-003 | 0.0895 | | 1,209.4748 | 1,209.4748 | 0.0713 | | 1,211.2561 |
| Worker | 0.7544 | 0.5186 | 7.0888 | 0.0201 | 1.9673 | 0.0159 | 1.9832 | 0.5217 | 0.0146 | 0.5364 | | 2,004.2349 | 2,004.2349 | 0.0591 | | 2,005.7113 |
| Total | 0.8882 | 4.7905 | 8.2056 | 0.0314 | 2.2490 | 0.0246 | 2.2736 | 0.6028 | 0.0230 | 0.6258 | | 3,213.7097 | 3,213.7097 | 0.1303 | | 3,216.9674 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | 0.0000 | 2,553.3639 | 2,553.3639 | 0.6160 | | 2,568.7643 |
| Total | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | 0.0000 | 2,553.3639 | 2,553.3639 | 0.6160 | | 2,568.7643 |

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3.5 Building Construction - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1337 | 4.2719 | 1.1168 | 0.0113 | 0.2817 | 8.7400e-003 | 0.2904 | 0.0811 | 8.3500e-003 | 0.0895 | | 1,209.4748 | 1,209.4748 | 0.0713 | | 1,211.2561 |
| Worker | 0.7544 | 0.5186 | 7.0888 | 0.0201 | 1.9673 | 0.0159 | 1.9832 | 0.5217 | 0.0146 | 0.5364 | | 2,004.2349 | 2,004.2349 | 0.0591 | | 2,005.7113 |
| Total | 0.8882 | 4.7905 | 8.2056 | 0.0314 | 2.2490 | 0.0246 | 2.2736 | 0.6028 | 0.0230 | 0.6258 | | 3,213.7097 | 3,213.7097 | 0.1303 | | 3,216.9674 |

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1255 | 4.0625 | 1.0567 | 0.0112 | 0.2817 | 7.6400e-003 | 0.2893 | 0.0811 | 7.3000e-003 | 0.0884 | | 1,198.9379 | 1,198.9379 | 0.0688 | | 1,200.6580 |
| Worker | 0.7067 | 0.4684 | 6.5402 | 0.0194 | 1.9673 | 0.0154 | 1.9827 | 0.5217 | 0.0142 | 0.5359 | | 1,933.7337 | 1,933.7337 | 0.0534 | | 1,935.0680 |
| Total | 0.8322 | 4.5309 | 7.5969 | 0.0306 | 2.2490 | 0.0230 | 2.2720 | 0.6028 | 0.0215 | 0.6243 | | 3,132.6716 | 3,132.6716 | 0.1222 | | 3,135.7260 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1255 | 4.0625 | 1.0567 | 0.0112 | 0.2817 | 7.6400e-003 | 0.2893 | 0.0811 | 7.3000e-003 | 0.0884 | | 1,198.9379 | 1,198.9379 | 0.0688 | | 1,200.6580 |
| Worker | 0.7067 | 0.4684 | 6.5402 | 0.0194 | 1.9673 | 0.0154 | 1.9827 | 0.5217 | 0.0142 | 0.5359 | | 1,933.7337 | 1,933.7337 | 0.0534 | | 1,935.0680 |
| Total | 0.8322 | 4.5309 | 7.5969 | 0.0306 | 2.2490 | 0.0230 | 2.2720 | 0.6028 | 0.0215 | 0.6243 | | 3,132.6716 | 3,132.6716 | 0.1222 | | 3,135.7260 |

3.6 Paving - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | | 2,207.6603 | 2,207.6603 | 0.7140 | | 2,225.5104 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | | 2,207.6603 | 2,207.6603 | 0.7140 | | 2,225.5104 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.6 Paving - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0602 | 0.0399 | 0.5574 | 1.6500e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 164.8069 | 164.8069 | 4.5500e-003 | | 164.9206 |
| Total | 0.0602 | 0.0399 | 0.5574 | 1.6500e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 164.8069 | 164.8069 | 4.5500e-003 | | 164.9206 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | 0.0000 | 2,207.6603 | 2,207.6603 | 0.7140 | | 2,225.5104 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | 0.0000 | 2,207.6603 | 2,207.6603 | 0.7140 | | 2,225.5104 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.6 Paving - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0602 | 0.0399 | 0.5574 | 1.6500e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 164.8069 | 164.8069 | 4.5500e-003 | | 164.9206 |
| Total | 0.0602 | 0.0399 | 0.5574 | 1.6500e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 164.8069 | 164.8069 | 4.5500e-003 | | 164.9206 |

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| Total | 30.3712 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1405 | 0.0932 | 1.3006 | 3.8600e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 384.5493 | 384.5493 | 0.0106 | | 384.8147 |
| Total | 0.1405 | 0.0932 | 1.3006 | 3.8600e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 384.5493 | 384.5493 | 0.0106 | | 384.8147 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | 0.0000 | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| Total | 30.3712 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | 0.0000 | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1405 | 0.0932 | 1.3006 | 3.8600e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 384.5493 | 384.5493 | 0.0106 | | 384.8147 |
| Total | 0.1405 | 0.0932 | 1.3006 | 3.8600e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 384.5493 | 384.5493 | 0.0106 | | 384.8147 |

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |
| Total | 30.3584 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2023**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1320 | 0.0843 | 1.1978 | 3.7200e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 370.4687 | 370.4687 | 9.5700e-003 | | 370.7079 |
| Total | 0.1320 | 0.0843 | 1.1978 | 3.7200e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 370.4687 | 370.4687 | 9.5700e-003 | | 370.7079 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |
| Total | 30.3584 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2023**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1320 | 0.0843 | 1.1978 | 3.7200e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 370.4687 | 370.4687 | 9.5700e-003 | | 370.7079 |
| Total | 0.1320 | 0.0843 | 1.1978 | 3.7200e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 370.4687 | 370.4687 | 9.5700e-003 | | 370.7079 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.4997 | 10.0690 | 30.0033 | 0.1102 | 9.0895 | 0.0815 | 9.1710 | 2.4324 | 0.0758 | 2.5082 | | 11,233.0102 | 11,233.0102 | 0.5492 | | 11,246.7402 |
| Unmitigated | 2.4997 | 10.0690 | 30.0033 | 0.1102 | 9.0895 | 0.0815 | 9.1710 | 2.4324 | 0.0758 | 2.5082 | | 11,233.0102 | 11,233.0102 | 0.5492 | | 11,246.7402 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|-------------------------------------|-------------------------|----------|----------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartment Mid Rise | 931.00 | 894.60 | 820.40 | 3,109,608 | 3,109,608 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | | |
| High Turnover (Sit Down Restaurant) | 644.01 | 802.14 | 667.77 | 913,094 | 913,094 |
| Total | 1,575.01 | 1,696.74 | 1,488.17 | 4,022,702 | 4,022,702 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartment Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Enclosed Parking with Elevator | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| High Turnover (Sit Down) | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |

4.4 Fleet Mix

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |
| Enclosed Parking with Elevator | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |
| High Turnover (Sit Down Restaurant) | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |
| NaturalGas Unmitigated | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 3535.26 | 0.0381 | 0.3258 | 0.1386 | 2.0800e-003 | | 0.0263 | 0.0263 | | 0.0263 | 0.0263 | | 415.9135 | 415.9135 | 7.9700e-003 | 7.6300e-003 | 418.3851 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 3202.19 | 0.0345 | 0.3139 | 0.2637 | 1.8800e-003 | | 0.0239 | 0.0239 | | 0.0239 | 0.0239 | | 376.7283 | 376.7283 | 7.2200e-003 | 6.9100e-003 | 378.9670 |
| Total | | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 3.53526 | 0.0381 | 0.3258 | 0.1386 | 2.0800e-003 | | 0.0263 | 0.0263 | | 0.0263 | 0.0263 | | 415.9135 | 415.9135 | 7.9700e-003 | 7.6300e-003 | 418.3851 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 3.20219 | 0.0345 | 0.3139 | 0.2637 | 1.8800e-003 | | 0.0239 | 0.0239 | | 0.0239 | 0.0239 | | 376.7283 | 376.7283 | 7.2200e-003 | 6.9100e-003 | 378.9670 |
| Total | | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |

6.0 Area Detail

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|----------------|--------|--------|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |
| Unmitigated | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|------------------------|------------------------|------------------------|---------------|---------------|------------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2727 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0101 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 36.6850 | 2.9048 | 71.1973 | 0.1816 | | 10.6944 | 10.6944 | | 10.6944 | 10.6944 | 1,311.368 6 | 2,520.000 0 | 3,831.368 6 | 3.9108 | 0.0890 | 3,955.661 3 |
| Landscaping | 0.3522 | 0.1336 | 11.5978 | 6.1000e-004 | | 0.0641 | 0.0641 | | 0.0641 | 0.0641 | | 20.8939 | 20.8939 | 0.0203 | | 21.4002 |
| Total | 40.3201 | 3.0383 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2727 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0101 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 36.6850 | 2.9048 | 71.1973 | 0.1816 | | 10.6944 | 10.6944 | | 10.6944 | 10.6944 | 1,311.3686 | 2,520.0000 | 3,831.3686 | 3.9108 | 0.0890 | 3,955.6613 |
| Landscaping | 0.3522 | 0.1336 | 11.5978 | 6.1000e-004 | | 0.0641 | 0.0641 | | 0.0641 | 0.0641 | | 20.8939 | 20.8939 | 0.0203 | | 21.4002 |
| Total | 40.3201 | 3.0383 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.3686 | 2,540.8939 | 3,852.2624 | 3.9310 | 0.0890 | 3,977.0615 |

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Reese Davidson Community Project - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

Reese Davidson Community Project

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Apartments Mid Rise | 140.00 | Dwelling Unit | 3.68 | 143,840.00 | 400 |
| High Turnover (Sit Down Restaurant) | 5.07 | 1000sqft | 0.12 | 5,065.00 | 0 |
| Enclosed Parking with Elevator | 436.00 | Space | 3.92 | 174,400.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|--------------------------------|----------------------------|--------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 33 |
| Climate Zone | 11 | | | Operational Year | 2023 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MWhr) | 702.44 | CH4 Intensity (lb/MWhr) | 0.029 | N2O Intensity (lb/MWhr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 140,000-SF default land use space for 140 units + 685-SF of associated affordable resident services + 3,155-SF of community arts/meeting space = 143,840-SF of "Apartments Mid Rise." 4,565-SF of retail/restaurant + 500-SF of outdoor seating = 5,065-SF of "High Turnover (Sit Down Restaurant)."

Construction Phase - Consistent with IS's proposed schedule (2021 - 2023).

Grading - Includes 9,100 cy of building material and soil export.

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

| Table Name | Column Name | Default Value | New Value |
|----------------------|-------------------|---------------|------------|
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 230.00 | 376.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 10.00 | 16.00 |
| tblConstructionPhase | PhaseEndDate | 3/23/2022 | 1/3/2023 |
| tblConstructionPhase | PhaseEndDate | 1/26/2022 | 10/3/2022 |
| tblConstructionPhase | PhaseEndDate | 1/27/2021 | 2/15/2021 |
| tblConstructionPhase | PhaseEndDate | 3/10/2021 | 4/23/2021 |
| tblConstructionPhase | PhaseEndDate | 2/23/2022 | 11/17/2022 |
| tblConstructionPhase | PhaseEndDate | 2/10/2021 | 3/9/2021 |
| tblConstructionPhase | PhaseStartDate | 2/24/2022 | 11/18/2022 |
| tblConstructionPhase | PhaseStartDate | 3/11/2021 | 4/24/2021 |
| tblConstructionPhase | PhaseStartDate | 2/11/2021 | 3/10/2021 |
| tblConstructionPhase | PhaseStartDate | 1/27/2022 | 10/4/2022 |
| tblConstructionPhase | PhaseStartDate | 1/28/2021 | 2/16/2021 |
| tblGrading | MaterialExported | 0.00 | 9,100.00 |
| tblLandUse | LandUseSquareFeet | 140,000.00 | 143,840.00 |

2.0 Emissions Summary

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------|----------------|----------------|----------------|-----------------|----------------|---------------|----------------|----------------|---------------|----------------|---------------|------------------------|------------------------|---------------|---------------|------------------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 3.3888 | 33.2554 | 22.3547 | 0.0405 | 0.1677 | 1.6601 | 1.8278 | 0.0445 | 1.5431 | 1.5876 | 0.0000 | 3,913.818 0 | 3,913.818 0 | 1.0632 | 0.0000 | 3,940.397 6 |
| 2021 | 3.9740 | 40.5558 | 24.2919 | 0.0577 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,901.157 6 | 5,901.157 6 | 1.1977 | 0.0000 | 5,929.623 8 |
| 2022 | 30.5280 | 20.1855 | 23.5023 | 0.0561 | 2.2490 | 0.8323 | 3.0813 | 0.6028 | 0.7829 | 1.3857 | 0.0000 | 5,541.045 1 | 5,541.045 1 | 0.7354 | 0.0000 | 5,559.428 9 |
| 2023 | 30.5060 | 1.3962 | 2.9023 | 6.4700e- 003 | 0.3912 | 0.0738 | 0.4650 | 0.1038 | 0.0736 | 0.1773 | 0.0000 | 630.3003 | 630.3003 | 0.0258 | 0.0000 | 630.9457 |
| Maximum | 30.5280 | 40.5558 | 24.2919 | 0.0577 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,901.157 6 | 5,901.157 6 | 1.1977 | 0.0000 | 5,929.623 8 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|---------|---------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2020 | 3.3888 | 33.2554 | 22.3547 | 0.0405 | 0.1677 | 1.6601 | 1.8278 | 0.0445 | 1.5431 | 1.5876 | 0.0000 | 3,913.8180 | 3,913.8180 | 1.0632 | 0.0000 | 3,940.3976 |
| 2021 | 3.9740 | 40.5558 | 24.2919 | 0.0577 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,901.1576 | 5,901.1576 | 1.1977 | 0.0000 | 5,929.6238 |
| 2022 | 30.5280 | 20.1855 | 23.5023 | 0.0561 | 2.2490 | 0.8323 | 3.0813 | 0.6028 | 0.7829 | 1.3857 | 0.0000 | 5,541.0451 | 5,541.0451 | 0.7354 | 0.0000 | 5,559.4289 |
| 2023 | 30.5060 | 1.3962 | 2.9023 | 6.4700e-003 | 0.3912 | 0.0738 | 0.4650 | 0.1038 | 0.0736 | 0.1773 | 0.0000 | 630.3003 | 630.3003 | 0.0258 | 0.0000 | 630.9457 |
| Maximum | 30.5280 | 40.5558 | 24.2919 | 0.0577 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 5,901.1576 | 5,901.1576 | 1.1977 | 0.0000 | 5,929.6238 |

[illegible]

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

2.2 Overall Operational**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|----------------|-----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|------------------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |
| Energy | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |
| Mobile | 2.4188 | 10.2636 | 28.7447 | 0.1048 | 9.0895 | 0.0820 | 9.1715 | 2.4324 | 0.0762 | 2.5086 | | 10,685.03 85 | 10,685.03 85 | 0.5501 | | 10,698.78 99 |
| Total | 42.8115 | 13.9417 | 111.9421 | 0.2910 | 9.0895 | 10.8906 | 19.9802 | 2.4324 | 10.8849 | 13.3173 | 1,311.368 6 | 14,018.57 41 | 15,329.94 27 | 4.4963 | 0.1035 | 15,473.20 34 |

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|----------------|-----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|------------------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |
| Energy | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |
| Mobile | 2.4188 | 10.2636 | 28.7447 | 0.1048 | 9.0895 | 0.0820 | 9.1715 | 2.4324 | 0.0762 | 2.5086 | | 10,685.03 85 | 10,685.03 85 | 0.5501 | | 10,698.78 99 |
| Total | 42.8115 | 13.9417 | 111.9421 | 0.2910 | 9.0895 | 10.8906 | 19.9802 | 2.4324 | 10.8849 | 13.3173 | 1,311.368 6 | 14,018.57 41 | 15,329.94 27 | 4.4963 | 0.1035 | 15,473.20 34 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 12/31/2020 | 2/15/2021 | 5 | 33 | |
| 2 | Site Preparation | Site Preparation | 2/16/2021 | 3/9/2021 | 5 | 16 | |
| 3 | Grading | Grading | 3/10/2021 | 4/23/2021 | 5 | 33 | |
| 4 | Building Construction | Building Construction | 4/24/2021 | 10/3/2022 | 5 | 376 | |
| 5 | Paving | Paving | 10/4/2022 | 11/17/2022 | 5 | 33 | |
| 6 | Architectural Coating | Architectural Coating | 11/18/2022 | 1/3/2023 | 5 | 33 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 16.5

Acres of Paving: 3.92

Residential Indoor: 291,276; Residential Outdoor: 97,092; Non-Residential Indoor: 7,598; Non-Residential Outdoor: 2,533; Striped Parking Area: 10,464 (Architectural Coating – sqft)

OffRoad Equipment

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Grading | Excavators | 1 | 8.00 | 158 | 0.38 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

Trips and VMT

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 1,138.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 176.00 | 44.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 35.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |
| Total | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2020**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0767 | 0.0544 | 0.6015 | 1.6700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 166.1131 | 166.1131 | 5.2400e-003 | | 166.2440 |
| Total | 0.0767 | 0.0544 | 0.6015 | 1.6700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 166.1131 | 166.1131 | 5.2400e-003 | | 166.2440 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | 0.0000 | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |
| Total | 3.3121 | 33.2010 | 21.7532 | 0.0388 | | 1.6587 | 1.6587 | | 1.5419 | 1.5419 | 0.0000 | 3,747.7049 | 3,747.7049 | 1.0580 | | 3,774.1536 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2020**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0767 | 0.0544 | 0.6015 | 1.6700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 166.1131 | 166.1131 | 5.2400e-003 | | 166.2440 |
| Total | 0.0767 | 0.0544 | 0.6015 | 1.6700e-003 | 0.1677 | 1.4000e-003 | 0.1691 | 0.0445 | 1.2900e-003 | 0.0458 | | 166.1131 | 166.1131 | 5.2400e-003 | | 166.2440 |

3.2 Demolition - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| Total | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| Total | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |
| Total | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.9449 | 3,747.9449 | 1.0549 | | 3,774.3174 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| Total | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| Total | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663 | 2.0445 | 20.1107 | 9.9307 | 1.8809 | 11.8116 | | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| Total | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4971 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |
| Total | 3.8882 | 40.4971 | 21.1543 | 0.0380 | 18.0663 | 2.0445 | 20.1107 | 9.9307 | 1.8809 | 11.8116 | 0.0000 | 3,685.6569 | 3,685.6569 | 1.1920 | | 3,715.4573 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |
| Total | 0.0858 | 0.0587 | 0.6629 | 1.9400e-003 | 0.2012 | 1.6300e-003 | 0.2028 | 0.0534 | 1.5000e-003 | 0.0549 | | 193.0052 | 193.0052 | 5.6800e-003 | | 193.1472 |

3.4 Grading - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.5835 | 0.0000 | 6.5835 | 3.3722 | 0.0000 | 3.3722 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.2903 | 24.7367 | 15.8575 | 0.0296 | | 1.1599 | 1.1599 | | 1.0671 | 1.0671 | | 2,871.9285 | 2,871.9285 | 0.9288 | | 2,895,1495 |
| Total | 2.2903 | 24.7367 | 15.8575 | 0.0296 | 6.5835 | 1.1599 | 7.7434 | 3.3722 | 1.0671 | 4.4393 | | 2,871.9285 | 2,871.9285 | 0.9288 | | 2,895,1495 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.4 Grading - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.2945 | 9.3637 | 2.2999 | 0.0264 | 0.6030 | 0.0288 | 0.6318 | 0.1653 | 0.0276 | 0.1929 | | 2,868.391 4 | 2,868.391 4 | 0.2051 | | 2,873.518 3 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| Total | 0.3660 | 9.4126 | 2.8523 | 0.0281 | 0.7706 | 0.0302 | 0.8008 | 0.2098 | 0.0288 | 0.2386 | | 3,029.229 1 | 3,029.229 1 | 0.2098 | | 3,034.474 3 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 6.5835 | 0.0000 | 6.5835 | 3.3722 | 0.0000 | 3.3722 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.2903 | 24.7367 | 15.8575 | 0.0296 | | 1.1599 | 1.1599 | | 1.0671 | 1.0671 | 0.0000 | 2,871.928 5 | 2,871.928 5 | 0.9288 | | 2,895.149 5 |
| Total | 2.2903 | 24.7367 | 15.8575 | 0.0296 | 6.5835 | 1.1599 | 7.7434 | 3.3722 | 1.0671 | 4.4393 | 0.0000 | 2,871.928 5 | 2,871.928 5 | 0.9288 | | 2,895.149 5 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.4 Grading - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.2945 | 9.3637 | 2.2999 | 0.0264 | 0.6030 | 0.0288 | 0.6318 | 0.1653 | 0.0276 | 0.1929 | | 2,868.391 4 | 2,868.391 4 | 0.2051 | | 2,873.518 3 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| Total | 0.3660 | 9.4126 | 2.8523 | 0.0281 | 0.7706 | 0.0302 | 0.8008 | 0.2098 | 0.0288 | 0.2386 | | 3,029.229 1 | 3,029.229 1 | 0.2098 | | 3,034.474 3 |

3.5 Building Construction - 2021**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | | 2,553.363 9 | 2,553.363 9 | 0.6160 | | 2,568.764 3 |
| Total | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | | 2,553.363 9 | 2,553.363 9 | 0.6160 | | 2,568.764 3 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1404 | 4.2631 | 1.2354 | 0.0110 | 0.2817 | 9.0200e-003 | 0.2907 | 0.0811 | 8.6200e-003 | 0.0897 | | 1,176.3203 | 1,176.3203 | 0.0759 | | 1,178.2188 |
| Worker | 0.8392 | 0.5740 | 6.4813 | 0.0189 | 1.9673 | 0.0159 | 1.9832 | 0.5217 | 0.0146 | 0.5364 | | 1,887.1619 | 1,887.1619 | 0.0555 | | 1,888.5502 |
| Total | 0.9796 | 4.8371 | 7.7167 | 0.0300 | 2.2490 | 0.0249 | 2.2739 | 0.6028 | 0.0233 | 0.6261 | | 3,063.4822 | 3,063.4822 | 0.1315 | | 3,066.7690 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | 0.0000 | 2,553.3639 | 2,553.3639 | 0.6160 | | 2,568.7643 |
| Total | 1.9009 | 17.4321 | 16.5752 | 0.0269 | | 0.9586 | 0.9586 | | 0.9013 | 0.9013 | 0.0000 | 2,553.3639 | 2,553.3639 | 0.6160 | | 2,568.7643 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2021**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1404 | 4.2631 | 1.2354 | 0.0110 | 0.2817 | 9.0200e-003 | 0.2907 | 0.0811 | 8.6200e-003 | 0.0897 | | 1,176.3203 | 1,176.3203 | 0.0759 | | 1,178.2188 |
| Worker | 0.8392 | 0.5740 | 6.4813 | 0.0189 | 1.9673 | 0.0159 | 1.9832 | 0.5217 | 0.0146 | 0.5364 | | 1,887.1619 | 1,887.1619 | 0.0555 | | 1,888.5502 |
| Total | 0.9796 | 4.8371 | 7.7167 | 0.0300 | 2.2490 | 0.0249 | 2.2739 | 0.6028 | 0.0233 | 0.6261 | | 3,063.4822 | 3,063.4822 | 0.1315 | | 3,066.7690 |

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1318 | 4.0515 | 1.1694 | 0.0109 | 0.2817 | 7.8900e-003 | 0.2896 | 0.0811 | 7.5400e-003 | 0.0887 | | 1,165.869 2 | 1,165.869 2 | 0.0733 | | 1,167.701 0 |
| Worker | 0.7882 | 0.5184 | 5.9695 | 0.0183 | 1.9673 | 0.0154 | 1.9827 | 0.5217 | 0.0142 | 0.5359 | | 1,820.842 2 | 1,820.842 2 | 0.0501 | | 1,822.095 7 |
| Total | 0.9200 | 4.5699 | 7.1389 | 0.0292 | 2.2490 | 0.0233 | 2.2723 | 0.6028 | 0.0217 | 0.6246 | | 2,986.711 5 | 2,986.711 5 | 0.1234 | | 2,989.796 7 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.333 6 | 2,554.333 6 | 0.6120 | | 2,569.632 2 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.333 6 | 2,554.333 6 | 0.6120 | | 2,569.632 2 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.1318 | 4.0515 | 1.1694 | 0.0109 | 0.2817 | 7.8900e-003 | 0.2896 | 0.0811 | 7.5400e-003 | 0.0887 | | 1,165.869 2 | 1,165.869 2 | 0.0733 | | 1,167.701 0 |
| Worker | 0.7882 | 0.5184 | 5.9695 | 0.0183 | 1.9673 | 0.0154 | 1.9827 | 0.5217 | 0.0142 | 0.5359 | | 1,820.842 2 | 1,820.842 2 | 0.0501 | | 1,822.095 7 |
| Total | 0.9200 | 4.5699 | 7.1389 | 0.0292 | 2.2490 | 0.0233 | 2.2723 | 0.6028 | 0.0217 | 0.6246 | | 2,986.711 5 | 2,986.711 5 | 0.1234 | | 2,989.796 7 |

3.6 Paving - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | | 2,207.660 3 | 2,207.660 3 | 0.7140 | | 2,225.510 4 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | | 2,207.660 3 | 2,207.660 3 | 0.7140 | | 2,225.510 4 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.6 Paving - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0672 | 0.0442 | 0.5088 | 1.5600e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 155.1854 | 155.1854 | 4.2700e-003 | | 155.2922 |
| Total | 0.0672 | 0.0442 | 0.5088 | 1.5600e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 155.1854 | 155.1854 | 4.2700e-003 | | 155.2922 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | 0.0000 | 2,207.6603 | 2,207.6603 | 0.7140 | | 2,225.5104 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.1028 | 11.1249 | 14.5805 | 0.0228 | | 0.5679 | 0.5679 | | 0.5225 | 0.5225 | 0.0000 | 2,207.6603 | 2,207.6603 | 0.7140 | | 2,225.5104 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.6 Paving - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0672 | 0.0442 | 0.5088 | 1.5600e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 155.1854 | 155.1854 | 4.2700e-003 | | 155.2922 |
| Total | 0.0672 | 0.0442 | 0.5088 | 1.5600e-003 | 0.1677 | 1.3100e-003 | 0.1690 | 0.0445 | 1.2100e-003 | 0.0457 | | 155.1854 | 155.1854 | 4.2700e-003 | | 155.2922 |

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| Total | 30.3712 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1567 | 0.1031 | 1.1871 | 3.6300e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 362.0993 | 362.0993 | 9.9700e-003 | | 362.3486 |
| Total | 0.1567 | 0.1031 | 1.1871 | 3.6300e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 362.0993 | 362.0993 | 9.9700e-003 | | 362.3486 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2045 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | 0.0000 | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |
| Total | 30.3712 | 1.4085 | 1.8136 | 2.9700e-003 | | 0.0817 | 0.0817 | | 0.0817 | 0.0817 | 0.0000 | 281.4481 | 281.4481 | 0.0183 | | 281.9062 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1567 | 0.1031 | 1.1871 | 3.6300e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 362.0993 | 362.0993 | 9.9700e-003 | | 362.3486 |
| Total | 0.1567 | 0.1031 | 1.1871 | 3.6300e-003 | 0.3912 | 3.0600e-003 | 0.3943 | 0.1038 | 2.8200e-003 | 0.1066 | | 362.0993 | 362.0993 | 9.9700e-003 | | 362.3486 |

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |
| Total | 30.3584 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2023**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1477 | 0.0932 | 1.0912 | 3.5000e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 348.8522 | 348.8522 | 8.9800e-003 | | 349.0766 |
| Total | 0.1477 | 0.0932 | 1.0912 | 3.5000e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 348.8522 | 348.8522 | 8.9800e-003 | | 349.0766 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 30.1667 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |
| Total | 30.3584 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2023**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.1477 | 0.0932 | 1.0912 | 3.5000e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 348.8522 | 348.8522 | 8.9800e-003 | | 349.0766 |
| Total | 0.1477 | 0.0932 | 1.0912 | 3.5000e-003 | 0.3912 | 2.9800e-003 | 0.3942 | 0.1038 | 2.7400e-003 | 0.1065 | | 348.8522 | 348.8522 | 8.9800e-003 | | 349.0766 |

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 2.4188 | 10.2636 | 28.7447 | 0.1048 | 9.0895 | 0.0820 | 9.1715 | 2.4324 | 0.0762 | 2.5086 | | 10,685.03 85 | 10,685.03 85 | 0.5501 | | 10,698.78 99 |
| Unmitigated | 2.4188 | 10.2636 | 28.7447 | 0.1048 | 9.0895 | 0.0820 | 9.1715 | 2.4324 | 0.0762 | 2.5086 | | 10,685.03 85 | 10,685.03 85 | 0.5501 | | 10,698.78 99 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|-------------------------------------|-------------------------|----------|----------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 931.00 | 894.60 | 820.40 | 3,109,608 | 3,109,608 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | | |
| High Turnover (Sit Down Restaurant) | 644.01 | 802.14 | 667.77 | 913,094 | 913,094 |
| Total | 1,575.01 | 1,696.74 | 1,488.17 | 4,022,702 | 4,022,702 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Enclosed Parking with Elevator | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| High Turnover (Sit Down) | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |

4.4 Fleet Mix

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |
| Enclosed Parking with Elevator | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |
| High Turnover (Sit Down Restaurant) | 0.545842 | 0.044768 | 0.205288 | 0.119317 | 0.015350 | 0.006227 | 0.020460 | 0.031333 | 0.002546 | 0.002133 | 0.005184 | 0.000692 | 0.000862 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |
| NaturalGas Unmitigated | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 3535.26 | 0.0381 | 0.3258 | 0.1386 | 2.0800e-003 | | 0.0263 | 0.0263 | | 0.0263 | 0.0263 | | 415.9135 | 415.9135 | 7.9700e-003 | 7.6300e-003 | 418.3851 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 3202.19 | 0.0345 | 0.3139 | 0.2637 | 1.8800e-003 | | 0.0239 | 0.0239 | | 0.0239 | 0.0239 | | 376.7283 | 376.7283 | 7.2200e-003 | 6.9100e-003 | 378.9670 |
| Total | | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Mid Rise | 3.53526 | 0.0381 | 0.3258 | 0.1386 | 2.0800e-003 | | 0.0263 | 0.0263 | | 0.0263 | 0.0263 | | 415.9135 | 415.9135 | 7.9700e-003 | 7.6300e-003 | 418.3851 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| High Turnover (Sit Down Restaurant) | 3.20219 | 0.0345 | 0.3139 | 0.2637 | 1.8800e-003 | | 0.0239 | 0.0239 | | 0.0239 | 0.0239 | | 376.7283 | 376.7283 | 7.2200e-003 | 6.9100e-003 | 378.9670 |
| Total | | 0.0727 | 0.6397 | 0.4024 | 3.9600e-003 | | 0.0502 | 0.0502 | | 0.0502 | 0.0502 | | 792.6417 | 792.6417 | 0.0152 | 0.0145 | 797.3520 |

6.0 Area Detail

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------------|----------------|----------------|--------|--------|----------------|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |
| Unmitigated | 40.3201 | 3.0384 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|------------------------|------------------------|------------------------|---------------|---------------|------------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2727 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0101 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 36.6850 | 2.9048 | 71.1973 | 0.1816 | | 10.6944 | 10.6944 | | 10.6944 | 10.6944 | 1,311.368 6 | 2,520.000 0 | 3,831.368 6 | 3.9108 | 0.0890 | 3,955.661 3 |
| Landscaping | 0.3522 | 0.1336 | 11.5978 | 6.1000e-004 | | 0.0641 | 0.0641 | | 0.0641 | 0.0641 | | 20.8939 | 20.8939 | 0.0203 | | 21.4002 |
| Total | 40.3201 | 3.0383 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.368 6 | 2,540.893 9 | 3,852.262 4 | 3.9310 | 0.0890 | 3,977.061 5 |

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|---------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.2727 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0101 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 36.6850 | 2.9048 | 71.1973 | 0.1816 | | 10.6944 | 10.6944 | | 10.6944 | 10.6944 | 1,311.3686 | 2,520.0000 | 3,831.3686 | 3.9108 | 0.0890 | 3,955.6613 |
| Landscaping | 0.3522 | 0.1336 | 11.5978 | 6.1000e-004 | | 0.0641 | 0.0641 | | 0.0641 | 0.0641 | | 20.8939 | 20.8939 | 0.0203 | | 21.4002 |
| Total | 40.3201 | 3.0383 | 82.7950 | 0.1822 | | 10.7585 | 10.7585 | | 10.7585 | 10.7585 | 1,311.3686 | 2,540.8939 | 3,852.2624 | 3.9310 | 0.0890 | 3,977.0615 |

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Reese Davidson Community Project - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

Attachment 3

Start date and time 10/13/20 16:02:10

AERSCREEN 16216

Reese Davidson Community Project Construction

Reese Davidson Community Project Construction

----- DATA ENTRY VALIDATION -----

METRIC

ENGLISH

** AREADATA **

Emission Rate: 0.214E-02 g/s 0.170E-01 lb/hr

Area Height: 3.00 meters 9.84 feet

Area Source Length: 215.00 meters 705.38 feet

Area Source Width: 50.00 meters 164.04 feet

Vertical Dimension: 1.50 meters 4.92 feet

Model Mode: URBAN

Population: 3990000

Dist to Ambient Air: 1.0 meters 3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u^*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:

2020.10.13_ReeseDavidsonCommunity_Construction.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

| Season | Albedo | Bo | zo |
|--------|--------|------|-------|
| Winter | 0.35 | 1.50 | 1.000 |
| Spring | 0.14 | 1.00 | 1.000 |
| Summer | 0.16 | 2.00 | 1.000 |
| Autumn | 0.18 | 2.00 | 1.000 |

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 10/13/20 16:03:02

Running AERMOD

Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Spring

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

***** WARNING MESSAGES *****

*** NONE ***

FLOWSECTOR ended 10/13/20 16:03:09

REFINE started 10/13/20 16:03:09

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

REFINE ended 10/13/20 16:03:11

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

Ending date and time 10/13/20 16:03:13

| Concentration | | | Distance | Elevation | Diag | Season/Month | | | Zo sector | | Date | |
|---------------|-------------|--------|----------|-----------|-------|--------------|-----|--------|-----------|--------|----------|------|
| H0 | U* | W* | DT/DZ | ZICNV | ZIMCH | M-O | LEN | Z0 | BOWEN | ALBEDO | REF | WS |
| REF | TA | HT | | | | | | | | | | HT |
| | 0.40477E+01 | | 1.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.42620E+01 | | 25.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.44356E+01 | | 50.00 | 0.00 | 5.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.45802E+01 | | 75.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.46939E+01 | | 100.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| * | 0.47258E+01 | | 108.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.32284E+01 | | 125.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.20460E+01 | | 150.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14427E+01 | | 175.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.11458E+01 | | 200.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.94441E+00 | | 225.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.79866E+00 | | 250.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.68953E+00 | | 275.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.60369E+00 | | 300.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.53535E+00 | | 325.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.47980E+00 | | 350.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |

| | | | | | | | | | | | |
|-------|-------------|--------|-------|-------|-----|--------|-------|----------|------|------|------|
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.43383E+00 | 375.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.39503E+00 | 400.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.36188E+00 | 425.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.33338E+00 | 450.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.30864E+00 | 475.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.28697E+00 | 500.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.26783E+00 | 525.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.25080E+00 | 550.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.23558E+00 | 575.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.22192E+00 | 600.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.20959E+00 | 625.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.19839E+00 | 650.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.18815E+00 | 675.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.17880E+00 | 700.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.17024E+00 | 725.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.16237E+00 | 750.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.15511E+00 | 775.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |

| | | | | | | | | | | | |
|-------|-------------|--------|---------|-------|------|-----|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.14840E+00 | | 800.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.14218E+00 | | 825.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13640E+00 | | 850.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13102E+00 | | 875.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12599E+00 | | 900.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12130E+00 | | 925.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.11690E+00 | | 950.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.11277E+00 | | 975.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.10889E+00 | | 1000.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.10524E+00 | | 1025.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.10179E+00 | | 1050.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.98538E-01 | | 1075.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.95454E-01 | | 1100.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.92539E-01 | | 1125.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.89776E-01 | | 1150.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | | | | | | | | | | |

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|------------------------------------|---------|------|----------------|--------|-------|----------|
| 0.84656E-01 | 1200.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.82282E-01 | 1225.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.80023E-01 | 1250.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.77869E-01 | 1275.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.75814E-01 | 1300.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.73852E-01 | 1325.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.71982E-01 | 1350.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.70192E-01 | 1375.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.68479E-01 | 1400.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.66836E-01 | 1425.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.65260E-01 | 1450.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.63748E-01 | 1475.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.62295E-01 | 1500.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.60899E-01 | 1525.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.59556E-01 | 1550.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.58263E-01 | 1575.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.57019E-01 | 1600.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |

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|-------|-------------|---------|-------|-------|-----|--------|-------|----------|------|------|------|--|
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.55819E-01 | 1625.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.54663E-01 | 1650.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.53548E-01 | 1675.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.52471E-01 | 1700.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.51431E-01 | 1725.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.50427E-01 | 1750.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.49456E-01 | 1775.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.48517E-01 | 1800.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.47608E-01 | 1825.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.46729E-01 | 1850.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.45877E-01 | 1875.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.45052E-01 | 1900.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.44252E-01 | 1924.99 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.43476E-01 | 1950.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.42724E-01 | 1975.00 | 0.00 | | | | | | | | | |

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|-------|-------------|--------|---------|-------|------|------|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.40597E-01 | | 2050.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.39928E-01 | | 2075.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.39279E-01 | | 2100.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.38647E-01 | | 2125.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.38033E-01 | | 2150.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.37436E-01 | | 2175.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.36854E-01 | | 2200.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.36289E-01 | | 2224.99 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.35738E-01 | | 2250.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.35201E-01 | | 2275.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.34678E-01 | | 2300.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.34169E-01 | | 2325.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.33673E-01 | | 2350.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.33189E-01 | | 2375.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.32717E-01 | | 2400.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | | | | | | | | | | | |

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|------------------------------------|----------------|------|------|--------|-------|----------|
| 0.31807E-01 | 2450.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.31367E-01 | 2475.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.30939E-01 | 2500.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.30520E-01 | 2525.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.30111E-01 | 2550.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.29711E-01 | 2575.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.29321E-01 | 2600.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.28939E-01 | 2625.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.28566E-01 | 2650.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.28201E-01 | 2675.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.27844E-01 | 2700.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.27495E-01 | 2725.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.27153E-01 | 2750.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.26819E-01 | 2775.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.26491E-01 | 2800.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.26171E-01 | 2825.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.25857E-01 | 2850.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |

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|-------|-------------|---------|-------|-------|-----|--------|-------|----------|------|------|------|--|
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.25550E-01 | 2875.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.25249E-01 | 2900.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.24954E-01 | 2925.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.24665E-01 | 2950.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.24381E-01 | 2975.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.24104E-01 | 3000.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.23831E-01 | 3025.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.23564E-01 | 3050.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.23302E-01 | 3075.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.23046E-01 | 3100.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.22793E-01 | 3125.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.22546E-01 | 3150.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.22304E-01 | 3174.99 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.22065E-01 | 3200.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.21832E-01 | 3225.00 | 0.00 | 0.0 | | | | | | | | |

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|-------|-------------|--------|---------|-------|------|------|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.21155E-01 | | 3300.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.20938E-01 | | 3325.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.20724E-01 | | 3350.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.20514E-01 | | 3375.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.20308E-01 | | 3400.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.20106E-01 | | 3425.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.19907E-01 | | 3450.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.19711E-01 | | 3475.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.19518E-01 | | 3500.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.19329E-01 | | 3525.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.19143E-01 | | 3550.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.18960E-01 | | 3575.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.18780E-01 | | 3600.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.18603E-01 | | 3625.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.18429E-01 | | 3650.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | | | | | | | | | | | |

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|------------------------------------|----------------|------|------|--------|-------|----------|
| 0.18089E-01 | 3700.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.17923E-01 | 3725.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.17760E-01 | 3750.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.17599E-01 | 3775.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.17441E-01 | 3800.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.17285E-01 | 3825.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.17131E-01 | 3850.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.16980E-01 | 3875.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.16832E-01 | 3900.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.16685E-01 | 3925.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.16541E-01 | 3950.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.16399E-01 | 3975.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.16258E-01 | 4000.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.16120E-01 | 4025.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.15984E-01 | 4050.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.15850E-01 | 4075.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.15718E-01 | 4100.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |

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|-------|-------------|--------|---------|-------|------|------|-----|--------|------|-------|----------|------|
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.15588E-01 | | 4125.00 | | 0.00 | 5.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.15460E-01 | | 4150.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.15333E-01 | | 4175.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.15208E-01 | | 4200.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.15085E-01 | | 4225.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14964E-01 | | 4250.00 | | 0.00 | 15.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14845E-01 | | 4275.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14727E-01 | | 4300.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14610E-01 | | 4325.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14496E-01 | | 4350.00 | | 0.00 | 10.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14382E-01 | | 4375.00 | | 0.00 | 10.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14271E-01 | | 4400.00 | | 0.00 | 10.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14160E-01 | | 4425.00 | | 0.00 | 5.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.14052E-01 | | 4450.00 | | 0.00 | 0.0 | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.13944E-01 | | 4475.00 | | 0.00 | | | | | | | |

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|-------|-------------|--------|---------|-------|------|-----|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13631E-01 | | 4550.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13529E-01 | | 4575.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13428E-01 | | 4600.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13329E-01 | | 4625.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13231E-01 | | 4650.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13135E-01 | | 4675.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.13039E-01 | | 4700.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12945E-01 | | 4725.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12852E-01 | | 4750.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12760E-01 | | 4775.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12669E-01 | | 4800.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12579E-01 | | 4825.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12491E-01 | | 4850.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12403E-01 | | 4875.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.12317E-01 | | 4900.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0 | | | | | | | | | | |

| | | | | | | |
|------------------------------------|----------------|------|------|--------|-------|----------|
| 0.12147E-01 | 4950.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.12063E-01 | 4975.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.11981E-01 | 5000.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |

Start date and time 10/13/20 16:03:15

AERSCREEN 16216

Reese Davidson Community Operation

Reese Davidson Community Operation

----- DATA ENTRY VALIDATION -----

METRIC

ENGLISH

** AREADATA **

Emission Rate: 0.474E-02 g/s 0.376E-01 lb/hr

Area Height: 3.00 meters 9.84 feet

Area Source Length: 215.00 meters 705.38 feet

Area Source Width: 50.00 meters 164.04 feet

Vertical Dimension: 1.50 meters 4.92 feet

Model Mode: URBAN

Population: 3990000

Dist to Ambient Air: 1.0 meters 3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u^*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:

2020.10.13_ReeseDavidsonCommunity_Operation.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

| Season | Albedo | Bo | zo |
|--------|--------|------|-------|
| Winter | 0.35 | 1.50 | 1.000 |
| Spring | 0.14 | 1.00 | 1.000 |
| Summer | 0.16 | 2.00 | 1.000 |
| Autumn | 0.18 | 2.00 | 1.000 |

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR started 10/13/20 16:04:04

Running AERMOD

Processing Winter

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Spring

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Summer

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

***** WARNING MESSAGES *****

*** NONE ***

Running AERMOD

Processing Autumn

Processing surface roughness sector 1

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

***** WARNING MESSAGES *****

*** NONE ***

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

***** WARNING MESSAGES *****

*** NONE ***

FLOWSECTOR ended 10/13/20 16:04:11

REFINE started 10/13/20 16:04:11

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

***** WARNING MESSAGES *****

*** NONE ***

REFINE ended 10/13/20 16:04:13

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

Ending date and time 10/13/20 16:04:15

| Concentration | | | Distance | Elevation | Diag | Season/Month | | | Zo sector | | Date | |
|---------------|-------------|--------|----------|-----------|-------|--------------|-----|--------|-----------|--------|----------|------|
| H0 | U* | W* | DT/DZ | ZICNV | ZIMCH | M-O | LEN | Z0 | BOWEN | ALBEDO | REF | WS |
| REF | TA | HT | | | | | | | | | | HT |
| | 0.89654E+01 | | 1.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.94402E+01 | | 25.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.98246E+01 | | 50.00 | 0.00 | 5.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.10145E+02 | | 75.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.10397E+02 | | 100.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| * | 0.10467E+02 | | 108.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.71508E+01 | | 125.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.45318E+01 | | 150.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.31956E+01 | | 175.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.25378E+01 | | 200.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.20918E+01 | | 225.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.17690E+01 | | 250.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.15273E+01 | | 275.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.13372E+01 | | 300.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.11858E+01 | | 325.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.10627E+01 | | 350.00 | 0.00 | 0.0 | | | Winter | | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |

| | | | | | | | | | | | |
|-------|--------------|-------------|------|-----|----------------|--------|-------|----------|------|--|--|
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.96092E+00 | 375.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.87497E+00 | 400.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.80156E+00 | 425.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.73843E+00 | 450.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.68362E+00 | 475.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.63563E+00 | 500.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.59325E+00 | 525.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.55551E+00 | 550.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.52181E+00 | 575.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.49155E+00 | 600.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.46424E+00 | 625.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.43942E+00 | 650.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.41675E+00 | 675.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.39605E+00 | 700.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.37707E+00 | 725.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.35963E+00 | 750.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |
| -1.30 | 0.043 -9.000 | 0.020 -999. | 21. | | 6.0 1.000 1.50 | | 0.35 | 0.50 | 10.0 | | |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.34356E+00 | 775.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | |

| | | | | | | | | | | | |
|-------|-------------|--------|---------|-------|------|-----|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.32869E+00 | | 800.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.31492E+00 | | 825.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.30212E+00 | | 850.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.29020E+00 | | 875.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.27907E+00 | | 900.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.26867E+00 | | 925.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.25893E+00 | | 950.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.24979E+00 | | 975.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.24119E+00 | | 1000.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.23310E+00 | | 1025.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.22547E+00 | | 1050.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.21826E+00 | | 1075.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.21143E+00 | | 1100.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.20497E+00 | | 1125.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.19885E+00 | | 1150.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | | | | | | | | | | |

| | | | | | | |
|------------------------------------|---------|------|----------------|--------|-------|----------|
| 0.18751E+00 | 1200.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.18225E+00 | 1225.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.17725E+00 | 1250.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.17248E+00 | 1275.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.16793E+00 | 1300.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.16358E+00 | 1325.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.15944E+00 | 1350.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.15547E+00 | 1375.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.15168E+00 | 1400.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.14804E+00 | 1425.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.14455E+00 | 1450.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.14120E+00 | 1475.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.13798E+00 | 1500.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.13489E+00 | 1525.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.13192E+00 | 1550.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.12905E+00 | 1575.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 2.0 | | | | | | |
| 0.12630E+00 | 1600.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | | | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 |

| | | | | | | | | |
|-------|-------|-------------|---------|-------|------|--------|-------|----------|
| 310.0 | 2.0 | 0.12364E+00 | 1625.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.12108E+00 | 1650.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.11861E+00 | 1675.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.11622E+00 | 1700.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.11392E+00 | 1725.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.11169E+00 | 1750.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.10954E+00 | 1775.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.10746E+00 | 1800.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.10545E+00 | 1825.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.10350E+00 | 1850.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.10162E+00 | 1875.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.99788E-01 | 1900.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.98017E-01 | 1924.99 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.96298E-01 | 1950.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.94632E-01 | 1975.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.93015E-01 | 2000.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 |
| 0.35 | 0.50 | 10.0 | | | | | | |
| 310.0 | 2.0 | 0.91446E-01 | 2025.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |

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|-------|-------------|--------|---------|-------|------|------|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.89921E-01 | | 2050.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.88440E-01 | | 2075.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.87001E-01 | | 2100.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.85602E-01 | | 2125.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.84242E-01 | | 2150.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.82919E-01 | | 2175.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.81631E-01 | | 2200.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.80378E-01 | | 2224.99 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.79158E-01 | | 2250.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.77969E-01 | | 2275.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.76811E-01 | | 2300.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.75683E-01 | | 2325.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.74584E-01 | | 2350.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.73512E-01 | | 2375.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.72466E-01 | | 2400.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | | | | | | | | | | | |

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|------------------------------------|----------------|------|------|--------|-------|----------|
| 0.70450E-01 | 2450.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.69478E-01 | 2475.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.68528E-01 | 2500.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.67601E-01 | 2525.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.66694E-01 | 2550.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.65809E-01 | 2575.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.64944E-01 | 2600.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.64099E-01 | 2625.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.63272E-01 | 2650.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.62464E-01 | 2675.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.61673E-01 | 2700.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.60900E-01 | 2725.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.60143E-01 | 2750.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.59403E-01 | 2775.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.58677E-01 | 2800.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.57968E-01 | 2825.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.57273E-01 | 2850.00 | 0.00 | 10.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |

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|-------|-------------|---------|-------|-------|-----|--------|-------|----------|------|------|------|--|
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.56592E-01 | 2875.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.55925E-01 | 2900.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.55272E-01 | 2925.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.54631E-01 | 2950.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.54004E-01 | 2975.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.53389E-01 | 3000.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.52786E-01 | 3025.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.52194E-01 | 3050.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.51614E-01 | 3075.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.51045E-01 | 3100.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.50487E-01 | 3125.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.49939E-01 | 3150.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.49402E-01 | 3174.99 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.48874E-01 | 3199.99 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.48356E-01 | 3225.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.47848E-01 | 3250.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.47348E-01 | 3275.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |

| | | | | | | | | | | | |
|-------|-------------|--------|---------|-------|------|------|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.46858E-01 | | 3300.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.46377E-01 | | 3325.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.45904E-01 | | 3350.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.45439E-01 | | 3375.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.44982E-01 | | 3400.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.44533E-01 | | 3425.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.44092E-01 | | 3450.00 | | 0.00 | 15.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.43659E-01 | | 3475.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.43232E-01 | | 3500.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.42813E-01 | | 3525.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.42401E-01 | | 3550.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.41996E-01 | | 3575.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.41597E-01 | | 3600.00 | | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.41205E-01 | | 3625.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.40819E-01 | | 3650.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | | | | | | | | | | | |

| | | | | | | |
|------------------------------------|----------------|------|------|--------|-------|----------|
| 0.40066E-01 | 3700.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.39699E-01 | 3725.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.39337E-01 | 3750.00 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.38981E-01 | 3775.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.38630E-01 | 3800.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.38285E-01 | 3825.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.37946E-01 | 3849.99 | 0.00 | 15.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.37611E-01 | 3875.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.37281E-01 | 3900.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.36957E-01 | 3925.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.36637E-01 | 3950.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.36322E-01 | 3975.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.36012E-01 | 4000.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.35706E-01 | 4025.00 | 0.00 | 5.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.35405E-01 | 4050.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.35108E-01 | 4075.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.34815E-01 | 4100.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |

| | | | | | | | | | | | | |
|-------|-------------|---------|-------|-------|-----|--------|-------|----------|------|------|------|--|
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.34527E-01 | 4125.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.34243E-01 | 4150.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.33962E-01 | 4175.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.33686E-01 | 4200.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.33414E-01 | 4225.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.33145E-01 | 4250.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.32880E-01 | 4275.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.32619E-01 | 4300.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.32361E-01 | 4325.00 | 0.00 | 5.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.32107E-01 | 4350.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.31856E-01 | 4375.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.31609E-01 | 4400.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.31365E-01 | 4425.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.31124E-01 | 4450.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.30886E-01 | 4475.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.30652E-01 | 4500.00 | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | | | | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 | |
| 310.0 | 2.0 | | | | | | | | | | | |
| | 0.30420E-01 | 4525.00 | 0.00 | 10.0 | | Winter | 0-360 | 10011001 | | | | |

| | | | | | | | | | | | |
|-------|-------------|--------|---------|-------|------|-----|-------|--------|-------|----------|------|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.30192E-01 | | 4550.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.29966E-01 | | 4575.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.29744E-01 | | 4600.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.29524E-01 | | 4625.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.29307E-01 | | 4650.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.29093E-01 | | 4675.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.28881E-01 | | 4700.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.28672E-01 | | 4725.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.28466E-01 | | 4750.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.28262E-01 | | 4775.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.28061E-01 | | 4800.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.27863E-01 | | 4825.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.27666E-01 | | 4850.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.27472E-01 | | 4875.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 | 10.0 |
| 310.0 | 2.0 | | | | | | | | | | |
| | 0.27281E-01 | | 4900.00 | | 0.00 | 0.0 | | Winter | 0-360 | 10011001 | |
| -1.30 | 0 | | | | | | | | | | |

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|------------------------------------|----------------|------|------|--------|-------|----------|
| 0.26904E-01 | 4950.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.26720E-01 | 4975.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |
| 0.26537E-01 | 5000.00 | 0.00 | 0.0 | Winter | 0-360 | 10011001 |
| -1.30 0.043 -9.000 0.020 -999. 21. | 6.0 1.000 1.50 | 0.35 | 0.50 | 10.0 | | |
| 310.0 2.0 | | | | | | |

Venice Sea Level Rise Vulnerability Assessment

Prepared For:



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200 N Spring St
Los Angeles, CA 90012

Prepared By:



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25 May 2018
M&N File: 9871

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APPENDICES

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Acronyms & Abbreviations

| Acronym/Abbreviation | Term |
|----------------------|---|
| BFE | Base Flood Elevation |
| CCC | California Coastal Commission |
| CDIP | Coastal Data Information Program |
| CEQA | California Environmental Quality Act |
| cm | centimeter |
| CNDDDB | California Natural Diversity Database |
| COAST | Coastal One-line Assimilated Simulation Tool |
| CoSMoS | Coastal Storm Modeling System |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| ft | feet |
| GIS | Geographic Information System |
| gpm | Gallons per minute |
| H++ | Extreme SLR scenario due to rapid Antarctic ice sheet mass loss (Sweet et al, 2017) |
| HD | Historic District |
| in | inch |
| IP | Implementation Plan |
| LA | Los Angeles |
| LAUSD | Los Angeles Unified School District |
| LCP | Local Coastal Program |
| LUP | Land Use Plan |
| m | meter |
| mcy | million cubic yards |
| M&N | Moffatt & Nichol |
| MHHW | Mean Higher High Water |
| MLLW | Mean Lower Low Water |
| MSL | Mean Sea Level |
| NAVD 88 | North American Vertical Datum of 1988 |
| NOAA | National Oceanic and Atmospheric Administration |
| NRC | National Research Center |
| OCOF | Our Coast, Our Future |
| OPC | Ocean Protection Council |
| PFIRM | Preliminary Flood Insurance Rate Map |
| PP | Pumping Plant |
| SLR | Sea Level Rise |
| SVI | Social Vulnerability Index |
| TAG | Technical Advisory Group |
| USACE | United States Army Corps of Engineers |

| | |
|------|---------------------------------|
| USGS | United States Geological Survey |
| VCA | Venice Canals Association |
| VA | Vulnerability Assessment |
| VAPP | Venice Auxiliary Pumping Plant |
| VSPP | Venice Stormwater Pumping Plant |
| VPP | Venice Pumping Plant |
| yr | year |

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1. Introduction

This vulnerability assessment presents a Venice-specific sea level rise (SLR) analysis to support an update to the city's Local Coastal Program in the Venice Coastal Zone. The assessment evaluates the degree to which important community assets are susceptible to, and unable to, accommodate adverse effects of projected SLR. The assessment identifies the assets that are likely to be impacted and the causes and components of each asset's vulnerability. The findings of this study will inform policy and adaptation efforts for the Venice area to be incorporated into an updated Local Coastal Program (LCP).

1.1 Scope of Work

The consultant team hired by the City of Los Angeles to assist with the LCP update consists of Dudek (prime), Moffatt & Nichol (M&N) and Kearns & West. M&N's role on the project team is to prepare a Sea Level Rise Vulnerability Assessment following the scope of work defined in Task 1 of the final work program for Coastal Commission Grant LCP 14-09. A brief description of Task 1 is provided below:

- 1.1. Identify five (5) SLR scenarios with input from the project team and based upon information available in the regional studies. These scenarios will be selected to provide a basis for understanding how hazards and vulnerabilities change with each increment of SLR.
- 1.2. M&N will evaluate previous studies and published SLR hazard data to understand the assumptions and limitations of the data, model(s), or method(s) used and whether said limitations or assumptions lead to overestimation, underestimation, or unknown impacts on the mapped hazard zones in Venice.
- 1.3. M&N will compile spatial data on City assets and resources to create a GIS basemap from which the various coastal hazards will be overlain. These maps will provide the basis for a Venice vulnerability assessment (VA) and provide a valuable resource for City staff to communicate the potential coastal hazards to stakeholders, resource agencies, and the public.
- 1.4. M&N will prepare a memorandum to summarize the previous studies and identify how SLR hazard information available from previous studies can be applied in the Venice VA. This memorandum will discuss the assumptions and limitations of the data, model, or method and whether said limitations or assumptions lead to overestimation, underestimation, or unknown impacts on the mapped vulnerabilities.
- 1.5. M&N will create a qualitative and quantitative assessment of consequences/risks/impacts on coastal resources.
- 1.6. M&N will prepare a Venice VA that will build from the previous regional SLR studies. Results of the Venice VA will inform preparation of the Land Use Plan (LUP) Coastal Hazards policies and Implementation Plan (IP) standards by identifying "triggers" at which significant planning areas, assets, or coastal resources could be impacted by SLR. The consequence of the identified impacts will also inform the policies and programs to minimize risk to important infrastructure, basic services, and valuable resources. The vulnerabilities and consequences identified in this assessment will help prioritize planning efforts to account for the urgency (time horizon) of each impact, and the importance of each impact on the community and resources. M&N will prepare

a matrix that evaluates potential risks and impacts of SLR to asset categories by rating and describing the exposure, sensitivity, and adaptive capacity.

- 1.7. M&N will develop presentation materials in coordination with the project team and present the findings of the Venice VA to the Technical Advisory Group (TAG) and to the Community at two public workshops.

1.2 Vulnerability Assessment Approach

The purpose of this assessment is to identify potential significant physical impacts and their various externalities to better understand current and future local hazard conditions that influence local resources, as defined for the study area. A resource's vulnerability to SLR is a product of its exposure to hazards (potential damage or loss of function), its sensitivity to said hazards, and its adaptive capacity (ability to restore function or avoid damage). Resiliency can come from increasing an asset's adaptive capacity by reducing exposure to hazards (e.g. through protection). Some of the resources identified in this study have reduced exposure to hazards, such as inland flooding because of protective measures such as tide gates. In the case of these protective resources that have an unknown potential for failure, this assessment looks at an asset's exposure to SLR in the case of a failure of these protective resources. This approach allows for a greater understanding of the impact of protective resources on the coastal zone's vulnerability and resiliency to SLR.

The approach for this study is as follows:

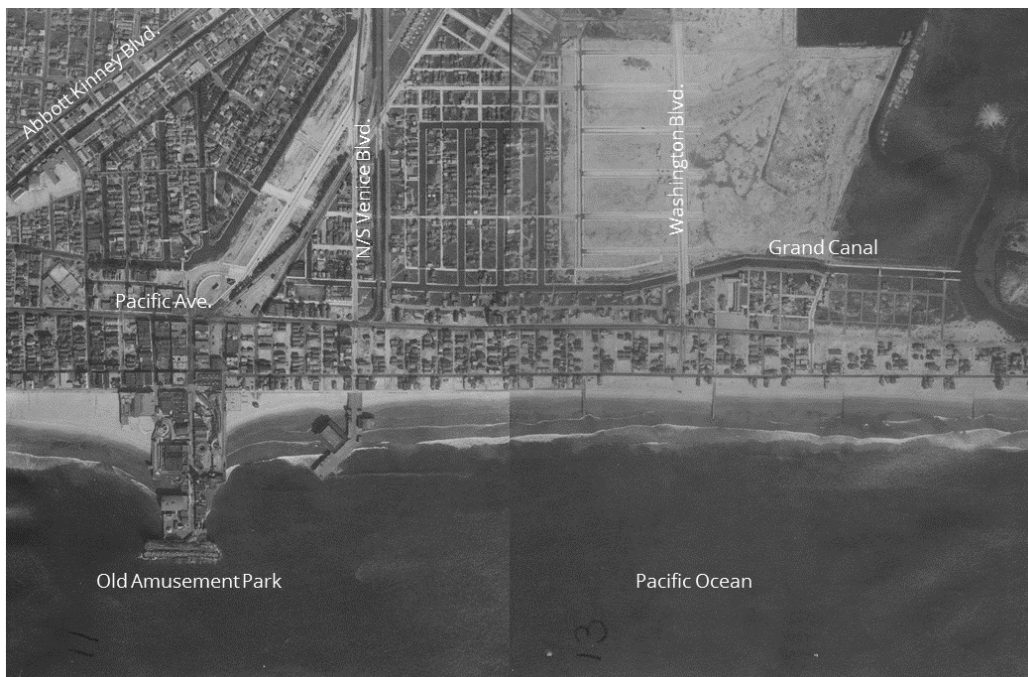
1. Identify coastal resources within the Venice coastal zone.
2. Choose appropriate SLR scenarios that allow for the identification of critical thresholds, as well as short-term and long-term issues.
3. Use the best available models to understand the type, extent, and location of physical hazards to identified resources.
4. Assess each resource's vulnerability by considering exposure, sensitivity, and adaptive capacity.

1.3 Background

Venice was founded as a resort town in 1905 and was an independent city until it merged with the City of Los Angeles in 1926. The town's founder, Abbot Kinney, dredged several canals in the former saltwater marshes of an area known as "La Ballona" (see Figure 1.1) to drain areas for development. Some historic canals were filled after it was decided to turn them into streets (Masters, 2013). The Venice Canals are the only remaining canals in the community today and are a popular attraction for locals and visitors to the area (VCA, 2009). Tourism has been a driving economic engine for the area since its inception, with an amusement pier, shown in Figure 1.1 and Figure 1.2, functioning as the center of beachfront activity in the 1920s (Stanton, 1998). The amusement pier was later demolished in the 1940s, but the rock breakwater along the seaward edge of the pier was left intact and continues to function as an effective sand retention structure.



*Figure 1.1: Historic Aerial of Venice, August 1927
(Special Research Collections, University of California Santa Barbara Library)*



*Figure 1.2: Historic Aerial of Venice, January 1928
(Special Research Collections, University of California Santa Barbara Library)*

1.4 Coastal Setting

The Venice coastal zone sits within the historic Ballona Marsh and is characterized by its wide and sandy beaches backed by beachfront development. It's important to note that prior to the 1930s beaches were much narrower than they are today. Much of the coastal development shown in Figure 1.1 and Figure 1.2, which lined the back beach, were subject to coastal erosion and flooding during extreme storm events. Artificial sand nourishments between 1945 and 1960 placed over 14 million cubic yards (mcy) of sand on Venice beach, which widened the beach by ~500 feet (Orme et al, 2011). Most of the sand came from excavation of the coastal dunes during construction of the Hyperion Treatment Plant. In addition to these large historic nourishments, coastal structures like the Santa Monica and Venice breakwaters, rock groin north of Venice Pier and the Marina del Rey Jetty have stabilized the artificially-widened beaches. The effect of these structures on the shoreline configuration is evident in Figure 1.3, especially near the Venice breakwater.



Figure 1.3: Oblique Aerial of modern Venice Beach (Perry, 2012)

Venice and nearby Marina del Rey and Playa del Rey are among the lowest lying elevations along Santa Monica Bay (Figure 1.4). Throughout this report elevations are referenced to North American Vertical Datum of 1988 (NAVD88) unless otherwise noted. Elevations near the beach range from 15 feet to 25 feet (NAVD88), giving way to the Ballona Lagoon in the south and a low-lying area approximately bounded by Abbot Kinney Boulevard, Pacific Avenue, and Washington Boulevard with elevations ranging from 3 feet to 9 feet (NAVD88) (Figure 1.5). The canals have access to the ocean via Grand Canal and Ballona Lagoon, and have water levels managed by two tide gates.

The Venice Canals Historic District (HD) is known for its picturesque man-made canals and homes. The HD was placed on the National Register of Historic Places in 1982 (VCA, 2009). The Venice Canals Association (VCA) was established in 1976 and works with city officials to “protect, preserve, and enhance” the district and includes property owners, residents, and non-residents or “Friends of the Canals.” The canal banks have suffered severe deterioration in the past with multiple efforts to try and restore or clean up the canals. In 1993, the canal banks were upgraded with Loffelstein blocks and dredged to remove contaminated sediment and debris.



*Figure 1.4: Map of Regional Elevations Relative to Venice
(Screen Capture from NOAA Sea Level Rise Viewer DEM)*



Figure 1.5: Map of Low-lying Areas in Venice
(Using CoSMoS COAST 3.0 Digital Elevation Model)

2. Inventory of Coastal Resources

An inventory of coastal resources was created to capture particular assets, communities, land uses, and infrastructure potentially at risk within the Venice coastal zone. These resources were identified through a variety of methods, including publicly available government databases, reports, and aerial imagery. The list focuses on all resources within the maximum extent of modeled hazard layers discussed in Section 5.

Table 2.1: Inventory of Coastal Resources

| Type | Resource | | Data Source |
|----------------|---|--|----------------------------|
| Infrastructure | Tide Gates | <ul style="list-style-type: none"> Marina del Rey Washington Boulevard | LA City geohub |
| | Stormwater Pumping Plants | <ul style="list-style-type: none"> Venice Stormwater Pumping Plant (VSPP) & Westward Stations Boone & Olive | LA County GIS |
| | Wastewater Pumping Plants | <ul style="list-style-type: none"> Venice Pumping Plant (VPP) Venice Auxiliary Pumping Plant (VAPP) | LA County GIS |
| | Storm Drain Outfalls | <ul style="list-style-type: none"> Three beach outfalls (excluding additional outfall not identified in County GIS data), 1 in Marina del Rey connected to Boone & Olive Pumping Plant (PP) | LA County GIS |
| | Utilities | <ul style="list-style-type: none"> Water and electricity | LA County GIS |
| | Sewage and Stormwater Network | | LA County GIS |
| | Transportation Infrastructure | <ul style="list-style-type: none"> Pedestrian, bike, and auto | LA County GIS |
| | Coastal Structures | <ul style="list-style-type: none"> Venice breakwater, marina jetty, groins | LA County GIS |
| Property | Residential | <ul style="list-style-type: none"> Parcels and buildings | LA City geohub |
| | Commercial | | LA City geohub |
| | Industrial | | LA City geohub |
| | Open Space/Civic Facilities | | LA City geohub |
| Cultural | Historic Districts (HD) | <ul style="list-style-type: none"> Venice Canals HD Lost Venice Canals HD, North Venice Walk Streets HD, Milwood Walk Streets HD, Windward-Pacific Commercial HD | LA City geohub SurveyLA |
| | Coastal Historic Monuments | <ul style="list-style-type: none"> Venice West Café, Warren Wilson Beach House, Venice Arcades (aka Windward Arcades) | LA City geohub |
| | Abbot Kinney and Venice Boulevard. Historic Resources | <ul style="list-style-type: none"> Kinney-Tabor House, Venice Branch Library, Venice Division Police Station, Sturtevant Bungalow, Venice City Hall, Venice of America House | LA City geohub |

| Type | Resource | | Data Source |
|-------------------|---|--|---|
| Civic | Bus Lines | <ul style="list-style-type: none"> • Metro: 108, 33, 733 • Santa Monica Big Blue Bus (SMBBB): 1, 18 • LADOT: CE437 • Culver City: 1 | LA City geohub, SMBBB, Culver City Bus, and LADOT |
| | LA Metro Division 6 Lot | | LA Metro |
| | Parking (City-owned) | | LA City geohub |
| | Parking (County-owned) | | LA County GIS |
| | Coastal Path/Bike Path | | LA County GIS |
| | Lifeguard HQ | | LA County Fire |
| Civic | Lifeguard Towers | <ul style="list-style-type: none"> • 22 in total | LA City geohub |
| | Schools – LAUSD | <ul style="list-style-type: none"> • Coeur d'Alene Elem. • Westminster Avenue Elem. • Westside Global Awareness Magnet • Broadway Elem./ Venice Skills Center (not affected) | LA City geohub |
| | Schools – Private/Charter | <ul style="list-style-type: none"> • Acton Academy Venice Beach, Ánimo Venice Charter High School, St. Mark School, Venice Lutheran School (not affected) | LA City geohub |
| | Police Stations | <ul style="list-style-type: none"> • LAPD Venice Substation | LAPD |
| | Fire Stations | <ul style="list-style-type: none"> • LAFD Station 63 | LA City geohub |
| Coastal Amenities | Recreation Centers | <ul style="list-style-type: none"> • Venice Beach • Oakwood | LA City geohub |
| | Venice Beach Ocean Front Walk | | |
| | Municipal Fishing Pier | | LA City geohub |
| | Beach Recreation | | |
| Ecological | Sandy Beach Habitat | <ul style="list-style-type: none"> • Grunion, Least Tern, Snowy Plover, etc. | California Natural Diversity Database (CNDDB) |
| | Ballona Lagoon Marsh Preserve | <ul style="list-style-type: none"> • Orcutt's Pincushion, Least Tern, subtidal and intertidal habitat, etc. | CNDDB |
| | Canals Area Environmentally Sensitive Habitat Area (ESHA) | <ul style="list-style-type: none"> • Subtidal and intertidal habitat | Venice Land Use Plan 2001 |

These resources were mapped using GIS and can be found in Figure 2.1.



Figure 2.1: Map of Coastal Resources in the Venice Coastal Zone

3. Coastal Processes

3.1 Historical and Existing Coastal Hazards

Venice has historically been at risk of flooding from coastal storms as well as tidal flooding in the low-lying inland areas. One of the most well-recorded incidents of coastal storm-related damage occurred during the 1982-1983 El Niño (see Figure 3.1). During this winter season, Southern California was hit by several large storms, which eroded the beach and caused flooding along Washington Boulevard up to Pacific Avenue. Many of the coastal structures and the bike path were severely damaged due to direct exposure to wave action or undercutting of the sand foundations, including the Municipal Fishing Pier, lifeguard headquarters and coastal trail.



*Figure 3.1: Damage to Venice Coastal Trail from 1982-1983 El Niño Season
(January 1983, TreasureNet.com)*

Historical records of flooding in the canals are unclear and tidal flooding has, for the most part, been limited due to the dual tide gate system. Flood hazard vulnerability for the low-lying region, including the canals, are two-fold: first, from high tide events and second, from heavy rainfall. During a high tide event, a failure of the tide gate systems can result in flooding from the Pacific Ocean due to the area's low elevation. In August 2017, a technical issue with the Marina del Rey tide gate caused flooding up to the sidewalk in and around the canals area until authorities could rectify the situation (see Figure 3.2). The reported maximum tide height was 6 feet mean lower low water (MLLW) and no damage was reported (DuFay, 2017). During large rainfall events, stormwater in the areas around the canals is gravity-drained to the canals. This runoff is then drained to the ocean during low tide. When ocean water levels are high, the canals are mechanically closed off from the ocean. This means that stormwater can accumulate in the canals and cause stormwater-related flooding.



*Figure 3.2: Flooding at Intersection of Sanborn Avenue and 28th Avenue Due to Tide Gate Failure
(Photo from VeniceUpdate.com (Dufay, 2017))*

3.2 Wave Climate

Waves act to carry sand in both the cross-shore and longshore directions and can also cause short-duration flooding events by causing dynamic increases in water levels. Thus, the wave climate (or long-term exposure of a coastline to incoming waves) and extreme wave events are important in understanding future SLR vulnerabilities.

For Venice, storms can cause extreme nearshore wave heights of 13.8 feet (5-yr return period) and 22.6 feet (100-yr return period) (Station 132: USACE, 2010). These can cause shoreline runup reaching 3 feet to 6 feet in vertical elevation on the beach (Terra Costa, 2016). The damage caused by the January 1983 El Niño storm was in part due a sequence of major storms starting in November 1982. The waves associated with these storms were exceptional because of their height, long periods, and more westerly approach. Coastal damage was aggravated by the synchronization of the January 1983 wave event with unusually extreme water levels. The frequency of these storms also reduced the beach width and left the backshore more vulnerable to wave attack and runup, which in combination caused a significant amount of damage to beach amenities (bike path) and the Lifeguard Headquarters building in Venice.

3.3 Water Levels

The tides in Venice are mixed semidiurnal, with two high tides and two low tides of differing magnitude occurring each day. Astronomical tides make up the most significant amount of the total water level. Typical daily tides range from MLLW to mean higher high water (MHHW), a tidal range of about 5.5 feet based on the tidal station at Santa Monica Municipal Pier (NOAA Station 9410840). During spring tides, which occur twice per lunar month, the tide range increases to about 7 feet due to the additive

gravitational forces of the sun and moon. During neap tides, which also occur twice per lunar month, the forces of the sun and moon partially cancel out, resulting in a smaller tide range of about 4 feet. The largest spring tides of the year are sometimes referred to as “king tides” and result in high tides of 7 feet or more above MLLW and tidal ranges of more than 8 feet.

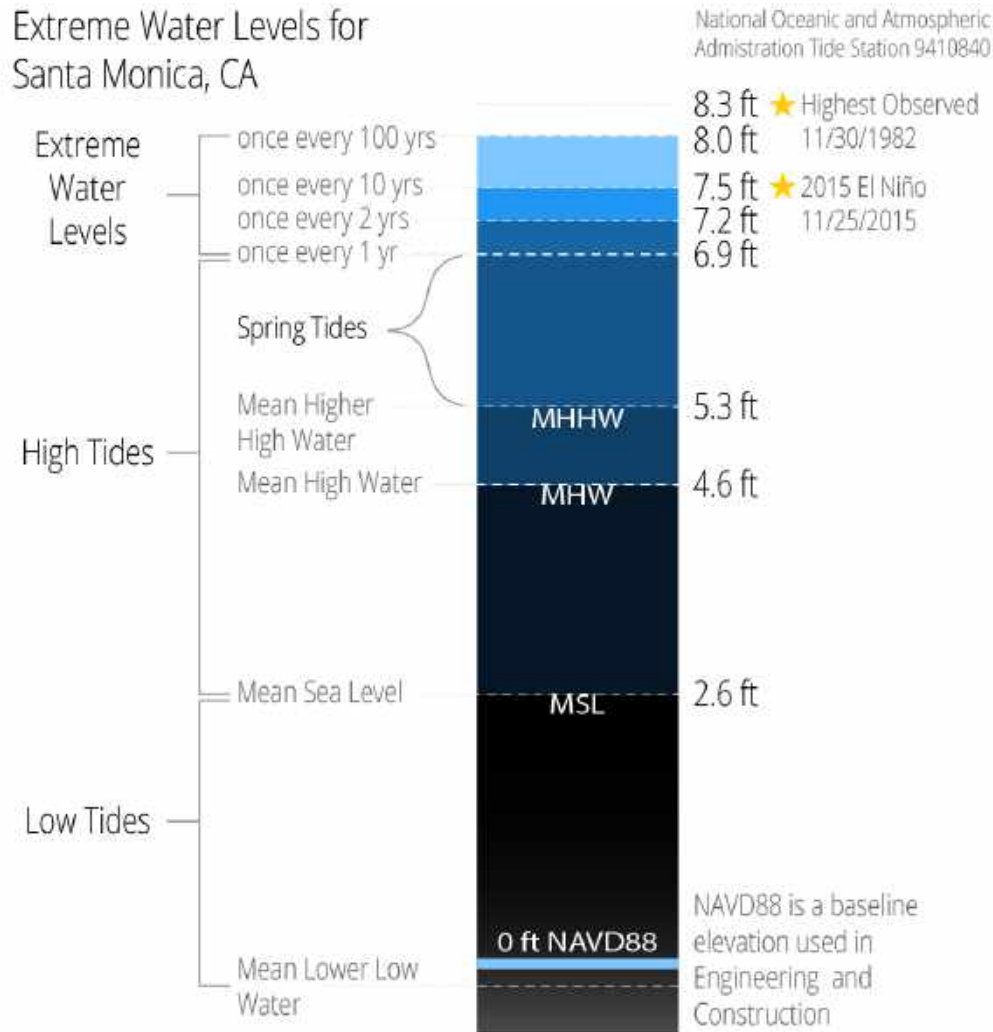


Figure 3.3: Tidal Datums for Santa Monica Municipal Pier NOAA Tide Station No. 9410840

3.4 Littoral Processes and Shoreline Change

The Venice shoreline has been greatly shaped by human activity and development in the 20th century. From the 1930s to 1963, more than 32 mcy of sand were placed on the beaches of Santa Monica Bay. This sand nourishment came from large construction projects, such as those at Marina del Rey, the Los Angeles International Airport, and the Hyperion Wastewater Plant (Terra Costa, 2016). Over 14 mcy were placed on Venice Beach mainly from excavation of the Hyperion Treatment Plant. The historic nourishments increased the beach width in Venice by ~500 feet (Orme et al, 2011). Coastal structures such as the old

piers, Santa Monica and Venice breakwaters, smaller groins, and the marina jetty have slowed the transport of this sand out of the system and maintained areas of very wide beaches.

While the beach has been kept artificially wide for decades, SLR has the potential to increase beach erosion. A widely accepted consequence of SLR is a landward and upward shift of the beach profile in response to higher waves and water levels. This landward shoreline response to SLR is described by the Bruun Rule, illustrated in Figure 3.4. This long-term shoreline retreat results in a process known as “coastal squeeze,” in which resources on the sandy beach are squeezed between rising seas and a fixed line of development along the back beach.

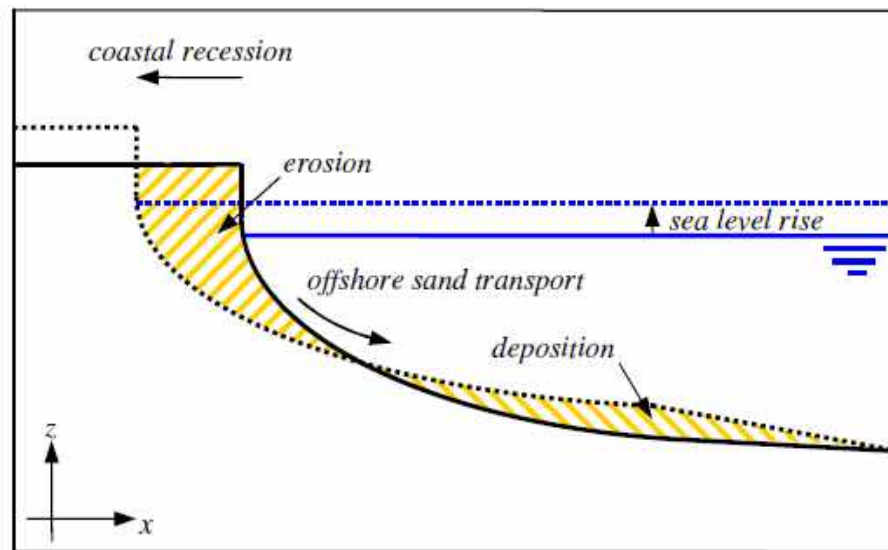


Figure 3.4: Schematic of Beach Profile Changes due to SLR (Bruun Rule)

The long-term rate of shoreline retreat is also a function of sediment supply. The natural supply of sediment to beaches in Santa Monica Bay from fluvial discharges has been reduced by development in the watershed (i.e. channelization of the Los Angeles River, construction of dams and debris basins). The natural supply of sediment from littoral drift (transport of sand along a shoreline) has been reduced by retreat of the Mugu Submarine Canyon, which captures the majority of sediment moving south along beaches of Ventura County (Griggs & Patsch, 2018). Artificial nourishment has been the main source of sand to the beaches of Venice and Santa Monica over the last century. Given the limited natural supply of sediment from streams and littoral drift, artificial nourishments will likely be the main source of sediment to mitigate the effects of coastal squeeze.

3.5 Venice Canals Tide Gate System

The Venice Canals District and nearby low-lying areas are protected from tidal flooding through a dual tide gate system. The first line of defense is the Marina del Rey tide gate (Figure 3.5), which is located on the northern Marina del Rey jetty and directly connects the Ballona Lagoon to the Pacific Ocean. The second tide gate is located at Washington Boulevard and directly connects the Venice Canals to the Grand

Canal, which opens to Ballona Lagoon. Both tide gates are owned by the City of Los Angeles and serve to mute the lower and upper limits of the ocean tidal range. This reduction in tide range allows for increased stormwater drainage capacity and prevents flooding that would otherwise occur during astronomical high tides.



Figure 3.5: Plan View of Tide Gate System

The two tide gates operate on separate schedules. The Marina del Rey tide gate has two modes: dry mode and wet mode. These modes are based on seasonal precipitation according to a 2007 report by Phillip Williams and Associates (PWA). During a dry mode, the Marina del Rey gate is closed when the following conditions are met:

- Marina water level exceeds 2.25 feet mean sea level (MSL)
- Marina water level is more than 0.25 feet higher than Ballona Lagoon water level

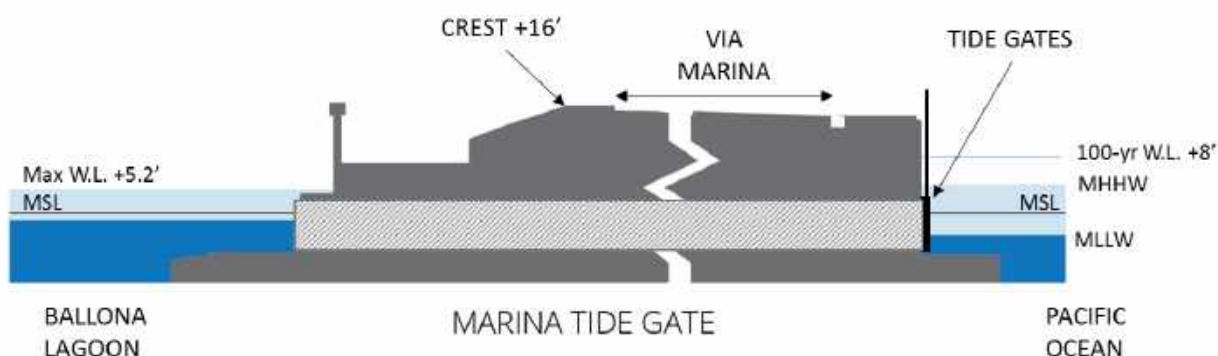
During a wet mode, the Marina del Rey tide gate reduces the upper tide range by closing when the following conditions are met:

- Marina water level exceeds 0.0 feet MSL
- Marina water level is more than 0.25 feet higher than Ballona Lagoon water level

The Washington Boulevard tide gate is opened during a low tide for 2-6 hours approximately twice a week (PWA, 2007).

Neither tide gate is certified by the Federal Emergency Management Agency (FEMA) as a flood control infrastructure, impacting the 2017 Preliminary Flood Insurance Rate Map (PFIRM) analysis, and resulting base flood elevation (BFE) for the low-lying areas. As important flood prevention infrastructure for the coastal zone area, any failure in the operation of both tide gates can result in flooding.

The barriers that allow the tide gates to close the Ballona Lagoon and Canals from the ocean are also important when considering SLR. The existing grade above the MR tide gate has a relatively high crest elevation of approximately 16 feet (NAVD88)(see Figure 3.6) and is sheltered from direct ocean waves due to the Marina del Rey breakwater. Note, this crest elevation provides roughly 8 feet of freeboard above the current 100-year BFE. Washington Boulevard, which separates Ballona Lagoon from the canals, has a relatively lower elevation of 6.9 feet (NAVD88).



*Figure 3.6: Diagram of Marina del Rey Tide Gate
(Based off 2007 as-built drawings)*

3.6 Groundwater

When a low-lying coastal area has intermediate to shallow groundwater level (<6.6 feet below the surface) SLR can cause what is known as shoaling. Shoaling is caused when a rise in sea level causes groundwater to rise as well. It can cause groundwater to emerge at the surface, resulting in chronic flooding (Hoover et al., 2016). Additionally, even if groundwater is relatively deep in the low-lying area, existing lower groundwater can rise to shallow elevations causing challenges to existing infrastructure or new development (Hoover et al., 2016). For example, construction projects requiring excavation may encounter the water table at higher elevations causing a need for the pumping of water out of a construction site. In a study of select sites in California by Hoover et al. in 2016, Marina del Rey was identified as a site, noting that little was known about the groundwater elevations and citing extensive groundwater pumping as a factor limiting its vulnerability to SLR. However, a report in 2011 about the feasibility of groundwater extraction in the area describes that the basin once had a deep groundwater table due to extensive pumping, but recently experienced groundwater elevations rising to above sea level and progressing seaward. It also describes the groundwater as having areas of gravel with enough permeability to allow infiltration of saltwater into the groundwater, citing recent increases in salinity (Kennedy/Jenks Consultants, 2011). This suggests that the vulnerability of Venice to groundwater shoaling may be higher than previously thought.

4. Sea Level Rise

4.1 What is Sea Level Rise?

SLR science involves both global and local physical processes. Models are created based on science's best understanding of these processes on global and local scales; therefore, they are dynamic and periodically updated to reflect these changes. On a global level, the most recent predictions come from the *International Panel on Climate Change's Fifth Assessment Report (AR5)* released in 2013. The AR5 projections for SLR were 50% higher than the *International Panel on Climate Change's Fourth Assessment Report (AR4)* (released 2007) due to the addition of ice sheet dynamics on SLR. At the state level, the California Coastal Commission (CCC) previously recommended the 2012 National Research Center (NRC) *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* report (2012). This report predicts 17 in to 66 inches (42 cm to 167 cm) by the year 2100 (CCC Guidance Document 2015).

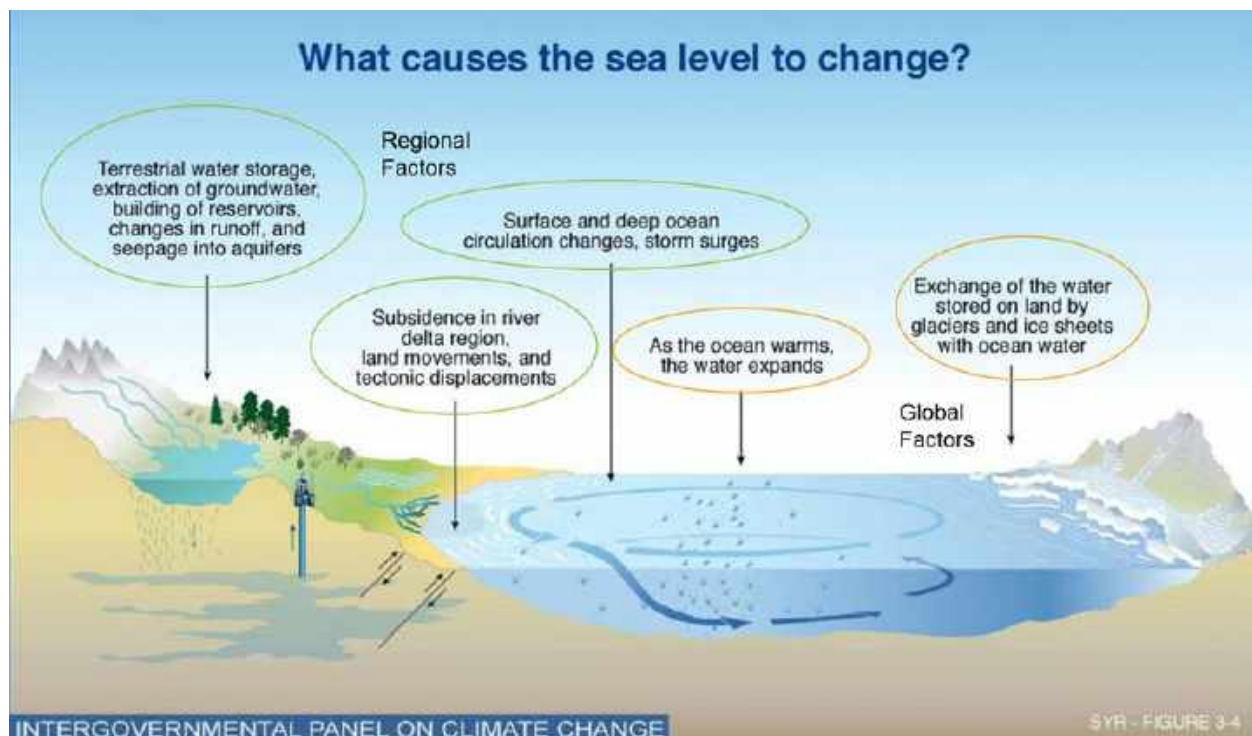


Figure 4.1: Regional and Global Factors that can Contribute to Changes in Sea Level
Source: IPCC (2001)

However, the State of California Ocean Protection Council (OPC) incorporated the best available science through the *Rising Seas in California: An Update on Sea Level Rise Science* report, released in April 2017. This report was then used to update the OPC's California State Guidance in 2018 (OPC 2018). The 2018 Guidance projects SLR for multiple emissions scenarios using a probabilistic approach. For both low- and high-emission scenarios, a "likely range" was determined for which there is a 67% probability that SLR will fall within that range. For the low-emissions scenario, the likely range of SLR for 2100 is 0.9 feet to 2.3

feet and for the high-emissions scenario; the likely range for 2100 is 1.5 feet to 3.3 feet. The OPC's 2017 report and 2018 guidance include a specific singular scenario (called H++), which represents recent scientific findings of faster rates of SLR due to previously unknown glacial dynamics by Sweet et al., 2017, which predicts 10 feet by the year 2100. The likelihood of this scenario is unknown, and is recommended by the OPC to be considered for long-term, high-stakes decisions (OPC, 2018).

Climate science is a constantly changing field, often with high degrees of uncertainty. In the case of California's SLR, the OPC has high confidence in estimates for SLR to around year 2050, after which emissions scenarios cause predictions to diverge. Therefore, this assessment focuses on key sea levels based on the location and coastal dynamics of the city to provide consistent reference points across scenarios and predictions. Planning for a varying degree of SLR can be challenging and requires continual or periodic updates based on the most recent predictions.

4.2 Selected Sea Level Rise Scenarios

Due to the high degree of uncertainty associated with predicting when and at what rate SLR will occur, this study looks at a range of five scenarios starting with present day conditions and including extreme SLR. Five scenarios have been selected for this study that consider increments of SLR between 0 and 6.6 feet (0 cm to 200 cm). This range of scenarios is based on available data for the region.

The five SLR scenarios identified for this study were selected based on a review of existing data and observed vulnerability thresholds (i.e., tipping points of where coastal hazard exposure changes substantially). The selected SLR scenarios for the study area are described in Table 4.1 below.

Table 4.1: Venice Vulnerability Assessment Sea Level Rise Scenarios

| Scenario | Sea Level Rise, ft | Sea Level Rise, cm | Approximate Time Horizon for Sea Level Rise Projection* | Justification |
|----------|--------------------|--------------------|---|--|
| 1 | 0 | 0 | Current | Establish existing (baseline) conditions |
| 2 | 1.6 | 50 | 2040 to 2080 | Identify vulnerabilities within LCP planning horizon |
| 3 | 3.3 | 100 | 2060 to 2100+ | Potential threshold for inland flooding & coastal recreation |
| 4 | 4.9 | 150 | 2080 to 2100+ | Consistent with upper range of projections in 2100 |
| 5 | 6.6 | 200 | 2090 to 2100+ | Characterize vulnerabilities from extreme SLR |

**Time horizon from ourcoastourfuture.org using OPC's An Update on Sea Level Rise Science for California (Griggs, et al. 2017) RCP 8.5 projections, ranges are conservative due to uncertainty of H++ timing*

4.3 Projections and Probability

The OPC 2018 Guidance incorporates probability and risk tolerance into its SLR projections. Figure 4.2 illustrates three risk tolerance projection curves for SLR. The 2018 CA State Guidance Document lays out a risk decision framework that explains when to use low or high-risk aversion in the planning process (see Figure 4.2). For example, the low-risk aversion curve represents the upper limit of a range that is considered to have a 67% probability. The state recommends this high-risk tolerance (low aversion) to be used when considering resources where the consequences of SLR are limited in scale and scope with minimum disruption and where there is low impact on communities, infrastructure, or natural systems. The extreme risk aversion curve should be used for unacceptable consequences with extensive scale and scope that are irreversible or threats to public health and safety. With this framework, the probabilistic projections inform a decision-making process rather than trying to estimate the exact rate or occurrence of SLR.

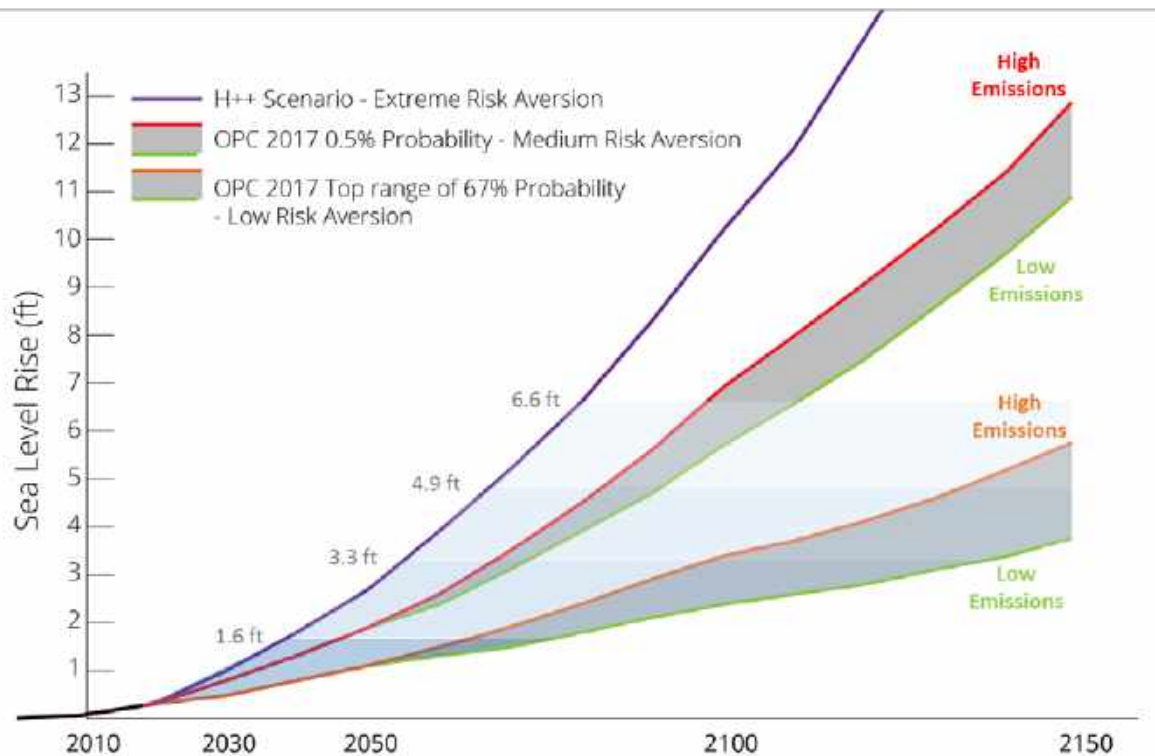


Figure 4.2: Approximate Sea Level Rise Projections for Three Risk Aversion Levels (Based on OPC-SAT 2018 State Guidance, these projections are not “low, medium, and high” curves, but reflect probabilistic projections for recommended risk tolerances.)

5. Sea Level Rise Hazard Mapping

5.1 CoSMoS Coastal One-line Assimilated Simulation Tool (COAST) Model 3.0

Coastal Storm Modeling System (CoSMoS) Version 3.0 Phase 2 is the latest version of the U.S. Geological Survey (USGS) coastal storm modeling system that utilizes global, regional, and local models to assess coastal flooding and erosion. CoSMoS includes 40 combinations of SLR and storm scenarios that apply wave projections, storm surge, sea level anomalies, river discharge, tides, and SLR to predict long-term coastal evolution.

A total of 10 SLR scenarios are available, including 0.8 feet (0.25 m) increments from 0 to 6.6 feet (0 to 200 cm) and an extreme SLR scenario of 16.4 feet (500 cm). Management scenarios include with and without beach nourishment and coastal armoring (Hold-the-Line or Not). Flood hazards are only available for the “Hold-the-Line and No Beach Nourishment” management scenario. More information on the CoSMoS data available and the hazard selection process is provided in a Sea Level Rise Memorandum that was prepared for this study, included in its entirety as Appendix B.

In summary of the findings of this memo, CoSMoS 3.0 Phase 2 model results were selected for use in this study because these data incorporate the most recent and comprehensive SLR hazard maps developed for the study area. Use of AdaptLA data for this effort would result in data gaps (e.g. SLR scenarios) that would require additional effort to fill. The advantages of using CoSMoS 3.0 Phase 2 are summarized below:

- A wide range of SLR scenarios.
- Flooding modeled with forecasted wave conditions and shoreline change for the 1-yr, 20-yr, and 100-yr coastal storm with layers for 2-minute sustained water level flooding and maximum wave runup extents.
- Includes shoreline management scenarios that consider “Beach Nourishment” and “Hold-the-Line” at the urban/beach interface.
- Erosion modeling comprises multiple methods that consider future erosion resulting from historic trends, long-shore and cross-shore sediment transport, and changes due to SLR; additionally, historic data was used to tune these models to account for site-specific erosion and accretion trends driven by natural and anthropogenic causes.

5.2 Inland Flood Potential

The existing studies identify inland flooding potential in the low-lying areas around the Venice Canals. Although these areas are set back from the active shoreline, the low topography requires a system of tide gates to control water levels and prevent flooding from the canals. These gates may not provide the same functionality as SLR because higher water levels could prohibit drainage and circulation that is currently achieved during low tides. SLR will reduce and eventually eliminate the potential for the release of stormwater during low tides. A rising groundwater table will also pose challenges to managing water levels in the Canal District.



The detail provided by existing studies does not accurately capture the potential for inland flooding in the Canal District because they do not account for tide gate operation, stormwater storage and drainage capacity, and the influence of groundwater. The complexity of the existing system requires a focused study that accounts for the different functions of the tide gates and potential hazards associated with rising sea levels. This type of study was beyond the scope of previous studies and is also beyond the scope of this report.

To capture the potential for inland flooding during a scenario in which the tidal gates are opened or damaged during a high tide event, a “bathtub” model was used to map flood hazards for the 1.65 feet (50 cm) increment scenarios. The same water level assumptions (extreme monthly high water level of 6.5 ft NAVD88) used by ESA in the AdaptLA study to model flood risk for the Canals District were applied but modified the hazard maps based on the SLR scenarios selected for this study.

Without further investigation into the capacity, design, and operation of the tide gates, the “bathtub” model approach was determined to be the preferred method for depicting the potential for inland flooding from high water levels in the canals. For this reason, a “bathtub” approach consistent with the method ESA applied for the AdaptLA study was used for the study.



Figure 5.1: Coastal and Inland Flooding for Baseline Scenario (no Sea Level Rise)



Figure 5.2: Coastal and Inland Flooding for 1.6-ft Sea Level Rise Scenario



Figure 5.3: Coastal and Inland Flooding for 3.3-ft Sea Level Rise Scenario



Figure 5.4: Coastal and Inland Flooding for 4.9-ft Sea Level Rise Scenario



Figure 5.5: Coastal and Inland Flooding for 6.6-ft Sea Level Rise Scenario

6. Vulnerability Assessment

The purpose of this assessment is to identify potential significant physical or functional impacts to both natural and man-made coastal resources under a range of SLR scenarios. A resource's vulnerability to SLR is a product of its exposure, sensitivity, and adaptive capacity, which are defined as follows:

- **Exposure** refers to the type, duration and frequency of coastal hazard a resource is subject to under a given SLR scenario. A resource that experiences daily wave and water level fluctuations would be considered more exposed than a resource that only experiences some minor flooding during an extreme event.
- **Sensitivity** is the degree to which a resource is impaired by exposure to a coastal hazard. For example, a parking lot would be less sensitive to temporary flooding than a residential or commercial building because once a flood subsides, the parking lot could resume normal operation with perhaps some minor clean up required. A residential or commercial building is more sensitive to temporary flooding due to the cost of damage and disruption of normal activity or operation.
- **Adaptive capacity** is the ability of a resource to adapt to evolving coastal hazards. Beaches can be thought to have a natural ability to adapt because the sand will migrate upward and landward in response to rising sea levels if sufficient sand exists in the system and landward space is available for this migration. Infrastructure typically has a low adaptive capacity because increased coastal hazards that exceed the design capacity often require significant improvements to maintain the same level of protection.

These three factors are discussed throughout this section to provide a general overview of the VA findings for each category of resources described in Section 2. The VA findings specific to each resource/asset are provided in Appendix A.

The findings presented here inform the adaptation planning process by identifying the SLR threshold at which impacts occur and the factors (exposure, sensitivity, adaptive capacity) contributing to a resource's vulnerability. The factors dictating a resource's vulnerability provide a starting point for adaptation planning. For a resource with high exposure, adaptation strategies that reduce exposure through protection or relocation may be considered. In other cases, strategies that reduce sensitivity to hazards and improve resiliency (ability to recover from hazard event) may be the most effective way to mitigate impacts.

6.1 Infrastructure

The assets evaluated include the tide gates, wastewater, stormwater, transportation, and utilities (water & power) systems, and coastal protection infrastructure. Almost all resources in the infrastructure category are located throughout developed areas of the planning area and are most vulnerable to inland flooding potential. The exceptions are coastal protection structures and stormwater outfalls within the surf zone and beach areas.

6.1.1 Exposure

The primary source of exposure to infrastructure assets is from inland flooding that could occur from a variety of potential hazards and includes tide gate malfunction, an extreme rainfall event, tsunami, or extreme coastal storm event. For current sea levels up to 1.6 feet of SLR, the exposure to flooding will be temporary and caused by one of these potential hazards. Assets such as the VPP and proposed VAPP, which sit at low elevations, could experience flooding during these events that will test the resiliency of this critical infrastructure to flooding, potential power outages, and limited access to the facility for maintenance.

Over the long-term, if sea levels rise by more than 3.3 feet, there is potential for permanent inundation of large portions of the low-lying areas of Venice due to a higher groundwater table. The upper SLR scenarios result in significant exposure of major infrastructure systems like transportation, stormwater and wastewater collection systems, and other utilities. The 6.6-foot SLR scenario indicates up to 35 miles of roadway and 5.7 miles of bikeway could be flooded (see Table 6.1 and Table 6.2). Many of these are main roadways like Venice Blvd, Washington Blvd and Abbot Kinney.

Table 6.1: Length of Bikeways Impacted by Hazard Type

| Inland Flooding | | Coastal Flooding (CoSMoS 3.0 Phase 2) | |
|-------------------|------------|---------------------------------------|------------|
| SLR | Total (mi) | SLR | Total (mi) |
| Current Sea Level | 0.03 | Current Sea Level | 0.22 |
| +1.6 ft | 1.41 | +1.6 ft | 0.18 |
| +3.3 ft | 2.30 | +3.3 ft | 0.82 |
| +4.9 ft | 3.40 | +4.9 ft | 0.52 |
| +6.6 ft | 3.82 | +6.6 ft* | 5.74 |
| | | *Overlap with Inland Flooding | |

Table 6.2: Length of Roadway Impacted by Hazard Type

| Inland Flooding | |
|-------------------|------------|
| SLR | Total (mi) |
| Current Sea Level | 8.7 |
| +1.6 ft | 17.3 |
| +3.3 ft | 21.7 |
| +4.9 ft | 28.4 |
| +6.6 ft | 35.0 |

Exposure from beach-side hazards to infrastructure assets are far lesser in comparison and are limited in terms of their exposure until 3.3 feet+ SLR or more based on the CoSMoS results. Present and short-term hazards include a buildup of sand further landwards on the beach, potentially reducing capacity of beach stormdrain outfalls. SLR-related beach erosion is projected to be 10-20% with 3.3 feet SLR and 25-50% with 6.6 feet SLR (Noble Consultants, 2016). This means beach erosion could be a greater issue in the long-term, but have limited impacts on infrastructure in the short term.

A key uncertainty of the beach loss projections are the long-term effectiveness of coastal structures like the Venice breakwater and groin near the former lifeguard headquarters building. These structures have a significant effect on current shoreline processes and the movement of sand alongshore. As sea levels rise, the influence of these structures on nearshore dynamics will also change. The evolution of these dynamics with respect to existing coastal structures was not captured in the previous modeling efforts. If it is assumed that the Venice breakwater is not maintained and allowed to deteriorate over time, a reduction in the amount of sand retained by the structure and possibly greater long-term erosion on the upcoast side of the breakwater can be expected. Monitoring of future shoreline changes will be an effective way to understand how SLR and the function of the existing coastal structures will shape the future beaches of Venice.

Secondary sources of exposure include higher water levels in the Marina, which reduce the capacity of the stormwater system in Southeast Venice (Boone-Olive PP), as well as higher groundwater levels that have the potential to cause more chronic flooding and/or structural issues for the low-lying areas of Venice. Higher groundwater levels can also disrupt buried infrastructure such as utility, stormwater, and wastewater networks.

6.1.2 Vulnerability

When discussing the vulnerabilities of a community like Venice, it is critical to consider the concept of cascading impacts. For example, Venice currently relies on the Marina del Rey tide gates to prevent tidal flooding in its low-lying areas. A failure of this singular piece of infrastructure can have cascading impacts on the infrastructure systems that keep both Venice and the region operating safely. Flooding from a tide gate malfunction could result in temporary outages in the area. These outages require emergency services and utility repairs that rely on access to the sites via the road network. Roads flooded at depths greater than 1.6 feet can reduce or completely block access from large vehicles and trucks, resulting in potentially delayed service repairs (Pregnoletto et al., 2017). Reduced service or repairs could result in further failures of key infrastructure, such as utilities and pump stations, and could magnify the damages and danger of a flood event.

These cascading impacts are important to consider in adaptation and resilience planning, and make it difficult to forecast or predict a specific range of conditions when infrastructure will be exposed to this type of flooding. Given that vulnerabilities exist today, and SLR will only increase these vulnerabilities, the near-term adaptation planning should focus on making the infrastructure more resilient to temporary flooding events through measures aimed at improving redundancy of key systems and emergency planning procedures to maintain operations despite temporary flooding or power outages.

6.1.2.1 Tide Gates

The Marina del Rey tide gates (also referred to as Venice Marina tide gates or marina gates) are the most critical components of flood prevention infrastructure in the study area. The road elevation above the gate is high enough (approx. 16 feet NAVD88) where SLR of less than 6.6 feet is not a concern in terms of overtopping (Figure 6.1). This provides a significant amount of adaptive capacity against tidal flooding. The primary vulnerability to the marina gates is the effect of higher water levels on its functionality. As sea levels rise, the duration the tide gates will need to remain closed will increase. For example, after +1.6 feet SLR, water levels in the marina will rarely be lower than the present minimum water level kept in the Ballona Lagoon. This could reduce the amount of flushing and affect water quality.

The tide gates need to serve the dual function of keeping high water levels out but also providing stormwater drainage for the Canals area. The tide gates have proven effective at preventing high water levels from flooding the community and there is sufficient freeboard above the gates to accommodate a significant amount of SLR. However, the short-term vulnerability will be a gradual reduction in the stormwater storage and conveyance capacity provided by the existing canals system. The timing of this impact could not be determined due to limited information available about the hydrologic and hydraulic capacity of the existing drainage infrastructure that services the tributary area of the canals.

Another vulnerability of the tide gates is the operational reliability of the system. As sea levels rise, the cascading impact of a tide gate malfunction increases significantly. The functionality of the tide gates as flood prevention infrastructure presently has varying degrees of uncertainty related to their adaptive capacity. According to recently updated California Environmental Quality Act (CEQA) documents, the gates are equipped with sensors and can be operated remotely; however, currently, the City of Los Angeles and its contractors operate the gates electronically on-site. Implementing a formal operations plan for the gates with roles, responsibilities, and emergency procedures assigned would be a good step toward increasing the operational reliability of this critical piece of infrastructure.

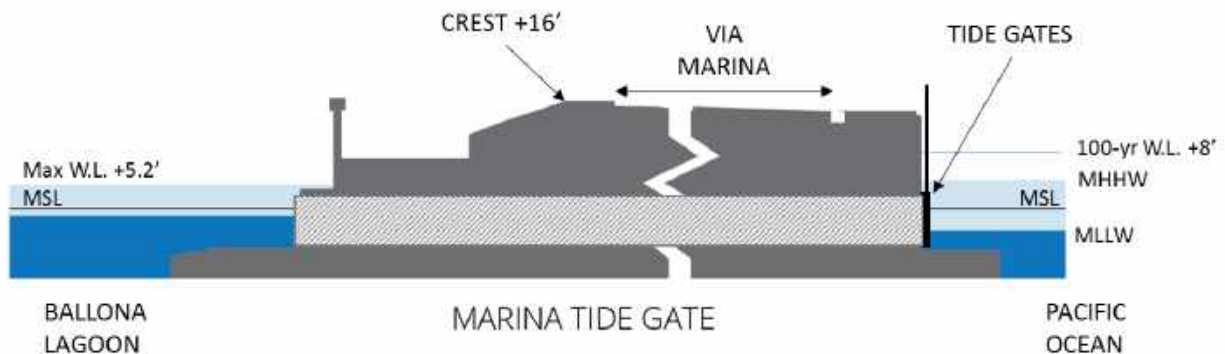


Figure 6.1: Diagram of Marina del Rey Tide Gate

6.1.2.2 Venice Pumping Plant and Auxiliary Pumping Plant

A Climate Risk and Resilience Assessment for Infrastructure Technical Memorandum No. 5.5 by One Water LA (2017) found the VPP and VAPP were at risk of inundation during a 500-yr flood or tsunami event. The VPP is the largest in the City with a capacity of 45,000 gallons per minute (gpm) and has a replacement value of about \$31.6 million. The VAPP, designed to complement the VPP, will increase the capacity of the two plants to over 60,000 gpm at an estimated cost of \$17 million. The technical memorandum recommended \$1.6 million in resilience improvements for the VPP and that design of the VAPP include additional resilience improvements to protect the backup power supply for the pumps and waterproof the first level of the electrical building. The flood hazard information used in the One Water LA study (FEMA & CoSMoS) was recently updated. FEMA released draft Flood Insurance Rate Map (FIRM) panels along coastal Los Angeles County that placed the VPP and VAPP within the current 100-yr flood zone. CoSMoS and Adapt LA released updated SLR hazards for Los Angeles County that place the facility within a SLR hazard zone. In other words, more recent SLR hazard information suggests risks to these existing and proposed facilities are higher than stated in Technical Memorandum No 5.5.

6.1.2.3 Venice (aka Windward or Kinney Circle) Stormwater Pumping Plant

The One Water LA memorandum also flagged the Kinney Circle PP as a facility at risk of inundation during 500-yr flood and tsunami events. Due to the updated hazard information, the risk to this facility is higher than stated in Technical Memorandum No 5.5. The Bureau of Sanitation is planning a \$5.5 million upgrade to the facility and the One Water LA memorandum recommends an additional \$600,000 in resilience improvements along with an evaluation of conveyance capacity under impacts from increased precipitation due to climate change.

The stormwater PP is situated at a higher elevation than the VPP and VAPP, and thus is not exposed or sensitive to potential inland flooding until the 3.3 feet SLR threshold. Although the facility is not directly exposed to inland flooding, the drainage area serviced by the pump station is exposed to inland flooding potential for SLR scenarios higher than +1.6 feet. Since the pump station was not designed to handle tidal flooding, it's not clear how much adaptive capacity is available to mitigate potential flooding under these scenarios.

6.1.2.4 Other Infrastructure

Due to Venice's proximity and connection to the ocean, SLR will impact almost every component of infrastructure. The potential for inland flooding could result in damage to networks of stormwater and sewer pipes, transportation, electrical lines, and traffic control equipment. In the longer term, rising groundwater levels could damage buried infrastructure and increase the amount of water needed to be pumped out of the low-lying areas during both the dry and wet seasons, potentially requiring additional pumps or upgrades.

The outfalls on the beach could also experience more frequent sand blockages, and in the long-term, require adaptation to an eroded shoreline. The Venice Force Main, also located on the beach (buried), is farther inland than the beach erosion projected by CoSMoS for all scenarios evaluated and, therefore, is not considered vulnerable to SLR impacts. Coastal protection infrastructure such as the Venice breakwater

and groin are expected to lose effectiveness as shoreline protection under rising sea levels and increased wave heights. As they lose effectiveness, the sand retained upcoast of these structures would be subject to more wave action that will change the current sand transport patterns and surf along the beach, if steps to maintain, repair, and elevate this infrastructure are not taken. Under this scenario there may be more long-term shoreline erosion upcoast of these structures but less erosion downcoast as the sand lost from the upcoast side of these structures is transported south toward the marina jetty.

6.2 Civic

This resource category includes assets that provide a civic service to the Venice community such as public transportation, public parking, schools, and emergency services. The assets evaluated include bus lines, public parking, coastal paths, lifeguard HQ/towers, schools, the LAPD Venice substation, and LAFD Station 63. Some of the civic services are provided by the City while others are provided by the County or other agencies. Vulnerability assessment findings specific to each asset are provided in Appendix A.

6.2.1 Exposure

Several bus line routes (Metro 108, 33, and 733) could be exposed to the inland flooding at the +1.6 feet SLR scenario. Four city-owned parking lots are exposed with SLR greater than +1.6 feet due to inland flooding potential. Westminster Avenue Elementary and Westside Global Awareness Magnet schools are within low lying areas and could be exposed to inland flooding starting at +1.6 feet SLR. Additionally, portions of Coeur d'Alene Elementary could be exposed to flooding with SLR greater than +4.9 feet. The LAPD and LAFD stations are exposed physically (meaning the sites are within mapped hazard areas) for the +6.6 feet coastal flooding scenario, but functionally (ability to service Venice community) could be impacted earlier by access challenges associated with inland flooding.

The Lifeguard HQ is primarily exposed to direct wave action and coastal flooding and is within mapped +4.9 feet coastal hazard area. However, the actual timing of this hazard could be affected by the evolution of the shoreline in response to the performance of coastal protection infrastructure. Portions of the coastal path could be flooded at current sea level during an extreme event near the Venice Beach Recreation Center county parking lot and the Rose Avenue county parking lot.

6.2.2 Vulnerability

The sensitivity of parking lots to flooding is relatively lower than other assets, as temporary flooding typically only requires some maintenance and clean up to resume normal operations. Temporary impacts to parking lot function can be expected due to closures during forecasted storms. However, in the case of a tide gate malfunction, flooding could occur rather suddenly (within a few hours) and cars parked in inland parking lots could be damaged. Similarly, bus routes themselves have few potential physical impacts but would be limited in function. Disruption of major bus routes such as Metro Rapid Line 733 could impact regional mobility and result in consequences to the mobility of riders and the regional network.

The coastal path and bikeway offers lateral coastal access and mobility along the beach from Venice to Santa Monica and is exposed at current sea level to a large storm. Flooding of the path may temporarily reduce the function of the affected portions, though direct wave attacks paired with high water levels could pose threats of permanent damage. This could occur in the northern portions of the path along Rose Ave county parking lot where flooding is projected to extend further inland.

Schools can be very sensitive to flooding and are often used as shelters during disaster events. Additionally, all the schools potentially impacted in Venice have limited capacity to adapt or retrofit without significant investment to improve flood protection. In the short-term, flood damage and disruption could be mitigated through sandbagging or site-specific flood proofing, but long-term solutions might require additional resources.

LAFD Station 63 services the study area and while not directly exposed, flooding of the transportation network could limit access of emergency services to both low-lying areas and relatively isolated areas such as the Marina Peninsula. The LAPD Venice substation is an off-site facility geared toward community engagement and is a place to report non-emergency crimes as well as speak to LAPD officers. The facility is within the mapped coastal flooding hazard for +6.6 feet SLR. Damage to the substation may impact policing services in the Venice community.

Lastly, the LA County Lifeguard HQ/Beaches & Harbors building has historically been damaged by high surf activity, such as the 1982-83 El Niño, and houses beach maintenance equipment and rescue equipment for Venice Beach. The facility is protected by a seasonally buried revetment and is sensitive to direct wave action paired with high water levels. The facility could experience scour during a strong winter season with intensified erosion due to SLR, causing structural damage and potentially requiring adaptation or retrofitting measures.

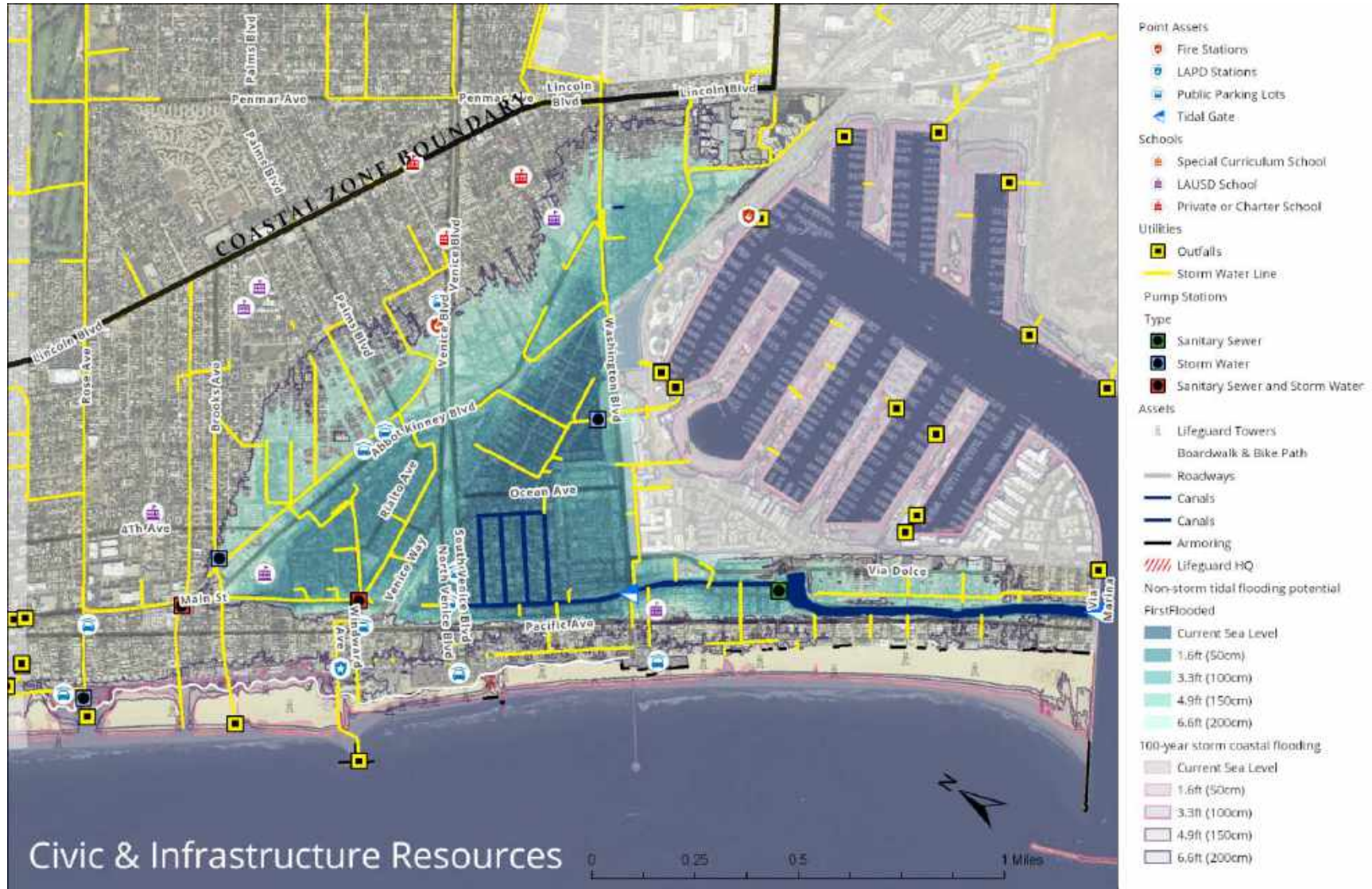


Figure 6.2: Exposure Map of Civic and Infrastructure Resources

6.3 Property

This category looks at parcels of land within the Venice Coastal Zone including open space, commercial, industrial, and residential development. Results from the parcel analysis were broken up by sub-area as designated by the 2001 LUP to better inform the LUP update. This section provides an overview of the vulnerability of parcels in Venice. Detailed results specific to each sub-area are provided in the Asset Profiles attached in Appendix A.

6.3.1 Exposure

To capture the exposure of property, land use parcel data from LA City Geohub was overlaid with the hazard layers to identify potentially affected parcels. A parcel was considered “affected” if 20% or more of the parcel by area was covered by the hazard layer. This value does not necessarily correlate to specific flood damage; rather, it was chosen because of its consistency (i.e. parcels at similar elevations were determined “affected” at the same hazard exposure).

The primary source of exposure to property in Venice is vulnerability to flooding from a tide gate malfunction or from reduced stormwater capacity with SLR. The hazard scenario used to quantify impacted parcels includes a malfunction of the tide gate during an extreme monthly high tide (~6.5 feet tide) in addition to each increment of SLR as described in Section 5.2. Under this hazard scenario, flooding could enter through the failed marina tide gate, into the Ballona Lagoon, under/over Washington Blvd and into the low-lying areas north and east of the Venice Canals. At current sea level, this hazard scenario could impact over 750 parcels, the majority of which are residential. The exposure increases significantly with each SLR increment due to the low and flat topography surrounding the Canals. Over 4,000 parcels are affected under this hazard scenario combined with +6.6 feet SLR.

According to the CoSMoS results, beachfront development could experience flooding during large storms with +3.3 feet SLR. The exposure is higher in the northern beachfront areas than the southern areas, according to CoSMoS results. The threshold for widespread flooding from an extreme coastal storm is near the +6.6 feet SLR scenario, in which flooding not only affects beachfront development but also extends into the low-lying areas around the Canals. Over 5,000 parcels could be affected under this scenario with significant flooding in North Venice, Southeast Venice, Venice Canals, and the Oxford Triangle sub-areas.

Public property, including land from the oceanfront walk to the Pacific Ocean, is directly exposed to inundation due to shoreline change and damage from storms. This exposure is covered in Coastal Amenities (Section 6.5).

6.3.2 Vulnerability

The sensitivity of property to flooding (i.e. damage inflicted) varies depending on factors related to the elevation of the first floor and structural conditions, in addition to flood depth and duration. Generally, property in Venice has not been constructed to withstand flooding, resulting in greater sensitivity to flood

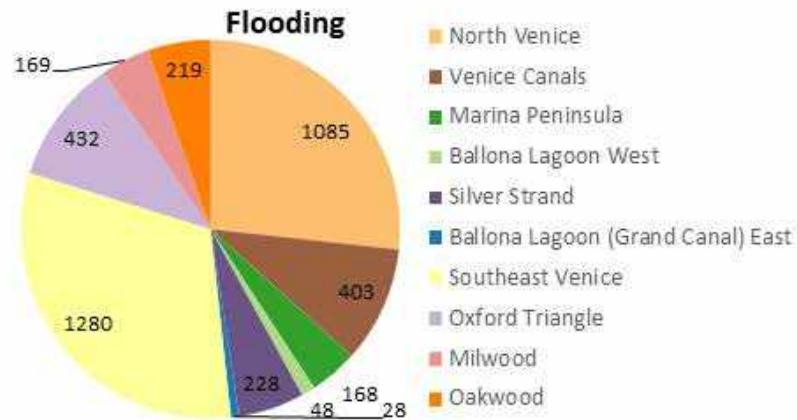
exposure. Additionally, property damage, loss of inventory (commercial/industrial), repairs, and retrofitting are often costly and time consuming. Historic and other building requirements for a portion of properties in Venice make the adaptive capacity of property generally low. Additionally, flood damage can impact renters by resulting in temporary or permanent loss in tenancy with no relocation benefits. Renters who live in rent stabilized housing are impacted as well, although they will need to file for a Reduction in Housing Services in order to be safely accommodated through the disaster.

Flooding depths of up to about 1 foot can often be mitigated through temporary measures such as sand bags, while flooding of greater depths can be more difficult to mitigate and can cause permanent damage. However, advance warning is needed to allow residents time to install these measures to be effective. Such warning is typically provided for large rainfall events or coastal storms, but a tide gate malfunction during a rising tide would not likely allow sufficient time to install temporary flood-proofing measures.

Description



of Parcels Affected for +6.6 feet Inland Flooding



Parcel Analysis

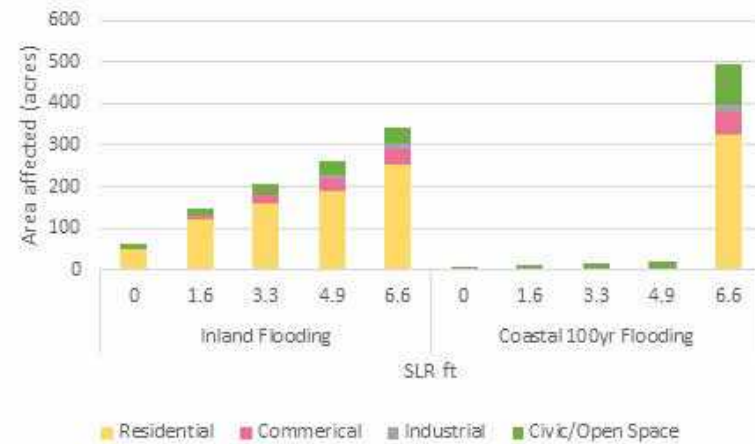
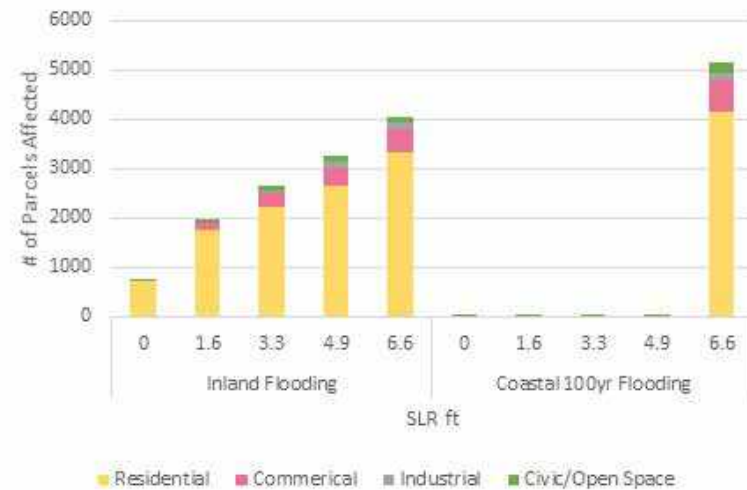


Figure 6.3: Property Exposure Summary

6.4 Cultural Resources

The assets identified in this category include cultural resources designated by the State of California, City of Los Angeles, and Federal Register.

6.4.1 Exposure

Cultural assets within the low-lying areas of Venice are exposed to inland flooding. These include the Venice Canals Historic District, the Lost Venice Canals Historic District, the Southwestern portion of the Milwood Venice Walk Streets Historic District, and the Abbot Kinney Area Historic Monuments. Similar to the exposure of parcels, a tide gate malfunction or extreme rainfall event during a high tide could result in flooding of the low-lying areas in the Venice Canals Historic District. Impact thresholds to each asset from this potential flooding vary depending on their location and elevation.

Closer to the beach, three historic monuments and two historic districts: North Venice Walk Streets Historic District and Windward-Pacific Commercial Historic District, are potentially exposed to flooding and wave runoff from large storms with +6.6 feet SLR.

6.4.2 Vulnerability

The culturally significant buildings and districts exposed to flooding can be highly sensitive to damage. Older foundations and wood construction can be damaged and require repair or reconstruction. Additionally, an inherent historic component to the Venice Canals is the water level in the canals, which currently is muted from the tides to maintain water and, therefore, aesthetic quality. How the tide gates are operated in response to SLR will have direct impacts on the water levels and water quality in the canals.

6.5 Coastal Amenities

The coastal amenities resource category includes the beach area, Venice Beach Boardwalk and Recreation Center, and the Municipal Fishing Pier. These resources offer a wide range of low cost recreational opportunities and other experiences that make Venice Beach a major draw for locals and tourists.

6.5.1 Exposure

The primary exposure to coastal amenities comes from the open coast. SLR increases the potential for damage due to direct wave attack for assets like the Municipal Fishing Pier when extreme storm waves coincide with higher water levels. Higher water levels during large storm events is also projected to increase potential for runoff up to the Ocean Front Walk. Additionally, the protective function of the beach itself will decrease with SLR, as sandy beaches are projected by CoSMoS to erode 10-20% for +1.6 feet and 25-50% with +3.3 feet SLR (Noble Consultants, 2016). A key uncertainty of the beach loss projections is the long-term effectiveness of coastal structures like the Venice breakwater and groin, as discussed in

Section 6.1.1. These structures have a significant effect on current shoreline processes and the movement of sand alongshore. As sea levels rise, the influence of these structures on nearshore dynamics will also change. Monitoring of future shoreline changes will be an effective way to understand how SLR and the function of the existing coastal structures will shape the future beaches of Venice.

6.5.2 Vulnerability

Some coastal amenities, such as the Ocean Front Walk and Venice Beach Recreation Center, may be able to tolerate temporary flooding from extreme events with only minor damage and disruption. More permanent damage to coastal amenities would occur when these assets are exposed to beach erosion and direct wave attack that can undermine foundations and cause significant structural damage to park facilities, bike paths, and other hardscape.

Presently, large beach widths and winter berms protect assets such as the Ocean Front Walk from direct wave action and overtopping. The dynamic factors of beach width are accounted for to a degree within the CoSMoS COAST model; however, monitoring of beach conditions is critical to inform future vulnerability assessments due to uncertainties surrounding the performance of existing coastal structures. The current projections depict a threshold of +3.3 feet SLR where flooding along the oceanfront and Venice Beach Recreation Center increases considerably. This exposure could result in temporary flooding and damage to beach facilities through relatively high elevations, although wide beaches make this exposure limited to large storm events that can be forecasted and prepared for by LA County Department of Beaches and Harbors.

To more accurately assess the vulnerability threshold of assets like the Municipal Fishing Pier, further information about the design, history of repairs, and current conditions of the pier are necessary to identify critical wave and water level conditions with respect to SLR. This is an important low-cost visitor-serving amenity to the City.

Venice's beaches provide large amounts of revenue for the City and County and are a major economic driver as a tourist destination. The estimated total annual spending for Venice Beach in 2000 was found to be approximately 880 million US dollars (in 2010 USD) with annual recreational and habitat value estimated near 80 million dollars (King et al. 2011). This data illustrates the economic value of Venice Beach and the coastal amenities. In this study, beach erosion is shown to correlate to loss of value and annual spending; therefore, beach recreation as a resource for the City should be considered sensitive to erosion.

6.6 Ecological

The ecological resources category evaluated habitat and species with special status. Resources were informed using the California Natural Diversity Database (CNDDB) developed by the California Department of Fish and Wildlife. The identified ecological assets in the scope of this study include sandy beach habitat, the Ballona Lagoon Marine Preserve, the canals' subtidal habitat, and rocky outcropping habitat. Species with special status include the California Snowy Plover, California Least Tern, Orcutt's Pincushion, and the California Brown Pelican.



6.6.1 Exposure

For sandy beach habitat, exposure to SLR hazards is primarily related to beach loss. The largest areas of erosion are projected by CoSMoS to be the southern portion of the study area, where protected habitat for California Least Tern and Snowy Plover sits today.

For the Ballona Lagoon and Canals habitat, the largest concern is how SLR will change the management of the tide gate system resulting in changes to water levels and water quality. As sea level rises, circulation, drainage, and tidal connection will be impacted, posing threats to water quality and the intertidal system.

6.6.2 Vulnerability

When thinking about ecological assets, in particular the coastal habitats that exist in Venice, one should consider the phenomenon of “coastal squeeze.” Habitat such as intertidal marshland is directly tied to water levels. For example, certain species can only exist within narrow bands of the tide range (e.g. MSL to mean high tide). So, as sea levels rise, the ecosystems gradually shift up with rising water levels. In a natural system, this migration of species upwards can occur relatively easily. However, where habitat is directly backed by coastal development, such as around the Canals or Ballona Lagoon, this upward migration is blocked and can result in a net loss of intertidal habitat.



Figure 6.4: Exposure Map of Cultural, Ecological, and Coastal Amenity Resources

6.7 Social Vulnerability and Environmental Justice

6.7.1 What Is Social Vulnerability

Social vulnerability is a broad term referring to how the impacts of physical hazards such as flooding can be amplified by social characteristics. These characteristics can include income, poverty, education, females as head of household, race, linguistic isolation, age, housing type and age, and physical and mental illnesses and disabilities. These characteristics are associated with higher sensitivity and/or lower adaptive capacity to flooding and SLR and, thus, can be used to inform adaptation planning (USC Sea Grant, 2013).

6.7.2 What Is Environmental Justice

With the passage of California Assembly Bill 2616, environmental justice was recognized as a component to consider when issuing coastal development permits. Environmental justice refers to the equitable distribution of environmental benefits throughout the state and is described in the bill as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (Burke, 2016). Environmental justice, as applied to SLR, can guide decisions with tradeoffs that affect coastal access and recreation, economic opportunity, or unequal exposure to environmental hazards.

Key findings from Adapt LA SLR Vulnerability Study, 2013

- *Venice may have reduced capacity to adapt to the impacts of sea level rise because of an older housing stock and high percentage of renters.*
- *The Social Vulnerability Index (developed by Cutter et al. 2003), which calculates a vulnerability index based on a combination of 32 census-based population characteristics, corroborates findings that communities in Venice, San Pedro and Wilmington are the most socially vulnerable coastal communities in the City.*

6.7.3 Vulnerable Populations

Flooding hazards can have disproportionate effects on populations with factors that make communication of emergency services or notifications, ability to evacuate to safe areas, and capacity to recover or adapt to hazards difficult. Such factors include age, disability, family status, homelessness, and linguistic isolation as well as populations who are institutionalized or burdened by poverty (Cutter et al, 2003). These factors are used to determine a Social Vulnerability Index (SVI) and are mapped in Figure 6.5 and Figure 6.6. Additionally, in Venice (and statewide), the burden of high costs of living can cause displacement and drive populations to live far away from their place of employment or public resources, such as the coast. SLR can exacerbate this displacement through additional costs of adaptation, flood

insurance, or repair. Consideration of these populations should be included in the development of adaptation strategies and emergency response plans.

6.7.4 Homelessness

Venice (and the region as a whole) has been dealing with an increasing homelessness crisis in recent years. The 2017 Greater Los Angeles Homeless Count surveyed Venice and reported a total of 1,191 homeless persons (Los Angeles Homeless Services Authority, 2017). Homeless encampments frequently occur along the oceanfront walk and near the beachfront and commercial centers on Lincoln Ave, but can also be found throughout the Venice Community Planning Area. Encampments within the hazard areas identified in this study cause concern for the safety of these populations. Hazards can appear suddenly and without notice, such as a tide gate failure, or can be forecasted, such as a large storm. Evacuations and emergency sheltering can be difficult and costly for the community and should, therefore, be considered in adaptation strategies or emergency response plans.

6.7.5 Dynamic Demographics

The Venice community has expressed concerns with issues such as gentrification, changing demographics, and increasing cost of living. SLR can take place over a long period time relative to the speed at which community demographics can change. When planning for SLR, it is important to consider the dynamic nature of community demographics.

Important questions to consider going forward include:

- How do the dynamic issues of gentrification, displacement, and population growth affect Venice's vulnerability to SLR?
- How might tide gate failure, flood insurance, storm-related coastal flooding, or other SLR issues affect displacement or community make up?
- How will vulnerable populations be impacted by hazards and potential adaptation strategies?

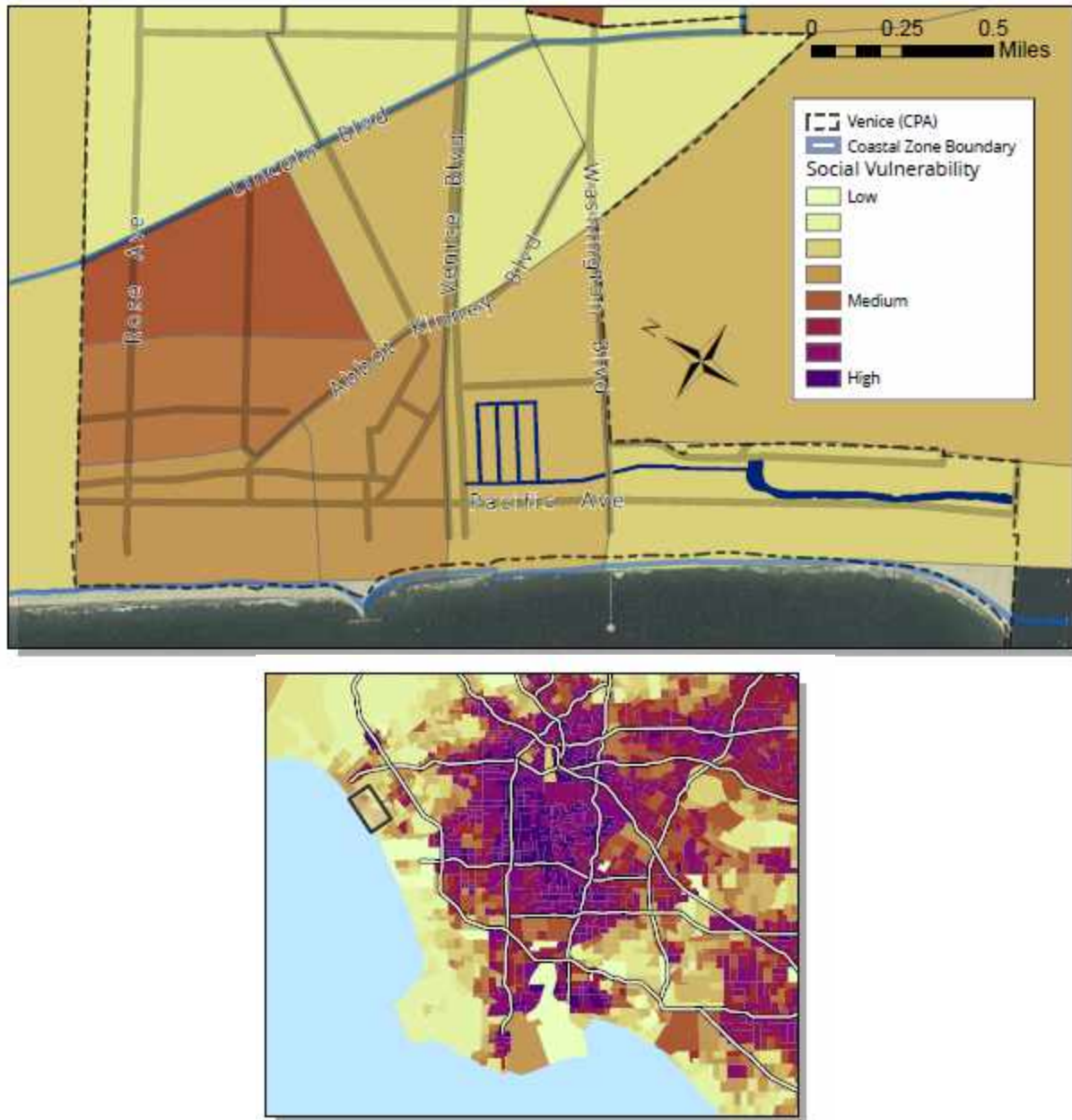


Figure 6.5: Map of 2016 Social Vulnerability Index for Venice and Region by Census Tract
(Data provided by Agency for Toxic Substances & Disease Registry)



Figure 6.6: Map of Minority Status and Language Isolation Index
(Used in 2016 Social Vulnerability Index. Data provided by Agency for Toxic Substances & Disease Registry)

7. Risk Assessment Matrix

For this study, risk was determined to be a product of both consequence and urgency. A simple scoring matrix was developed to assess the risk to coastal resources, presented in Table 7.1. The risk scores range from R1 (lowest risk) to R4 (highest risk). Risk can be difficult to define because consequences are subjective and the accuracies of the probabilities are unknown. The goal of this section is to organize the findings of the VA in a way that can help focus the adaptation planning efforts on short-term impacts that have a high consequence.

Consequences were determined for each asset qualitatively based on the vulnerability of each asset category. Consequences were determined to be either “low,” “medium-low,” medium-high or “high” based on criteria outlined in Table 7.1.

Urgency was determined by distinguishing between long-term and short-term SLR thresholds. Short-term SLR thresholds refer to impacts identified for the current sea level or +1.6 feet SLR scenario, which represents a conservative estimate of SLR by mid-century. Long-term thresholds refer to impacts identified for the +3.3 feet and higher SLR scenarios expected to occur toward the end of the century or beyond. This approach focuses on specific SLR increments so the study can be interpreted and updated with future and more accurate projections about the timing of each increment.

Table 7.1: Definition of Risk Assessment Scoring System

| Consequence | Risk Score | |
|--|--|---|
| | Short-term SLR Threshold SLR ≤ 1.6 ft | Long-term SLR Threshold SLR ≥ 3.3 ft |
| High: Permanently damaged, large impact on system, large loss of value or life | R4 | R3 |
| Medium: Temporarily damaged but moderate impact on system, medium loss of value | R3 | R2 |
| Low: Temporarily damaged, low impact to system, small loss of value | R2 | R1 |

R1 = Low Risk, R2 = Medium Low Risk, R3 = Medium High Risk, R4 = High Risk

7.1 Infrastructure

Infrastructure systems throughout Venice provide important services to the community. In general, all assets in this category have some degree of exposure either currently, or with SLR of +1.6 feet. Most infrastructure has a limited adaptive capacity to accommodate the evolving hazards identified in this study. The tide gate system is subject to functional and operational vulnerabilities identified in Section 6.1.2 that could lead to cascading impacts that affect infrastructure and other resources in the low-lying areas of Venice. Assets like the VPP/VAPP provide a critical service to the Venice community, and impacts to the operations would result in significant consequences for public health and the environment. The



VPP and VAPP service both a large area and amount of sewage making any damage to the facility, its power supply, or increased demand felt throughout the system. Over 20% of the parcel of the facility intersects with the inland flood zone for present day sea level, with increased potential flood depths as sea level rises.

The VSPP and Westward Pump Stations service low-lying areas at risk to inland flooding with SLR of 1.6 feet. The pump stations themselves could experience a similar kind of flooding before 3.3 feet of SLR. The consequence of even temporary damage to the stations could result in decreased capacity for stormwater management, resulting in damages to nearby property. Similarly, the Boone & Olive PP and its service area could flood at present day, temporary interruptions in service during a flood event could damage nearby property. These risks increase with SLR as the potential flood depth increases and puts additional pressure on the conveyance capacity of these engineered systems. The results of this analysis are shown in Table 7.2 below.

Table 7.2: Infrastructure Resource Risk Assessment Matrix

| Asset | SLR Threshold | Consequence | Justification | Risk Score |
|---|------------------------------|-------------|---|------------|
| Tide Gates | Short-term (SLR ≤ 1.6 ft) | High | Critical facility & potential for cascading impacts | R4 |
| VPP/VAPP | Short-term (SLR ≤ 1.6 ft) | High | Large regional impact, potential for damaging pollution | R4 |
| VSPP and Westward Pump Stations | Short-term (SLR ≤ 1.6 ft) | High | Large impact on drainage area | R4 |
| Boone & Olive PP | Short-term (SLR ≤ 1.6 ft) | High | Large impact on drainage area | R4 |
| Outfalls | Short-term (SLR ≤ 1.6 ft) | Medium | Moderate impact, easier to adapt/repair | R3 |
| Electric Infrastructure | Short-term (SLR ≤ 1.6 ft) | Medium | Temporary impact on communities and emergency services | R3 |
| Waste and Stormwater Collection Network | Short-term (SLR ≤ 1.6 ft) | Medium | Temporary impact on communities and emergency services | R3 |
| Transportation Infrastructure | Short-term (SLR ≤ 1.6 ft) | High | Large impact on communities and emergency services | R4 |
| Coastal Infrastructure | Short-term (SLR ≤ 1.6 ft) | Medium | Loss of function gradual but important for beach system | R3 |

R3 = Medium High Risk, R4 = High Risk

7.2 Civic

Access related assets, such as bus lines and parking, have a low potential for severe damage with flooding. The consequences associated with them involve the temporary loss of function and are, therefore, considered to have medium consequences with SLR. Schools and emergency services are considered to have high consequences, as any loss of service has a major impact to vulnerable populations and/or public safety. The results of this analysis are shown in Table 7.3 below.

Table 7.3: Civic Resource Risk Assessment Matrix

| Asset | SLR Threshold | Consequence | Justification | Risk Score |
|--|------------------------------|-------------|--|------------|
| Bus Lines | Long-term (SLR > 3.3 ft) | Medium | Temporary loss of service | R2 |
| Parking (City-owned) | Short-term (SLR ≤ 1.6 ft) | Medium | Temporary loss of use, minor damage | R3 |
| Parking (County-owned) | Long-term (SLR ≥ 3.3 ft) | Medium | Temporary loss of use, minor damage | R2 |
| Lifeguard HQ | Long-term (SLR ≥ 3.3 ft) | High | Non-movable resource for safety and emergency services | R3 |
| Lifeguard Towers | Short-term (SLR ≤ 1.6 ft) | Low | Easily movable | R2 |
| Coeur d'Alene Elementary (LAUSD) | Long-term (SLR ≥ 3.3 ft) | High | Place of education | R3 |
| Westminster Ave Elementary (LAUSD) | Short-term (SLR ≤ 1.6 ft) | High | Place of education | R3 |
| Westside Global Awareness Magnet (LAUSD) | Long-term (SLR ≥ 3.3 ft) | High | Place of education | R3 |
| LAPD Venice Substation | Long-term (SLR ≥ 3.3 ft) | High | Non-movable resource for safety and emergency services | R3 |
| LA Fire Station 63 | Long-term (SLR ≥ 3.3 ft) | High | Loss of access would affect emergency services | R3 |

R2 = Medium Low Risk, R3 = Medium High Risk

7.3 Property

Damage to large segments of the Venice Canals and Southeast Venice sub-areas are possible from coastal hazards today. These impacts expand significantly with each increment of SLR, affecting a portion of all the sub-areas in Venice. Damage to property from flooding was characterized as a high consequence impact due to the resulting economic and social costs the community would face. Indirect impacts to property use also result from impacts to infrastructure and emergency services for these areas. The results of this analysis are shown in Table 7.4 below.

Table 7.4: Property Resource Risk Assessment Matrix

| Sub-area (as defined in LUP) | SLR Threshold | Consequence | Justification | Risk Score |
|-----------------------------------|---------------------------|-------------|---------------------------|------------|
| North Venice | Short-term (SLR ≤ 1.6 ft) | High | Large impact on community | R4 |
| Marina Peninsula | Short-term (SLR ≤ 1.6 ft) | High | Large impact on community | R4 |
| Ballona Lagoon West | Short-term (SLR ≤ 1.6 ft) | High | Large impact on community | R4 |
| Ballona Lagoon (Grand Canal) East | Short-term (SLR ≤ 1.6 ft) | High | Large impact on community | R4 |
| Silver Strand | Long-term (SLR ≥ 3.3 ft) | Medium | Large impact on community | R3 |
| Southeast Venice | Short-term (SLR ≤ 1.6 ft) | High | Large impact on community | R4 |
| Venice Canals | Short-term (SLR ≤ 1.6 ft) | High | Large impact on community | R4 |
| Oxford Triangle | Long-term (SLR ≥ 3.3 ft) | Medium | Large impact on community | R3 |
| Millwood | Long-term (SLR ≥ 3.3 ft) | Medium | Large impact on community | R3 |
| Oakwood | Long-term (SLR ≥ 3.3 ft) | Medium | Large impact on community | R3 |

R3 = Medium High Risk, R4 = High Risk

7.4 Cultural Resources

The Venice Canals Historic District has a short-term SLR threshold due to its low elevation and direct proximity to the canals. The consequence of flooding to these cultural resources is considered medium



because the impacts to the accessibility and character of the Canals are expected to be temporary, at least in the short-term. The Abbot Kinney & Venice Boulevard Historic Resources are also considered to have a short-term SLR threshold due to the inland flood potential at the +1.6 feet SLR scenario. The Coastal Historic Monuments are considered to have a long-term SLR threshold based on CoSMoS flood projections that indicate a 100-yr storm would not reach the monuments until the +3.3 feet SLR scenario. The consequences of damage to these coastal monuments is considered medium due to the ability to repair moderate damage from infrequent and short duration flooding associated with short-term SLR exposure. These consequences would have a limited effect on the Venice community. The results of this analysis are shown in Table 7.5 below.

Table 7.5: Cultural Resource Risk Assessment Matrix

| Asset | SLR Threshold | Consequence | Justification | Risk Score |
|--|------------------------------|-------------|--|------------|
| Venice Canals Historic District | Short-term (SLR ≤ 1.6 ft) | Medium | Range of damage, possible for historic aspects to be repaired | R3 |
| Coastal Historic Monuments | Long-term (SLR ≥ 3.3 ft) | Medium | Range of damage, possible for historic aspects to be repaired | R2 |
| Abbot Kinney & Venice Boulevard Historic Resources | Short-term (SLR ≤ 1.6 ft) | Medium | Range of damage, possible for historic aspects to be repaired | R3 |

R2 = Medium Low Risk, R3 = Medium High Risk

7.5 Coastal Amenities

The iconic beaches and recreation centers of Venice are visited and used by multiple residents both local and regional, as well as tourists. The impact of erosion and flooding to these assets could have large cultural and economic impacts and are, therefore, considered to have a high consequence. The Municipal Fishing Pier has been damaged by coastal storms before, and SLR will increase the potential from storm-related damage. The results of this analysis are shown in Table 7.6 below.

Table 7.6: Coastal Amenities Resource Risk Assessment Matrix

| Asset | SLR Threshold | Consequence | Justification | Risk Score |
|-----------------------------------|-----------------------------|-------------|---|------------|
| Venice Beach Recreation Center | Long-term (SLR ≥ 3.3 ft) | High | Valuable resource for vulnerable population, center for tourism | R3 |



| | | | | |
|---------------------------|-----------------------------------|--------|---|----|
| Oakwood Recreation Center | Long-term (SLR \geq 3.3 ft) | High | Valuable resource for vulnerable population | R3 |
| Venice Beach Boardwalk | Long-term (SLR \geq 3.3 ft) | High | Iconic center for tourism, local economy | R3 |
| Municipal Fishing Pier | Long-term (SLR \geq 3.3 ft) | Medium | Can and has been repaired or rebuilt | R2 |
| Beach Recreation | Short-term (SLR \leq 1.6 ft) | High | Major source of revenue for the area and cultural value of Venice | R4 |

R2 = Medium Low Risk, R3 = Medium High Risk, R4 = High Risk

7.6 Ecological

The sandy beach habitat is considered to have a short-term SLR threshold due to SLR-related erosion and increased potential for damaging storms. The Ballona Lagoon Marsh Preserve is considered to have a short-term threshold for SLR due to a decreased connection with ocean from tide gates causing potential changes in water quality and salinity. The endangered species associated with these habitats make consequences high. The Canals Area ESHA is considered to have a short-term SLR threshold for similar reasons as the Ballona Lagoon Preserve, but was assigned a medium consequence because there is less intertidal habitat in the Canals Area ESHA due to the limited tide range and landscape/hardscape features which line the canals. The coastal rocky nesting habitat is considered to have a long-term SLR threshold due to the height of the marina breakwater and jetties and lower consequence due to adaptive capacity of the de-listed California Brown Pelican. The results of this analysis are shown in Table 7.7 below.

Table 7.7: Ecological Resource Risk Assessment Matrix

| Asset | SLR Threshold | Consequence | Justification | Risk Score |
|-------------------------------|-----------------------------------|-------------|--|------------|
| Sandy Beach Habitat | Short-term (SLR \leq 1.6 ft) | High | Loss of habitat for endangered species | R4 |
| Ballona Lagoon Marsh Preserve | Short-term (SLR \leq 1.6 ft) | High | Loss of habitat for endangered species | R4 |
| Canals Area ESHA | Short-term (SLR \leq 1.6 ft) | Medium | Less existing intertidal habitat | R3 |
| Coastal Rocky Nesting Habitat | Long-term (SLR \geq 3.3 ft) | Low | De-listed species, similar rocky revetments nearby | R1 |

R1 = Low Risk, R3 = Medium High Risk, R4 = High Risk



8. Conclusion

This assessment identifies potentially significant vulnerabilities to the Venice Coastal Zone both with present conditions and future SLR. A resource's vulnerability to SLR is a product of its exposure to coastal hazards (direct physical exposure or cascading impacts to system), its sensitivity to said hazards (potential damage or loss of function), and its adaptive capacity (ability to restore function or avoid damage).

Assets in low-lying areas (3 to 8 feet NAVD88) are vulnerable to potential inland flooding. Potential exposure to inland flooding is the result of three vulnerabilities: 1) Canal tide gate malfunction; 2) large rainfall event coinciding with high ocean water levels; and 3) groundwater shoaling. While this study investigates each of these components to the extent possible within the allocated time and budget, further studies are recommended to understand Venice's exposure to items 2 and 3. Flooding of these low-lying areas is currently prevented and mitigated by two tide gates and several stormwater pump stations. Tide gate malfunction during high ocean water levels could result in flooding of varying depths, damaging critical infrastructure, property, and reducing access to emergency services. These high water levels will occur more frequently as sea level rises.

Higher water levels will also present challenging tradeoffs with regards to adaptation. The tide gates currently open for a limited window during the tide cycle to mute the effects of the ocean tides on the Ballona Lagoon and Venice Canals' water levels. SLR may require a change in the operation of these tide gates that could impact the exposure of inland assets to flooding, water quality, or habitat. If water levels are muted further in the future to prevent flooding then circulation in the canals could suffer, impacting water quality and habitat. On the other hand if the tide range is maintained in the canals, then the potential for flooding of developed areas around the canals would increase with each SLR increment.

Existing wide beaches generally protect Venice from coastal hazards. Coastal assets along or near the beachfront are potentially vulnerable during a large storm event in combination with SLR greater than 3.3 feet. After 4.9 feet SLR, beachfront assets are more vulnerable to damage from flooding or potential erosion of the beach. A SLR of 6.6 feet is a tipping point for Venice's exposure to extreme coastal wave events. Beachfront and coastal assets could flood annually, beaches could be greatly reduced in width, and high water levels could greatly increase potential for flooding of inland low-lying areas.

This report was based on the best available SLR science published by the OPC and consistent with CCC guidelines. SLR hazards were projected by CoSMoS, a multi-agency effort led by the USGS. The coastal processes affecting the City's shoreline are always changing and the hazards and projections depicted in this report are limited by the inherent difficulties in predicting future climate conditions, wave patterns, sediment supply, and development patterns.

There is considerable uncertainty around the timing of SLR, how future coastal processes may be affected, and what adaptation approaches will be applied in the future. The most effective way for the City to address the vulnerabilities described in this report is to implement policies and programs that are flexible and can be adapted in response to SLR, future beach conditions, and future development.



Recommended areas to focus primary efforts on include reducing current exposure to low-lying assets such as:

- Resilience improvements to the VPP and proposed VAPP per recommendations in the One Water LA Technical Memorandum No 5.5.
- Resilience improvements to the stormwater pump stations per recommendations in the One Water LA Technical Memorandum No 5.5.
- Improve resilience and redundancy of the Marina del Rey and Washington Boulevard tide gate systems.
- Investing in further analysis of stormwater system capacity for the Venice Canals' sub-area in combination with high ocean water levels and storm events.
- Investing in further analysis of existing and projected groundwater conditions and associated hazards with regards to SLR.

Venice's low-lying elevation makes it one of the most vulnerable communities in the region to SLR. Developing strategies for financing further studies and adaptation efforts in the short-term will contribute to increasing the resilience of the Venice coastal zone overall. In the long-term, increasing coordination with LA County and stakeholder groups will help inform regional approaches to adaptation to include nearby communities such as Santa Monica, Marina del Rey, and Playa del Rey.

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Appendix A

ASSET PROFILES



Venice Sea Level Rise Vulnerability Assessment

Asset Profiles



Funded in part by CCC Grant LCP-14-09



Assets evaluated:

- Tide gates
- Wastewater
- Stormwater
- Transportation
- Utilities (water & power)
- Coastal protection



Infrastructure

Stormwater Pump Plants ☆

Critical for flood protection.

Service areas and pump stations could flood with +1.6 ft SLR during tide gate failure.

Maintenance issues exacerbated by SLR affects on beach outfalls.

Tide Gates △

Critical for flood protection.

Prevent flooding at high tides / drain stormwater during low tides

Tide gate operations sensitive to SLR

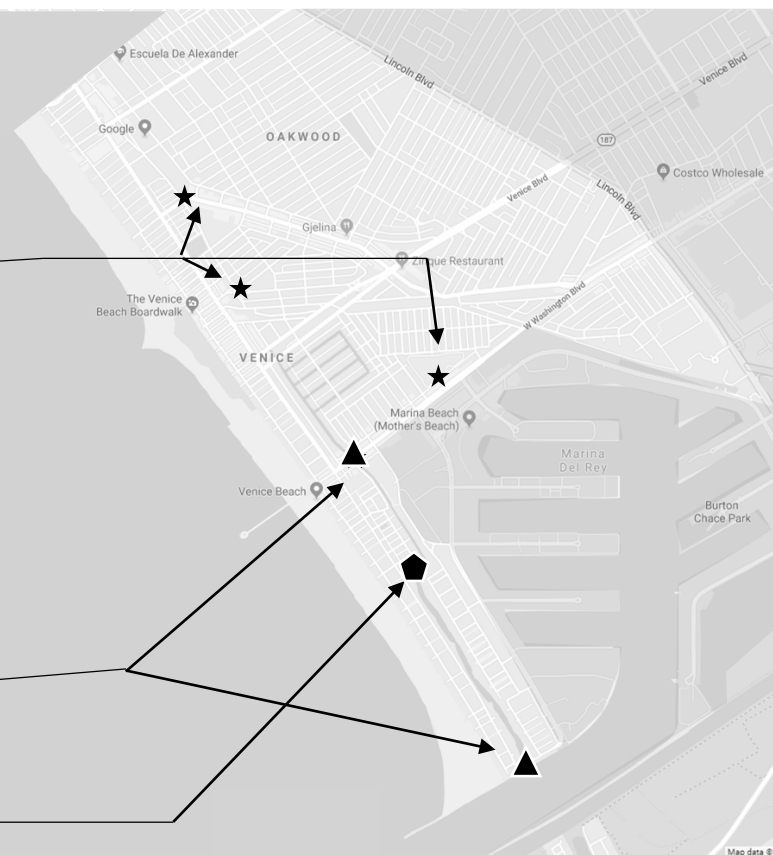
VPP/ VAPP ⬠

Critical wastewater facility / large service area

Venice Pumping Plant at risk to flooding from tide gate failure +1.6 ft SLR

Transportation

Length streets flooded:
8+ miles (no SLR)
35+ miles (+6.6 ft SLR)
~6 miles of bikeways could be flooded.



Exposure: High exposure for infrastructure within inland low lying areas

Sensitivity: physical vs functional

- Physical – damage resulting from flooding, erosion or wave impact
Example: Coastal protection sensitive to physical damage, leads to functional impact
- Functional – service or operation provided by asset is impaired
Example: Tide gates – function/operation highly sensitive to SLR

Adaptive Capacity: limited / improvements needed to build in added capacity

Marina del Rey Tide Gate

Description

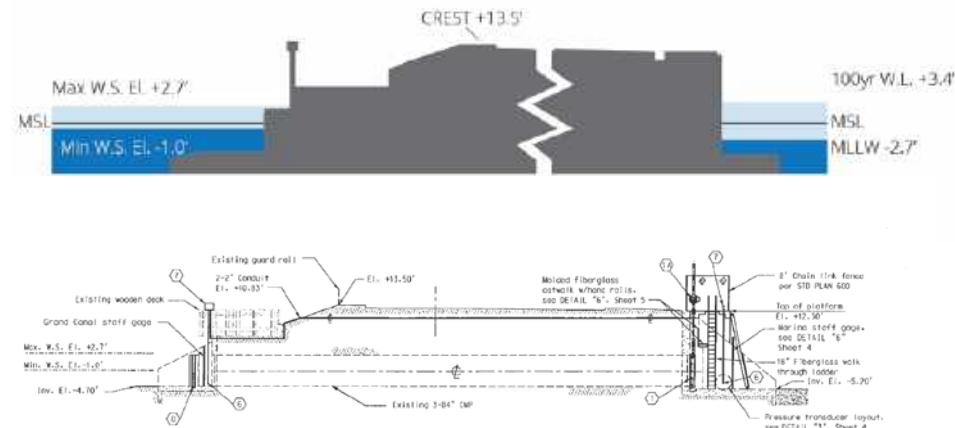
- Critical flood protection infrastructure.
- Prevents flooding of low-lying areas during high tide.
- Dampen high and low tides based on set operating schedule which has a wet and dry mode.



Analysis

- SLR will force a change in operating regime.
- Reduced drainage capacity during large rain event
- Reduce flushing opportunities for Canals and Ballona Lagoon – water quality issues
- The elevation of the revetment which separates the Ballona Lagoon and the Marina is around 15ft NAVD88. This would mean overtopping of the gate would not be an issue until SLR >6.6 ft

SLR Exposure



Washington Blvd. Tide Gate

Description

- Barrier between Ballona Lagoon and Venice Canals.
- Provides redundancy to MdR gates
- Used to manage water levels in Venice Canals.
- Operated by Mariposa Landscaping (in partnership with City of LA) opened ~bi-weekly in coordination with City and predicted tides



Analysis

- The sensitivity of this tide gate is greater than the Marina gate because it is the last line of defense for the inland areas of Venice.
- Water quality management could be challenging with reduced flushing opportunities.
- The elevation surrounding the tide gate is close to present day MHHW, meaning a breach of the Marina gate could mean flooding on extreme high tides for inland areas even without SLR.

SLR Exposure



Venice Storm Water Pumping Plant (VSPP) & Westward Pump Stations

Description

The Venice Storm Water / Urban Runoff Pumping plant (also referred to as Windward Circle) is a low flow diversion pump designed to move urban runoff and storm water to processing at a treatment plant during low flows and discharge into the ocean during storm flows (Adapt LA).



Analysis

- Service area exposed to potential tidal flooding with 1.6 ft SLR
- Pumps would be key infrastructure for relieving tidal flooding
- Sensitive to supply of electricity, outfall maintenance, limits in pumping capacity
- VSPP is central hub, though level of support of surrounding pump stations is unknown

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (1.6 ft +)

Windward service area in potential flood zone if tide gates were to fail at +1.6 ft.

Storm: (6.6 ft +)

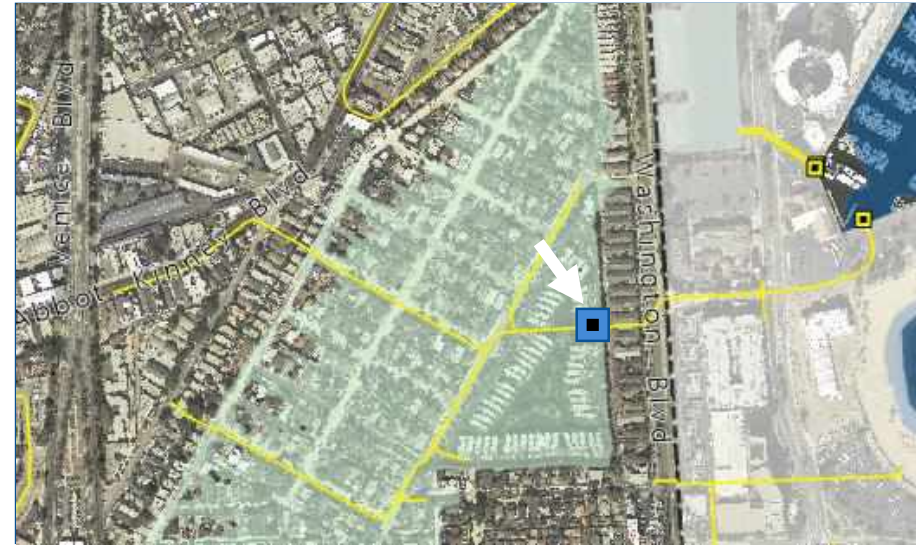
Potential flood zone could be increased with high tide + storm surge. With 100 year storm flooding could come from coast side with +6.6 ft SLR.

Boone & Olive Pumping Plant

Description

Stormwater pump station serving low lying area of Southeast Venice (south of Abbot Kinney Blvd and North of Washington).

Pump station discharges to outfall in Marina del Rey



Analysis

- Service area could flood at present day high tide
- Unknown storage/pumping capacity
- SLR could create a higher tailwater at the outfall in the marina, reducing drainage capacity during storm events.
- Sensitive to:
 - Groundwater flooding of low-lying areas
 - Limits in pumping capacity
 - Power supply
 - Water levels in Marina del Rey

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Current)

If tide gates were to fail, the pump station and service area could be impacted by flooding at present day, drastically increasing demand

Storm: (Long-term threshold)

Large rain event combined with high tide and storm surge will put maximum demand on station.

Wastewater Pumping Stations (VPP & VAPP)

Description

Venice Pumping Plant (VPP) and Venice Auxiliary Pumping Plant (VAPP) discharge to the Venice Dual Force Main, an important sewer line responsible for delivering sewage from large areas of the westside to the Hyperion Water Reclamation Plant.

VAPP will provide increased capacity & redundancy for this critical facility.



Analysis

- VPP surrounded by walls but not flood-proofed. \$1.6M of resilience improvements recommended in TM 5.5 (One Water LA, 2017).
- VAPP will include more flood-proofing measures
- Underground infrastructure (pipes & tanks) sensitive to changes in groundwater, liquefaction layer
- Sensitive to higher peak flows due to elevated groundwater levels or during a flood event

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (1.6 ft +)

With 1.6 ft SLR, area surrounding VPP could experience flooding at high tide with tide gate failure.

Storm: (Long-term threshold)

Potential flood zone could be increased with high tide + storm surge. With 100 year storm flooding could come from coast side with +6.6 ft SLR.

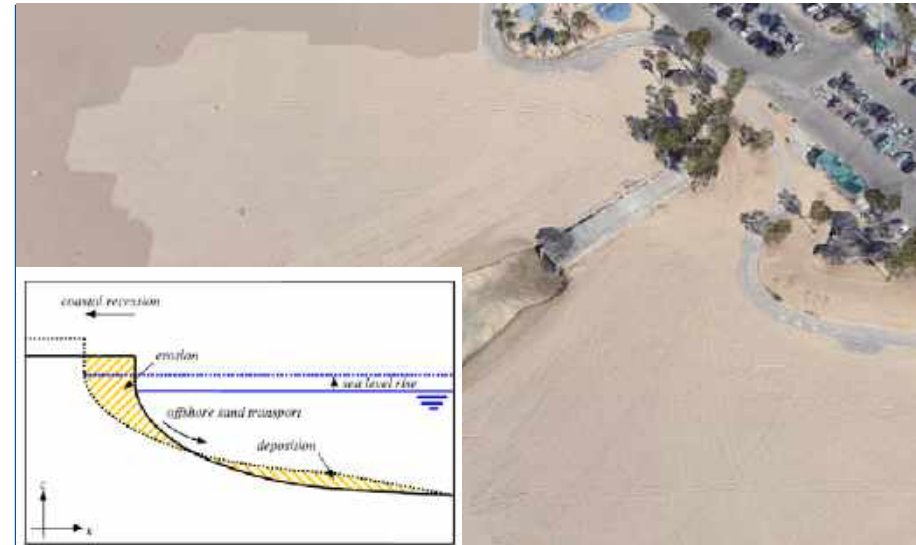
Beach Storm Drain Outfalls

Description

Three outfalls located along Venice Beach:

- Venice breakwater
- Brooks Ave
- Rose Ave

Outfall maintenance is currently a challenge and limits storm drain capacity if not adequately cleared prior to a storm event (One Water 2017).



Analysis

- SLR will push beach upward and landward
- Outfalls will experience higher potential for sand blockage
- Outfalls could be damaged or exposed due to beach erosion (long-term)
- Outfalls could be reconstructed to adapt to changing beach conditions

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Unknown threshold)

With greater SLR, beach erosion could damage outfalls.
(High uncertainty in erosion rates)

Storm: (1.6 ft +)

With 100-year storm at +1.6 ft SLR, higher water levels could reduce drainage capacity of outfalls. With a large rain event, drainage demand will be at highest resulting in increased demand and decreased capacity.

Electric Infrastructure

Description

- Overhead power lines throughout Venice
- 428 traffic signal cabinets, 3 communications hubs, 5 CMS cabinets, and 30 camera transceivers
- 230kV Scattergood-Olympic Cable underground
- Distribution stations at intersection of Culver Blvd. and Centinela Ave. (outside of Venice CZ/CPA)



Getty Images

Analysis

- Flooding prohibits access or work space which would be problematic in power restoration efforts until flooding subsides
- Corrosion would be amplified in consistent flooding cycles
- No physical exposure for transmission stations for SLR <6.6 ft
- Any electrical infrastructure along boardwalk could be damaged in 100yr flood with 3.3 ft SLR
- Electrical grid is critical resource and has potential for impact on tide gate and pump plant system.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Short-term threshold)

Inland flooding could prevent maintenance and amplify corrosion

Storm: (Long-term threshold)

Coastal flooding during large storm could damage beachfront infrastructure and reduce access for repair

Waste and storm water network

Description

Includes storm water and wastewater collection systems pulled from LA City geohub.

Most of the storm drain collection systems drain to pump stations, except for Venice Canals and Ballona Lagoon and coastal areas (higher in elevation).

Wastewater collection systems convey sewage to VPP and VAPP

Analysis

- Stormwater network is resilient to minor flooding and experiences large tidal influence according to County report (2014).
- Possibility for reverse flooding from tide gate failure (short-term) and from open coast or Marina outfalls (long-term)
- Possibility for biofouling inside pipes or network as tidal range increases in elevation
- Higher groundwater could result in more inflow & infiltration into the wastewater collection system



Murakawa Communications

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Short-term threshold)

Higher groundwater levels, possibility for reverse flooding from outfalls, biofouling, potential instability of infrastructure (pipes & tanks).

Storm: (Short-term threshold)

Reduced capacity in storm event, higher tailwater, reverse flooding from outfalls

Transportation Infrastructure

Description

Auto infrastructure: street network, major thoroughfares such as Highway 1/PCH/Lincoln Blvd., Venice Blvd, Washington Blvd, etc., traffic control systems

Bike infrastructure: Class I, II, and III bikeways as well as Cycle Tracks

Pedestrian infrastructure: sidewalks, boardwalk

Analysis

- Potential for significant temporary impacts to function/service provided by transportation infrastructure
- Bikeways and roads could be elevated to act as flood prevention infrastructure in key areas.

| | Inland Flood Potential | | | | | 100yr Coastal Flooding (CoSMoS) | |
|-------------------------------------|------------------------|--------|--------|--------|--------|---------------------------------|--------|
| | 0 ft | 1.6 ft | 3.3 ft | 4.9 ft | 6.6 ft | 3.3 ft | 6.6 ft |
| Length of Street Affected (miles) | 8.7 | 17.3 | 21.7 | 28.4 | 35.0 | 0.7 | 35+ |
| Length of Bikeways Affected (miles) | 0.03 | 1.4 | 2.3 | 3.4 | 3.8 | 0.8 | 5.7 |



SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Short-term threshold)

Temporary flooding of major roads and bikeways could lead to reduction in access for emergency services.

Storm:

SLR increases potential for wave overtopping, scouring, and direct wave attack on existing infrastructure such as boardwalk/coastal bike trail as well as limiting access for emergency services.

Coastal Infrastructure

Description

Includes breakwater and groin at Windward Ave, armoring and groin at Lifeguard HQ and jetty and breakwater at marina entrance



Analysis

- Reengineering may be required to update designed water levels of coastal infrastructure with SLR
- SLR may worsen potential damage of large storm events
- Use of "hard" coastal infrastructure can be effective in protecting sandy beach but can also have negative impacts on surf and aesthetic quality of beach.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Short-term threshold)

With greater SLR, effectiveness of existing infrastructure is diminished

Storm:

SLR increases potential for wave overtopping, scouring, and direct wave attack on existing infrastructure.

Exposure

- High for inland low-lying areas - flood potential exists today
- Lower for coastal storm flooding / 6.6 ft SLR (2090 – 2100+)

Sensitivity

- Highly sensitive to flooding / cost of damage / disruption to community

Adaptive capacity

- Temporary flood proofing (sand bags/elevate valuables): flooding <1 ft deep
- Limited adaptive capacity for flooding > 1 ft

Property



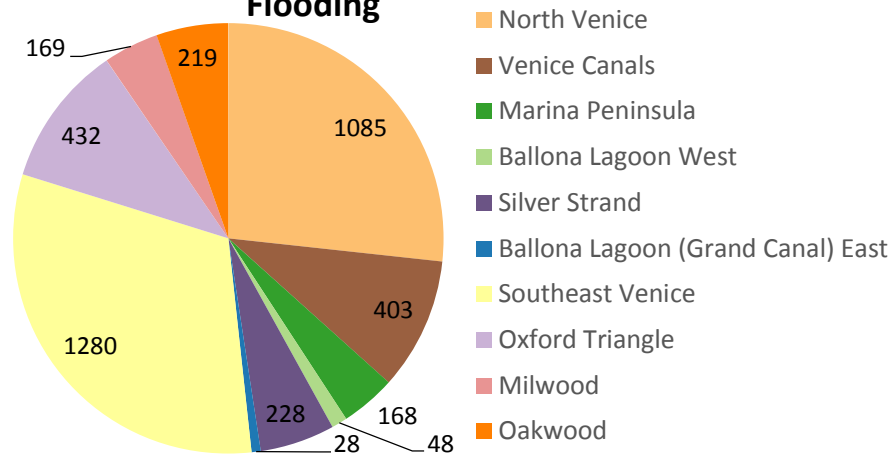
Summary

Description

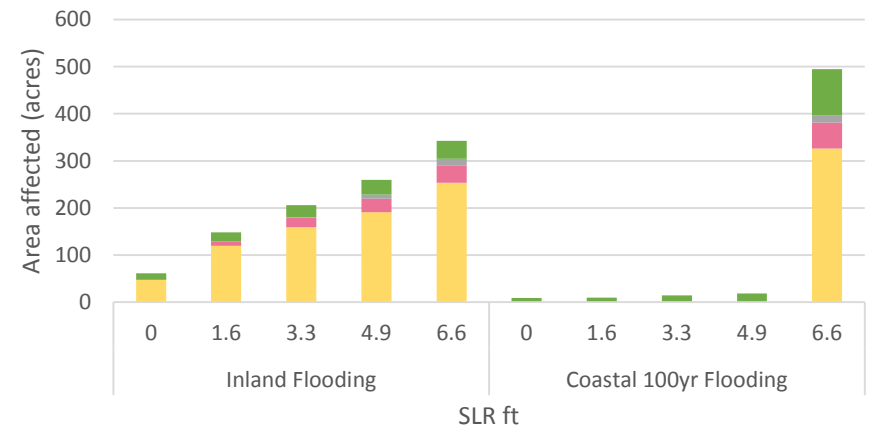
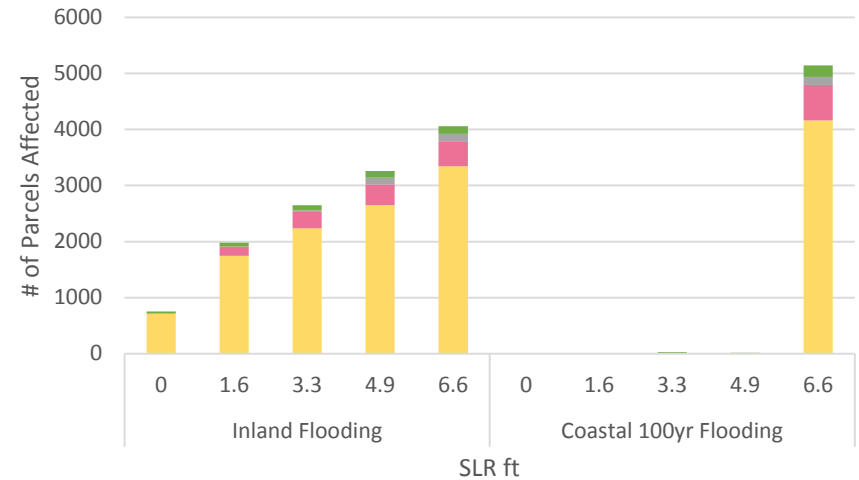


of Parcels Affected for +6.6 feet Inland Flooding

Flooding



Parcel Analysis



Venice Canals

Description

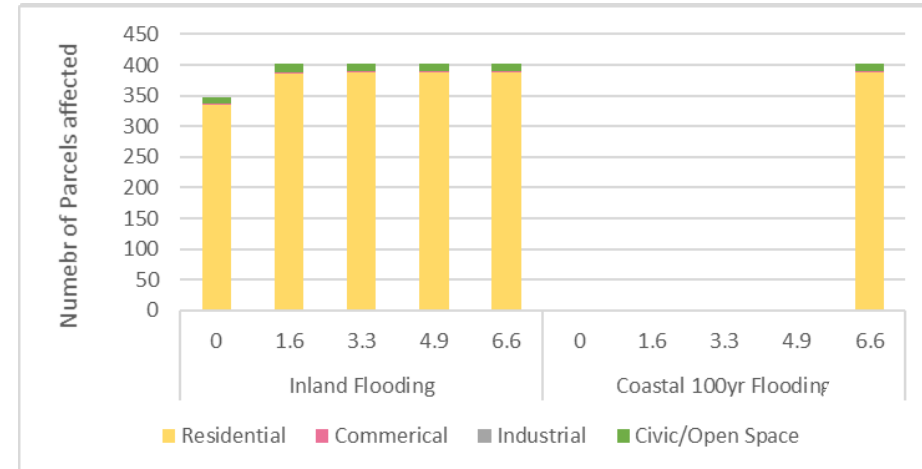
Historic District surrounding Venice Canals.



+0.0 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Sensitive to access from emergency services due to bridges and limited road network, historical character of property.

Adaptive Capacity:

Limited adaptive capacity due to historical designation limitations.

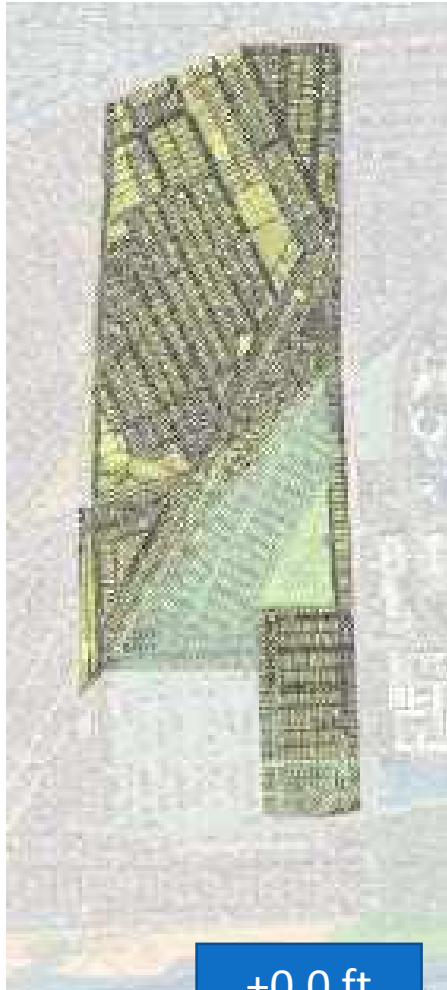
Short-term SLR Threshold (Current Sea Level)

Potentially first properties to flood in the case of tide gate failure.

Southeast Venice

Description

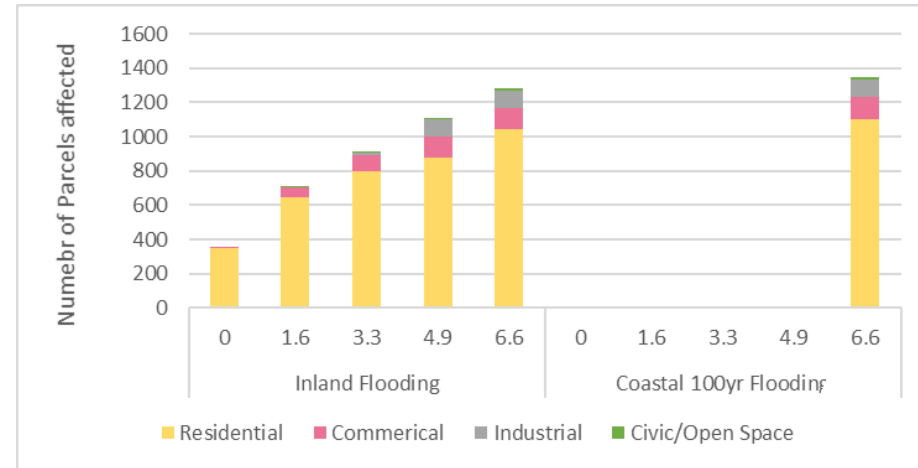
Central Venice subarea extending from Grand Canal to Lincoln Blvd..
Includes lowest lying areas of the coastal zone.



+0.0 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents. Sensitive to Adaptation efforts in MdR. Sensitive to higher groundwater levels.

Adaptive Capacity:

Limited adaptive capacity due to cost of construction and present height limitations.

Short-term SLR Threshold (Current Sea Level)

Low-lying residential and commercial centers most vulnerable to inland flooding.

North Venice

Description

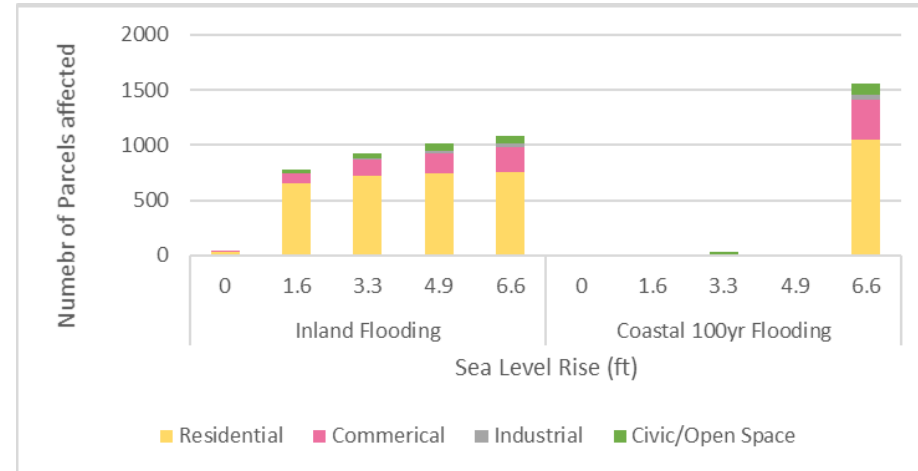
Central area including Abbot Kinney and Boardwalk commercial areas as well low-medium density residential areas.



+1.6 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents. Beach area is sensitive to storm-related flooding and damage to beachfront.

Adaptive Capacity:

Generally limited adaptive capacity due to factors such as ground level retail and cost of repair.

Short-term SLR Threshold (+1.6 ft)

Low-lying residential and commercial centers most vulnerable to inland flooding. Beachfront areas on north and south side of recreation center vulnerable to 100 year storm with +6.6 ft SLR.

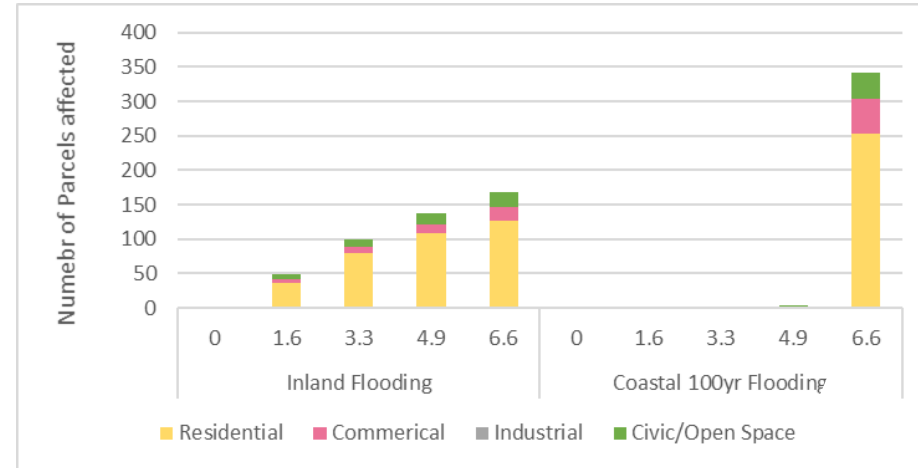
Marina Peninsula

Description

Beachfront community of Venice from Washington Blvd. to the Marina Jetty.



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents. Beach area is sensitive to storm-related flooding though less storm related damage projected for beachfront.

Adaptive Capacity:

Limited due to cost of repair, some development has covered ground floor parking and elevated living spaces reducing exposure.

Short-term SLR Threshold (+1.6 ft)

Low-lying residential most vulnerable to inland flooding. Beachfront areas in northern reach of subarea at risk to coastal flooding.

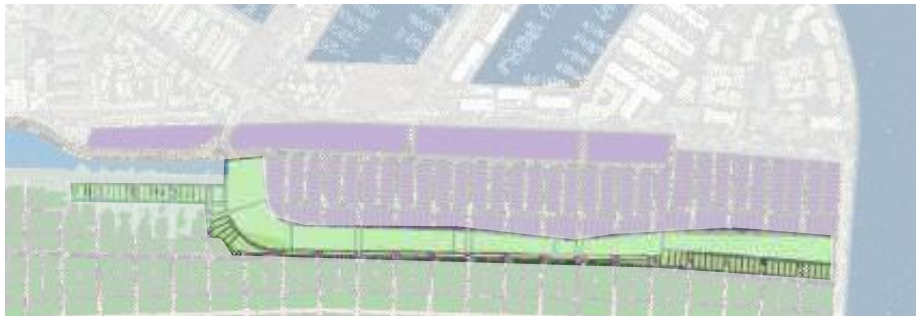
+3.3 ft



Ballona Lagoon West

Description

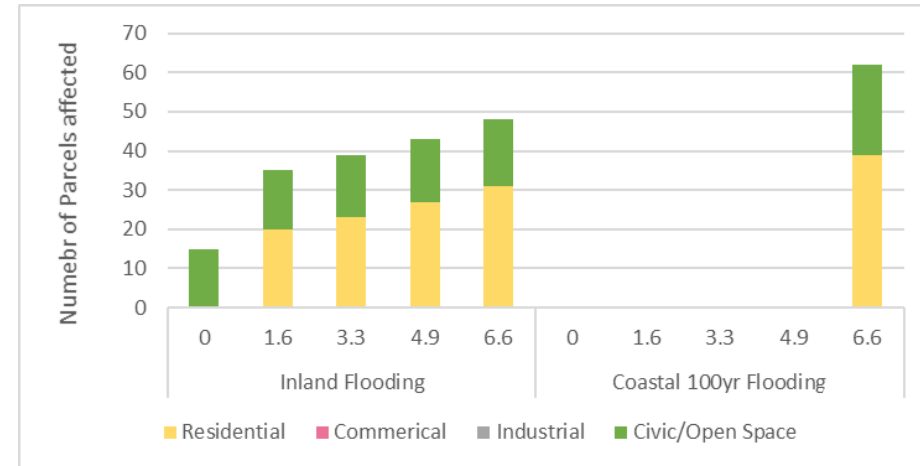
Includes Ballona Lagoon including westward adjacent properties.



+1.6 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents. Open space sensitive to higher water level. Highly dependent on MdR tide gates.

Adaptive Capacity:

Limited adaptive capacity of residential parcels, Ballona Lagoon provides some buffer for adaptation measures.

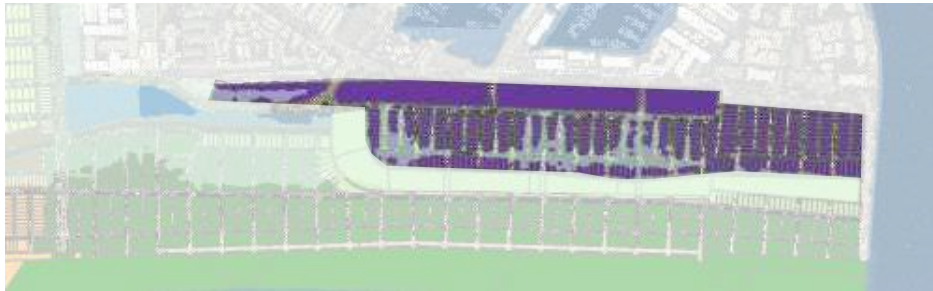
Short-term SLR Threshold (+1.6 ft)

Low-lying residential and open space most vulnerable to flooding.

Silver Strand

Description

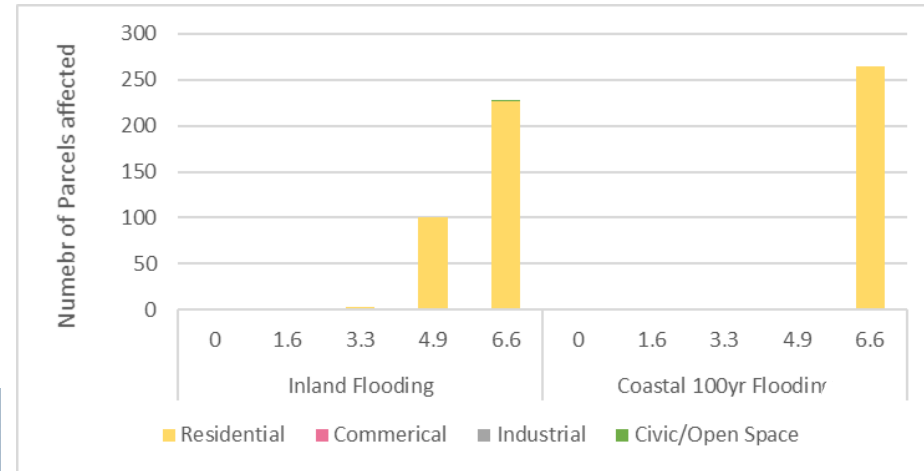
Residential area east of Ballona Lagoon and West of Via Dolce



+4.9 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents. Sensitive to adaptation efforts of MdR.

Adaptive Capacity:

Limited, higher elevations may improve drainage to Ballona Lagoon

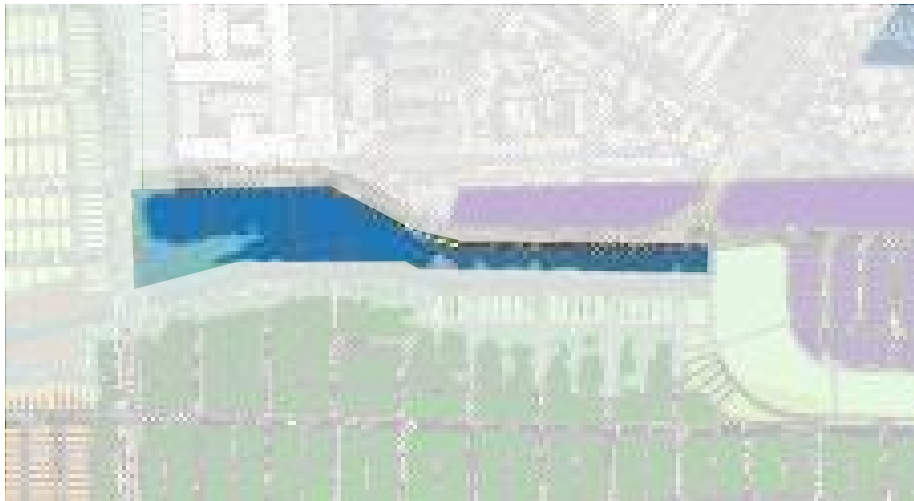
Long Term SLR Threshold (+4.9 ft)

Low-lying residential properties vulnerable to flooding from larger sea level rise. Adjacent to lowest point between inland area and the ocean (Via Marina and Tahiti way).

Ballona Lagoon (Grand Canal) East

Description

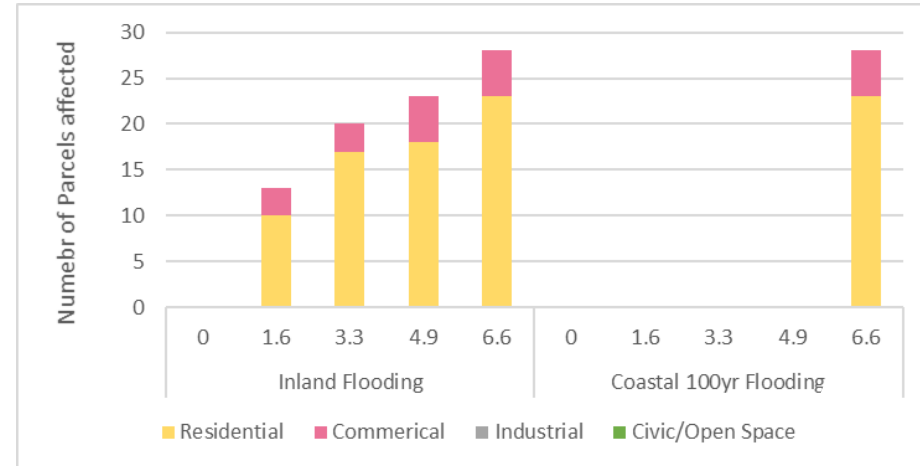
Mixed-use area east of grand canal between Via Dolce and Washington Blvd with relatively higher density development.



+1.6 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents.

Adaptive Capacity:

Due to multi-story development, first floors may be retrofitted to handle temporary flooding.

Short-term SLR Threshold (+1.6 ft)

Low-lying residential and commercial centers most vulnerable to inland flooding..

Oxford Triangle

Description

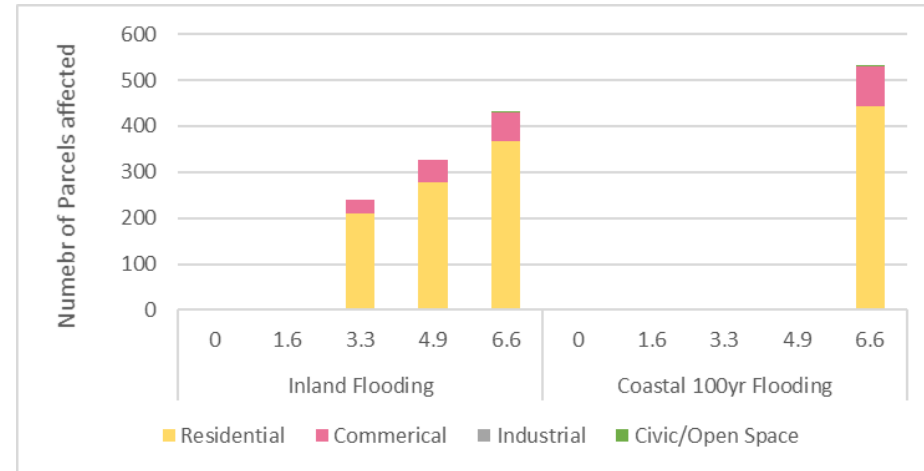
Bounded by Marina del Rey, Washington, and Lincoln Blvd. Includes higher density development and commercial use.



+3.3 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents. Sensitive to adaptation efforts of MdR.

Adaptive Capacity:

Limited capacity due to cost of construction, large city-owned lot midway down Admiralty way could be adapted for water storage or flood prevention infrastructure.

Long-term SLR Threshold (+3.3 ft)

Low-lying low density residential most vulnerable to inland flooding.

Milwood

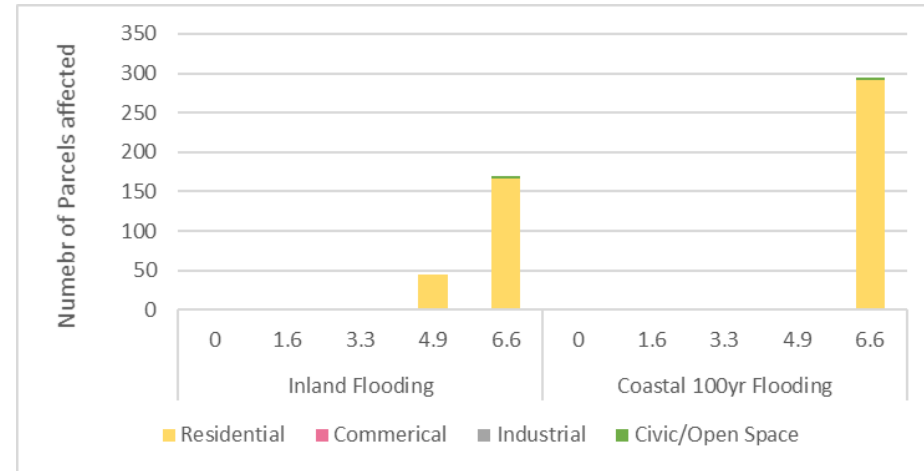
Description

Mainly residential area bounded by Lincoln Blvd, South Venice and Electric Ave.



+4.9 ft

Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents.

Adaptive Capacity:

Limited adaptive capacity though higher elevations could provide better drainage.

Long-term SLR Threshold (+4.9 ft)

Low-lying residential most vulnerable to inland flooding.

Oakwood

Description

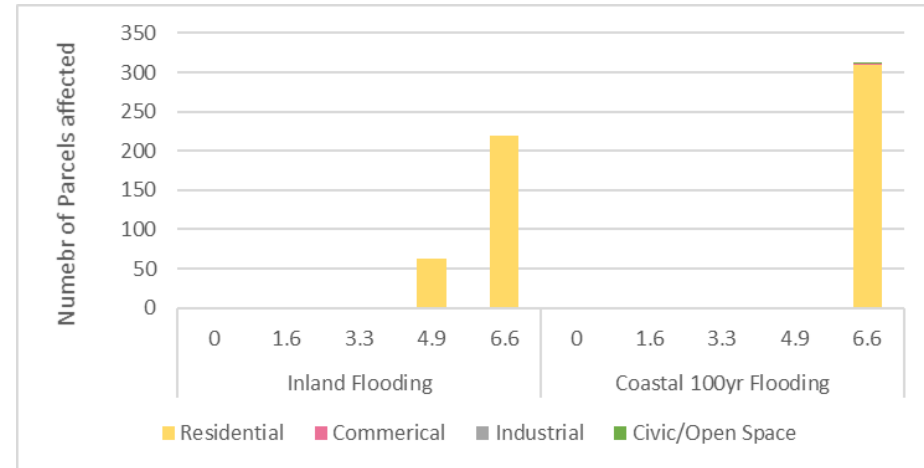
One of few historically African American neighborhoods in West Los Angeles, historically area of vulnerable populations and communities of color.



+4.9 ft



Parcel Analysis



Vulnerability Assessment

Sensitivity:

Potentially sensitive to damage from inland flooding that could threaten safety and property of residents. Vulnerable populations sensitive to high cost of repair or flood insurance.

Adaptive Capacity:

Limited adaptive capacity though higher elevations could provide better drainage.

Long-term SLR Threshold (+4.9 ft)

Low-lying residential most vulnerable to inland flooding.



Assets evaluated:

- Venice Canal Historic District
- Kinney-Tabor House
- Venice Branch Library
- Venice Division Police Station
- Sturdevant Bungalow
- Venice City Hall
- Venice of America House
- *Venice West Café*
- *Warren Wilson Beach House*
- *Venice Arcades*

Cultural

Abbot-Kinney & Venice Blvd Historic Monuments

Monuments such as Venice of America House could be flooded with tide gate failure and +1.6 ft SLR

Others within potential flood zone with higher SLR increments

Venice Canals Historic District

Potential for flooding today if tide gates were to fail.

Tide gate operations may raise average water level in the district changing aesthetic quality.

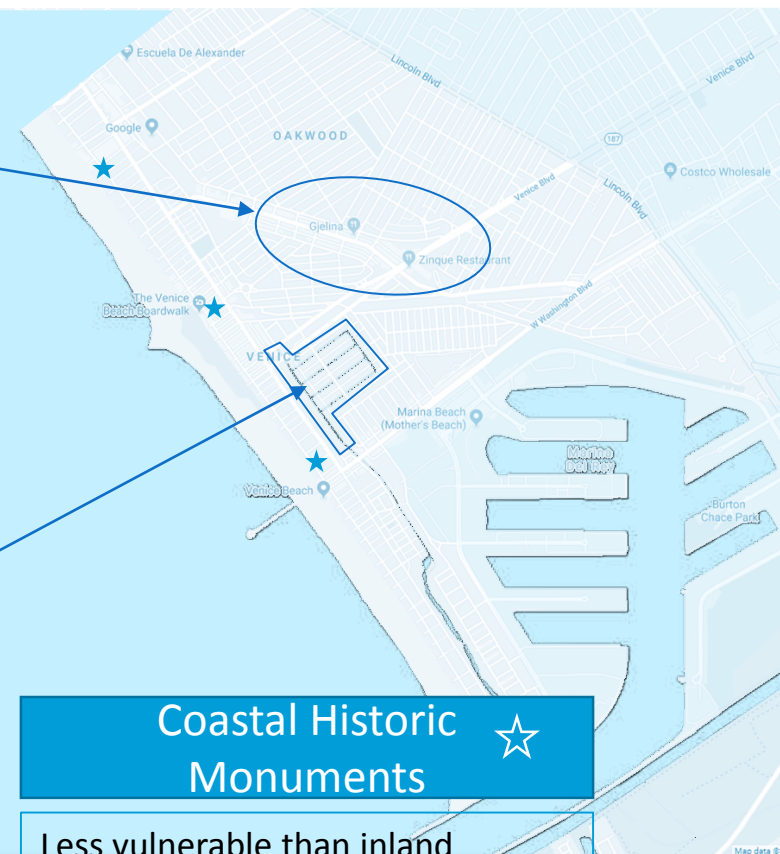
Water quality impacts from reduced flushing.

Coastal Historic Monuments ☆

Less vulnerable than inland monuments

Venice West Café borders modeled 100yr flood of CoSMoS +3.3 ft SLR (2060 – 2100+)

Potential for temporary flooding of first floors during 100-year coastal storm +6.6 ft SLR (2090 – 2100+)



Venice Canal Historic District

Description

Residential district listed on National Register of Historic Places in 1982, originally constructed in 1905.



Analysis

- Water levels inside the district are controlled by the Washington Blvd. Tide Gate with no redundancies
- Aesthetic and historic character of district is sensitive to protective infrastructure such as bulkheads
- Center for tourists and high home prices
- Sensitive to large rain events in combination with higher SLR
- District is the first area to be flooded in the case of tide gate failure

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Current)

Present day high tides could flood the community with tide gate failure. Rising groundwater levels due to SLR could result in flooding or sea water infiltration.

Storm: (Current)

A large rain event in combination with storm surge and high tide could reduce the capacity of the canals to store stormwater, possibly resulting in flooding for the district.

Coastal Historic Monuments

Description

Venice West Café, Warren Wilson Beach House, Venice Arcades



Analysis

- The main hazards for these resources are storm related and dependent on the beach conditions and wave conditions for each scenario
- The historic nature of these monuments are tied to their location near the beach and have limited adaptive capacity in terms of possible relocation
- The sensitivity to damage is dependent on the magnitude of flooding or overtopping, higher elevations and large beach could reduce damage from flooding



SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Long-term Threshold)

Extreme scenarios of beach erosion could put some of these monuments at risk with greater SLR

Storm: (3.3 ft +)

The northern most historic monument: Venice West Café, is at edge of modeled flood extent starting at +3.3 ft SLR
The remaining two show exposure from the coastal side starting at 6.6 ft SLR

Abbot Kinney and Venice Blvd Historic Resources

Description

Includes Kinney-Tabor House, Venice Branch Library, Venice Division Police Station, Sturdevant Bungalow, Venice City Hall, Venice of America House



Analysis

- Historic monuments in the Abbot Kinney area are at risk to potential flooding at +1.6 ft SLR
- These resources have high sensitivity due to the limitations on repairs and construction
- Developing in situ infrastructure may be more difficult due to historic nature of buildings

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (1.6 ft +)

Potentially at risk to flooding in the case of tide gate failure.

Storm: (Long-term Threshold)

A large rain event in combination with the reduced capacity of stormwater system due to SLR could result in temporary flooding of these resources.



Assets evaluated:

- Bus Lines
- Parking Lots
- Lifeguard HQ & Towers
- Low-Lying Schools:
 - Coeur d'Alene
 - Westminster
 - Westside Global Awareness Magnet
- LAPD Venice Substation
- LA Fire Station #63

Civic

Lifeguard HQ



Beach often narrowest in front of Lifeguard HQ

Damaged in '82-83 storms

Increased potential for wave and storm related damage with SLR

Low-lying Elementary Schools



Tide gate failure could flood portions of Westminster and Westside Global Magnet elementary schools.

Fire and Police Stations



With +4.9 ft SLR, Fire Station 63 could have reduced access due to flooding from tide gate failure

Access to LAPD Substation at Venice Beach could be impacted by 6.6ft 100 yr storm.

Bus lines / Parking

Several bus lines including Metro 108/33/733 could be temporarily interrupted by flooding from tide gate failure

City and County parking lots at risk of temporary flooding with +1.6 ft SLR



Exposure

- High exposure to inland flooding for parking lots, bus lines, and Westminster Elementary
- Sustained coastal or inland flooding could affect service areas.

Sensitivity

- Emergency services highly sensitive to loss of access
- Schools considered highly sensitive resource

Adaptive capacity

- Lifeguard towers highly mobile
- Civic centers such as schools have limited resources to adapt

Civic

Bus Lines

Description

Regional and local bus lines serving Venice community and beyond including:

- Metro: 108, 33,733
- Santa Monica Big Blue Bus: 1, 18
- LA DOT: CE437
- Culver City: 1

Analysis

Some routes lie within the potential flood zone at +1.6 ft SLR at Washington Blvd and Venice Blvd.

With greater SLR, the potential flood area expands along Washington while Via Marina and Pacific Ave remain at higher elevations.

At +6.6 ft SLR, overtopping from the beach could affect Pacific Ave. The ability to adapt to inundate areas varies depending on severity

33 and 733 could be critical to regional mobility for Venice residents and commuters though more information would needed from Metro.



SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (3.3 ft+)

With 3.3 ft SLR, the route may be disturbed by tide gate failure.

Storm: (6.6 ft+)

The capacity of the stormwater and flood prevention systems will affect the potential for storm related flooding. At +6.6 ft SLR, flooding from the coast may disrupt the line during a 100-year storm.

Parking (city-owned)

Description

City owned parking lots throughout coastal zone



Analysis

The parking lots along Venice Blvd. are in potential inland flood zone with +1.6 ft SLR

Parking lots along the edge of Abbot-Kinney are within zone at +3.3 ft SLR

Flooding of parking lots may result in minor damages but are generally easily repairable.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (1.6 ft +)

With 1.6 ft SLR, parking lots may be flooded by tide gate failure.

Storm: (6.6 ft +)

The capacity of the stormwater and flood prevention systems will affect the potential for storm related flooding.

Parking (county-owned)

Description

Three county-owned parking lots (need verification) along the beach



Analysis

- The vulnerability of these parking lots is difficult to determine due to the limitations of the CoSMoS model.
- Hazards include periodic flooding with higher SLR and wave damage with large storm events.
- Lots sensitive to erosion, but can accommodate temporary flooding.
- The revenue and access provided by these parking lot is tied to the value of the beaches below.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Long-term Threshold)

With greater SLR, the beach will erode and be pushed up and back onto the parking lots.

Storm: (3.3 ft +)

The Rose Ave parking lot is within the 100-year coastal flood extent starting at +3.3 ft SLR and could be at risk to damage from storm events (i.e. wave energy, scouring, and flooding)

Lifeguard HQ

Description

Local headquarters for LA County Lifeguards, storage of vehicles and equipment used for safety and beach maintenance. Protected by buried revetment and jetty.



Analysis

- Historical damage from 1983 El Nino storms.
- Exposed to wave runoff, potential beach erosion, direct wave action
- Storage of county assets and role in providing safety makes areas sensitive to damage
- Can be relocated or reconstructed to reduce exposure

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Short-term Threshold)

Potentially at risk to beach erosion, reducing access and resulting in possible damage

Storm: (4.9 ft +)

CoSMoS model results show potential for flooding during a 100-year storm. Potential for damage from direct wave action.

Lifeguard Towers

Description

Variable number of lifeguard towers (~19) moved with changing beach conditions



Analysis

- Potential for damage from large storm events
- Potential loss of beach area from beach erosion
- Highly adaptive due to mobility
- Sensitive to beach conditions, visibility, storm frequency, visitors, and beach loss

SLR Exposure

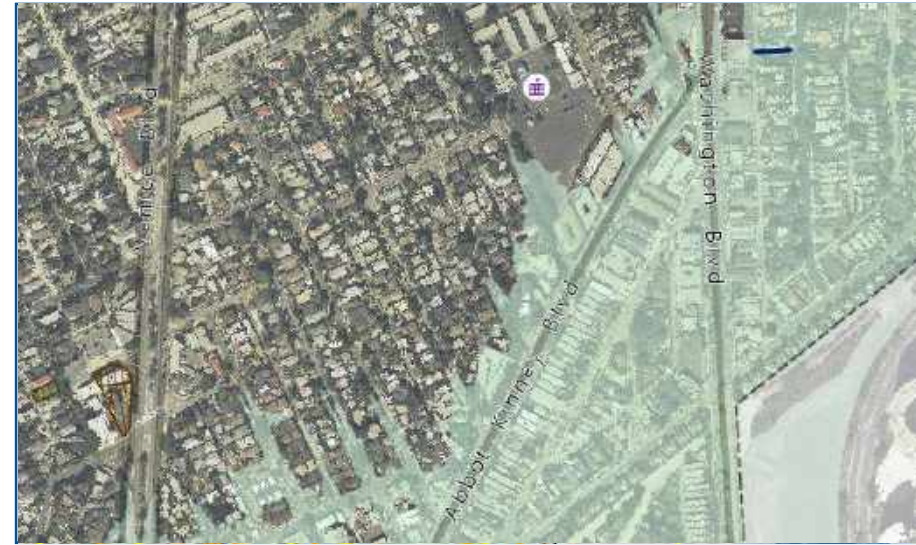
| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

While exposure is high at any SLR condition, towers can be relocated to adapt

Coeur d'Alene Elementary (LAUSD)

Description

LAUSD Elementary School



Analysis

- Western portion of campus at risk to flooding at 4.9 ft SLR
- Highly sensitive to flooding due to function
- Can be reconstructed or retrofitted to reduce exposure

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (4.9 ft +)

Portions of school yard could flood in the case of tide gate failure.

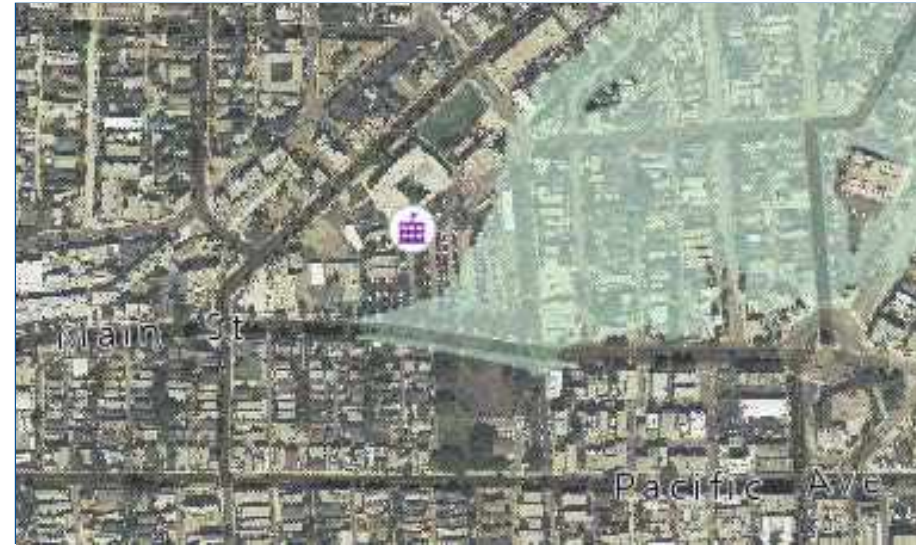
Storm: (Long-term Threshold)

Large rain events in combination with decreased capacity of stormwater management system due to SLR could result in temporary flooding.

Westminster Elementary (LAUSD)

Description

LAUSD Elementary School



Analysis

- Portions of campus potentially at risk to flooding at 1.6 ft SLR
- Highly sensitive as a school
- Extent of potential flood exposure increases with SLR due to low elevation
- Much of buildings are single story, increasing potential damages from flooding
- Can be reconstructed to adapt

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (1.6 ft +)

Potential for flooding of property in the case of tide gate failure.

Storm: (Short-term)

Large rain events in combination with reduced capacity for stormwater management due to SLR could result in flooding.

Westside Global Awareness Magnet (LAUSD)

Description

LAUSD Magnet School near ocean



Analysis

- Campus at risk to flooding from tide gate failure at 1.6 ft SLR
- Campus at risk to flooding from 100-year storm event from overtopping of coast at 6.6 ft SLR
- Highly sensitive as a school
- Only protected by Marina del Rey tide gate

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200 cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|-------------------|
|---------|------------------|-------------------|-------------------|-------------------|

Non-storm: (1.6 ft +)

Potential for flooding in the case of tide gate failure

Storm: (6.6 ft +)

CoSMoS model results show potential for flooding during a 100-year storm. Potential for damage from flooding, no direct wave action.

LAPD Venice Substation

Description

LAPD Substation at Venice Boardwalk and recreation area, located directly on boardwalk and deals with non-emergency crimes



Analysis

- Limited direct exposure at elevation of 14-17 ft NAVD88
- Surrounding area could be impacted by coastal flooding starting at 6.6 ft SLR
- Low sensitivity due to nature of non-emergency focus
- Can be relocated or reconstructed to adapt to future beach conditions & hazards

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Long-term Threshold)

Potentially at risk to beach erosion, reducing access and resulting in possible damage

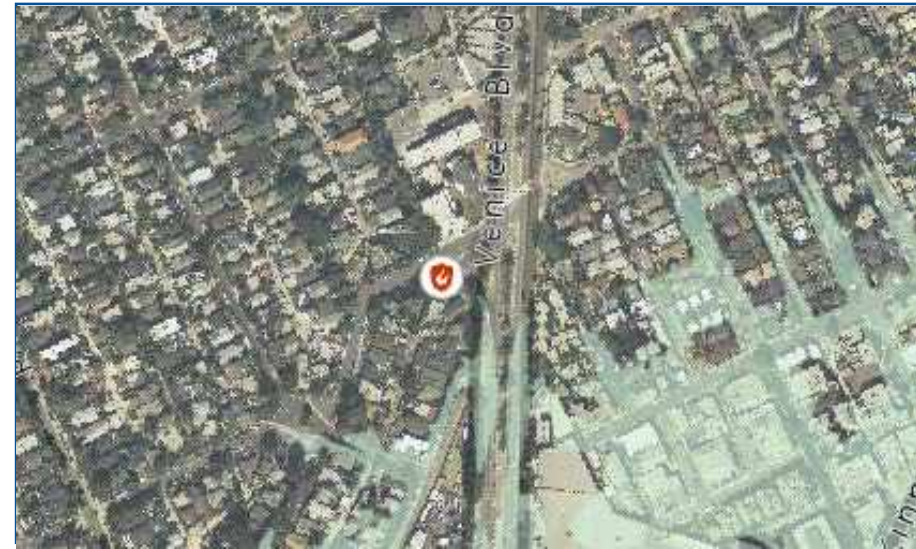
Storm: (6.6 ft +)

CoSMoS model results show potential for flooding during a 100-year storm. Potential for damage from direct wave action.

Los Angeles Fire Station 63

Description

LA Fire station part of West Bureau servicing Venice Beach area



Analysis

- Risk to response times in service area with potential inland flooding
- Direct exposure to facility at 4.9 to 6.6 ft SLR
- Sensitive to neighborhood flooding due to potential service impacts
- Future adaptations could include relocation, or service supplemented by neighboring stations

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (4.9 ft)

Potential for reduced access due to flooding in the case of tide gate failure.

Storm: (Long-term Threshold)

Potential for flooding during large rain event with reduced capacity for stormwater management due to SLR

Assets evaluated:

- Venice Beach Recreation Center
- Oakwood Recreation Center
- Venice Beach Boardwalk
- Venice Fishing Pier
- Beach Recreation



Coastal Amenities

Venice Boardwalk

Boardwalk could temporarily flood during 100yr storm +3.3ft

Potential for storm-related damages.

Impacts to tourism economy, vendors and retailers

Venice Recreation Center

Low-lying portions of recreation center could flood during 100yr storm +3.3 ft SLR (2060 – 2100+)

Reduced effect of breakwater could alter beach width & shoreline configuration

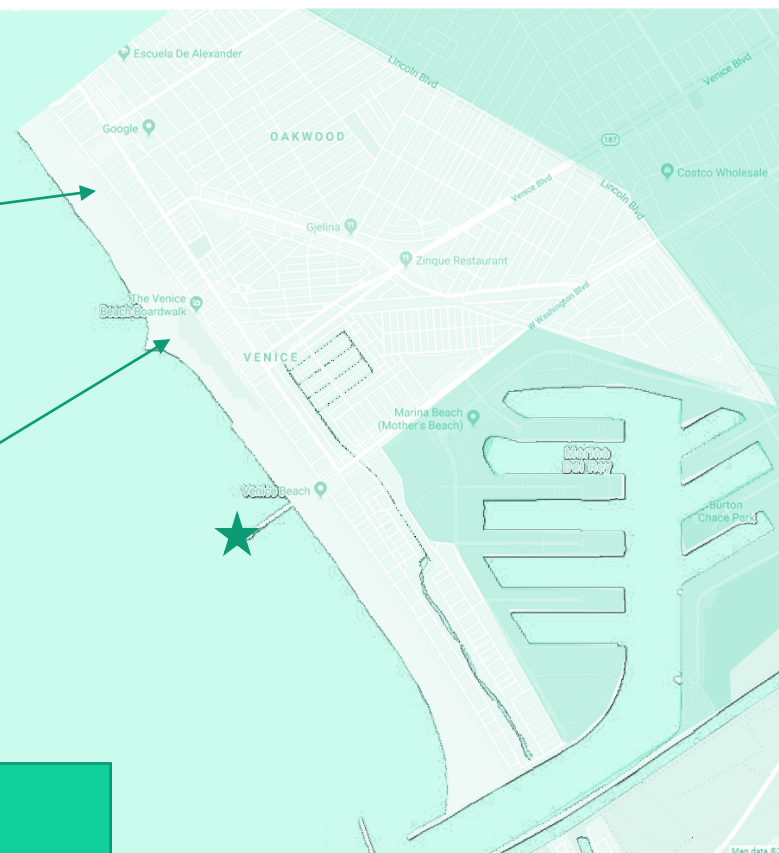
Venice Fishing Pier ☆

Pier damaged by storms in the 80s
SLR increases potential damage from large wave events

Beach Recreation

Erosion of beach due to SLR could have major economic impacts on tourism & visitor serving commercial industries

SLR increases potential loss of beaches & amenities during large storms



Exposure

- Beachfront amenities and Oakwood Recreation center could experiences damage due to erosion or storm-related flooding in long term (3.3ft+ of sea level rise)
- Beach Recreation could be affected by erosion of 50ft (short term) to 300ft (long term)

Sensitivity

- Beach recreation sensitive to storm frequency and chronic erosion
- Recreation Centers important resource for Venice and LA Region, therefore sensitive to loss of capacity or damage

Adaptive capacity

- Repairs and nourishment may be expensive but can restore full functionality

Coastal Amenities

Venice Beach Recreation Center

Description

Public cultural and recreational complex adjacent to Venice Boardwalk Basketball Courts (Unlighted / Outdoor), Handball Courts (Unlighted), Gymnastics Area, Children's Play Area - 2, Sand Volleyball Court, Fishing Pier, Skate Park, Muscle Beach Venice, Outdoor Stage (Unlighted)



Analysis

- Northern reaches of complex at risk to flooding at 3.3 ft SLR during extreme storm event
- Exposure could be increased with beach erosion leading to scouring of structures, dependent on sand nourishment and protective measures
- Skate park at risk to flooding or decreased capacity in drainage
- Larger flooding exposure at 6.6 ft SLR
- Highly sensitive as central tourism, recreation, cultural hub
- Potential for reconstruction, protection, relocation
- Beach area seaward is narrowest within the CZ.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Long-term Threshold)

Potentially at risk to beach erosion, reducing access and resulting in possible damage

Storm: (3.3 ft +)

CoSMoS model results show potential for flooding during a 100-year storm. Potential for damage from direct wave action. Initial areas at risk are in northern portion such as skate park.

Oakwood Recreation Center

Description

Recreation Center with after school programs, teen club, senior programs with community room, indoor gym, multipurpose fields and courts, and computer lab



Analysis

- No direct physical exposure with SLR < 6.6 ft
- Sensitive resource for community
- Limited space to relocate

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Long-term Threshold)

Limited access due to flooding in the case of tide gate failure.

Storm: (Long-term Threshold)

CoSMoS model results show potential for limited flooding near facility during a 100-year storm.

Venice Beach Boardwalk

Description

1.5 mile ocean front pedestrian promenade and bikeway. Center for tourism, commercial activity and cultural activities.



Analysis

- Low lying areas at Rose Ave and Thornton Ave result in potential flooding from large storm events around 3.3 ft SLR (High uncertainty in CoSMoS results)
- Exposure increases with 6.6 ft SLR
- Sensitive pedestrian mobility corridor and tourism center for economy
- Beach width and profile impact exposure
- Drainage capacity can improve adaptive capacity
- Storm preparation and warning can limit exposure of more sensitive resources for shops and vendors

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Long-term Threshold)

Potentially at risk to beach erosion, reducing access and resulting in possible damage

Storm: (3.3 ft +)

CoSMoS model results show potential for flooding during a 100-year storm. Potential for damage from direct wave action.

Venice Fishing Pier

Description

Venice Fishing Pier part of larger Venice Beach Recreation Center



Victor Decolongon/Getty Images

Analysis

- Further analysis needed to determine vulnerability from extreme wave events
- Highly dependent on storm activity and beach erosion
- Historically damaged by large storm events

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Short-term Threshold)

Potentially at risk to beach erosion, reducing access at base of pier and resulting in possible damage

Storm: (Unknown Threshold)

Further review of design and structural components needed to estimate critical SLR. Historic storms have resulted in significant damage.

Beach Recreation

Description

Use of beach for leisure and recreation considered to be important culturally and economically to the region



Venice Beach Eco Cottages

Analysis

- Narrowest width of beach is also center for tourism in Venice (recreation center)
- Historical nourishment has maintained relatively wide beach for Southern California, SLR will push beach back and up and exacerbate storm related erosion
- Economically important resource on magnitude of \$100s of millions of dollars (King, 2011)
- Hazards include beach erosion (semi-permanent loss) and coastal flooding (periodic loss)

SLR Exposure

Non-storm: (continuous threat)

Potentially at risk to beach erosion, reducing access and resulting in permanent economic loss

Storm: (Unknown Threshold)

Large storm events will have greater impact with higher SLR resulting in more severe flooding and damage to beach and associated economic activities

Assets evaluated:

- Sandy Beach Habitat
- Ballona Lagoon Marsh Preserve
- Canals Habitat Area
- Coastal Rocky Nesting Habitat



Ecological

Sandy Beach Habitat

Beach erosion could range from 0 - 100 ft with +1.6ft and 100-350 ft with +6.6 ft.

Includes protected species (Snowy Plover, Least Tern, Grunion)

Ballona Lagoon Marsh Preserve

Sensitive to changes in salinity from tide gate operations

Vulnerable to “coastal squeeze”

Loss of vital intertidal habitat

Canals Ecological Sensitive Habitat

Less intertidal habitat than Ballona Lagoon, relatively more mudflat

Potential effects on Water Quality from reduced flushing

Increase in subtidal habitat

Coastal Rocky Nesting Habitat

Recovering CA Brown Pelican Nesting Area (CNDBB)

Loss of habitat with SLR

Potential for relocation to Marina jetties

Venice Vulnerability Assessment - DRAFT



Exposure

- Erosion of 50 feet (short term) to 300 feet (long term) of beach
- Water quality and tidal flow of canals likely affected by tide gates

Sensitivity

- Endangered Species such CA Snowy Plover at critically low habitat for nesting
- Plant species within canals area limited migration area causing loss of habitat (Coastal Squeeze)

Adaptive capacity

- Habitat can be restored
- Large beach allows for increase in future restored/protected habitat

Ecological

Sandy Beach Habitat

Description

Includes migratory birds Snowy Plover, Threatened status under ESA (1973), and Least Tern, Endangered (recovering) status, nesting areas in sandy beach/ dune habitat in addition to Grunion spawning areas on intertidal portion of beach.

Analysis

- Non-protected beach habitat sensitive to sand raking and pedestrian use, erosion of sandy beach
- Well protected at southern reach of beach in terms of erosion but this could limit taking of sand to be used for nourishment in other areas
- Protected nesting areas can be re-configured & expanded to other portions of beach



SLR Exposure

Non-storm: (Continuous threat)

At risk to loss of habitat due to erosion of sandy beach along

Storm: (Unknown Threshold)

Large storm events have potential greater risk to erode sandy beach with increasing SLR

Ballona Lagoon Marsh Preserve

Description

Coastal, Intertidal, and subtidal habitat including rare, threatened, or endangered species of plant known as "Ballona Flower."



Analysis

- Sensitive to coastal squeeze from SLR, increased salinity due to decreased flushing of tide gates, runoff, chronic flooding
- Limited habitat or potential restoration areas.
- Near tidal ecosystems are typically resilient to temporary flooding or salinity but chronic conditions or changes in groundwater may cause permanent ecological changes.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (1.6 ft +)

Changes in salinity from adjusted tide control, reduced wildlife access to ocean, tied to tide gate management system

Storm: (Long-term Threshold)

Reduced capacity for stormwater management may result in periodic flooding at higher elevations

Canals Area ESHA

Description

Mainly subtidal habitat and lower-intertidal habitat due to reinforced canal banks considered environmentally sensitive habitat area by city



Analysis

- More restricted tide schedule than Ballona Lagoon system with larger drainage area resulting in higher exposure to runoff and flooding.
- Environmental quality important to recreational use and surrounding community
- Sensitive to coastal squeeze from SLR, increased salinity due to decreased flushing of tide gates, runoff, chronic flooding
- Near tidal ecosystems are typically resilient to temporary flooding or salinity but chronic conditions or changes in groundwater may cause permanent ecological changes.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (1.6 ft +)

Changes in salinity from adjusted tide control, reduced wildlife access to ocean, tied to tide gate management system

Storm: (Long-term Threshold)

Reduced capacity for stormwater management may result in periodic flooding at higher elevations

Coastal Rocky Nesting Habitat

Description

California Brown Pelican, a recently de-listed species, of pelican known to nest and feed off of Marina breakwater.



Analysis

- Sensitive to habitat loss via coastal squeeze
- Breakwater can be elevated or reinforced to re-establish existing habitat
- Potentially high adaptive capacity to storms due to ability to migrate inland.

SLR Exposure

| Current | 50 cm/ 1.6 ft | 100 cm/ 3.3 ft | 150 cm/ 4.9 ft | 200cm/ 6.6 ft |
|---------|------------------|-------------------|-------------------|------------------|
|---------|------------------|-------------------|-------------------|------------------|

Non-storm: (Long-term Threshold)
Higher water levels will reduce potential habitat

Storm: (Long-term Threshold)
Higher SLR will increase damage from storms

Appendix B
DRAFT SEA LEVEL RISE MEMO
(M&N NOV. 2017)



VENICE VULNERABILITY ASSESSMENT

COASTAL HAZARD MODEL AND SEA LEVEL RISE SCENARIO SELECTION REPORT

DRAFT

November 2017

Submitted By



moffatt & nichol

1660 Hotel Circle North, Ste. 500
San Diego, CA 92108-2805

Prepared for
City of Los Angeles
Department of City Planning



Funded in part by
California Coastal Commission
Grant LCP-14-09



CALIFORNIA
COASTAL
COMMISSION



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1. Introduction

A number of prior sea level rise (SLR) vulnerability studies and supporting studies have been completed in the Venice coastal zone of the City of Los Angeles, California. These studies were conducted mostly under regional efforts, which can sometimes miss small-scale details affecting local hazards in communities like Venice. As a first step toward completing a Venice Vulnerability Assessment (VA) to inform the preparation of the Land Use Plan (LUP) Coastal Hazards policies and Implementation Plan (IP) standards, Moffatt & Nichol (M&N) conducted a review and summary of these available studies with the goal of leveraging these existing work products as much as possible. This report provides a description of the limitations of prior efforts and the numerical modeling used to drive the hazard mapping. Recommendations on which model to use to map coastal hazards, as well as which SLR scenarios to use for the Venice VA are provided in this study.

This study also identifies assets and resources to be analyzed within Venice VA. These assets are shown in preliminary coastal hazard base maps, which will be further developed with additional input from the project team, stakeholders, and the public during the outreach process.

1.1. Scope of Work

M&N's scope of work for the Venice VA is provided below:

- 1.1. Develop SLR Scenarios: Five (5) SLR scenarios (covering increments of SLR between 1 and 6 feet) will be evaluated. The exact SLR scenarios will be developed with the City and based upon information available in the regional studies. These scenarios will be selected to provide a basis for understanding how hazards and vulnerabilities change with each increment of SLR. Given the low lying topography of the Venice coastal zone, additional focus on the lower SLR increments may be warranted.
- 1.2. Discussion of model limitations: M&N will prepare a memorandum that will include a discussion of the assumptions and limitations of the data, model(s), or method used and whether said limitations or assumptions lead to over-estimation, under estimation, or unknown impacts on the mapped hazard zones.
- 1.3. Spatial data and base map: M&N will compile spatial data on City assets and resources to create a GIS basemap from which the various coastal hazards will be overlain. These maps will provide the basis for a Venice VA and provide a valuable resource for City staff to communicate the potential coastal hazards to stakeholders, resource agencies, and the public. SLR hazard maps will also show storm and non-storm conditions at each SLR increment.
- 1.4. Memorandum of previous SLR and Climate Change Studies: M&N will prepare a memorandum to summarize the previous studies and identify how the information available can be applied in the draft and final Venice VA. This memorandum will discuss the assumptions and limitations of the data, model, or method and whether said limitations or assumptions lead to over-estimation, under estimation, or unknown impacts on the mapped vulnerabilities.
- 1.5. Coastal Resources Assessment: M&N will create a qualitative and quantitative assessment of consequences/risks/impacts on coastal resources.
- 1.6. Prepare Vulnerability Assessment:
 - A. Prepare Venice VA: M&N will prepare a Venice VA that will build from the existing regional SLR. Results of the Venice VA will inform preparation of the LUP Coastal Hazards policies and IP standards by identifying “triggers” at which significant planning areas, assets, or



coastal resources could be impacted by SLR. The consequence of the identified impacts will also inform the policies and programs to minimize risk to important infrastructure, basic services, and valuable resources. The vulnerabilities and consequences identified in this assessment will help prioritize planning efforts to account for the urgency (time horizon) of each impact, and the importance of each impact on the community and resources.

- B. Risk Assessment Matrix: M&N will prepare a matrix that evaluates potential risks and impacts of SLR to asset categories by rating and describing the exposure, sensitivity, and adaptive capacity.
- 1.7. Draft Presentation Materials: M&N will develop draft presentation materials in coordination with City staff for their presentation on the VA findings for the public, the City's Technical Advisory Group (TAG), regional collaborators, and community stakeholders.

This study presents the results of Tasks 1.1 through 1.4 of our scope of work and provides the foundation for tasks 1.5 and 1.6.



2. Available Studies and Models

Available SLR VAs and supporting studies for the Venice area were reviewed to understand what work could be leveraged for this study. Prior studies were based on results from regional SLR models along with some site-specific analyses. These efforts include:

- AdaptLA (USC Sea Grant 2016)
- Los Angeles County Public Beach Facilities SLR VA (Noble 2016)
- Coastal Storm Modeling System (CoSMoS) 3.0, Phase 2 (USGS 2017)
- Federal Emergency Management Agency (FEMA) Open Pacific Coast Study of California Coastal Analysis and Mapping Project (CCAMP) (FEMA 2017)

These studies, and the corresponding SLR models and analyses are summarized below with a focus on their applicability and limitations to this Venice effort. The latest regional SLR coastal hazard model available for the Venice area is CoSMoS Version 3.0, Phase 2. Although previous versions of this model have been used in prior studies, the latest version has not yet been incorporated in any studies and its applicability and limitations are included in this document. Discussion of the recent FEMA Open Pacific Coast Study of California Coastal Analysis and Mapping Project (CCAMP) is included as an additional reference for baseline conditions. The CCAMP Study does not account for or map sea level rise related coastal hazards.

2.1. AdaptLA: Coastal Impacts Planning for the Los Angeles Region (USC SeaGrant 2017)

The study summarizes the methodologies, findings, and recommendations of two technical studies developed by TerraCosta Consulting Group (TCG) and Environmental Science Associates (ESA) for the Los Angeles County coast. The TCG study provides short-term seasonal shoreline position change driven by waves and long-term shoreline position change driven by SLR. The TCG results only include shoreline position change estimates and did not analyze the potential for coastal flooding. The ESA study assesses coastal hazards and vulnerabilities associated with long-term, wave-driven shoreline erosion and flooding. Therefore, the ESA study provides a more comprehensive assessment of coastal hazards due to SLR.

2.1.1. Sea Level Rise Scenarios

Table 2.1 lists the SLR scenarios used in the AdaptLA Study. SLR projections used ranged from 0.4 to 5.5 feet. Each of these scenarios included an armored and non-armored shoreline condition scenario to evaluate potential future management actions. The armored condition assumes that the existing coastal structures will protect against flooding and erosion in future SLR scenarios. The unarmored condition scenario assumes that existing coastal structures do not exist and the shoreline is allowed to erode landward unimpeded.

Table 2.1: AdaptLA Sea Level Rise Scenarios

| Planning Horizon, Year | Description | Sea Level Rise, ft (m) |
|------------------------|---------------------|------------------------|
| 2010 | Existing Conditions | - |
| 2030 | Medium SLR | 0.4 ft (0.14 m) |
| 2050 | Medium SLR | 1.0 ft (0.29 m) |
| 2100 | Medium SLR | 3.0 ft (0.93 m) |
| 2030 | High SLR | 1.0 ft (0.31 m) |
| 2050 | High SLR | 2.0 ft (0.61 m) |
| 2100 | High SLR | 5.5 ft (1.68 m) |
| 2080* | Extreme SLR | 5.5 ft (1.68 m) |

*Extreme SLR scenario with a trajectory that reaches 9.4 ft (2.88 m) by 2100.

2.1.2. Storm Scenarios

A 100-year (1% annual chance) coastal storm event was calculated from the results of ESA's coastal flooding and erosion modeling. ESA and TCG used CoSMoS 3.0 modeled hindcast (1980-2011) and forecast (2012-2100) wave and water level predictions at nearshore locations (USGS model output points) at 3-hour time intervals as forcing for their modeling.

2.1.3. Flooding

ESA coastal flood hazard zones include the effects of coastal processes and future SLR. Flooding extents were mapped based on a total water level (TWL) exceedance curve, which is used to determine a threshold for the relative amount of time that flood water from wave run-up reaches a certain elevation. The TWL is based on coastal processes that include: elevated ocean levels due to anomalies (e.g., elevated water levels during El Niño phases), storm surge (a rise in the ocean water level caused by winds and pressure changes during a storm), and wave runup and wave setup (water levels from waves, including water levels resulting from waves running up over the beach and coastal structures).

The combination of these coastal processes yields the TWL for existing conditions. Coastal flooding was assessed along each coastal reach, comprising elevation data shoreline transects, representative beach slopes and wave parameters to calculate TWLs and resulting flooding extents for a given reach. This methodology was adapted for the SLR scenarios by applying projected sea levels in the TWL calculations.

ESA also mapped extreme monthly tidal flooding hazard zones that only include water levels resulting from the monthly high astronomic tide (not considering waves, storms, erosion, or river discharge).

2.1.4. Erosion

Three erosion hazard zones were mapped by ESA and TCG. ESA modeled two erosion scenarios: (1) long term-coastal erosion with SLR and (2) 100-year (1% annual chance) coastal storm erosion with SLR. The ESA scenarios include both armored and non-armored conditions. The armored scenario assumes any existing armor structures would remain intact during future SLR conditions. TCG modeled one scenario that included future seasonal erosion and long-term coastal erosion with SLR.

The ESA long-term erosion hazard zone represents the potential maximum extents of erosion that could occur based on historic erosion trends and the additional effects of SLR. This includes



applying historic erosion rates over the planning horizon along with beach recession resulting from increased wave runup elevations due to higher sea levels. The initial beach condition is based on a 2010 fall shoreline; thus, the long-term eroded shoreline positions represent future fall shoreline positions when beaches are generally their widest. This erosion methodology is based on the 2009, Philip William and Associates, Ltd. (PWA, now ESA) Pacific Institute Study “Impacts of Sea Level Rise to the California Coast.”

The ESA 100-year coastal storm erosion hazard zone includes long-term erosion and additional erosion that could result from a 100-year wave event. The 100-year storm erosion approach models beach erosion due to wave action with adjustments to beach slopes and inclusion of long-term erosion to include the effects of SLR.

The TCG erosion hazard zone includes short-term seasonal changes (erosion and accretion) resulting from waves and long-term beach erosion considering SLR. The short-term seasonal change model utilizes USGS wave data and USGS beach change coefficients. The long-term beach erosion model utilizes a sand balance approach based on the Bruun rule, which assumes a beach profile will rise at the same rate as sea levels by eroding landward to provide sand to the shifting profile. This long-term erosion approach is independent of historic erosion rates. The TCG erosion approach does not consider beach nourishment, coastal structures (i.e., breakwater, groins), or coastal armoring (i.e., revetments and seawalls).

2.1.5. Inland Flooding

ESA mapped areas of potential inland flooding to address low-lying areas such as the Venice Canals Historic District. Areas such as this may be susceptible to flooding as higher sea levels diminish their effectiveness to drain stormwater to the ocean during low tides. This also includes areas that may potentially connect to other flooded areas through conduits or seepage like pools (greater than 3 square meters) within 5 meters of areas connected to the ocean, patches of dry land that are smaller than 1 acre and completely surrounded by inundated area, and areas with uncertain connectivity to coastal waters that could be susceptible to flooding. The flood extents shown in this study are low-lying areas relative to the projected tide elevation and do not account for effectiveness of the tide gates that are used to manage water levels in the Grand Canal and Venice Canals.

2.1.6. Applicability and Limitations

The AdaptLA study provides projected flooding and erosion data for six SLR scenarios ranging from 0.5 ft to 5.5 ft, which are a useful point of comparison for other studies that assess the same levels of SLR. The following should be considered:

- The ESA and TCG models both use the USGS CoSMoS wave hindcast and forecast data, providing a consistent wave dataset across these models and CoSMoS.
- ESA mapped flood areas are based on an exceedance curve, and the threshold for elevation and duration is not clear.
- ESA inland flood hazard zones do not explicitly consider stormwater flooding, which will likely impact low-lying coastal areas like Venice as sea levels rise. The inland flood hazard zones reflect a tidal elevation and do not account for the tide gates that currently manage water levels in the canals. Therefore, the inland flood extents can be interpreted as an approximation of flood limits if the tide gates were removed or if they malfunctioned and remained in the open position during a high-water level event.



- ESA erosion hazards are mapped for an armored (existing structures) and non-armored condition.
- ESA erosion rates are based on the projected time horizon.
- TCG erosion hazards do not consider armoring, beach nourishment, coastal structures, or historic erosion rates.
- TCG erosion hazards apply the Bruun rule to a shoreline with sediment transport patterns that have been historically altered and continue to be shaped by coastal structures, including the Santa Monica Breakwater, Venice Breakwater, and the Marina Del Rey Jetty and Breakwater. The Bruun rule may not be appropriate in this location to account for these site-specific conditions.

2.2. Los Angeles County Public Beach Facilities Sea Level Rise Vulnerability Assessment (Noble April 2016)

This study assessed the vulnerability of beach facilities along the Los Angeles coastline due to the effects of SLR, flooding, and erosion. The study includes an assessment based on CoSMoS Version 3.0 results along with a “Traditional Beach Erosion and Wave Runup Hazard Analysis,” described in the study as a simplified assessment of shoreline erosion and wave runup. This study includes an assessment of the effectiveness of the use of beach berms to control localized coastal flooding. Analysis of this study is limited to the “Traditional Beach Erosion and Wave Runup Hazard Analysis” as the version of CoSMoS used in this study has been superseded by CoSMoS Version 3.0 Phase 2, which is described in Section 2.3.

2.2.1. Sea Level Rise Scenarios

Table 2.2 lists the SLR scenarios used in this study. SLR estimates from 1.5 to 6.6 feet were analyzed.

Table 2.2: Los Angeles County Public Beach Facilities Sea Level Rise Scenarios

| Planning Horizon, Year | Description | Sea Level Rise, ft (m) |
|------------------------|----------------------------|------------------------|
| N/A | CoSMoS 100 cm SLR Scenario | 3.3 ft (1.00 m) |
| N/A | CoSMoS 200 cm SLR Scenario | 6.6 ft (2.00 m) |
| 2040 | NRC Upper Curve Projection | 1.5 ft (0.45 m) |
| 2100 | NRC Upper Curve Projection | 5.5 ft (1.68 m) |

2.2.2. Storm Scenarios

A 100-year (1% annual chance) coastal storm event was calculated from the results of wave runup modeling. Water levels used in runup calculations were obtained from 36 years of historic water level data from the Los Angeles Outer Harbor tide gauge (NOAA ID: 9410660).

2.2.3. Flooding

Coastal flood extents were assessed based on wave runup elevations and wave overtopping calculations. Wave runup was calculated using historic water level data, and representative wave and beach parameters from the Los Angeles Coast of California Storm and Tidal Waves Study (USACE 2010). A statistical analysis was performed on the overtopping results to determine the 100-year (1% annual chance) event. Wave overtopping was calculated in areas where wave



runup elevations exceeded that of the beach berm. The berm elevations, runup elevations and inland propagation distance of flood waters area reported for Venice in the report.

2.2.4. Erosion

Beach erosion was assessed considering seasonal variation, storm erosion, and the effects of SLR. A statistical analysis was conducted on surveyed beach profiles to determine a seasonal beach erosion distance. Storm erosion was determined from the beach widths following the January 18-25, 2010 El Niño storm. Beach erosion due to SLR was calculated using the Bruun rule, which assumes a beach profile will rise at the same rate as sea levels by eroding landward to provide sand to the shifting profile. The 2010 beach width and erosion distance associated with a seasonal shifts, storm response, and SLR are reported for Venice in the report.

2.2.5. Inland Flooding

Inland flooding was not assessed in this study. The focus was on the coastal zone.

2.2.6. Applicability and Limitations

The study analyzes four separate SLR scenarios for the beachfront area. Two of the scenarios are based on an outdated version of CoSMoS and should not be carried forward. The most recent version of CoSMoS should be used in any future study. The “Traditional Beach Erosion and Wave Runup Hazard Analysis” SLR scenarios provide an additional reference for other studies that consider 1.5 ft and 5.5 ft of SLR. The following aspects of the “Traditional Beach Erosion and Wave Runup Hazard Analysis” should be considered:

- This study is based on historic wave and water level data that may not accurately reflect future conditions.
- Venice is characterized by a single set of results that may not fully capture shoreline dynamics influenced by the Venice Breakwater, groin, and the Marina Del Rey Jetty and Breakwater.
- Results are not mapped, making comparison to other studies difficult.
- Findings of the beach berm study can be applied in the Venice VA as an evaluation of beach berms as a potential future adaptation strategy.
- Beach erosion did not consider beach nourishment or historic erosion rates.
- SLR erosion applied the Bruun rule to a shoreline with sediment transport patterns that have been historically altered and continue to be shaped by coastal structures, including the Santa Monica Breakwater, Venice Breakwater, and the Marina Del Rey Jetty and Breakwater. The Bruun rule may not be applicable for use at this location.
- Flooding was assumed not to pass any “hard structure” barriers.

2.3. Coastal Storm Modeling System (CoSMoS) Version 3.0 Phase 2

CoSMoS Version 3.0 Phase 2 is the latest version of the USGS Coastal Storm Modeling System that utilizes global, regional, and local models to assess coastal flooding and erosion. CoSMoS includes 40 combinations of SLR and storm scenarios that apply wave projections, storm surge, sea level anomalies, river discharge, tides, and SLR.



2.3.1. Sea Level Rise Scenarios

A total of 10 SLR scenarios are available, these include 0.8 ft (0.25 m) increments from 0 to 6.6 feet (0 to 2 m) and an extreme sea level rise scenario of 16.4 feet (5 m). Table 2.3 summarizes the SLR scenarios that are available from CoSMoS Version 3.0 Phase 2. Shoreline erosion projections are available for each SLR scenario and four management scenarios. Management scenarios include with and without beach nourishment and coastal armoring (Hold-the-Line or not). Flood hazards are only available for the “Hold-the-Line and No Beach Nourishment” management scenario.

Table 2.3: Summary of CoSMoS Version 3.0 Phase 2 Scenarios

| Planning Horizon, Year | Management Scenario Description | Sea Level Rise, ft (m) | Available Data |
|------------------------|--|-------------------------|-------------------------------------|
| Current – 2100 | Hold-the-Line, Beach Nourishment | 0 – 16.4 ft (0 – 5.0 m) | Shoreline erosion |
| Current – 2100 | Hold-the-Line, No Beach Nourishment | 0 – 16.4 ft (0 – 5.0 m) | Flood hazards and shoreline erosion |
| Current – 2100 | No Hold-the-Line, Beach Nourishment | 0 – 16.4 ft (0 – 5.0 m) | Shoreline erosion |
| Current – 2100 | No Hold-the-Line, No Beach Nourishment | 0 – 16.4 ft (0 – 5.0 m) | Shoreline erosion |

2.3.2. Storm Scenarios

Future storm scenarios for typical conditions, 1-year (100% annual chance), 20-year (5% annual chance), and 100-year (1% annual chance) are available for each SLR scenario. The coastal storm is largely characterized by waves but also includes limited fluvial (river) inputs resulting from projected atmospheric conditions; however, there is no fluvial source modeled for Venice. Future wave conditions are based on hindcast and future-cast data and tides were derived from the Oregon State University TOPEX/Poseidon global tide database. Sea level anomalies were also applied in the modeling.

2.3.3. Flooding

CoSMoS coastal flooding includes the effects of waves during storm events. Flooding extents are mapped at the intersection of the maximum 2-minute sustained water level and landward position of the eroded beach profile. Wave runup was calculated along each coastal reach, comprising elevation data, shoreline transects, representative beach slopes, forecasted wave parameters and water levels to calculate resulting flooding extents. The projected water levels used in runup calculations consider shoreline change, tides, sea level anomalies like El Niño, storm surge, and SLR. The flooding results are only available for the “Hold-the-line, No Beach Nourishment” management scenario, which assumes future shoreline retreat will be halted at the existing development line and protected by coastal structures. The Hold-the-Line assumption is applied to future shoreline position but not flooding. Wave runup and flooding landward of the development line was mapped as predicted.

Maximum runup is also mapped as part of the CoSMoS results as single points at each coastal transect. This is because maximum runup levels are short in duration and, depending on beach geometry, may only result in a few inches of flood depth.



2.3.4. Erosion

CoSMoS results include long-term erosion resulting from SLR and projected wave conditions. Beach erosion was modeled with the CoSMoS Coastal One-line Assimilated Simulation Tool (CoSMoS-COAST), which comprises a suite of models that consider historic erosion trends, long-shore and cross-shore sediment transport, and changes due to SLR; these models were tuned with historic data to account for unresolved sediment transport processes and inputs, such as sediment loading from rivers and streams, regional sediment supply (beach nourishment and bypassing), and long-term erosion. Model tuning is a valuable feature because it considers site-specific sediment erosion and accretion trends, which may be under predicted or over predicted by erosion models that are based on idealized shoreline conditions.

Any accretion trends, regardless of their source, were included in the beach nourishment scenario. The differences between with and without beach nourishment scenarios is relatively small, with a maximum fluctuation of approximately 60 ft. This is a relatively small difference considering existing beach width ranges from 400 to 700 ft.

The erosion results are based on long-term trends, which may not account for erosion that could result from a large-scale wave event. Large-scale wave events can result in significant beach width losses over a short period of time, and this type of event-based erosion may be suppressed when considering long-term trends. Additionally, a large-scale event may not have occurred over the timespan covered by available historical erosion data.

Beach erosion results include four management scenarios:

- Hold-the-Line, Beach Nourishment
- Hold-the-Line, No Beach Nourishment
- No Hold-the-Line, Beach Nourishment
- No Hold-the-Line, No Beach Nourishment

Hold-the-Line assumes that the existing division of beach and urban infrastructure is maintained with coastal structures. No Hold-the-Line would allow erosion to propagate inland to the maximum potential erosion extents. Beach Nourishment assumes historical beach nourishment rates are carried forward. No Beach Nourishment assumes the beach is left in its existing state.

2.3.5. Inland Flooding

Inland flooding potential was mapped as part of the CoSMoS results. This includes low-lying, flood-prone areas below the surrounding coastal flood elevation, but not directly connected. The Venice Canal District was modeled without a connection to Marina Del Rey Harbor. The extents of flooding mapped in the Venice Canal District and surrounding low-lying areas are based on the coastal flood elevation of the selected SLR and storm scenario.

2.3.6. Applicability and Limitations

CoSMoS Version 3.0 Phase 2, is the latest SLR model for Venice, California and is a useful tool for identifying coastal erosion and flooding hazards for a wide range of sea level rise scenarios and shoreline management conditions. The following should be considered:

- A wide range of SLR scenarios and shoreline management options can be considered from this model in the Venice VA.



- CoSMoS-COAST provides long-term beach erosion projections that account for SLR and erosion trends, the model is tuned from historical data to account for site-specific erosion and accretion patterns.
- CoSMoS-COAST looks at long-term changes and does not detail short-term, event-based storm erosion. This may under predict significant beach recession resulting from successive coastal storm events.
- Coastal flooding extents for 2-minute duration flooding and potential maximum flooding extents from runup are mapped separately, providing a more representative depiction of hazards.
- Flooding resulting from stormwater is not considered.
- Inland flooding extents do not follow existing topography so it's difficult to understand what is controlling the potential flooding limits.

2.4. FEMA Open Pacific Coast Study of California Coastal Analysis and Mapping Project (CCAMP)

FEMA distributed Preliminary Flood Insurance Rate Maps (PFIRMs) to map results of the Open Pacific CCAMP. The PFIRMs are intended to supersede the current effective FIRMs. These maps include updated coastal flooding hazards that are based on current conditions and do not consider future SLR or erosion. Coastal flooding hazards for Venice, California are mapped on PFIRM panels 1751, 1752, and 1754. These panels are combined into a single map, which is available on the FEMA GIS Webmap viewer, this composite map is provided in Figure 2.1.

2.4.1. Sea Level Rise Scenarios

The study does not include the potential impacts of SLR.

2.4.2. Storm Scenarios

The PFIRMs delineate flood zones that show the extents of 100-year (1% annual chance) coastal flooding and note the flood elevation (Zone VE). The 500-year (0.2% annual chance) is delineated by a separate zone and the flood elevation is not provided (Zone X). Ocean wave, wind, and water level data is based on a hindcast for the period of January 1, 1960 to December 31, 2009 at various points along the California coastline.

2.4.3. Flooding

Flooding mapped along the beachfront comprises Zone VE, which is based on the extents and elevation of the resulting 100-year (1% annual chance) base flood elevation (BFE) resulting from wave runup. The PFIRM maps the full extents that wave runup could travel up the beach on an infinite slope, this differs from ESA's approach, which uses an exceedance curve to determine flooding extents, and CoSMoS, which uses a 2-minute sustained water level criteria. The extents of this flooding appear to be truncated in some locations where the beach ends and urban development begins.

Wave runup was modeled along representative coastal reaches using nearshore wave parameters from the wave hindcast and transect parameters, including beach slopes and other shoreline characteristics. The results of the wave runup calculations yielded the TWLs. A statistical analysis was performed on the TWLs of the highest 100+ selected storm events, yielding the 100-year (1% annual chance) BFE.



2.4.4. Erosion

The FEMA maps do not include the potential for shoreline erosion. This study is based on current conditions.

2.4.5. Inland Flooding

Inland flooding mapped on the PFIRMs (Zone AE) for Venice includes the Canal District and low-lying land that surrounds this area. These flooding extents assume that all tide gates are open, allowing tidal waters to flow freely from the Grand Canal entrance at the Marina Del Rey Harbor entrance inland to the canal district and surrounding areas. Based on this assumption, the inland flooding elevation is consistent with the water surface elevation in Marina Del Rey Harbor.

2.4.6. Applicability and Limitations

The PFIRMs provide a baseline for existing coastal flood hazards and do not consider future sea level rise flooding or erosion. The following should be considered:

- Coastal flooding (Zone VE) BFEs assume wave runup on an infinite beach slope and extend the entire beach width, which may be an overly conservative assumption.
- Tide gates were modeled “open,” allowing tidal waters to propagate inland to the Venice Canal District and surrounding low-lying areas.
- Flooding resulting from stormwater is not considered.

3. Sea Level Rise Hazard Model Selection

3.1. Coastal Flooding and Erosion

CoSMoS 3.0 Phase 2 model results have been selected to map coastal flooding hazards for the Venice VA. A summary table comparing the available models and the justification for selecting CoSMoS is provided in Table 3.1.

CoSMoS 3.0 Phase 2 model results are recommended for use in this study since these data are the most recent and comprehensive SLR hazard maps developed for the study area. Use of AdaptLA data for this effort would result in data gaps (e.g., SLR scenarios) that would require additional effort to fill. Advantages of using CoSMoS 3.0 Phase 2 are summarized below:

- A wide range of SLR scenarios.
- Flooding modeled with forecasted wave conditions and shoreline change for the 1-year, 20-year, and 100-year coastal storm with layers for 2-minute sustained water level flooding and maximum wave runup extents.
- Includes shoreline management scenarios that consider Beach Nourishment and Hold-the-Line at the urban/beach interface.
- Erosion modeling comprises multiple methods that consider future erosion resulting from historic trends, long-shore and cross-shore sediment transport, and changes due to SLR; additionally, historic data was used to tune these models to account for site specific erosion and accretion trends driven by natural and anthropogenic causes.

The differences between the AdaptLA and CoSMoS model are shown graphically for an approximately 3-foot SLR scenario for comparative purposes (Figure 3.1 and Figure 3.2). In general, CoSMoS depicts more coastal flooding and less beach erosion than AdaptLA results. Although the use of the CoSMoS results for this study are recommended, the following limitations should be considered when using these data:

- CoSMoS-COAST does not include event-based storm erosion, which may under predict significant short-term beach recession resulting from one or more large coastal storm events. The CoSMoS XBeach modeling includes storm related erosion but the landward extent of flooding is less than predicted by ESA and TCG.
- The shoreline erosion (retreat) predicted by CoSMoS-COAST is significantly less than that predicted by ESA and TCG, as illustrated in Figure 3.3 and Figure 3.4. Different assumptions were applied in each analysis leading to the disparity in predictions. Due to the many unknowns associated with future beach profile evolution, a definitive judgement as to which method is more appropriate or accurate cannot be made.
- Flood mapping and analyses are based on aerial LiDAR derived Digital Elevation Models (DEM), which may not capture narrow topographical features like seawalls or other structures that are less than the dataset 3 feet (1 m) resolution, which can result in over prediction of flooding in some areas. This is common to other regional SLR models that rely on LiDAR derived DEMs and can only be corrected by incorporating local survey data that identifies these features.

3.2. Inland Flooding

The existing studies identify inland flooding potential in the low lying areas around the Venice Canals. Although these areas are setback from the active shoreline the low topography requires



a system of tide gates to control water levels and prevent flooding from the Canals. Canal water levels are controlled by two sets of tide gates that are operated to keep high tides out but also provide storage and release of stormwater during low tides. These gates may not provide the same functionality as sea levels rise since higher water levels could prohibit drainage and circulation that is currently achieved during low tides. SLR will reduce and eventually eliminate the potential for release of stormwater during low tides. A rising groundwater table will also pose challenges to managing water levels in the Canal District.

The detail contained in existing studies does not accurately capture the potential for inland flooding in the Canal District because they do not account for the tide gate operation, the stormwater storage and drainage capacity and the influence of groundwater. The complexity of the existing system requires a focused study that accounts for the different functions of the tide gates and potential hazards associated with rising sea levels. This type of study was beyond the scope of previous studies and is also beyond the scope of this memo and the Venice Vulnerability Assessment.

In order to capture this potential for inland flooding during a scenario in which the tidal gates are opened or damaged during a high tide event, a “bathtub” model was used to map flood hazards for the 1.65 feet (0.5 m) increment scenarios. We applied the same water level assumptions (extreme monthly high water level) used by ESA in the AdaptLA study to model flood risk for the Canals District but have modified the hazard maps based on the SLR scenarios selected for the Venice Vulnerability Assessment.

Without further study into the capacity, design, and operation of the tide gates, this is our preferred method for depicting the potential for inland flooding from high water levels in the Canals. When CoSMoS is compared to the type of analysis performed by ESA, as seen in Figure 3.5, the resulting low-lying area does not follow existing topography. The CoSMoS modeling effort was more complicated than a simple “bathtub” assessment but since we are not familiar with the input parameters, assumptions and resulting water levels in the Venice Canals it is difficult to understand what factors are responsible for the mapped low-lying flood limits. For this reason, we propose using the modified “bathtub” approach that is consistent with the method ESA applied for the AdaptLA study.



Table 3.1: Comparison of AdaptLA and CoSMoS Sea Level Rise Models and Coastal Hazard Model Selection

| Parameter | AdaptLA | CoSMoS Version 3.0 Phase 2 | Selected Model or Method for this Study | Justification |
|-----------------------|---|--|--|---|
| Coastal Management | ESA: <ul style="list-style-type: none"> • Armored (existing structures) • Non-Armored TCG: <ul style="list-style-type: none"> • Non-Armored | <ul style="list-style-type: none"> • Hold-The-Line (urban development line) • No Hold-The-Line • Beach Nourishment • No Beach Nourishment | CoSMoS V3.0 Phase 2, No Hold-The-Line | <ul style="list-style-type: none"> • Identifies all areas of potential vulnerability. May underscore the value of coastal protection in areas |
| Coastal Flooding | Storm: <ul style="list-style-type: none"> • Forecasted 100-year storm wave conditions Extents: <ul style="list-style-type: none"> • Determined from exceedance curve • Maximum runup not mapped | Storm: <ul style="list-style-type: none"> • Forecasted 100-year coastal storm Extents: <ul style="list-style-type: none"> • 2-minute sustained water level/land position • Maximum runup mapped with a marker at each transect | CoSMoS V3.0 Phase 2 | <ul style="list-style-type: none"> • Clear definition of flood mapping criteria • Wave runup points provide valuable depiction of maximum runup hazards |
| Erosion | ESA: <ul style="list-style-type: none"> • Long-term erosion based on historic rates and projected time horizon • Shoreline retreat due to increased wave runup elevation • Erosion resulting from 100-year event wave conditions TCG: <ul style="list-style-type: none"> • Seasonal variation • Long-term SLR erosion (Bruun Rule) | <ul style="list-style-type: none"> • Long-term erosion trends • Long- and cross-shore erosion • Erosion due to SLR • Historic data used for model tuning to account for site-specific erosion and accretion trends driven by natural and anthropogenic causes • Results show much less long-term erosion than both ESA and TCG • CoSMoS-COAST does not include event-based storm erosion, which may under predict significant beach recession resulting from one or more large wave events | CoSMoS V3.0 Phase 2 | <ul style="list-style-type: none"> • Applies multiple erosion models that are tuned with historical data to account for natural and anthropogenic conditions |
| Inland Flooding | <ul style="list-style-type: none"> • Low-lying areas, flood-prone areas vulnerable due to groundwater levels/seepage or indirect connections, extents are mapped based on projected tide elevation. | <ul style="list-style-type: none"> • Low-lying, flood-prone areas below the surrounding coastal flood elevation but not directly connected, extents based on the 2D modeling performed for harbors, embayments and estuaries | AdaptLA (modified for selected SLR scenarios) | <ul style="list-style-type: none"> • Mapping potential inland flooding based on existing topography provides a simple way to understand potential vulnerabilities in and around the Canal District |

Venice (North)

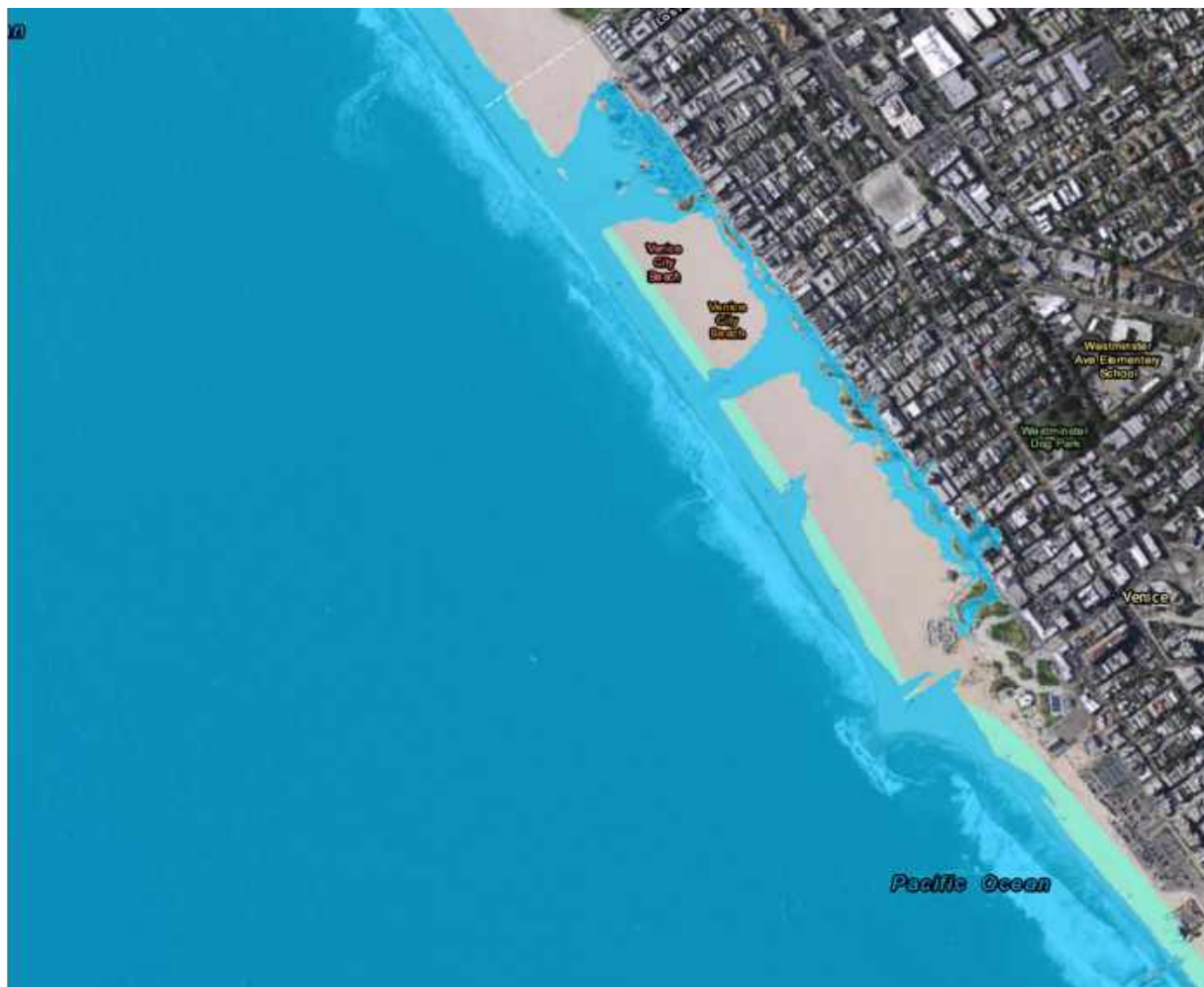


Figure 3.1: Comparison of CoSMoS 3.0 and Adapt LA Flooding Results in Venice (North) (TPL 2017)

Venice (South)

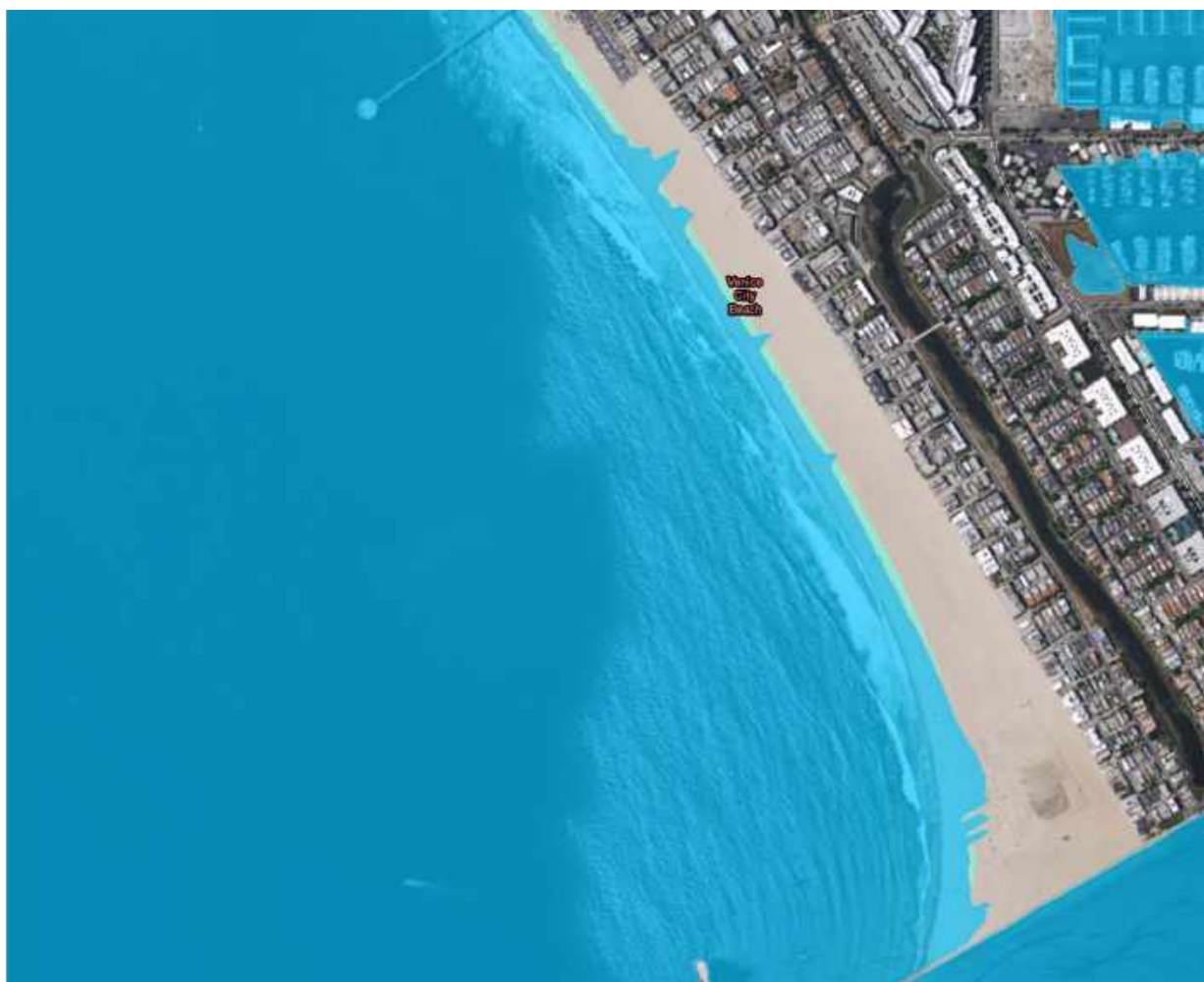
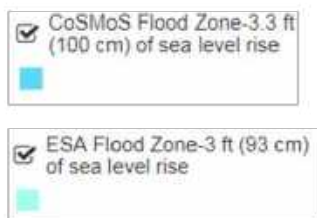


Figure 3.2: Comparison of CoSMoS 3.0 and Adapt LA Flooding Results in Venice (South) (TPL 2017)

Venice (North)

☒ CoSMoS Coastal Erosion-
3.3 ft (100 cm) of sea level
rise

☒ TerraCosta Coastal Erosion-
3 ft (93 cm) of sea level rise

☒ ESA Coastal Erosion-3 ft
(93 cm) of sea level rise

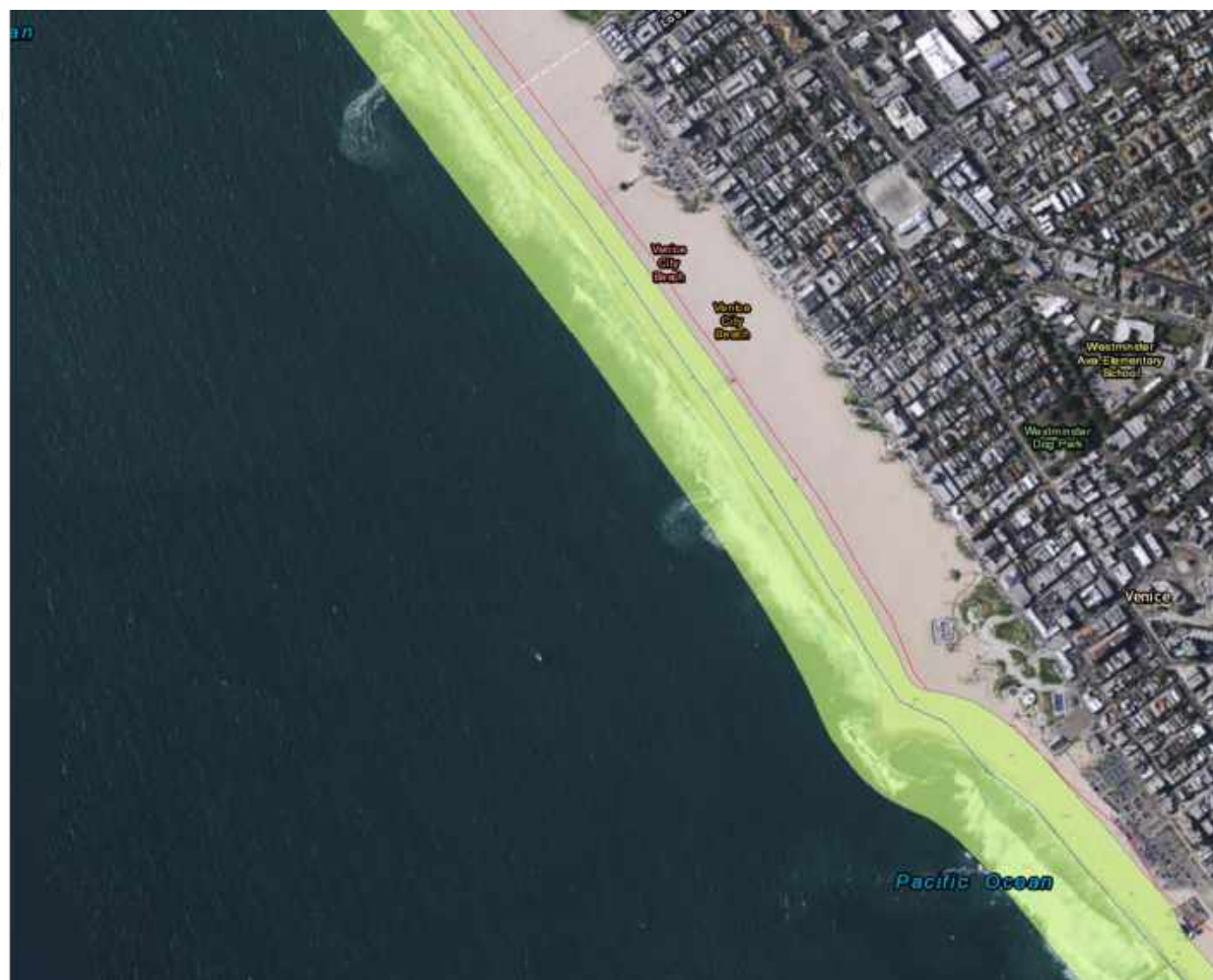


Figure 3.3: Comparison of CoSMoS 3.0 and Adapt LA Shoreline Erosion Results in Venice (North) (TPL 2017)

Venice (South)

☒ CoSMoS Coastal Erosion-
 3.3 ft (100 cm) of sea level
 rise

☒ TerraCosta Coastal Erosion-
 3 ft (93 cm) of sea level rise

☒ ESA Coastal Erosion-3 ft
 (93 cm) of sea level rise

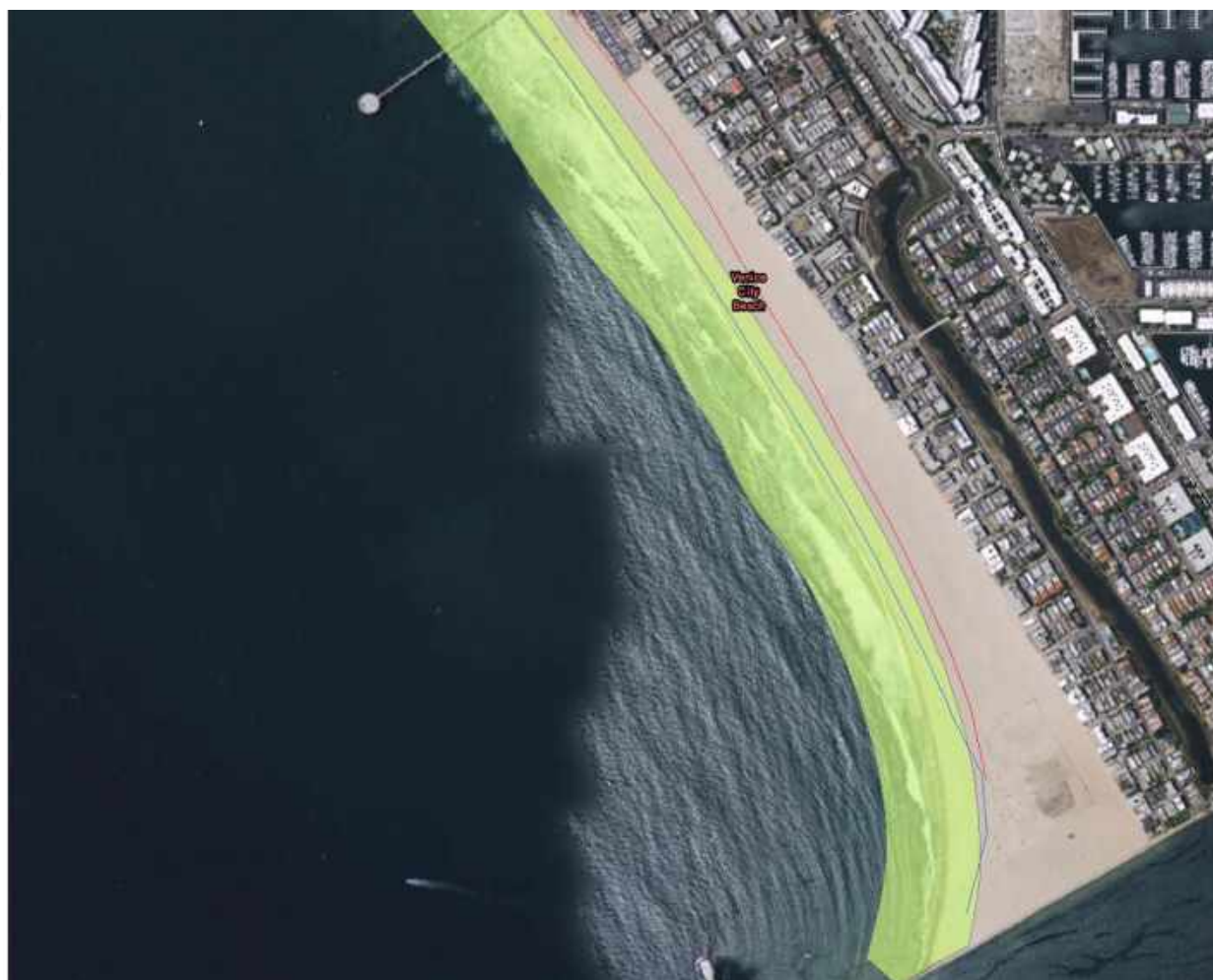


Figure 3.4: Comparison of CoSMoS 3.0 and Adapt LA Shoreline Erosion Results in Venice (South) (TPL 2017)

Venice Beach – Canals District & Surrounding Areas



-  ESA Coastal Erosion and inland flooding for 3.0ft (93cm)
-  CoSMoS 3.0 Phase 2 Erosion and low lying areas for 100cm (3.3ft)



Figure 3.5: Comparison of CoSMoS 3.0 and Adapt LA - Potential Inland Flooding Areas

4. Selected Sea Level Rise Scenarios

Five scenarios have been selected for this study that consider increments of SLR between 0 and 6.6 feet (0 – 2 m). This range of scenarios is based on available data for the region. Best available science currently projects sea levels to rise by 1.5 to 5.5 feet in the study area by year 2100 (NRC 2012).

The five sea level rise scenarios were selected based upon review of existing data and observed vulnerability thresholds (i.e., tipping points of where coastal hazard exposure changes substantially). The recommended SLR scenarios for the study area are provided in Table 4.1 below.

Table 4.1: Venice Vulnerability Assessment Sea Level Rise Scenarios

| Scenario | Sea Level Rise, ft | Sea Level Rise, m | Approximate Time Horizon for Sea Level Rise Projection* | Justification |
|----------|--------------------|-------------------|---|--|
| 1 | 0 | 0 | Current | Establish existing (baseline) conditions |
| 2 | 1.7 | 0.5 | 2050 to 2080 | Identify vulnerabilities within LCP planning horizon |
| 3 | 3.3 | 1.0 | 2060 to 2100+ | Potential threshold for inland flooding & coastal recreation |
| 4 | 4.9 | 1.5 | 2080 to 2100+ | Consistent with upper range of projections in 2100 |
| 5 | 6.6 | 2.0 | Beyond 2100 | Characterize vulnerabilities from extreme SLR |

**Time horizon from ourcoastourfuture.org using CA SCI UPDT (Griggs, et al. 2017) RCP 8.5 projections*

5. Preliminary Sea Level Rise Hazard Maps

Based on the selected models and scenarios described we have generated preliminary sea level rise hazard maps depicting both storm and non-storm conditions. A map for each sea level rise scenario is shown in the following figures (Figure 5.1 through Figure 5.5). The preliminary maps also include an inventory of the coastal resources based on information collected from City and County GIS data. The coastal resource database is shown in Figure 5.6 with more information provided on each feature in Figure 5.7 and Figure 5.8. The sea level rise hazard maps and coastal resource inventory will provide the basis for the Venice Vulnerability Assessment. These should be circulated to the project team, City staff and other stakeholders for additional input to expand on this inventory if necessary.



Figure 5.1: Coastal Hazard Map for Existing Conditions (current sea level)



Figure 5.2: Coastal Hazard Map for 1.64ft (0.5m) of Sea Level Rise



Figure 5.3: Coastal Hazard Map for 3.28ft (1.0m) of Sea Level Rise



Figure 5.4: Coastal Hazard Map for 4.92ft (+1.5m) of Sea Level Rise














Figure 5.5: Coastal Hazard Map for 6.56ft (+2.0m) of Sea Level Rise



Figure 5.6: Coastal Resources Base Map for Venice, CA

Coastal Resources List / Legend










| Infrastructure: | | Data source: | Comments: |
|---|--|--|---|
|  | Tide Gates -- Marina Del Rey owned by county and operated by city -- Washington Blvd. unknown owner and operated by Mariposa Landscaping | LA City geohub | <ul style="list-style-type: none"> Additional water infrastructure such as stormwater pipes was not shown in this map |
|  | Stormwater Pumping Stations -- Windward Circle | LA County GIS Portal | |
|  | Wastewater Pumping Stations -- Venice Pumping Plant (VPP) -- Venice Auxillary Pumping Plant (VAPP) | LA County GIS Portal | |
|  | Outfalls | LA County GIS Portal | |
|  | Canals | LA County GIS Portal | |
|  | Armoring | LA County GIS Portal | |
|  | Major Sewer Pipes -- Force main from VPP to Hyperion -- Gravity main along canal | LA City geohub | |
| Access: | | | |
|  | Metro bus line -- 108 -- 33 & 733 | LA City geohub | |
|  | Parking -- City owned lots -- County owned lots at Venice City Beach | LA City geohub LA County GIS Portal | |
|  | Coastal Path/Bike Path | LA County GIS Portal | |
| Cultural Resources: | | | |
|  | Historic Monuments -- Venice Canal District -- Others including: Kinney-Tabor House, Lincoln Place Apartments, Sturdevant Bungalow, Venice Arcades, Venice Branch Library, Venice City Hall, Venice Division Police Station, Venice of America House, Venice West Cafe, and Warren Wilson Beach House | LA City geohub | <ul style="list-style-type: none"> Historic-Cultural Monument Areas as listed by City of Los Angeles, does not include recent Venice Pride Lifeguard Tower |

pg 1 of 2

Figure 5.7: Coastal Resources Inventory (1 of 2)



Coastal Resources List / Legend (cont.)

| Civic Facilities: | | Data source: | Comments: |
|---|---|--|---|
|        | Lifeguard HQ | LA County Fire | <ul style="list-style-type: none"> Marina Del Rey Hospital, LAC Fire Station 110 are not within City of Los Angeles, but included for functional proximity |
| | Lifeguard towers (22 in total) | LA City geohub | |
| | Schools - LAUSD <ul style="list-style-type: none"> → Broadway Elementary → Coeur d'Alene Elementary → Venice Skills Center → Westminster Elementary → Westside Global Awareness Magnet | LA City geohub | |
| | Schools - Private/Charter <ul style="list-style-type: none"> → Acton Academy Venice Beach → Animo Venice Charter High School → St. Mark School → Venice Lutheran School | LA City geohub | |
| | LAPD Venice Substation | | |
| | Marina Del Rey Hospital | LA City geohub | |
| | LAFD Stations <ul style="list-style-type: none"> → Los Angeles Fire Station 63 → LA County Fire Station 110 (Marina Del Rey) | LA City geohub | |
| Coastal Amenities | | | |
|  | Recreation Centers <ul style="list-style-type: none"> → Venice Beach Recreation Center → Oakwood Recreation Center | LA City geohub | |
| | Other Amenities <ul style="list-style-type: none"> → Venice Beach Boardwalk → Venice Fishing Pier | | |
| Ecological Resources: | | | |
|  | Rare plants and animals habitat <ul style="list-style-type: none"> → Snowy Plover → Least Tern → Orcutt's Pincushion → California Brown Pelican | California Natural Diversity Database (CNDDDB) | |

pg 2 of 2

Figure 5.8: Coastal Resources Inventory (2 of 2)



6. References

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- United States Geological Survey (USGS). 2017. CoSMoS 3.0 Phase 2 Southern California Bight: Summary of data and methods. 2017.

Appendix C

OPC RISK DECISION FRAMEWORK





APPENDIX 4:

Risk Decision Framework

(Adapted from the Governor's Office of Planning and Research's
"Planning and Investing for a Resilient California: A Guidebook for State Agencies")

This framework serves to help planners and decision makers evaluate sea-level rise impacts across a range of projections to inform appropriate design, adaptation pathways, and contingency plans that build resilience.

| RISK CONSIDERATIONS & EVALUATION | Consequences of Impact or Disruption | LOW <i>Minimum Disruption, Limited Scale and Scope</i> | MEDIUM TO HIGH <i>Inconvenience, but Limited in Scope and Scale</i> | EXTREME <i>Unacceptable Risk and/or Extensive Scale and Scope</i> |
|--|--------------------------------------|---|--|--|
| | Adaptive Capacity | <ul style="list-style-type: none"> • Future flexibility maintained • People or systems readily able to respond or adapt | <ul style="list-style-type: none"> • Limited future flexibility | <ul style="list-style-type: none"> • Irreversible • Threat to public health and safety |
| | Who or What is Affected? | <ul style="list-style-type: none"> • Low impact on communities, infrastructure, or natural systems | <ul style="list-style-type: none"> • Communities, systems, or infrastructure readily able to adapt or respond to change | <ul style="list-style-type: none"> • Vulnerable populations • Critical infrastructure • Critical natural systems • Areas of economic, historic, or cultural significance |
| | Economic Impacts | LOW | MEDIUM | HIGH |
|  | | | | |
| EMISSIONS SCENARIO EVALUATION | Pre-2050 | RCP 8.5 <i>(high emissions)</i> | RCP 8.5 <i>(high emissions)</i> | RCP 8.5 <i>(high emissions)</i> |
| | Post-2050 |  | | |
| SLR PROJECTIONS SELECTION | | LOW RISK AVERSION | MEDIUM-HIGH RISK AVERSION | EXTREME RISK AVERSION |



Eric Noreen <eric.noreen@lacity.org>

Venice canal...BSS info requests

11 messages

Eric Noreen <eric.noreen@lacity.org>

Tue, Apr 7, 2020 at 12:07 PM

To: Fred Burnett <Fred.Burnett@lacity.org>, "michael.mulhern" <Michael.Mulhern@lacity.org>

Cc: Patrick Schmidt <Patrick.Schmidt@lacity.org>

Derrick Lee (BSS) asked the following questions:

1. *One recommendation GED considers is to construct trenches to correct the leaking of the canal and to fill voids beneath the street. The other recommendation is to grout from the surface. What is the budget for each of these recommendations? I am preparing a budget request to the CAO's office and I would like to get a Class O cost estimate.*

Furthermore, do the trenches provide structural support for the roadway?

2. *GED is recommending to conduct 6 borings at 10-15 feet in depth at an estimate of \$5,000 to be performed in approximately 2 weeks conducted by GSD. Do you anticipate conducting the borings during the design phase?*

I dug up some relevant documents for this site that may help Derrick....the standards report that went thru a few revisions under my guidance (but I do not have the final signed copy available), and a estimate sheet that may not be valid at this time for a class 'o' estimate?? (not sure what that requires from potential contractors/consultants/subs/etc. as far as 'valid' written estimates...which we do not have) but it is a start.

For Question 1:

As Fred replied, trenches for this are not the best alternative, they may work, but opening up this area could be problematic at best, and catastrophic at worst (bank collapse is a possibility.)

So that leaves some type of grouting that is impermeable and has low potential to heave ground or run into a utility; a polymer type similar to Uretek or equivalent (multiple bids should be sourced? but the polymer grout does need to be of specific properties due to the sensitivity of the area) **The attached word doc has that estimate from January of last year...may need updating (and i'm not sure of its utility for a class 'O' estimate.)**

For the "structural support for the roadway" part, slurry trenches or top down polymer injection for cut-off wall application would both provide improved support for anything above if the existing ground like a road if advanced in the road. But structural support for the road as GED intends, NO. GED recommends advancing these cut-off walls in the sidewalk areas and pathways around the canal. The 'bridge' area of Washington is a separate cost (another ~\$80K+) which would be a grid pattern focused on filling any potential void spaces between the canal pipes, but should IMPROVE the existing condition. Again...I do not know how useful this is for a class "O" estimate.

To understand what this stuff is the previous engineer on this project (who retired from GED) stated...*"Please see the attached demonstration. There is this grouting company from Texas called Uretek. Gary Moore asked me to look into it about 6 months ago and the more I check the better it looks. If you follow the demonstration they took a box of loose rocks and sand (like what we likely have in the utility backfill at Washington Bl in Venice) and turned it into a solid block that is strong and impermeable. It is injected under relatively low pressure and doesn't flow more than a few feet, which is the typical problem with other types of grout. Other grouts will heave the street due to the high injection pressure, or flow a long distance and get into the utilities and plug them up."* See the Uretek product sheet attached. I am not requiring/recommending this particular product, I am recommending something with similar properties.

For Question 2:

We did already do most of the exploration work as described. See the attached DRAFT standards report for these borings. Some of the remaining unknowns at this time include the obstructions encountered during hand augers in the parkway on the 'bridge' section, this could be a concrete 'cap' or encasement of the canal pipes. We do not know how thick this is and what is underneath, so the grid pattern in Washington may not need to be done, or could be problematic even in the sidewalk area of Washington. Therefore, at least SOME exploration in the sidewalk is REQUIRED to be included as part of this project if it moves forward, but would not have to be done before, as the recommendation for a cut off system should not change. The sidewalk area may require more effort though, necessitating the removal of an area for exploring, which may possibly then lead to needing to open up the entire length of sidewalk of Washington on either side of the bridge for access to inject the grout for a cut-off wall. This should be accounted for as a 'likely' contingency or deletable stand alone line item. Same for the rest of the grid pattern in the main street area of Washington...the "separate cost (another ~\$80K+)" mentioned above.

Other things that have not been done are approvals from the Coastal Commission or Army Corps...both of which will take time and require a current/knowledge status report from GED and the environmental people of the BOE assisting with navigating that process.

That is all I can think of for now...and I am just the associate geologist who was working on this...But If you have any questions or need the email strings for previous discussions regarding the grout option with BOE enviro/stormwater people please let me know.

Thanks.

--

Eric Noreen, P.G., C.E.G., ENV-SP
Geotechnical Engineering Division | Engineering Geologist Associate III
Bureau of Engineering | Department of Public Works
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eric.noreen@lacity.org



"lavote.net"

"Proud Recipient of the Mayor's Office 2019 Gender Equity Award"

3 attachments



Washington Boulevard over Grand Canal CAO summary.docx

19K



Draft Report3.pdf

1010K



URETEK- Demonstration 6-4-2013 (1).pdf

1187K

Eric Noreen <eric.noreen@lacity.org>

Tue, Apr 7, 2020 at 12:08 PM

To: Fred Burnett <Fred.Burnett@lacity.org>, "michael.mulhern" <Michael.Mulhern@lacity.org>

Cc: Patrick Schmidt <Patrick.Schmidt@lacity.org>

Please forward to Derrick if you think appropriate....I am on lunch.

[Quoted text hidden]

Fred Burnett <fred.burnett@lacity.org>

Tue, Apr 7, 2020 at 12:43 PM

To: Eric Noreen <eric.noreen@lacity.org>

Cc: "michael.mulhern" <michael.mulhern@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>

I will review and get tomorrow but thanks Eric. The sooner the better we move this on the better.

[Quoted text hidden]

Eric Noreen <eric.noreen@lacity.org>

Wed, Apr 8, 2020 at 9:20 AM

To: "michael.mulhern" <Michael.Mulhern@lacity.org>

[Quoted text hidden]

3 attachments**Washington Boulevard over Grand Canal CAO summary.docx**

19K

**Draft Report3.pdf**

1010K

**URETEK- Demonstration 6-4-2013 (1).pdf**

1187K

Fred Burnett <fred.burnett@lacity.org>

Wed, Apr 8, 2020 at 10:21 AM

To: Eric Noreen <eric.noreen@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>, Michael Mulhern <michael.mulhern@lacity.org>

Cc: Benjamin Moore <benjamin.moore@lacity.org>

I have read what Eric prepared. I recommend Eric and I finish the report I was working on. EMG wanted me to put in some language regarding the site being a major roadway and tsunami emergency route. Also there is a possible conflict with the Venice Fishing pier project and there schedule. Some sort of grouting is my recommendation. Can be a material excepted by all regulators. GED should be involved and any estimate should provide funding for GED. We can certainly provide some specs. Quickly.

I think our management should talk to there's. Remember it is CD11.

I have cced Ben as he is becoming a grouting expert quickly. Also I recommend that Jose be brought in. And Eric in the most knowlegable as the Geologist when Theo was on the project. I have discussed this in the past with him. He has applied for grouting training. Don't know about the Virus though and it's impact on budget and travel.

On Tue, Apr 7, 2020, 12:08 PM Eric Noreen <eric.noreen@lacity.org> wrote:

[Quoted text hidden]

Eric Noreen <eric.noreen@lacity.org>

Wed, Apr 8, 2020 at 10:33 AM

To: Fred Burnett <fred.burnett@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Michael Mulhern <michael.mulhern@lacity.org>, Benjamin Moore <benjamin.moore@lacity.org>

So...do we respond to derrick or not?

The 'material' was looked at by some of the inhouse Enviro people already...the regulators would need our report and would likely take a year to review everything...even then approval is not guaranteed.

yes...everyone should talk to each other...funding acquired, and an understanding reached that this is not approved by regulators yet, and may not even work (several other attempts have failed.)

for the grouting issue...I have been intimately involved with at least 4 grouting projects so I am not an expert like Ben soon will be. The Mines gorut class was approved for me, but then canceled indefinitely until non-essential travel is allowed for anyone in the City, I did ask Mines to move the course online.

[Quoted text hidden]

Fred Burnett <fred.burnett@lacity.org>

Wed, Apr 8, 2020 at 11:04 AM

To: Eric Noreen <eric.noreen@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Michael Mulhern <michael.mulhern@lacity.org>, Benjamin Moore <benjamin.moore@lacity.org>

I think we reply but just done set Streets loose. EMG has had little input they wanted a report but no funding was available.

Management decision. I have given my recommendation. I also think the cost is low, depending if you want to do the whole street or just the ends. What about the sides. Water is certainly migrating based I the tide. How much of that can we mitigate.

[Quoted text hidden]

Michael Mulhern <michael.mulhern@lacity.org>

Wed, Apr 8, 2020 at 11:01 AM

To: Fred Burnett <fred.burnett@lacity.org>

Cc: Benjamin Moore <benjamin.moore@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>

I agree with you.

[Quoted text hidden]

--

Mike Mulhern, E.G.

Geotechnical Engineering Division (GED) | Engineering Geologist III

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Proud Recipient of Mayor Garcetti's 2019 Gender Equity Award!

Michael Mulhern <michael.mulhern@lacity.org>

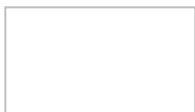
Wed, Apr 8, 2020 at 11:10 AM

To: Patrick Schmidt <patrick.schmidt@lacity.org>, Fred Burnett <Fred.Burnett@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Benjamin Moore <benjamin.moore@lacity.org>

All: I think Eric's email response is fine to sem=nd? Any reason not?

We of course need a request from BSS and WO before you do anything more.

Mike Mulhern, E.G.
Geotechnical Engineering Division (GED) | Engineering Geologist III
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Phone: (213)847-0525 Cell: (213)923-6377



Proud Recipient of Mayor Garcetti's 2019 Gender Equity Award!

On Wed, Apr 8, 2020 at 11:08 AM Patrick Schmidt <patrick.schmidt@lacity.org> wrote:

Hi Mike,

Please work with Fred, Eric and Ben to sort this out and do what is best.

Thank you,

Patrick

[Quoted text hidden]

--

Patrick Schmidt, P.E. G.E.

Geotechnical Engineering Division | Manager

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1149 S. Broadway, Suite 120

Los Angeles, CA 90015

Mail Stop 495

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[Quoted text hidden]

Eric Noreen <eric.noreen@lacity.org>

Wed, Apr 8, 2020 at 1:28 PM

To: Michael Mulhern <michael.mulhern@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Fred Burnett <Fred.Burnett@lacity.org>, Benjamin Moore <benjamin.moore@lacity.org>

Ok...I will cobble together both emails and put at the lead the request/requirement/need for the official request and WO # for this project.

[Quoted text hidden]

Michael Mulhern <michael.mulhern@lacity.org>

Wed, Apr 8, 2020 at 1:30 PM

To: Eric Noreen <eric.noreen@lacity.org>, Fred Burnett <Fred.Burnett@lacity.org>

Thank you Eric!

[Quoted text hidden]

[Quoted text hidden]



Eric Noreen <eric.noreen@lacity.org>

Re: Canals Still Leaking-

25 messages

Theo Seeley <theo.seeley@lacity.org>

Wed, Mar 29, 2017 at 8:24 AM

To: Susan Shu <susan.shu@lacity.org>

Cc: Taylor Bazley <taylor.bazley@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Debbie DyerHarris <debbie.dyerharris@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Patrick Schmidt <Patrick.Schmidt@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Fred Burnett <fred.burnett@lacity.org>

Hi Susan, I was talking to Steven this morning about this. This is the same problem that Eric Noreen and I investigated about two years ago. At that time we proposed having Standards drill about 8 to 10 shallow borings in the City ROW between the pipes under Washington Bl. and also in Strongs Drive, both north and south of Washington Bl. The purpose of that would be to check two potential paths that the water is following to drain the canals. Based upon our investigation at that time the two most likely paths are the poor quality backfill around the pipes under Washington Bl., or the water is draining horizontally through the west bank of the Venice Canal and entering the backfill above the 66 inch sewer that runs under Strongs Dr. and following the sewer trench backfill until it is south of Washington Bl. where at low tide it then flows into the Grand Canal. I have stood in the Grand Canal at low tide and observed water flowing UP THROUGH the dry exposed bottom of the Grand Canal.

We need to investigate both of these potential paths in two phases. First drill and install observation wells IN THE CITY ROW only. This way we can find out how the 66 inch sewer was backfilled and if it has a fluctuating water table that could conduct water from north to south. Also drilling between the pipes to find out how that section of Washington Bl. was constructed and if it is transmitting water. Our research from two years ago found photos of the Grand Canal as an open channel where 4 pipes were being lowered into the channel. We did not find any records of how they backfill the space between the pipes to build the street.

Once we have some basic data we may need to follow up with wells installed by a consultant where we can install Data Loggers to check the up and down movement of the water table and compare it to water level in the Venice Canals and the Grand Canal. At that time we will have a good handle on where the water is flowing and be able to develop a plan to grout the critical sections to stop the flow.

Eric please put out a request to Standards drill crew to give us an estimate on the cost to drill and install wells in Washington Bl. and Strongs Dr.

Theo

On Tue, Mar 28, 2017 at 10:36 PM, Susan Shu <susan.shu@lacity.org> wrote:

Hi, Taylor,
Thanks for reach out to all of us.
Bing has informed me that Mariposa notified him about potential canal leak still exist.
The culvert project we just done is to make sure leak is not through pipe cracks. We think we now are certain that the leak is not from pipes.

There is a good chance that the canal water seeps from the canal bed itself, but we are not sure how to proceed further.
I will contact BOE's Geotechnical Group this week to get their advice in how to investigate the seepage, and how to fix it if possible.

Please let us know if you have any other question
thanks

On Tue, Mar 28, 2017 at 5:30 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

The resident leadership in the canals are reporting pretty severe water leakage as bad as before the Washington culvert & bulk head project. From my recollection CD11 was briefed that if this happened it is likely due to seepage from the canal bed itself. Would you all be able to give us some insight into this issue?

-Taylor

----- Forwarded message -----

From: **Marjorie Weitzman** <marjorie@madwomanproductions.com>

Date: Fri, Mar 24, 2017 at 1:16 PM

Subject: Re: Canals Still Leaking-

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Josie Scibetta <josiescibetta@yahoo.com>, Luis Valenzuela <luisv@mariposa-ca.com>

Hi Taylor-

I'm afraid you need a few more lessons on canal maintenance and the tidal system -- your understanding of the relationship of the gates and the leakage is incorrect. The gates are meant to capture the water at their peak high tide and hold it through the weekend. When the gates are open the waters levels will change according to the flow of the tide, but once closed the gates are expected to hold the water for a period of time. Our Mariposa

maintenance crew will open and close the gates during the week for flushing and cleaning with the ultimate goal of keeping the water high on the weekend for residents and tourists. Usually we are able to maintain full canals throughout the weekend and often three or four days for a holiday weekend.

This past weekend we had full canals on Friday which normally would last several days. By Sunday the canals had dropped drastically to the point of looking completely drained. I took photos and forwarded to Luis asking what was up on Monday. Luis and I spoke and he let me know he has been in touch with Bing Sun at the City of LA Bureau of Engineering and sent a video on 1/3/17 which clearly shows water leaking from the South side of the canal (other side of Washington) into our canals at a rapid rate and explains the loss we are experiencing here when the process is reversed. Bing was given the February tide schedules to check it out himself on a full tide which would have been 2/24/17. Luis also forwarded my pictures to Bing on 3/21. The water level dropped two feet in two days and it has become impossible to maintain the proper water levels. It is clear to everyone there is a significant leak that was not corrected by the last culvert repair. Luis' video gives a detailed visual of where the water is leaking from the top seal of the canal.

This is much more than normal evaporation or "expected amount of leakage" and not attributable to the "bed of the canals". It's a big problem, especially as we come into the spring and summer months. In addition, I can no longer guarantee a full canal for any film shoots wishing to use this venue. We'd appreciate your help coordinating an engineering test to see what's causing this problem and how best to remedy the situation. I've attached my email and pics to Luis below. I will forward Luis' video separately.

Thanks-

Marjorie

Marjorie Weitzman
marjorie@madwomanproductions.com
310-305-3555 (O)
310-990-3030 (C)

My understanding is the water level of the canals has always lowered throughout the week in accordance with tides (there is also of course evaporation and an expected amount of leakage). The repair on the bulkhead was meant to just help slow down unneeded leakage but not lock the water level in place. Are you all experiencing anything unusual or out of the ordinary? The engineers said those were the last improvement needed and if there was any additional unexpected leakage than it is likely from the actual bed of the canals which will be a tough thing to fix.

-Taylor

On Fri, Mar 24, 2017 at 10:19 AM, Josie Scibetta <josiescibetta@yahoo.com> wrote:

Hi Taylor,

I need to ask if you can please follow up with the engineers that worked on the leakage on Grand Canal. We are still leaking and losing a foot of water daily.

What is happening?? Thank you 😊

Josie

Sent by Josie Scibetta

Begin forwarded message:

From: Marjorie Weitzman <madwomantv@aol.com>

Subject: Fwd: Pics

Date: March 21, 2017 11:26:20 AM PDT

To: Luis Valenzuela <luisv@mariposa-ca.com>

Cc: Enrique Figueroa <enrique@mariposa-ca.com>, Antonio Valenzuela <antonio@mariposa-ca.com>



Hi Luis-

Wanted you to be aware of the current water level situation in the canals. I took these photos Sunday afternoon, around 3PM. The canals were full on Friday so this is the amount of water we're losing in just two days. We clearly still have a problem with the gates. Please let me know who I should contact to help follow up on this issue.

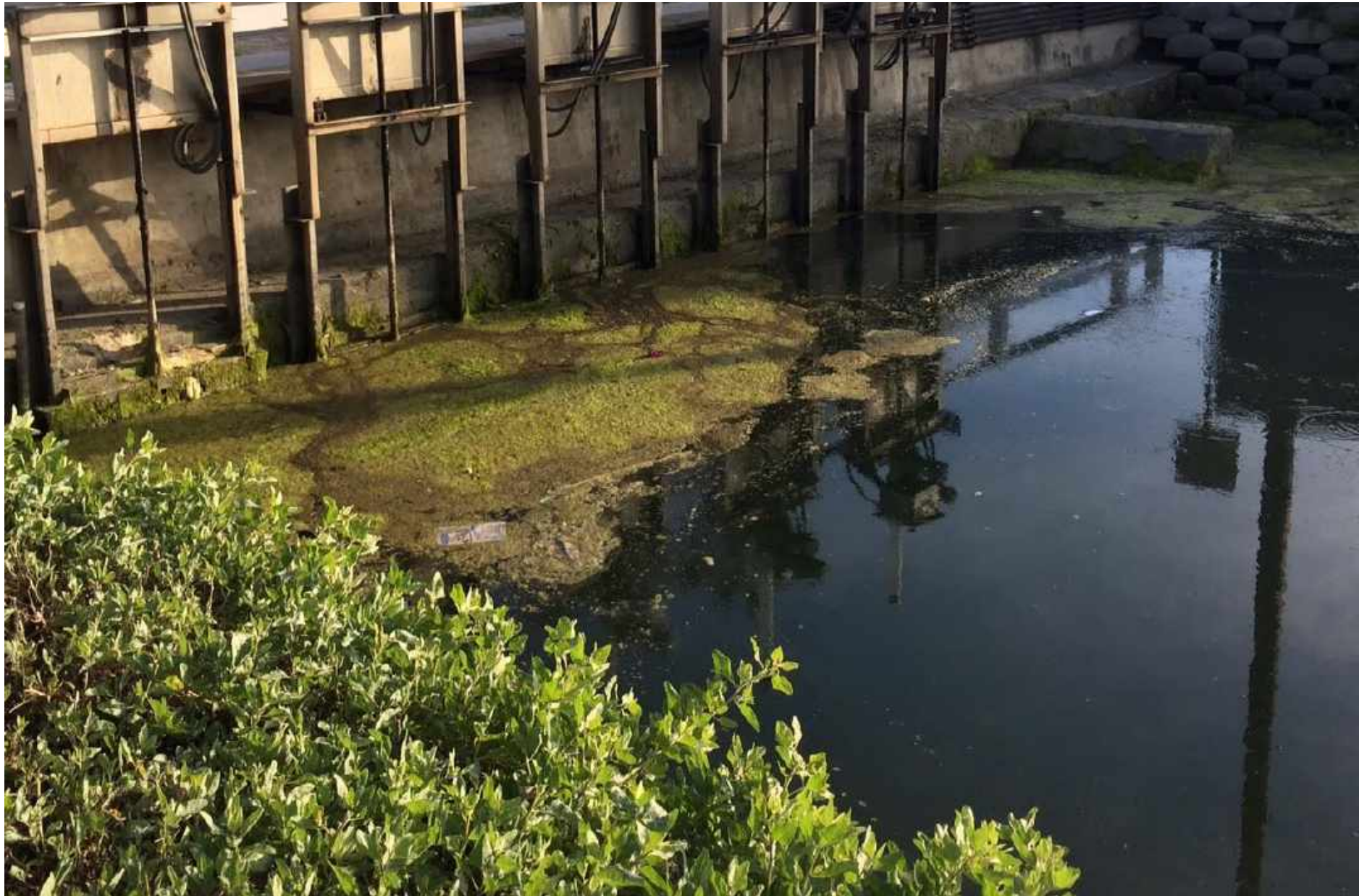
Appreciate your help as always-

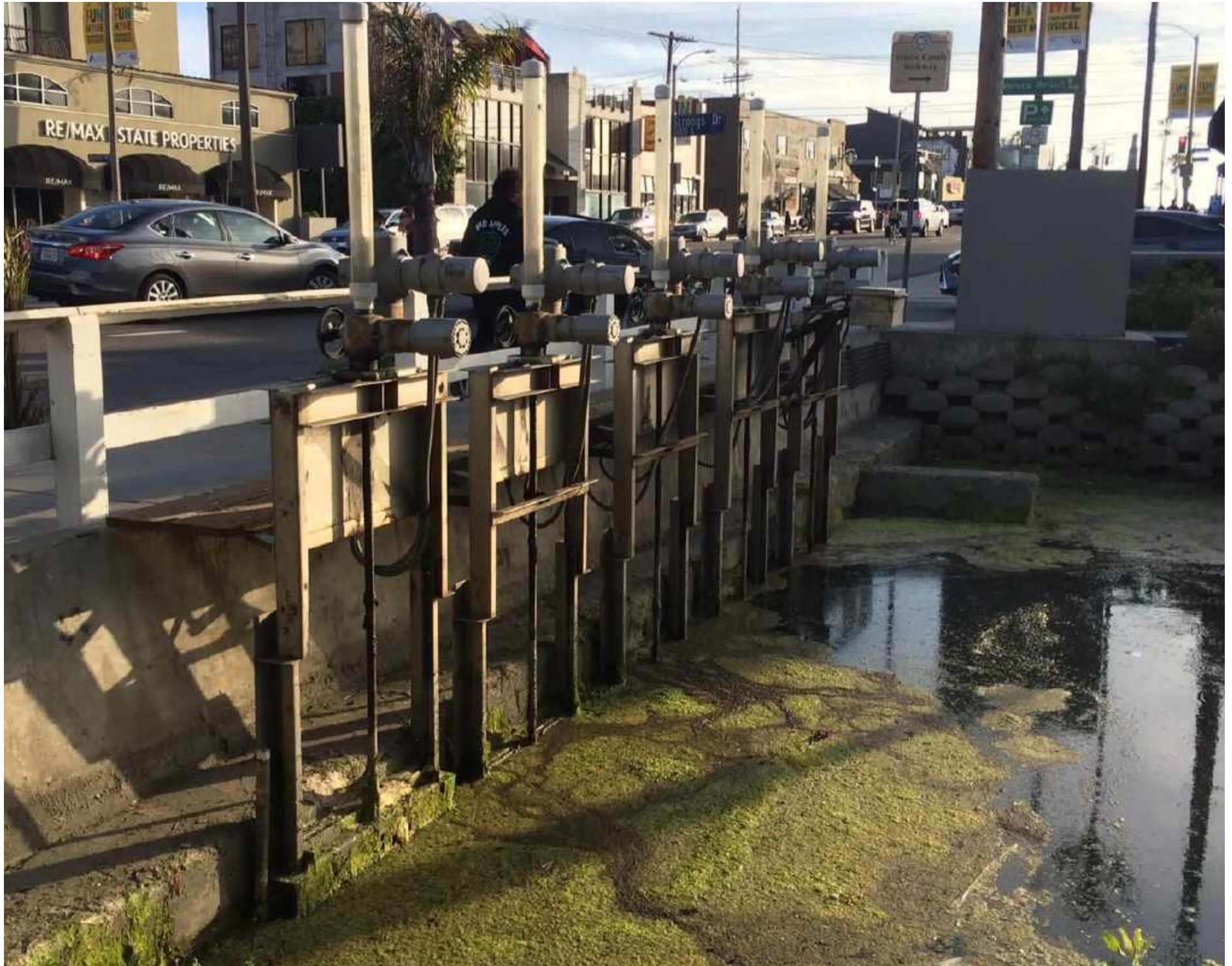
Marjorie

Marjorie Weitzman/[310-990-3030](tel:310-990-3030)













**Taylor Bazley**

Field Deputy - Venice, OFW, Silver Strand, Marina Peninsula
Councilmember Mike Bonin

City of Los Angeles

310-575-8461 | www.11thdistrict.com



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--

Theo R. Seeley G. E.

Geotechnical Engineering Group / Geotechnical Engineer II

Bureau of Engineering/Department of Public Works

1149 S. Broadway #120

Los Angeles, CA 90015

Mail Stop 495

O:(213)847-0534 / C:(213) 923-4521 / F:(213) 847-0541

Theo.Seeley@lacity.org

Debbie Dynere Harris <debbie.dynereharris@lacity.org>

Fri, Apr 7, 2017 at 11:55 AM

To: Theo Seeley <theo.seeley@lacity.org>

Cc: Susan Shu <susan.shu@lacity.org>, Taylor Bazley <taylor.bazley@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Patrick Schmidt <Patrick.Schmidt@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Fred Burnett <fred.burnett@lacity.org>

Thanks Theo. Is there anything our office can do to help you out?

Thanks

Debbie

[Quoted text hidden]

--

--

**Debbie Dynere Harris**

District Director
Councilmember Mike Bonin

City of Los Angeles

310-575-8461 | www.11thdistrict.com



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Theo Seeley <theo.seeley@lacity.org>

Fri, Apr 7, 2017 at 4:09 PM

To: Debbie Dynere Harris <debbie.dynereharris@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>

Cc: Ray Solomon <ray.solomon@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

Yes there is something that you can do to help. As I said in my previous email Eric Noreen and I made observations that indicated that the problem is in the utility trench backfill and most likely the large sewers in that area. My problem is that I have filed all the paper work to retire on the 27th of this month. What Eric and I need is for GSD Standards drill crew to make this a priority so we can track the water in the utility backfill. Given that the tide changes twice a day it won't take very long to determine if that is the source of the transmission of water or not. But we need at least some of the wells in by the week of the 17th. So it would be very helpful if the Council office called Ray Solomon's office and put in a good word for us.

Also, in three weeks I will be gone fishing or golfing, but like I said Eric Noreen will still be here and we both agree on what is likely to be the source of the problem and what appears to be the best way to fix it. So you can contact him regarding the findings and the recommended repair.

Please see the attached demonstration. There is this grouting company from Texas called Uretek. Gary Moore asked me to look into it about 6 months ago and the more I check the better it looks. If you follow the demonstration they took a box of loose rocks and sand (like what we likely have in the utility backfill at Washington Bl in Venice) and turned it into a solid block that is strong and impermeable. It is injected under relatively low pressure and doesn't flow more than a few feet, which is the typical problem with other types of grout. Other grouts will heave the street due to the high injection pressure, or flow a long distance and get into the utilities and plug them up.

They told me that the State of Minnesota was concerned that the grout might decay over time and pollute their streams and lakes. So they had an independent lab run toxicity tests and found that it does not decay under normal circumstances and it is non-toxic. Its main use is to improve streets and airport pavement without doing the usual excavation that disrupts traffic for long periods of time. We are testing it out tonight in Alameda down in San Pedro and hope to have the testing completed in 10 to 12 days. They say they can fix 100 feet of street at night when the traffic volume is low and open the street back up for rush hour the next morning. So tonight I am putting them to the test. If you want I will keep you in the loop as the testing progresses. Just in case your District has some streets in bad shape and occasionally have some traffic. HA HA.

Theo

PS they are also starting to do some repair work at LAX. And please call Ray and put in a good word for us.

[Quoted text hidden]

2 attachments

 **URETEK- Demonstration 6-4-2013 (1).pdf**
1187K

 **Toxicity Testing.pdf**
3509K

Debbie Dyner Harris <debbie.dynerharris@lacity.org>

Fri, Apr 7, 2017 at 4:15 PM

To: Theo Seeley <theo.seeley@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Ray Solomon <ray.solomon@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

Wow, that sounds very cool. Definitely let me know what happens. And no, we have no traffic in CD11. Ever. It's like a dream.

And congratulations on your retirement! That is a lot of institutional memory and skill that goes with you, unfortunately. But I know Eric and the rest of the team can carry on quite well.

I will reach out to Ray next week.

Thanks for many jobs well done,
Debbie

[Quoted text hidden]

Ray Solomon <ray.solomon@lacity.org>

Tue, Apr 11, 2017 at 7:38 AM

To: Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Theo Seeley <theo.seeley@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Alex Chu <alex.chu@lacity.org>, Jerome Kunesch <jerome.kunesch@lacity.org>

Hello Debbie,

Thank you for reaching out to us yesterday and we definitely are glad to be of help in anyway we can for this project.

I have spoken to Jerome Kunesch, the Drill crew supervisor, who will be providing a cost estimate of the testing services to the Geotechnical Group of BOE this afternoon or tomorrow morning. The estimate will be based on the information he has (so far) obtained from Eric or Theo. As I understand it, he has already been apprised of this project and he would like to get additional details for the work and his cost estimate.

Theo,

Can you (or Eric) get in touch with Jerome to provide him the additional details he requires?

Thanks,

Ray H. Solomon, Director
General Services / Standards Division
Ph. (213) 847-0928
Fax. (213) 485-5075

[Quoted text hidden]

Theo Seeley <theo.seeley@lacity.org>

Tue, Apr 11, 2017 at 3:53 PM

To: Ray Solomon <ray.solomon@lacity.org>

Cc: Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>, Alex Chu <alex.chu@lacity.org>, Jerome Kunesch <jerome.kunesch@lacity.org>

Just to let everyone know I met with Jerome and Daniel and we marked the boring locations and they are planning to drill next Tuesday morning and set wells for us. I think we will only need a few readings at high and low tide with the Venice Canal full and empty to be able to tell if the flow is passing through the utility backfill. Once that is known it will be up to Uretex or similar grouting company to give an estimate on the grouting to stop the water flow.

Theo

[Quoted text hidden]

Debbie Dyner Harris <debbie.dynerharris@lacity.org>

Wed, Apr 12, 2017 at 9:30 AM

To: Theo Seeley <theo.seeley@lacity.org>

Cc: Eric Noreen <eric.noreen@lacity.org>, Ray Solomon <ray.solomon@lacity.org>, Jerome Kunesch <jerome.kunesch@lacity.org>, Alex Chu <alex.chu@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>

Excellent, thank you !

[Quoted text hidden]

Taylor Bazley <taylor.bazley@lacity.org>

Mon, May 1, 2017 at 12:54 PM

To: Debbie Dyner Harris <debbie.dynerharris@lacity.org>

Cc: Theo Seeley <theo.seeley@lacity.org>, Susan Shu <susan.shu@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Patrick Schmidt <Patrick.Schmidt@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Fred Burnett <fred.burnett@lacity.org>

Hi All,

I wanted to check back in on this. Do we know anything more now than we did? What was the status of the testing?

-Taylor

[Quoted text hidden]

Susan Shu <susan.shu@lacity.org>

Mon, May 1, 2017 at 1:27 PM

To: Taylor Bazley <taylor.bazley@lacity.org>, Patrick Schmidt <Patrick.Schmidt@lacity.org>

Cc: Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Theo Seeley <theo.seeley@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Fred Burnett <fred.burnett@lacity.org>

Hi, Patrick,

Who is taking the lead now?

thanks

[Quoted text hidden]

Patrick Schmidt <patrick.schmidt@lacity.org>

Mon, May 1, 2017 at 1:32 PM

To: Susan Shu <susan.shu@lacity.org>

Cc: Taylor Bazley <taylor.bazley@lacity.org>, Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Theo Seeley <theo.seeley@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Eric Noreen <eric.noreen@lacity.org>, Fred Burnett <fred.burnett@lacity.org>

Fred Burnett is the new lead. He will get together with Eric and provide the team with an update.

[Quoted text hidden]

--

Patrick Schmidt, P.E. G.E.
Geotechnical Engineering Group | Acting Group Manager
Bureau of Engineering | Department of Public Works
1149 S. Broadway, Suite 120
Los Angeles, CA 90015
O: (213) 847-0535 | C: (213) 923-5984 | F: (213) 847-0541



Check out these sites and links! Go ahead, just click.

Fred Burnett <fred.burnett@lacity.org>

Tue, May 2, 2017 at 1:00 PM

To: Patrick Schmidt <patrick.schmidt@lacity.org>

Cc: Susan Shu <susan.shu@lacity.org>, Taylor Bazley <taylor.bazley@lacity.org>, Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

We did some borings last week and had refusal at a depth of 3 feet in the Washington Bridge area. In this area we are looking into any additional information regarding the ground near the subsurface pipes at the bridge. Eric Noreen is contacting Susan Shu regarding any additional info. Following this we may drill some additional borings.

Additional borings on Strong Street show that the ground is extremely soft in the area of utility lines. Groundwater was encountered at a depth of 5 to 7 feet below the ground surface.

Three groundwater sensors were installed on Strong Street. The sensors collect data at 15 minute intervals. Following approximately 2 weeks of collecting data we plan on comparing the water fluctuations with tidal data and tidal gates opening and closing times.

We are probably a month or two away from a report depending on Standards Division's response for additional drilling.

[Quoted text hidden]

Debbie Dyner Harris <debbie.dynerharris@lacity.org>

Tue, May 2, 2017 at 1:03 PM

To: Fred Burnett <fred.burnett@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Susan Shu <susan.shu@lacity.org>, Taylor Bazley <taylor.bazley@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

This is great information, thank you.

[Quoted text hidden]

Taylor Bazley <taylor.bazley@lacity.org>

Mon, Oct 23, 2017 at 11:47 AM

To: Fred Burnett <fred.burnett@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Susan Shu <susan.shu@lacity.org>, Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

I might have missed the report back and what happened with this study? The issue of low canal water has been habitual and it would be ideal to get an answer to the constituents as to what is possible.

-Taylor

On Tue, May 2, 2017 at 1:00 PM, Fred Burnett <fred.burnett@lacity.org> wrote:

[Quoted text hidden]

[Quoted text hidden]

Eric Noreen <eric.noreen@lacity.org>

Mon, Oct 23, 2017 at 1:49 PM

To: Patrick Schmidt <Patrick.Schmidt@lacity.org>

do you want me to respond to this? I am still waiting on Jerome to dig a few holes in the parkway to figure out what that refusal is all about...they would be larger diameter, I guess he is hesitant to do them. I still have the sensors in the ground and I need to collect the data. I haven't been out there in a great while....

[Quoted text hidden]

--

Eric Noreen, P.G., C.E.G., ENV-SP

Geotechnical Engineering Division| Engineering Geologist Associate III

9/22/2020

City of Los Angeles Mail - Re: Canals Still Leaking-

Bureau of Engineering | Department of Public Works
1149 S. Broadway, Suite 120
Los Angeles, CA 90015
Phone: O: (213) 847 - 0507



Eric Noreen <eric.noreen@lacity.org>

Mon, Oct 23, 2017 at 4:26 PM

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Fred Burnett <fred.burnett@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>, Susan Shu <susan.shu@lacity.org>, Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>

Taylor,

GEO still wants to determine the nature and extent of the obstruction at 3' below the parkway. It may be several holes to the 3' depth and approx 2' wide in the parkway. It may be something we could do easily/quickly with a backhoe...If someone has access to one...please let me know. Other than that, we still need to get the finalized report from standards and collect and review the data from the sensors in the wells to prepare the Geotech report and recommendations.

In any case...if you want talk about some of the preliminary indications from the exploration...please let me know.

Thanks.

On Mon, Oct 23, 2017 at 11:47 AM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

[Quoted text hidden]

--

Eric Noreen, P.G., C.E.G., ENV-SP

Geotechnical Engineering Division | Engineering Geologist Associate III

Bureau of Engineering | Department of Public Works

1149 S. Broadway, Suite 120

Los Angeles, CA 90015

Phone: O: (213) 847 - 0507

[Quoted text hidden]

Taylor Bazley <taylor.bazley@lacity.org>

Tue, Oct 24, 2017 at 11:44 AM

To: Eric Noreen <eric.noreen@lacity.org>

Cc: Fred Burnett <fred.burnett@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>, Susan Shu <susan.shu@lacity.org>, Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>

Thanks for the update! We could get a backhoe if you need it - RAP has one at Venice Beach and i'm sure we could borrow one from any number of other partners.

It isn't urgent so I wouldn't push the quick and dirty method - I just wanted to make sure this is still on everyone's plates since it has been half a year since we started this survey. Let's chat next week when you get back into the office - my schedule is wide open Monday and Tuesday afternoon if you had any overlap in availability and wanted to shoot a calendar invite my way.

-Taylor

[Quoted text hidden]

Eric Noreen <eric.noreen@lacity.org>

Fri, Oct 27, 2017 at 3:45 PM

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Fred Burnett <fred.burnett@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>, Susan Shu <susan.shu@lacity.org>, Debbie Dyner Harris <debbie.dynerharris@lacity.org>, Bing Sun <bing.sun@lacity.org>, Anthony Felipe <Anthony.Felipe@lacity.org>, Hans Chang <Hans.Chang@lacity.org>, Nadir Shah <nadir.shah@lacity.org>, Steven Chen <Steven.Chen@lacity.org>

Taylor,

9/22/2020

City of Los Angeles Mail - Re: Canals Still Leaking-

I should be free in the afternoon on Tues (Mon is my RDO), say 1:30 pm? I can go over our present thinking on the site and show you (by mirroring my computer). Let me know if this works for you.

[Quoted text hidden]

Taylor Bazley <taylor.bazley@lacity.org>

Fri, Oct 27, 2017 at 5:20 PM

To: Eric Noreen <eric.noreen@lacity.org>

Perfect - phone I assume? I just sent a calendar invite with this as the number; 641-715-0634 and access code 744375

-Taylor

[Quoted text hidden]

Taylor Bazley <taylor.bazley@lacity.org>

Thu, Nov 2, 2017 at 2:23 PM

To: Robert Davis <robert.davis@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

Hey Eric!

Bob Davis here is both fantastic and the superintendent for Venice Beach and the lead for RAP in the area. It might be helpful if you guys talk about BOE's needs for the canal study.

-Taylor

On Wed, Nov 1, 2017 at 7:04 PM, Robert Davis <robert.davis@lacity.org> wrote:

No. I have a skiploader which is a tractor without the backhoe attachment. The other unit I got for the beach is a smaller skid steer tractor but unfortunately it was stolen from a mechanical repair yard when it was in for service.

Anyway, do they have an operator for the backhoe requested or do they need that too? And what date are they looking for?

If you prefer, you can have them give me a call so I can attempt to assist them.

Thanks.

Bob

Sent from my Windows 10 phone

From: Taylor Bazley

Sent: Wednesday, November 1, 2017 5:01 PM

To: Robert Davis

Subject: Re: Canals Still Leaking-

Oh! I thought you had one with the light equipment operator! Let me know - please don't spend too much effort on it and I appreciate the help!

-Taylor

On Wed, Nov 1, 2017 at 9:17 AM, Robert Davis <robert.davis@lacity.org> wrote:

Hi Taylor,

Actually, I do not have a backhoe. I will make a call to see if another division within RAP is willing to loan them one.

Will let you know asap?

Bob

Sent from my Windows 10 phone

From: Taylor Bazley
Sent: Tuesday, October 31, 2017 3:45 PM
To: Robert Davis

Subject: Re: Canals Still Leaking-

Hey Bob,

BOE is doing a survey at Washington at the Grand Canal about water levels in the Venice Canals and mentioned they need to identify a backhoe that they could borrow for a day to do light excavation. Eric Noreen mentioned they usually borrow one from RAP so I thought I would reach out and see if you had a backhoe and if you might be amenable to letting another department use it for a day? I don't know how regular an ask like this is...Also thanks for the information about the plumbing - i'm letting Mike know the price tag and sent the information to Lava Mae.

-Taylor

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--
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Bureau of Engineering/Department of Public Works
[1149 S. Broadway #120](#)
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O:(213)847-0534 / C:(213) 923-4521 / F:(213) 847-0541
Theo.Seeley@lacity.org

**Debbie Dyner Harris***District Director*

Councilmember Mike Bonin

City of Los Angeles

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**Taylor Bazley***Field Deputy - Venice, OFW, Silver Strand, Marina Peninsula*

Councilmember Mike Bonin




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[Quoted text hidden]

Eric Noreen <eric.noreen@lacity.org>

Fri, Nov 3, 2017 at 9:34 AM

To: Robert Davis <robert.davis@lacity.org>

Cc: Taylor Bazley <taylor.bazley@lacity.org>, Fred Burnett <Fred.Burnett@lacity.org>

Bob,

We would need to dig 3-4 holes in the parkway space on the Washington 'Bridge' over the Venice Grand Canal. These holes would be the width of the parkway ~3 feet long and at least 3 feet deep. At 3 feet in depth there is an obstruction (everywhere we hand augured) that we will need to drill through, and possibly open up and dig/hand auger to see what is underneath. But the holes dug will not exceed 5 feet or so max depth. Some compactive effort should be applied when replacing the soil. The rig would likely need to be onsite for a day and a half.

With the above in mind...can you get a backhoe (or an attachment) and an operator for this project? As far as scheduling...this is not a rush/emergency, the problem has been around for a while. But, I would need some lead time to take care of the Underground Service Alert.

Please don't hesitate to call me if you have any questions

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Hey Eric!

Bob Davis here is both fantastic and the superintendent for Venice Beach and the lead for RAP in the area. It might be helpful if you guys talk about BOE's needs for the canal study.

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No. I have a skiploader which is a tractor without the backhoe attachment. The other unit I got for the beach is a smaller skid steer tractor but unfortunately it was stolen from a mechanical repair yard when it was in for service.

Anyway, do they have an operator for the backhoe requested or do they need that too? And what date are they looking for?

If you prefer, you can have them give me a call so I can attempt to assist them.

Thanks.

Bob

Sent from my Windows 10 phone

From: [Taylor Bazley](#)

Sent: Wednesday, November 1, 2017 5:01 PM

To: [Robert Davis](#)

Subject: Re: Canals Still Leaking-

Oh! I thought you had one with the light equipment operator! Let me know - please don't spend too much effort on it and I appreciate the help!

-Taylor

On Wed, Nov 1, 2017 at 9:17 AM, Robert Davis <robert.davis@lacity.org> wrote:

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Actually, I do not have a backhoe. I will make a call to see if another division within RAP is willing to loan them one.

Will let you know asap?

Bob

Sent from my Windows 10 phone

From: [Taylor Bazley](#)

Sent: Tuesday, October 31, 2017 3:45 PM

To: [Robert Davis](#)

Subject: Re: Canals Still Leaking-

Hey Bob,

BOE is doing a survey at Washington at the Grand Canal about water levels in the Venice Canals and mentioned they need to identify a backhoe that they could borrow for a day to do light excavation. Eric Noreen mentioned they usually borrow one from RAP so I thought I would reach out and see if you had a backhoe and if you might be amenable to letting another department use it for a day? I don't know how regular an ask like this is...Also thanks for the information about the plumbing - i'm letting Mike know the price tag and sent the information to Lava Mae.

-Taylor

On Fri, Oct 27, 2017 at 5:20 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Perfect - phone I assume? I just sent a calendar invite with this as the number; [641-715-0634](tel:641-715-0634) and access code 744375

-Taylor

On Fri, Oct 27, 2017 at 3:45 PM, Eric Noreen <eric.noreen@lacity.org> wrote:

Taylor,

I should be free in the afternoon on Tues (Mon is my RDO), say 1:30 pm? I can go over our present thinking on the site and show you (by mirroring my computer). Let me know if this works for you.

On Tue, Oct 24, 2017 at 11:44 AM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Thanks for the update! We could get a backhoe if you need it - RAP has one at Venice Beach and i'm sure we could borrow one from any number of other partners.

It isn't urgent so I wouldn't push the quick and dirty method - I just wanted to make sure this is still on everyone's plates since it has been half a year since we started this survey. Let's chat next week when you get back into the office - my schedule is wide open Monday and Tuesday afternoon if you had any overlap in availability and wanted to shoot a calendar invite my way.

-Taylor

On Mon, Oct 23, 2017 at 4:26 PM, Eric Noreen <eric.noreen@lacity.org> wrote:

Taylor,

GEO still wants to determine the nature and extent of the obstruction at 3' below the parkway. It may be several holes to the 3' depth and approx 2' wide in the parkway. It may be something we could do easily/quickly with a backhoe...If someone has access to one...please let me know. Other than that, we still need to get the finalized report from standards and collect and review the data from the sensors in the wells to prepare the Geotech report and recommendations.

In any case...if you want talk about some of the preliminary indications from the exploration...please let me know.

Thanks.

On Mon, Oct 23, 2017 at 11:47 AM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

I might have missed the report back and what happened with this study? The issue of low canal water has been habitual and it would be ideal to get an answer to the constituents as to what is possible.

-Taylor

On Tue, May 2, 2017 at 1:00 PM, Fred Burnett <fred.burnett@lacity.org> wrote:

We did some borings last week and had refusal at a depth of 3 feet in the Washington Bridge area. In this area we are looking into any additional information regarding the ground near the subsurface pipes at the bridge. Eric Noreen is contacting Susan Shu regarding any additional info. Following this we may drill some additional borings.

Additional borings on Strong Street show that the ground is extremely soft in the area of utility lines. Groundwater was encountered at a depth of 5 to 7 feet below the ground surface.

Three groundwater sensors were installed on Strong Street. The sensors collect data at 15 minute intervals. Following approximately 2 weeks of collecting data we plan on comparing the water fluctuations with tidal data and tidal gates opening and closing times.

We are probably a month or two away from a report depending on Standards Division's response for additional drilling.

On Mon, May 1, 2017 at 4:32 PM, Patrick Schmidt <patrick.schmidt@lacity.org> wrote:

Fred Burnett is the new lead. He will get together with Eric and provide the team with an update.

On Mon, May 1, 2017 at 1:27 PM, Susan Shu <susan.shu@lacity.org> wrote:

Hi, Patrick,

Who is taking the lead now?

thanks

On Mon, May 1, 2017 at 12:54 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Hi All,

I wanted to check back in on this. Do we know anything more now than we did? What was the status of the testing?

-Taylor

On Fri, Apr 7, 2017 at 11:55 AM, Debbie Dyner Harris <debbie.dynerharris@lacity.org> wrote:

Thanks Theo. Is there anything our office can do to help you out?

Thanks

Debbie

On Wed, Mar 29, 2017 at 8:24 AM, Theo Seeley <theo.seeley@lacity.org> wrote:

Hi Susan, I was talking to Steven this morning about this. This is the same problem that Eric Noreen and I investigated about two years ago. At that time we proposed having Standards drill about 8 to 10 shallow borings in the City ROW between the pipes under Washington Bl. and also in Strong's Drive, both north and south of Washington Bl. The purpose of that would be to check two potential paths that the water is following to drain the canals. Based upon our investigation at that time the two most likely paths are the poor quality backfill around the pipes under Washington Bl., or the water is draining horizontally through the west bank of the Venice Canal and entering the backfill above the 66 inch sewer that runs under Strong's Dr. and following the sewer trench backfill until it is south of Washington Bl. where at low tide it then flows into the Grand Canal. I have stood in the Grand Canal at low tide and observed water flowing UP THROUGH the dry exposed bottom of the Grand Canal.

We need to investigate both of these potential paths in two phases. First drill and install observation wells IN THE CITY ROW only. This way we can find out how the 66 inch sewer was backfilled and if it has a fluctuating water table that could conduct water from north to south. Also drilling between the pipes to find out how that section of Washington Bl. was constructed and if it is transmitting water. Our research from two years ago found photos of the Grand Canal as an open channel where 4 pipes were being lowered into the channel. We did not find any records of how they backfill the space between the pipes to build the street.

Once we have some basic data we may need to follow up with wells installed by a consultant where we can install Data Loggers to check the up and down movement of the water table and compare it to water level in the Venice Canals and the Grand Canal. At that time we will have a good handle on where the water is flowing and be able to develop a plan to grout the critical sections to stop the flow.

Eric please put out a request to Standards drill crew to give us an estimate on the cost to drill and install wells in Washington Bl. and Strongs Dr.

Theo

On Tue, Mar 28, 2017 at 10:36 PM, Susan Shu <susan.shu@lacity.org> wrote:

Hi, Taylor,

Thanks for reach out to all of us.

Bing has informed me that Mariposa notified him about potential canal leak still exist.

The culvert project we just done is to make sure leak is not through pipe cracks. We think we now are certain that the leak is not from pipes.

There is a good chance that the canal water seeps from the canal bed itself, but we are not sure how to proceed further.

I will contact BOE's Geotechnical Group this week to get their advice in how to investigate the seepage, and how to fix it if possible.

Please let us know if you have any other question

thanks

On Tue, Mar 28, 2017 at 5:30 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

The resident leadership in the canals are reporting pretty severe water leakage as bad as before the Washington culvert & bulk head project. From my recollection CD11 was briefed that if this happened it is likely due to seepage from the canal bed itself. Would you all be able to give us some insight into this issue?

-Taylor

----- Forwarded message -----

From: **Marjorie Weitzman** <marjorie@madwomanproductions.com>

Date: Fri, Mar 24, 2017 at 1:16 PM

Subject: Re: Canals Still Leaking-

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Josie Scibetta <josiescibetta@yahoo.com>, Luis Valenzuela <luisv@mariposa-ca.com>

Hi Taylor-

I'm afraid you need a few more lessons on canal maintenance and the tidal system -- your understanding of the relationship of the gates and the leakage is incorrect. The gates are meant to capture the water at their peak high tide and hold it through the weekend. When the gates are open the waters levels will change according to the flow of the tide, but once closed the gates are expected to hold the water for a period of time. Our Mariposa maintenance crew will open and close the gates during the week for flushing and cleaning with the ultimate goal of keeping the water high on the weekend for residents and tourists. Usually we are able to maintain full canals throughout the weekend and often three or four days for a holiday weekend.

This past weekend we had full canals on Friday which normally would last several days. By Sunday the canals had dropped drastically to the point of looking completely drained. I took photos and forwarded to Luis asking what was up on Monday. Luis and I spoke and he let me know he has been in touch with Bing Sun at the City of LA Bureau of Engineering and sent a video on 1/3/17 which clearly shows water leaking from the South side of the canal (other side of Washington) into our canals at a rapid rate and explains the loss we are experiencing here when the process is reversed. Bing was given the February tide schedules to check it out himself on a full tide which would have been 2/24/17. Luis also forwarded my pictures to Bing on 3/21. The water level dropped two feet in two days and it has become impossible to maintain the proper water levels. It is clear to everyone there is a significant leak that was not corrected by the last culvert repair. Luis' video gives a detailed visual of where the water is leaking from the top seal of the canal.

This is much more than normal evaporation or "expected amount of leakage" and not attributable to the "bed of the canals". It's a big problem, especially as we come into the spring and summer months. In addition, I can no longer guarantee a full canal for any film shoots wishing to use this venue. We'd appreciate your help coordinating an engineering test to see what's causing this problem and how best to remedy the situation. I've attached my email and pics to Luis below. I will forward Luis' video separately.

Thanks-

Marjorie

Marjorie Weitzman

marjorie@madwomanproductions.com

[310-305-3555](tel:310-305-3555) (O)

[310-990-3030](tel:310-990-3030) (C)

My understanding is the water level of the canals has always lowered throughout the week in accordance with tides (there is also of course evaporation and an expected amount of leakage). The repair on the bulkhead was meant to just help slow down unneeded leakage but not lock the water level in place. Are you all experiencing anything unusual or out of the ordinary? The engineers said those were the last improvement needed and if there was any additional unexpected leakage than it is likely from the actual bed of the canals which will be a tough thing to fix.

-Taylor

On Fri, Mar 24, 2017 at 10:19 AM, Josie Scibetta <josiescibetta@yahoo.com> wrote:

Hi Taylor,
I need to ask if you can please follow up with the engineers that worked on the leakage on Grand Canal. We are still leaking and losing a foot of water daily.
What is happening?? Thank you 😊
Josie

Sent by Josie Scibetta

Begin forwarded message:

From: Marjorie Weitzman <madwomantv@aol.com>

Subject: Fwd: Pics

Date: March 21, 2017 11:26:20 AM PDT

To: Luis Valenzuela <luisv@mariposa-ca.com>

Cc: Enrique Figueroa <enrique@mariposa-ca.com>, Antonio Valenzuela <antonio@mariposa-ca.com>

Hi Luis-

Wanted you to be aware of the current water level situation in the canals. I took these photos Sunday afternoon, around 3PM. The canals were full on Friday so this is the amount of water we're losing in just two days.

We clearly still have a problem with the gates. Please let me know who I should contact to help follow up on this issue.

Appreciate your help as always-

Marjorie

Marjorie Weitzman / [310-990-3030](tel:310-990-3030)

**Taylor Bazley***Field Deputy - Venice, OFW, Silver Strand, Marina Peninsula*

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**Debbie Dynner Harris***District Director*

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3 attachments



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64K



2015_BOElogo_Color_Medium.jpg
105K



facebook-256.png
4K

Taylor Bazley <taylor.bazley@lacity.org>
To: Eric Noreen <eric.noreen@lacity.org>
Cc: Fred Burnett <Fred.Burnett@lacity.org>

Tue, Jun 5, 2018 at 5:25 PM

It has been 6 months since we planned to confirm or deny the theory on why the canals lose water so quickly. Has the work been completed and is there a report to share?

-Taylor

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----- Forwarded message -----

From: **Marjorie Weitzman** <marjorie@madwomanproductions.com>

Date: Fri, Mar 24, 2017 at 1:16 PM

Subject: Re: Canals Still Leaking-

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Josie Scibetta <josiescibetta@yahoo.com>, Luis Valenzuela <luisv@mariposa-ca.com>

Hi Taylor-

I'm afraid you need a few more lessons on canal maintenance and the tidal system -- your understanding of the relationship of the gates and the leakage is incorrect. The gates are meant to capture the water at their peak high tide and hold it through the weekend. When the gates are open the waters levels will change according to the flow of the tide, but once closed the gates are expected to hold the water for a period of time. Our Mariposa maintenance crew will open and close the gates during the week for flushing and cleaning with the ultimate goal of keeping the water high on the weekend for residents and tourists. Usually we are able to maintain full canals throughout the weekend and often three or four days for a holiday weekend.

This past weekend we had full canals on Friday which normally would last several days. By Sunday the canals had dropped drastically to the point of looking completely drained. I took photos and forwarded to Luis asking what was up on Monday. Luis and I spoke and he let me know he has been in touch with Bing Sun at the City of LA Bureau of Engineering and sent a video on 1/3/17 which clearly shows water leaking from the South side of the canal (other side of Washington) into our canals at a rapid rate and explains the loss we are experiencing here when the process is reversed. Bing was given the February tide schedules to check it out himself on a full tide which would have been 2/24/17. Luis also forwarded my pictures to Bing on 3/21. The water level dropped two feet in two days and it has become impossible to maintain the proper water levels. It is clear to everyone there is a significant leak that was not corrected by the last culvert repair. Luis' video gives a detailed visual of where the water is leaking from the top seal of the canal.

This is much more than normal evaporation or "expected amount of leakage" and not attributable to the "bed of the canals". It's a big problem, especially as we come into the spring and summer months. In addition, I can no longer guarantee a full canal for any film shoots wishing to use this venue. We'd appreciate your help coordinating an engineering test to see what's causing this problem and how best to remedy the situation. I've attached my email and pics to Luis below. I will forward Luis' video separately.

Thanks-

Marjorie

Marjorie Weitzman

marjorie@madwomanproductions.com

310-305-3555 (O)

310-990-3030 (C)

My understanding is the water level of the canals has always lowered throughout the week in accordance with tides (there is also of course evaporation and an expected amount of leakage). The repair on the bulkhead was meant to just help slow down unneeded leakage but not lock the water level in place. Are you all experiencing anything unusual or out of the ordinary? The engineers said those were the last improvement needed and if there was any additional unexpected leakage than it is likely from the actual bed of the canals which will be a tough thing to fix.

-Taylor

On Fri, Mar 24, 2017 at 10:19 AM, Josie Scibetta <josiescibetta@yahoo.com> wrote:

Hi Taylor,

I need to ask if you can please follow up with the engineers that worked on the leakage on Grand Canal. We are still leaking and losing a foot of water daily.

What is happening?? Thank you 😊

Josie

Sent by Josie Scibetta

Begin forwarded message:

From: Marjorie Weitzman <madwomantv@aol.com>

Subject: Fwd: Pics

Date: March 21, 2017 11:26:20 AM PDT

To: Luis Valenzuela <luisv@mariposa-ca.com>

Cc: Enrique Figueroa <enrique@mariposa-ca.com>, Antonio Valenzuela <antonio@mariposa-ca.com>

Hi Luis-

Wanted you to be aware of the current water level situation in the canals. I took these photos Sunday afternoon, around 3PM. The canals were full on Friday so this is the amount of water we're losing in just two days.

We clearly still have a problem with the gates. Please let me know who I should contact to help follow up on this issue.

Appreciate your help as always-

Marjorie

Marjorie Weitzman/310-990-3030





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Theo R. Seeley G. E.
Geotechnical Engineering Group / Geotechnical Engineer II
Bureau of Engineering/Department of Public Works
[1149 S. Broadway #120](#)
[Los Angeles, CA 90015](#)
Mail Stop 495
O:(213)847-0534 / C:(213) 923-4521 / F:(213) 847-0541
Theo.Seeley@lacity.org

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Debbie Dyner Harris

District Director

Councilmember Mike Bonin

City of Los Angeles

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Patrick Schmidt, P.E. G.E.

Geotechnical Engineering Group | Acting Group Manager

Bureau of Engineering | Department of Public Works

[1149 S. Broadway, Suite 120](#)[Los Angeles, CA 90015](#)

O: (213) 847-0535 | C: (213) 923-5984 | F: (213) 847-0541

https://ci5.googleusercontent.com/proxy/2EDnze32j_4_KwKyp-g7mzVDqATT6TxC198vYFK044v4-CtuHephbun91g1daOJE0ql2lbjuhqH_rkpg=s0-d-e1-ft#http://eng.lacity.org/images/BOEsig.png https://ci4.googleusercontent.com/proxy/_2nScLwEDsP4JdCeaOQjGG0qHncDoake30cHtzHqLDnwM49gSSJUNKsXHqWz8a5FitddJ7Szyf45_R=s0-d-e1-ft#http://eng.lacity.org/images/LAsig.png <https://ci4.googleusercontent.com/proxy/fcMa3sLVL8wN8ZiGg9XzOy4f3POs-yyYyhkTEtnNmcRCB2TjxPYgL9H7UdlBPgHMP4c2Fx77LByaUNDH=s0-d-e1-ft#http://eng.lacity.org/images/FBsig.png>**Check out these sites and links! Go ahead, just click.****Taylor Bazley***Field Deputy - Venice, OFW, Silver Strand, Marina Peninsula*

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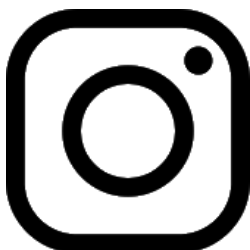
3 attachments



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4K



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105K



instagram_new1600.png
64K

Fred Burnett <fred.burnett@lacity.org>
To: Taylor Bazley <taylor.bazley@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>
Cc: Eric Noreen <eric.noreen@lacity.org>

Wed, Jun 6, 2018 at 8:35 AM

Hi Taylor,

Unfortunately, the work has not been completed as we were not able to locate a city department to provide the necessary backhoe and operator. Please assist in obtaining support from another City Department that has a backhoe and operator. Alternatively, if funding can be provided we could have the work performed through one of our on-call consultant contracts.

On Tue, Jun 5, 2018 at 5:25 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

It has been 6 months since we planned to confirm or deny the theory on why the canals lose water so quickly. Has the work been completed and is there a report to share?

-Taylor

On Fri, Nov 3, 2017 at 9:34 AM, Eric Noreen <eric.noreen@lacity.org> wrote:

Bob,

We would need to dig 3-4 holes in the parkway space on the Washington 'Bridge' over the Venice Grand Canal. These holes would be the width of the parkway ~3 feet long and at least 3 feet deep. At 3 feet in depth there is an obstruction (everywhere we hand augured) that we will need to drill through, and possibly open up and dig/hand auger to see what is underneath. But the holes dug will not exceed 5 feet or so max depth. Some compactive effort should be applied when replacing the soil. The rig would likely need to be onsite for a day and a half.

With the above in mind...can you get a backhoe (or an attachment) and an operator for this project? As far as scheduling...this is not a rush/emergency, the problem has been around for a while. But, I would need some lead time to take care of the Underground Service Alert.

Please don't hesitate to call me if you have any questions

On Thu, Nov 2, 2017 at 2:23 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Hey Eric!

Bob Davis here is both fantastic and the superintendent for Venice Beach and the lead for RAP in the area. It might be helpful if you guys talk about BOE's needs for the canal study.

-Taylor

On Wed, Nov 1, 2017 at 7:04 PM, Robert Davis <robert.davis@lacity.org> wrote:

No. I have a skiploader which is a tractor without the backhoe attachment. The other unit I got for the beach is a smaller skid steer tractor but unfortunately it was stolen from a mechanical repair yard when it was in for service.

Anyway, do they have an operator for the backhoe requested or do they need that too? And what date are they looking for?

If you prefer, you can have them give me a call so I can attempt to assist them.

Thanks.

Bob

Sent from my Windows 10 phone

From: [Taylor Bazley](#)

Sent: Wednesday, November 1, 2017 5:01 PM

To: [Robert Davis](#)

Subject: Re: Canals Still Leaking-

Oh! I thought you had one with the light equipment operator! Let me know - please don't spend too much effort on it and I appreciate the help!

-Taylor

On Wed, Nov 1, 2017 at 9:17 AM, Robert Davis <robert.davis@lacity.org> wrote:

Hi Taylor,

Actually, I do not have a backhoe. I will make a call to see if another division within RAP is willing to loan them one.

Will let you know asap?

Bob

Sent from my Windows 10 phone

From: [Taylor Bazley](#)

Sent: Tuesday, October 31, 2017 3:45 PM

To: [Robert Davis](#)

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-Taylor

----- Forwarded message -----

From: **Marjorie Weitzman** <marjorie@madwomanproductions.com>

Date: Fri, Mar 24, 2017 at 1:16 PM

Subject: Re: Canals Still Leaking-

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Josie Scibetta <josiescibetta@yahoo.com>, Luis Valenzuela <luisv@mariposa-ca.com>

Hi Taylor-

I'm afraid you need a few more lessons on canal maintenance and the tidal system – your understanding of the relationship of the gates and the leakage is incorrect. The gates are meant to capture the water at their peak high tide and hold it through the weekend. When the gates are open the waters levels will change according to the flow of the tide, but once closed the gates are expected to hold the water for a period of time. Our Mariposa maintenance crew will open and close the gates during the week for flushing and cleaning with the ultimate goal of keeping the water high on the weekend for residents and tourists. Usually we are able to maintain full canals throughout the weekend and often three or four days for a holiday weekend.

This past weekend we had full canals on Friday which normally would last several days. By Sunday the canals had dropped drastically to the point of looking completely drained. I took photos and forwarded to Luis asking what was up on Monday. Luis and I spoke and he let me know he has been in touch with Bing Sun at the City of LA Bureau of Engineering and sent a video on 1/3/17 which clearly shows water leaking from the South side of the canal (other side of Washington) into our canals at a rapid rate and explains the loss we are experiencing here when the process is reversed. Bing was given the February tide schedules to check it out himself on a full tide which would have been 2/24/17. Luis also forwarded my pictures to Bing on 3/21. The water level dropped two feet in two days and it has become impossible to maintain the proper water levels. It is clear to everyone there is a significant leak that was not corrected by the last culvert repair. Luis' video gives a detailed visual of where the water is leaking from the top seal of the canal.

This is much more than normal evaporation or "expected amount of leakage" and not attributable to the "bed of the canals". It's a big problem, especially as we come into the spring and summer months. In addition, I can no longer guarantee a full canal for any film shoots wishing to use this venue. We'd appreciate your help coordinating an engineering test to see what's causing this problem and how best to remedy the situation. I've attached my email and pics to Luis below. I will forward Luis' video separately.

Thanks-

Marjorie

Marjorie Weitzman

marjorie@madw.omanproductions.com

[310-305-3555](tel:310-305-3555) (O)

[310-990-3030](tel:310-990-3030) (C)

My understanding is the water level of the canals has always lowered throughout the week in accordance with tides (there is also of course evaporation and an expected amount of leakage). The repair on the bulkhead was meant to just help slow down unneeded leakage but not lock the water level in place. Are you all experiencing anything unusual or out of the ordinary? The engineers said those were the last improvement needed and if there was any additional unexpected leakage than it is likely from the actual bed of the canals which will be a tough thing to fix.

-Taylor

On Fri, Mar 24, 2017 at 10:19 AM, Josie Scibetta <josiescibetta@yahoo.com> wrote:

Hi Taylor,
I need to ask if you can please follow up with the engineers that worked on the leakage on Grand Canal. We are still leaking and losing a foot of water daily.
What is happening?? Thank you 😊
Josie

Sent by Josie Scibetta

Begin forwarded message:

From: Marjorie Weitzman <madwomantv@aol.com>

Subject: Fwd: Pics

Date: March 21, 2017 11:26:20 AM PDT

To: Luis Valenzuela <luisv@mariposa-ca.com>

Cc: Enrique Figueroa <enrique@mariposa-ca.com>, Antonio Valenzuela <antonio@mariposa-ca.com>

Hi Luis-

Wanted you to be aware of the current water level situation in the canals. I took these photos Sunday afternoon, around 3PM. The canals were full on Friday so this is the amount of water we're losing in just two days.

We clearly still have a problem with the gates. Please let me know who I should contact to help follow up on this issue.

Appreciate your help as always-

Marjorie

Marjorie Weitzman/[310-990-3030](tel:310-990-3030)

**Taylor Bazley***Field Deputy - Venice, OFW, Silver Strand, Marina Peninsula*

Councilmember Mike Bonin

City of Los Angeles

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Theo.Seeley@lacity.org**Debbie Dyer Harris***District Director*

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 [Inline image 1](#)

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ENGINEERING



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Phone: [213-8470523](tel:213-8470523)

3 attachments

2015_BOElogo_Color_Medium.jpg
105K



instagram_new1600.png
64K



facebook-256.png
4K

Taylor Bazley <taylor.bazley@lacity.org>

Thu, Jun 7, 2018 at 4:23 PM

To: Fred Burnett <fred.burnett@lacity.org>, Tricia Keane <Tricia.Keane@lacity.org>

Cc: Patrick Schmidt <patrick.schmidt@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

Didn't we already transfer a very substantial amount of money for this study? My understanding was the money we transferred was supposed to get the study completed - if you need more money because this study is costing more then you had quoted us than that is one thing, but otherwise i'm not sure why this particular expense would be seen as outside of the scope of what we already transferred a money to complete or somehow our obligation to arrange. We ordered this survey well over a year ago and it is a concern that this would have likely stalled if I didn't think to check in.

-Taylor

On Wed, Jun 6, 2018 at 8:35 AM, Fred Burnett <fred.burnett@lacity.org> wrote:

Hi Taylor,

Unfortunately, the work has not been completed as we were not able to locate a city department to provide the necessary backhoe and operator. Please assist in obtaining support from another City Department that has a backhoe and operator. Alternatively, if funding can be provided we could have the work performed through one of our on-call consultant contracts.

On Tue, Jun 5, 2018 at 5:25 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

It has been 6 months since we planned to confirm or deny the theory on why the canals lose water so quickly. Has the work been completed and is there a report to share?

-Taylor

On Fri, Nov 3, 2017 at 9:34 AM, Eric Noreen <eric.noreen@lacity.org> wrote:

Bob,

We would need to dig 3-4 holes in the parkway space on the Washington 'Bridge' over the Venice Grand Canal. These holes would be the width of the parkway ~3 feet long and at least 3 feet deep. At 3 feet in depth there is an obstruction (everywhere we hand augured) that we will need to drill through, and possibly open up and dig/hand auger to see what is underneath. But the holes dug will not exceed 5 feet or so max depth. Some compactive effort should be applied when replacing the soil. The rig would likely need to be onsite for a day and a half.

With the above in mind...can you get a backhoe (or an attachment) and an operator for this project? As far a scheduling...this is not a rush/emergency, the problem has been around for a while. But, I would need some lead time to take care of the Underground Service Alert.

Please don't hesitate to call me if you have any questions

On Thu, Nov 2, 2017 at 2:23 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:
Hey Eric!

Bob Davis here is both fantastic and the superintendent for Venice Beach and the lead for RAP in the area. It might be helpful if you guys talk about BOE's needs for the canal study.

-Taylor

On Wed, Nov 1, 2017 at 7:04 PM, Robert Davis <robert.davis@lacity.org> wrote:

No. I have a skiploader which is a tractor without the backhoe attachment. The other unit I got for the beach is a smaller skid steer tractor but unfortunately it was stolen from a mechanical repair yard when it was in for service.

Anyway, do they have an operator for the backhoe requested or do they need that too? And what date are they looking for?

If you prefer, you can have them give me a call so I can attempt to assist them.

Thanks.

Bob

Sent from my Windows 10 phone

From: [Taylor Bazley](#)
Sent: Wednesday, November 1, 2017 5:01 PM

To: [Robert Davis](#)
Subject: Re: Canals Still Leaking-

Oh! I thought you had one with the light equipment operator! Let me know - please don't spend too much effort on it and I appreciate the help!

-Taylor

On Wed, Nov 1, 2017 at 9:17 AM, Robert Davis <robert.davis@lacity.org> wrote:

Hi Taylor,

Actually, I do not have a backhoe. I will make a call to see if another division within RAP is willing to loan them one.

Will let you know asap?

Bob

Sent from my Windows 10 phone

From: Taylor Bazley
Sent: Tuesday, October 31, 2017 3:45 PM
To: Robert Davis

Subject: Re: Canals Still Leaking-

Hey Bob,

BOE is doing a survey at Washington at the Grand Canal about water levels in the Venice Canals and mentioned they need to identify a backhoe that they could borrow for a day to do light excavation. Eric Noreen mentioned they usually borrow one from RAP so I thought I would reach out and see if you had a backhoe and if you might be amenable to letting another department use it for a day? I don't know how regular an ask like this is...Also thanks for the information about the plumbing - i'm letting Mike know the price tag and sent the information to Lava Mae.

-Taylor

On Fri, Oct 27, 2017 at 5:20 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Perfect - phone I assume? I just sent a calendar invite with this as the number; [641-715-0634](tel:641-715-0634) and access code 744375

-Taylor

On Fri, Oct 27, 2017 at 3:45 PM, Eric Noreen <eric.noreen@lacity.org> wrote:

Taylor,

I should be free in the afternoon on Tues (Mon is my RDO), say 1:30 pm? I can go over our present thinking on the site and show you (by mirroring my computer). Let me know if this works for you.

On Tue, Oct 24, 2017 at 11:44 AM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Thanks for the update! We could get a backhoe if you need it - RAP has one at Venice Beach and i'm sure we could borrow one from any number of other partners.

It isn't urgent so I wouldn't push the quick and dirty method - I just wanted to make sure this is still on everyone's plates since it has been half a year since we started this survey. Let's chat next week when you get back into the office - my schedule is wide open Monday and Tuesday afternoon if you had any overlap in availability and wanted to shoot a calendar invite my way.

-Taylor

On Mon, Oct 23, 2017 at 4:26 PM, Eric Noreen <eric.noreen@lacity.org> wrote:

Taylor,

GEO still wants to determine the nature and extent of the obstruction at 3' below the parkway. It may be several holes to the 3' depth and approx 2' wide in the parkway. It may be something we could do easily/quickly with a backhoe...If someone has access to one...please let me know. Other than that, we still need to get the finalized report from standards and collect and review the data from the sensors in the wells to prepare the Geotech report and recommendations.

In any case...if you want talk about some of the preliminary indications from the exploration...please let me know.

Thanks.

On Mon, Oct 23, 2017 at 11:47 AM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

I might have missed the report back and what happened with this study? The issue of low canal water has been habitual and it would be ideal to get an answer to the constituents as to what is possible.

-Taylor

On Tue, May 2, 2017 at 1:00 PM, Fred Burnett <fred.burnett@lacity.org> wrote:

We did some borings last week and had refusal at a depth of 3 feet in the Washington Bridge area. In this area we are looking into any additional information regarding the ground near the subsurface pipes at the bridge. Eric Noreen is contacting Susan Shu regarding any additional info. Following this we may drill some additional borings.

Additional borings on Strong Street show that the ground is extremely soft in the area of utility lines. Groundwater was encountered at a depth of 5 to 7 feet below the ground surface.

Three groundwater sensors were installed on Strong Street. The sensors collect data at 15 minute intervals. Following approximately 2 weeks of collecting data we plan on comparing the water fluctuations with tidal data and tidal gates opening and closing times.

We are probably a month or two away from a report depending on Standards Division's response for additional drilling.

On Mon, May 1, 2017 at 4:32 PM, Patrick Schmidt <patrick.schmidt@lacity.org> wrote:

Fred Burnett is the new lead. He will get together with Eric and provide the team with an update.

On Mon, May 1, 2017 at 1:27 PM, Susan Shu <susan.shu@lacity.org> wrote:

Hi, Patrick,

Who is taking the lead now?

thanks

On Mon, May 1, 2017 at 12:54 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Hi All,

I wanted to check back in on this. Do we know anything more now than we did? What was the status of the testing?

-Taylor

On Fri, Apr 7, 2017 at 11:55 AM, Debbie Dyner Harris <debbie.dynerharris@lacity.org> wrote:

Thanks Theo. Is there anything our office can do to help you out?

Thanks

Debbie

On Wed, Mar 29, 2017 at 8:24 AM, Theo Seeley <theo.seeley@lacity.org> wrote:

Hi Susan, I was talking to Steven this morning about this. This is the same problem that Eric Noreen and I investigated about two years ago. At that time we proposed having Standards drill about 8 to 10 shallow borings in the City ROW between the pipes under Washington Bl. and also in Strongs Drive, both north and south of Washington Bl. The purpose of that would be to check two potential paths that the water is following to drain the canals. Based upon our investigation at that time the two most likely paths are the poor quality backfill around the pipes under Washington Bl., or the water is draining horizontally through the west bank of the Venice Canal and entering the backfill above the 66 inch sewer that runs under Strongs Dr. and following the sewer trench backfill until it is south of Washington Bl. where at low tide it then flows into the Grand Canal. I have stood in the Grand Canal at low tide and observed water flowing UP THROUGH the dry exposed bottom of the Grand Canal.

We need to investigate both of these potential paths in two phases. First drill and install observation wells IN THE CITY ROW only. This way we can find out how the 66 inch sewer was backfilled and if it has a fluctuating water table that could conduct water from north to south. Also drilling between the pipes to find out how that section of Washington Bl. was constructed and if it is transmitting water. Our research from two years ago found photos of the Grand Canal as an open channel where 4 pipes were being lowered into the channel. We did not find any records of how they backfill the space between the pipes to build the street.

Once we have some basic data we may need to follow up with wells installed by a consultant where we can install Data Loggers to check the up and down movement of the water table and compare it to water level in the Venice Canals and the Grand Canal. At that time we will have a good handle on where the water is flowing and be able to develop a plan to grout the critical sections to stop the flow.

Eric please put out a request to Standards drill crew to give us an estimate on the cost to drill and install wells in Washington Bl. and Strongs Dr.

Theo

On Tue, Mar 28, 2017 at 10:36 PM, Susan Shu <susan.shu@lacity.org> wrote:

Hi, Taylor,

Thanks for reach out to all of us.

Bing has informed me that Mariposa notified him about potential canal leak still exist.

The culvert project we just done is to make sure leak is not through pipe cracks. We think we now are certain that the leak is not from pipes.

There is a good chance that the canal water seeps from the canal bed itself, but we are not sure how to proceed further.
I will contact BOE's Geotechnical Group this week to get their advice in how to investigate the seepage, and how to fix it if possible.

Please let us know if you have any other question

thanks

On Tue, Mar 28, 2017 at 5:30 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

The resident leadership in the canals are reporting pretty severe water leakage as bad as before the Washington culvert & bulk head project. From my recollection CD11 was briefed that if this happened it is likely due to seepage from the canal bed itself. Would you all be able to give us some insight into this issue?

-Taylor

----- Forwarded message -----

From: **Marjorie Weitzman** <marjorie@madwomanproductions.com>

Date: Fri, Mar 24, 2017 at 1:16 PM

Subject: Re: Canals Still Leaking-

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Josie Scibetta <josiescibetta@yahoo.com>, Luis Valenzuela <luisv@mariposa-ca.com>

Hi Taylor-

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marjorie@madwomanproductions.com

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On Fri, Mar 24, 2017 at 10:19 AM, Josie Scibetta <josiescibetta@yahoo.com> wrote:

Hi Taylor,

I need to ask if you can please follow up with the engineers that worked on the leakage on Grand Canal. We are still leaking and losing a foot of water daily.

What is happening?? Thank you 😊

Josie

Sent by Josie Scibetta

Begin forwarded message:

From: Marjorie Weitzman <madwomantv@aol.com>

Subject: Fwd: Pics

Date: March 21, 2017 11:26:20 AM PDT

To: Luis Valenzuela <luisv@mariposa-ca.com>

Cc: Enrique Figueroa <enrique@mariposa-ca.com>, Antonio Valenzuela <antonio@mariposa-ca.com>

Hi Luis-

Wanted you to be aware of the current water level situation in the canals. I took these photos Sunday afternoon, around 3PM. The canals were full on Friday so this is the amount of water we're losing in just two days.

We clearly still have a problem with the gates. Please let me know who I should contact to help follow up on this issue.

Appreciate your help as always-

Marjorie

Marjorie Weitzman/[310-990-3030](tel:310-990-3030)

--



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3 attachments



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105K



facebook-256.png
4K

instagram_new1600.png



64K

Fred Burnett <fred.burnett@lacity.org>

To: Taylor Bazley <taylor.bazley@lacity.org>

Cc: Tricia Keane <Tricia.Keane@lacity.org>, Patrick Schmidt <patrick.schmidt@lacity.org>, Eric Noreen <eric.noreen@lacity.org>

Mon, Jun 11, 2018 at 6:38 AM

The original engineer retired last year. We are unaware of any funding. Please provide funding information.

On Thu, Jun 7, 2018 at 4:23 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Didn't we already transfer a very substantial amount of money for this study? My understanding was the money we transferred was supposed to get the study completed - if you need more money because this study is costing more then you had quoted us than that is one thing, but otherwise i'm not sure why this particular expense would be seen as outside of the scope of what we already transferred a money to complete or somehow our obligation to arrange. We ordered this survey well over a year ago and it is a concern that this would have likely stalled if I didn't think to check in.

-Taylor

On Wed, Jun 6, 2018 at 8:35 AM, Fred Burnett <fred.burnett@lacity.org> wrote:

Hi Taylor,

Unfortunately, the work has not been completed as we were not able to locate a city department to provide the necessary backhoe and operator. Please assist in obtaining support from another City Department that has a backhoe and operator. Alternatively, if funding can be provided we could have the work performed through one of our on-call consultant contracts.

On Tue, Jun 5, 2018 at 5:25 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

It has been 6 months since we planned to confirm or deny the theory on why the canals lose water so quickly. Has the work been completed and is there a report to share?

-Taylor

On Fri, Nov 3, 2017 at 9:34 AM, Eric Noreen <eric.noreen@lacity.org> wrote:

Bob,

We would need to dig 3-4 holes in the parkway space on the Washington 'Bridge' over the Venice Grand Canal. These holes would be the width of the parkway ~3 feet long and at least 3 feet deep. At 3 feet in depth there is an obstruction (everywhere we hand augured) that we will need to drill through, and possibly open up and dig/hand auger to see what is underneath. But the holes dug will not exceed 5 feet or so max depth. Some compactive effort should be applied when replacing the soil. The rig would likely need to be onsite for a day and a half.

With the above in mind...can you get a backhoe (or an attachment) and an operator for this project? As far as scheduling...this is not a rush/emergency, the problem has been around for a while. But, I would need some lead time to take care of the Underground Service Alert.

Please don't hesitate to call me if you have any questions

On Thu, Nov 2, 2017 at 2:23 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Hey Eric!

Bob Davis here is both fantastic and the superintendent for Venice Beach and the lead for RAP in the area. It might be helpful if you guys talk about BOE's needs for the canal study.

-Taylor

On Wed, Nov 1, 2017 at 7:04 PM, Robert Davis <robert.davis@lacity.org> wrote:

No. I have a skiploader which is a tractor without the backhoe attachment. The other unit I got for the beach is a smaller skid steer tractor but unfortunately it was stolen from a mechanical repair yard when it was in for service.

Anyway, do they have an operator for the backhoe requested or do they need that too? And what date are they looking for?

If you prefer, you can have them give me a call so I can attempt to assist them.

Thanks.

Bob

Sent from my Windows 10 phone

From: [Taylor Bazley](#)

Sent: Wednesday, November 1, 2017 5:01 PM

To: [Robert Davis](#)

Subject: Re: Canals Still Leaking-

Oh! I thought you had one with the light equipment operator! Let me know - please don't spend too much effort on it and I appreciate the help!

-Taylor

On Wed, Nov 1, 2017 at 9:17 AM, Robert Davis <robert.davis@lacity.org> wrote:

Hi Taylor,

Actually, I do not have a backhoe. I will make a call to see if another division within RAP is willing to loan them one.

Will let you know asap?

Bob

Sent from my Windows 10 phone

From: [Taylor Bazley](#)

Sent: Tuesday, October 31, 2017 3:45 PM

To: [Robert Davis](#)

Subject: Re: Canals Still Leaking-

Hey Bob,

BOE is doing a survey at Washington at the Grand Canal about water levels in the Venice Canals and mentioned they need to identify a backhoe that they could borrow for a day to do light excavation. Eric Noreen mentioned they usually borrow one from RAP so I thought I would reach out and see if you had a backhoe and if you might be amenable to letting another department use it for a day? I don't know how regular an ask like this is...Also thanks for the information about the plumbing - i'm letting Mike know the price tag and sent the information to Lava Mae.

-Taylor

On Fri, Oct 27, 2017 at 5:20 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Perfect - phone I assume? I just sent a calendar invite with this as the number; [641-715-0634](tel:641-715-0634) and access code 744375

-Taylor

On Fri, Oct 27, 2017 at 3:45 PM, Eric Noreen <eric.noreen@lacity.org> wrote:

Taylor,

I should be free in the afternoon on Tues (Mon is my RDO), say 1:30 pm? I can go over our present thinking on the site and show you (by mirroring my computer). Let me know if this works for you.

On Tue, Oct 24, 2017 at 11:44 AM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Thanks for the update! We could get a backhoe if you need it - RAP has one at Venice Beach and i'm sure we could borrow one from any number of other partners.

It isn't urgent so I wouldn't push the quick and dirty method - I just wanted to make sure this is still on everyone's plates since it has been half a year since we started this survey. Let's chat next week when you get back into the office - my schedule is wide open Monday and Tuesday afternoon if you had any overlap in availability and wanted to shoot a calendar invite my way.

-Taylor

On Mon, Oct 23, 2017 at 4:26 PM, Eric Noreen <eric.noreen@lacity.org> wrote:

Taylor,

GEO still wants to determine the nature and extent of the obstruction at 3' below the parkway. It may be several holes to the 3' depth and approx 2' wide in the parkway. It may be something we could do easily/quickly with a backhoe...If someone has access to one...please let me know. Other than that, we still need to get the finalized report from standards and collect and review the data from the sensors in the wells to prepare the Geotech report and recommendations.

In any case...if you want talk about some of the preliminary indications from the exploration...please let me know.

Thanks.

On Mon, Oct 23, 2017 at 11:47 AM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

I might have missed the report back and what happened with this study? The issue of low canal water has been habitual and it would be ideal to get an answer to the constituents as to what is possible.

-Taylor

On Tue, May 2, 2017 at 1:00 PM, Fred Burnett <fred.burnett@lacity.org> wrote:

We did some borings last week and had refusal at a depth of 3 feet in the Washington Bridge area. In this area we are looking into any additional information regarding the ground near the subsurface pipes at the bridge. Eric Noreen is contacting Susan Shu regarding any additional info. Following this we may drill some additional borings.

Additional borings on Strong Street show that the ground is extremely soft in the area of utility lines. Groundwater was encountered at a depth of 5 to 7 feet below the ground surface.

Three groundwater sensors were installed on Strong Street. The sensors collect data at 15 minute intervals. Following approximately 2 weeks of collecting data we plan on comparing the water fluctuations with tidal data and tidal gates opening and closing times.

We are probably a month or two away from a report depending on Standards Division's response for additional drilling.

On Mon, May 1, 2017 at 4:32 PM, Patrick Schmidt <patrick.schmidt@lacity.org> wrote:

Fred Burnett is the new lead. He will get together with Eric and provide the team with an update.

On Mon, May 1, 2017 at 1:27 PM, Susan Shu <susan.shu@lacity.org> wrote:

Hi, Patrick,

Who is taking the lead now?

thanks

On Mon, May 1, 2017 at 12:54 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

Hi All,

I wanted to check back in on this. Do we know anything more now than we did? What was the status of the testing?

-Taylor

On Fri, Apr 7, 2017 at 11:55 AM, Debbie Dyner Harris <debbie.dynerharris@lacity.org> wrote:

Thanks Theo. Is there anything our office can do to help you out?

Thanks

Debbie

On Wed, Mar 29, 2017 at 8:24 AM, Theo Seeley <theo.seeley@lacity.org> wrote:

Hi Susan, I was talking to Steven this morning about this. This is the same problem that Eric Noreen and I investigated about two years ago. At that time we proposed having Standards drill about 8 to 10 shallow borings in the City ROW between the pipes under Washington Bl. and also in Strongs Drive, both north and south of Washington Bl. The purpose of that would be to check two potential paths that the water is following to drain the canals. Based upon our investigation at that time the two most likely paths are the poor quality backfill around the pipes under Washington Bl., or the water is draining horizontally through the west bank of the Venice Canal and entering the backfill above the 66 inch sewer that runs under Strongs Dr. and following the sewer trench backfill until it is south of Washington Bl. where at low tide it then flows into the Grand Canal. I have stood in the Grand Canal at low tide and observed water flowing UP THROUGH the dry exposed bottom of the Grand Canal.

We need to investigate both of these potential paths in two phases. First drill and install observation wells IN THE CITY ROW only. This way we can find out how the 66 inch sewer was backfilled and if it has a fluctuating water table that could conduct water from north to south. Also drilling between the pipes to find out how that section of Washington Bl. was constructed and if it is transmitting water. Our research from two years ago found photos of the Grand Canal as an open channel where 4 pipes were being lowered into the channel. We did not find any records of how they backfill the space between the pipes to build the street.

Once we have some basic data we may need to follow up with wells installed by a consultant where we can install Data Loggers to check the up and down movement of the water table and compare it to water level in the Venice Canals and the Grand Canal. At that time we will have a good handle on where the water is flowing and be able to develop a plan to grout the critical sections to stop the flow.

Eric please put out a request to Standards drill crew to give us an estimate on the cost to drill and install wells in Washington Bl. and Strongs Dr.

Theo

On Tue, Mar 28, 2017 at 10:36 PM, Susan Shu <susan.shu@lacity.org> wrote:

Hi, Taylor,

Thanks for reach out to all of us.

Bing has informed me that Mariposa notified him about potential canal leak still exist.

The culvert project we just done is to make sure leak is not through pipe cracks. We think we now are certain that the leak is not from pipes.

There is a good chance that the canal water seeps from the canal bed itself, but we are not sure how to proceed further.

I will contact BOE's Geotechnical Group this week to get their advice in how to investigate the seepage, and how to fix it if possible.

Please let us know if you have any other question

thanks

On Tue, Mar 28, 2017 at 5:30 PM, Taylor Bazley <taylor.bazley@lacity.org> wrote:

The resident leadership in the canals are reporting pretty severe water leakage as bad as before the Washington culvert & bulk head project. From my recollection CD11 was briefed that if this happened it is likely due to seepage from the canal bed itself. Would you all be able to give us some insight into this issue?

-Taylor

----- Forwarded message -----
From: **Marjorie Weitzman** <marjorie@madwomanproductions.com>
Date: Fri, Mar 24, 2017 at 1:16 PM
Subject: Re: Canals Still Leaking-
To: Taylor Bazley <taylor.bazley@lacity.org>
Cc: Josie Scibetta <josiescibetta@yahoo.com>, Luis Valenzuela <luisv@mariposa-ca.com>

Hi Taylor-

I'm afraid you need a few more lessons on canal maintenance and the tidal system -- your understanding of the relationship of the gates and the leakage is incorrect. The gates are meant to capture the water at their peak high tide and hold it through the weekend. When the gates are open the waters levels will change according to the flow of the tide, but once closed the gates are expected to hold the water for a period of time. Our Mariposa maintenance crew will open and close the gates during the week for flushing and cleaning with the ultimate goal of keeping the water high on the weekend for residents and tourists. Usually we are able to maintain full canals throughout the weekend and often three or four days for a holiday weekend.

This past weekend we had full canals on Friday which normally would last several days. By Sunday the canals had dropped drastically to the point of looking completely drained. I took photos and forwarded to Luis asking what was up on Monday. Luis and I spoke and he let me know he has been in touch with Bing Sun at the City of LA Bureau of Engineering and sent a video on 1/3/17 which clearly shows water leaking from the South side of the canal (other side of Washington) into our canals at a rapid rate and explains the loss we are experiencing here when the process is reversed. Bing was given the February tide schedules to check it out himself on a full tide which would have been 2/24/17. Luis also forwarded my pictures to Bing on 3/21. The water level dropped two feet in two days and it has become impossible to maintain the proper water levels. It is clear to everyone there is a significant leak that was not corrected by the last culvert repair. Luis' video gives a detailed visual of where the water is leaking from the top seal of the canal.

This is much more than normal evaporation or "expected amount of leakage" and not attributable to the "bed of the canals". It's a big problem, especially as we come into the spring and summer months. In addition, I can no longer guarantee a full canal for any film shoots wishing to use this venue. We'd appreciate your help coordinating an engineering test to see what's causing this problem and how best to remedy the situation. I've attached my email and pics to Luis below. I will forward Luis' video separately.

Thanks-

Marjorie

Marjorie Weitzman
marjorie@madwomanproductions.com
310-305-3555 (O)
310-990-3030 (C)

My understanding is the water level of the canals has always lowered throughout the week in accordance with tides (there is also of course evaporation and an expected amount of leakage). The repair on the bulkhead was meant to just help slow down unneeded leakage but not lock the water level in place. Are you all experiencing anything unusual or out of the ordinary? The engineers said those were the last improvement needed and if there was any additional unexpected leakage than it is likely from the actual bed of the canals which will be a tough thing to fix.

-Taylor

On Fri, Mar 24, 2017 at 10:19 AM, Josie Scibetta <josiescibetta@yahoo.com> wrote:

Hi Taylor,
I need to ask if you can please follow up with the engineers that worked on the leakage on Grand Canal. We are still leaking and losing a foot of water daily.
What is happening?? Thank you 😊
Josie
Sent by Josie Scibetta

Begin forwarded message:

From: Marjorie Weitzman <madwomantv@aol.com>

Subject: Fwd: Pics

Date: March 21, 2017 11:26:20 AM PDT

To: Luis Valenzuela <luisv@mariposa-ca.com>

Cc: Enrique Figueroa <enrique@mariposa-ca.com>, Antonio Valenzuela <antonio@mariposa-ca.com>

Hi Luis-

Wanted you to be aware of the current water level situation in the canals. I took these photos Sunday afternoon, around 3PM. The canals were full on Friday so this is the amount of water we're losing in just two days.

We clearly still have a problem with the gates. Please let me know who I should contact to help follow up on this issue.

Appreciate your help as always-

Marjorie

Marjorie Weitzman/310-990-3030

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Fred Burnett
Geotechnical Engineering Division | Engineering Geologist I

Bureau of Engineering | Department of Public Works
1149 S. Broadway, Suite 120
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Phone: 213-8470523



Taylor Bazley
Field Deputy - Venice, OFW, Silver Strand, Marina Peninsula
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3 attachments



2015_BOElogo_Color_Medium.jpg
105K



instagram_new1600.png
64K

facebook-256.png
4K

9/22/2020

City of Los Angeles Mail - Re: Canals Still Leaking-



Eric Noreen <eric.noreen@lacity.org>
To: Fred Burnett <Fred.Burnett@lacity.org>

Tue, Dec 4, 2018 at 3:46 PM

[Quoted text hidden]

--

Eric Noreen, P.G., C.E.G., ENV-SP
Geotechnical Engineering Division | Engineering Geologist Associate III
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**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic The Venice Canal Historic District

and/or common N/A

2. Location

The District consists of the public right of way of Carroll Canal, Linnie Canal, Howland Canal
street & number Sherman Canal, Eastern Canals, and that portion of N/A not for publication
Canal Street and the Grand Canal between north

city, town Los Angeles N/A vicinity of congressional district 27

state California code 06 county Los Angeles code 037

3. Classification

| | | | |
|--|--|---|--|
| Category | Ownership | Status | Present Use |
| <input checked="" type="checkbox"/> district | <input checked="" type="checkbox"/> public | <input type="checkbox"/> occupied | <input type="checkbox"/> agriculture <input type="checkbox"/> museum |
| <input type="checkbox"/> building(s) | <input type="checkbox"/> private | <input checked="" type="checkbox"/> unoccupied | <input type="checkbox"/> commercial <input checked="" type="checkbox"/> park |
| <input type="checkbox"/> structure | <input type="checkbox"/> both | <input type="checkbox"/> work in progress | <input type="checkbox"/> educational <input type="checkbox"/> private residence |
| <input type="checkbox"/> site | Public Acquisition | Accessible | <input type="checkbox"/> entertainment <input type="checkbox"/> religious |
| <input type="checkbox"/> object | <input type="checkbox"/> in process | <input type="checkbox"/> yes: restricted | <input type="checkbox"/> government <input type="checkbox"/> scientific |
| | <input checked="" type="checkbox"/> being considered | <input checked="" type="checkbox"/> yes: unrestricted | <input type="checkbox"/> industrial <input checked="" type="checkbox"/> transportation |
| | <u>N/A</u> | <input type="checkbox"/> no | <input checked="" type="checkbox"/> other: Recreation |

4. Owner of Property

name City of Los Angeles

street & number 200 North Spring Street

city, town Los Angeles N/A vicinity of state California 90012

5. Location of Legal Description

courthouse, registry of deeds, etc. County of Los Angeles, Recorder's Office

street & number 227 North Broadway

city, town Los Angeles state California

6. Representation in Existing Surveys

title Historical Property Survey 07-LA-187 2.4/3.5 Venice Boulevard from Lincoln Boulevard
to Pacific Avenue, 07219-06221 has this property been determined eligible? ☐ yes ☒ no

date November, 1976 ☐ federal ☒ state ☐ county ☐ local

depository for survey records State of California, Department of Transportation,
Environmental Planning

city, town Los Angeles state California 90012

7. Description

| | | | | |
|------------------------------------|--|---|---|-----------------|
| Condition | | Check one | Check one | |
| <input type="checkbox"/> excellent | <input checked="" type="checkbox"/> deteriorated | <input checked="" type="checkbox"/> unaltered | <input checked="" type="checkbox"/> original site | |
| <input type="checkbox"/> good | <input type="checkbox"/> ruins | <input type="checkbox"/> altered | <input type="checkbox"/> moved | date <u>N/A</u> |
| <input type="checkbox"/> fair | <input type="checkbox"/> unexposed | | | |

Describe the present and original (if known) physical appearance

The Venice Canal District and surrounding areas were originally marshland adjacent to the outlet of Ballona Creek at the Pacific Ocean. The area was developed, beginning in 1904, with a series of connected canals. The first canals within this development were located northerly of the proposed Venice Canal District in the "Venice of America" subdivision which was patterned after Venice, Italy and was intended to be a beach resort and cultural center.

The proposed Venice Canal District was an adjacent development to the south of "Venice of America" known as the "Short Line Beach Venice Canal Subdivision Number 1". Recorded in 1905, this development provided four parallel canals, approximately 1,100 feet long, aligned perpendicular to the Pacific Ocean; from north to south these are named Carroll, Linnie, Howland, and Sherman Canals. These canals were bounded on the west by Grand Canal, which connected with the Venice of America canal system at the present location of Canal Street and extended southerly of the current proposed Venice Canal District limits at Washington Street and then to the Ballona Lagoon and the Pacific Ocean. (See map 2, sheet #1, and photograph 1.) Eastern Canal, also a part of the proposed Venice Canal District, is shown in connection with tract 3533, recorded in 1920. This placement is adjacent to the Short Line Beach Venice Canal Subdivision Number 1 (see map 2).

The canals were constructed with a trapezoidal cross section and lined with clay. Concrete banks and concrete walks were constructed along the canal perimeters. To provide access to the three islands formed by the canal system, four concrete vehicular bridges on Dell Avenue and nine wooden pedestrian bridges over all six canals were constructed.

Lots abutting the canals were developed with single family dwellings. The surrounding area evolved into a beachfront resort and amusement center.

In addition to the canals and their rights of way, the proposed Venice Canal District contains 440 square feet of city-owned land, formerly railroad right of way, which also contains small portions of an abandoned railroad bridge northerly of South Venice Boulevard which lie outside the Canal Street right of way on portions of four lots owned by the City of Los Angeles.

The canals within the Venice Canal District are deteriorated. The ecosystem has been endangered by pollutants introduced into the water. Water flow through the remaining system is regulated by a tidegate separating Ballona Lagoon from the Marina del Rey entrance channel and the Pacific Ocean. Water circulation is hindered by the silt, debris, and rubble on the canal bottoms. The courts on the islands, the bridges, and the sidewalks are all substandard (too narrow for two-way traffic) and/or deteriorated (see photographs 2 and 3). The vehicular bridges will be used for one-way traffic. There are future plans, no date has been set, to replace one of the original bridges (the middle bridge on Eastern Canal); intentions are to replace this bridge with one designed in the manner of the original except that it will be widened.

(11/78)

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE**NATIONAL REGISTER OF HISTORIC PLACES
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CONTINUATION SHEET two

ITEM NUMBER 7 PAGE 1

The canals developed north of the District were filled in starting in 1929 and are presently paved as streets. The Venice Short Line Railway went out of service in 1950 and tracks have been removed.

The canals are public property, owned and maintained by the City of Los Angeles. They have remained intact since their 1905 construction with the same basic cross-section and design details, despite some neglect and deterioration over the years.

The property adjacent to the canals is privately owned and has gone through a number of changes through the years. Photographic evidence suggests that there are probably no more than two structures in the canal area that date from the first decade of this century. A large percentage of the residences have been built in the last ten years, possibly 40 percent. The remainder is divided between circa 1925-35 cottages and 1950s' stucco-covered apartment buildings.

The mix of housing stock is so great that inclusion of the privately owned property would detract from the recognition and importance of the canals themselves.

8. Significance

| Period | Areas of Significance—Check and justify below | | | |
|---|---|--|---|--|
| <input type="checkbox"/> prehistoric | <input type="checkbox"/> archeology-prehistoric | <input checked="" type="checkbox"/> community planning | <input type="checkbox"/> landscape architecture | <input type="checkbox"/> religion |
| <input type="checkbox"/> 1400-1499 | <input type="checkbox"/> archeology-historic | <input type="checkbox"/> conservation | <input type="checkbox"/> law | <input type="checkbox"/> science |
| <input type="checkbox"/> 1500-1599 | <input type="checkbox"/> agriculture | <input type="checkbox"/> economics | <input type="checkbox"/> literature | <input type="checkbox"/> sculpture |
| <input type="checkbox"/> 1600-1699 | <input type="checkbox"/> architecture | <input type="checkbox"/> education | <input type="checkbox"/> military | <input type="checkbox"/> social/ |
| <input type="checkbox"/> 1700-1799 | <input type="checkbox"/> art | <input type="checkbox"/> engineering | <input type="checkbox"/> music | <input type="checkbox"/> humanitarian |
| <input type="checkbox"/> 1800-1899 | <input type="checkbox"/> commerce | <input type="checkbox"/> exploration/settlement | <input type="checkbox"/> philosophy | <input type="checkbox"/> theater |
| <input checked="" type="checkbox"/> 1900- | <input type="checkbox"/> communications | <input type="checkbox"/> industry | <input type="checkbox"/> politics/government | <input type="checkbox"/> transportation |
| | | <input type="checkbox"/> invention | | <input type="checkbox"/> other (specify) |

Specific dates 1905-1920 **Builder/Architect** Moses Sherman/Eli Clark

Statement of Significance (in one paragraph)

The Venice Canal District is significant as an early example of community/recreational planning in a coastal marshland area. The proposed Venice Canal District contains the major remaining portion of the Venice Canal system.

Early development in the area was facilitated by the development of mass public transportation from the central part of Los Angeles. The interurban trolley system between Los Angeles and Santa Monica was constructed in 1896 and extended southward through the Venice area to Redondo Beach by 1900. The Venice Short Line was constructed in 1902 by the Los Angeles and Pacific Railway, headed by Moses Sherman and Eli Clark, sponsors of the 1905 development of the "Short Line Beach Venice Canal Subdivision" which makes up the proposed District. This pattern of development illustrates the relationship between construction of the railway transportation system of that era and the concurrent community planning and land development by the operators of the Los Angeles and Pacific Railways (Moses Sherman and Eli Clark).

Although this pattern of land development was repeated in many areas of Los Angeles County by the Los Angeles and Pacific Railway and other railways which eventually formed the Pacific Electric system headed by Henry E. Huntington, the particular development of the Venice of America and the Short Line Beach Venice Canal Subdivision Number 1 was unique. The attempt to create a beach resort patterned after the canal system of Venice, Italy, interfaced well with the particular geographical nature of the marshland adjacent to the outlet of Ballona Creek, to convey a sense of historic cohesiveness through community planning based upon the canal system. Such a canal system appears to be unique to both the local area as well as to the State of California. Although a number of canals were filled in beginning in 1929, the six canals which constitute the proposed Venice Canal District retain the integrity of the original development. Likewise, the Short Line Beach Venice Canal Subdivision Number 1 has, due to its unique canal system, remained distinct from the densely built surrounding neighborhoods.

Other than a few picket fences and diving boards put up by private property owners, there are no intrusions into the proposed Venice Canal District. Boundary lines were chosen to exclude private property and include the canals and the canal rights of way. The northern boundary extends along Grand Canal to North Venice Boulevard, the end of the present and the original canal system. The southern boundary extends along Grand Canal to Washington Street which was the original boundary line for the Short Line Beach Venice Canal Subdivision Number 1. The boundary lines also include the bridge approaches of the abandoned Venice Short Line Railway bridge. (Please see map 2.) As

9. Major Bibliographical References

Basten, Fred E., Santa Monica Bay: The First 100 Years, Douglas-West Publishers, Inc., 1974
Ingersoll, Luther A., Century History of Santa Monica Bay Cities, Los Angeles, 1908.
Schmidt-Brunner, Hurst, Venice California: An Urban Fantasy, Grossman Publishers, New York, 1973.
Sweet, Ira L., W.A. Myers, Trolleys to the Surf, Interurbans Publications, Glendale, California, 1976

10. Geographical Data

Acres of nominated property 12.11

Quadrangle name Venice, California

Quadrangle scale 1:24000

UMT References

| | | | |
|---|------|-------------|---------------|
| A | 1 1 | 3 6 4 7 6 0 | 3 7 6 1 4 2 0 |
| | Zone | Easting | Northing |
| C | 1 1 | 3 6 4 7 8 0 | 3 7 6 0 7 4 0 |
| E | 1 1 | 3 6 4 3 2 0 | 3 7 6 1 3 1 0 |
| G | | | |

| | | | |
|---|------|-------------|---------------|
| B | 1 1 | 3 6 4 9 1 0 | 3 7 6 1 1 8 0 |
| | Zone | Easting | Northing |
| D | 1 1 | 3 6 4 7 2 0 | 3 7 6 0 7 2 0 |
| F | | | |
| H | | | |

Verbal boundary description and justification

(See continuation sheet, Item 10, pages 1 and 2)

List all states and counties for properties overlapping state or county boundaries

| | | | | | |
|-------|-----|------|--------|-----|------|
| state | N/A | code | county | N/A | code |
|-------|-----|------|--------|-----|------|

| | | | | | |
|-------|-----|------|--------|-----|------|
| state | N/A | code | county | N/A | code |
|-------|-----|------|--------|-----|------|

11. Form Prepared By

| | | |
|-----------------|--|---------------------------------|
| name/title | Edna Bruce, Legislative Analyst | Office of Historic Preservation |
| organization | City of Los Angeles, Office of the Chief Legislative Analyst | Staff Revisions: Carol Branan |
| date | November 20, 1978 | |
| street & number | 200 North Spring Street, Room 253 | telephone (213) 485-6613 |
| city or town | Los Angeles | state California 90012 |

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

☐ national ☒ state ☐ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature

K. M. Ellison

title State Historic Preservation Officer

date July 13, 1982

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I hereby certify that this property is included in the National Register

Keeper of the National Register

Attest:

Chief of the

8/30/82

8/29/82

(11/78)

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CONTINUATION SHEET three

ITEM NUMBER

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1

mentioned above, the Short Line Railway was an integral part of the Short Line Beach Venice Canal Subdivision Number 1, and the bridge is therefore included within the boundary lines.

Although both those portions of the Venice Canal system north and south of Washington Street have historical significance, it is important for contemporary geographic and procedural reasons that they be separated in this application.

The area north of Washington Street consists of Sherman Canal, Eastern Canal, Howland Canal, Linnie Canal, and an approximately 1,900-foot long section of Grand Canal. South of Washington Street is found the approximately 1,800-foot long remainder of Grand Canal and Ballona Lagoon which extends for approximately 3,200 feet before terminating at the Marina del Rey entrance channel.

In September 1904, the Ocean Park Improvement Association decided to construct these canals (1). The property owners' association wished to have canals running through their parcels of undeveloped land and have them connected to those canals then under construction to the north by Abbot Kinney. The new canals would join with a channel portion of the Ballona Lagoon, created when the area served as the ocean terminus of the Los Angeles River, and thus have access to the sea at Playa del Rey to the south.

In October 1904, the property owners agreed on a method of assessment for the excavation work but actual construction did not start until July 1905, several days following the opening of Abbot Kinney's canals on the north (2).

The canals north of Washington Street were constructed in a trapezoidal cross-section and lined with clay. Grand Canal south of Washington Street was similarly built. The natural Ballona Lagoon was dredged, and its banks were lined with timber.

The entire canal system, Kinney's to the north and the addition leading south to Playa del Rey, allowed visitors to ride gondolas or other vessels from Venice's amusement zone to the sea at Del Rey.

Over the years a number of changes occurred. Kinney's original canals were filled with dirt and paved over in 1929 after several failed earlier attempts. Oil was discovered in the Venice area that same year and the canals south of Washington Street were lined with producing well towers. North of Washington Street the area remained residential although oil pollution intruded into those waterways.

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CONTINUATION SHEET four

ITEM NUMBER 8

PAGE 2

Today those areas north and south of Washington Street are distinct and separate. The canal does not flow unimpeded between the areas but is fed under Washington Street through pipes. Residents commonly refer to the "North Canals" and "South Canals", implying the sausage-like sectioning of the areas.

The area north of Washington Street is almost completely developed with housing stock along the canals. South of Washington Street has seen some new construction, and grading for new residential subdivisions has taken place.

North-south streets bounding the North Canals do not penetrate far below Washington Street adding to the difference between the areas. The canals north of Washington Street form a grid of obvious human design. South of Washington Street they form a flattened S-curve following the old lagoon's natural course.

These dissimilarities suggest that the area south of Washington Street should be considered separately.

NOTES

1. Santa Monica Outlook, September 10, October 14, and November 1, 1904.
2. Santa Monica Outlook, October 14, November 1, 1904.
3. Santa Monica Outlook, January 13, May 5, 1906.

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PAGE 1

10. VERBAL BOUNDARY DESCRIPTION OF THE VENICE CANAL DISTRICT

Beginning at the intersection of the west line of Canal Street, being 60 feet wide, and the south line of North Venice Boulevard, being 50 feet wide, then easterly to the intersection of the south line of North Venice Boulevard and the east line of Canal Street, then southerly along the east line of Canal Street to a line parallel to and distant 71 feet northerly from the north line of South Venice Boulevard, being 40 feet wide, then easterly along said line 5 feet, then southerly along a line parallel to and distant 5 feet easterly from the east line of Canal Street to a line parallel to and distant 27 feet northerly from the north line of South Venice Boulevard, then westerly along said line 5 feet to the east line of Canal Street, then southerly along the east lines of Canal Street and Grand Canal, being 69.93 feet wide, to the north line of Carroll Canal, then easterly along the north lines of Carroll Canal, being 70 feet wide, and Eastern Canal to the east line of Eastern Canal, then southerly along the east line of Eastern Canal, being 70 feet wide, to the south line of Eastern Canal, then westerly along the south lines of Eastern Canal and Sherman Canal, being 70 feet wide, to the east line of Grand Canal, then southerly along the east line of Grand Canal, being 70 feet wide, to the north line of Washington Street, then westerly to the intersection of the west line of Grand Canal with a line parallel to and distant 50 feet northerly from the centerline of Washington Street, then northerly along the west line of Grand Canal, being 70 feet wide south of Linnie Canal and 69.93 feet wide north of Linnie Canal, to the north line Grand Canal, then easterly along the north line of Grand Canal to the west line of Canal Street, then northerly along the west line of Canal Street to a line parallel to and distant 28 feet northerly from the north line of South Venice Boulevard, then westerly along said line 5 feet, then northerly along a line parallel to and distant 5 feet westerly from the west line of Canal Street to a line parallel to and distant 72 feet northerly from the north line of South Venice Boulevard, then easterly along said line 5 feet to the west line of Canal Street, then northerly along the west line of Canal Street to the point of beginning.

(See Continuation Sheet, Item 10, Page 2)

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CONTINUATION SHEET five

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The District excludes three islands containing public and private land within the above boundary. These exclusions are bounded as follows:

1. Beginning at the intersection of the east line of Grand Canal with the south line of Carroll Canal, then easterly along the south line of Carroll Canal to the west line of Eastern Canal, then southerly along the west line of Eastern Canal to the north line of Linnie Canal, then westerly along the north line of Linnie Canal, being 70 feet wide, to the east line of Grand Canal, then northerly along the east line of Grand Canal to the point of beginning.
2. Beginning at the intersection of the east line of Grand Canal with the south line of Linnie Canal, then easterly along the south line of Linnie Canal to the west line of Eastern Canal, then southerly along the west line of Eastern Canal to the north line of Howland Canal, then westerly along the north line of Howland Canal, being 70 feet wide, to the east line of Grand Canal, then northerly along the east line of Grand Canal to the point of beginning.
3. Beginning at the intersection of the east line of Grand Canal with the south line of Howland Canal, then easterly along the south line of Howland Canal to the west line of Eastern Canal, then southerly along the west line of Eastern Canal to the north line of Sherman Canal, then westerly along the north line of Sherman Canal, being 70 feet wide, to the east line of Grand Canal, then northerly along the east line of Grand Canal to the point of beginning.

The streets, boulevards and canals described above are shown on District Maps 105A145, 105A147, 106.5A145 and 106.5A147 prepared by the City Engineer of the City of Los Angeles, California.

SHORT LINE BEACH SUBDIVISION
NO. 1 Maps 2-59

SHORT LINE BEACH VENICE
CANAL SUBDIVISION NO. 1
Maps 7-126/127

TRACT NO. 26683
Maps 822-63

SHORT LINE BEACH SUBDIVISION
NO. 2 Maps 4-42

TRACT NO. 3533
Maps 41-73/74

TRACT NO. 6098
Maps 108-58/59

SHORT LINE BEACH SUBDIVISION
NO. 3 Maps 5-116

SHORT LINE BEACH SUBDIVISION
NO. 4 Maps 5-176

VENICE CANALS DISTRICT

- ① WOODEN PEDESTRIAN BRIDGE
- ② CONCRETE VEHICULAR BRIDGE

▨ DISTRICT AREA

--- TRACT BOUNDARIES

③ RAILROAD BRIDGE (ABANDONED)

④ VEHICULAR BRIDGE

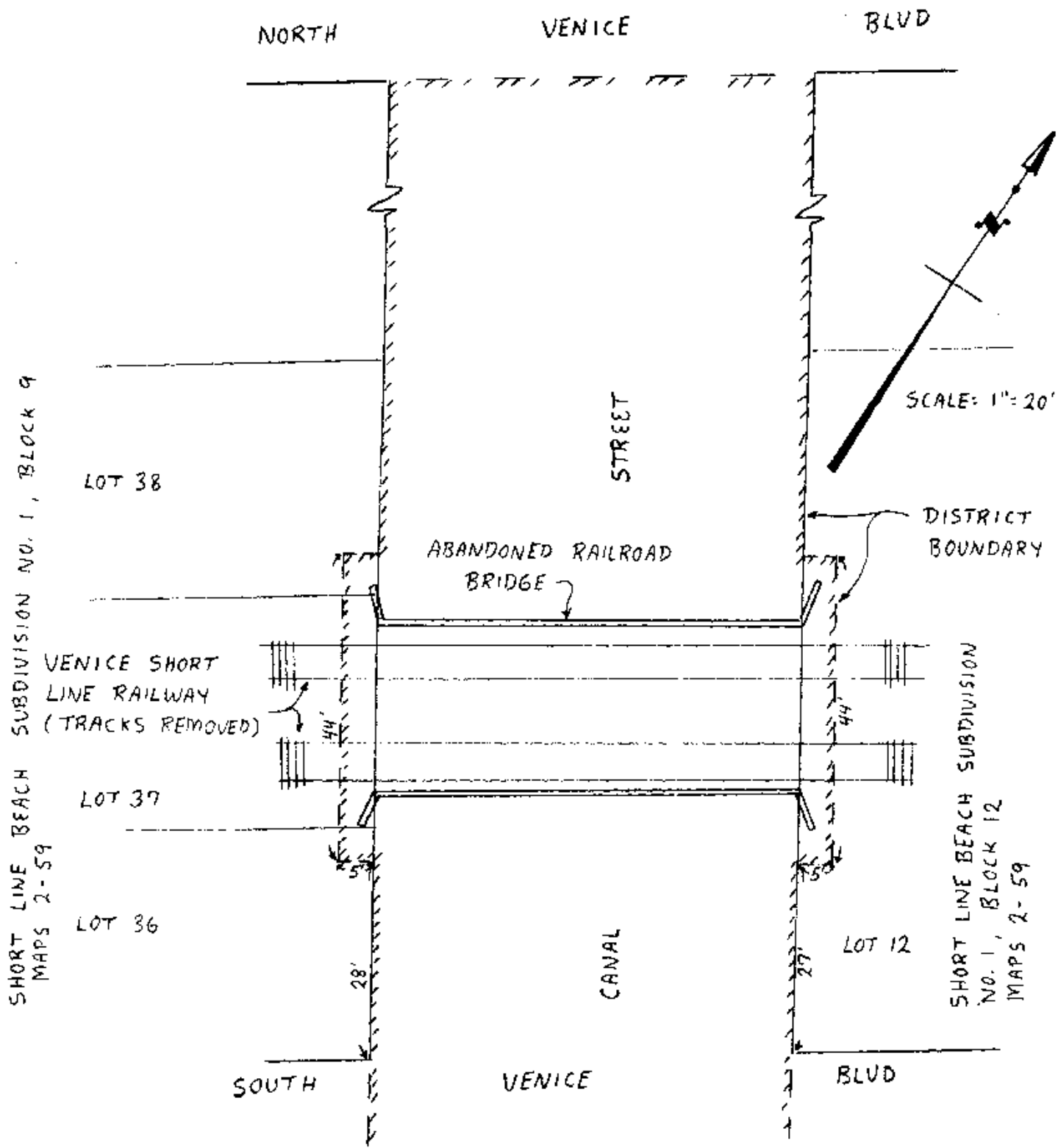
SCALE:
1"=400'

CITY OF LOS ANGELES

DONALD L. TILL, CIVIL ENGINEER

JUN - 1 1976

MAP 2
SHEET 1 OF 2



VENICE CANAL: DETAIL OF DISTRICT BOUNDARY
 BETWEEN NORTH VENICE BLVD
 AND SOUTH VENICE BLVD
 CITY OF LOS ANGELES
 MAP 2
 SHEET 2 OF 2

Exhibit D

Letter Submitted on January 12, 2021 by
Channel Law Group, LLP

Channel Law Group, LLP

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Suite 750
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JULIAN K. QUATTLEBAUM, III
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CHARLES J. McLURKIN

Writer's Direct Line: (310) 982-1760
jamie.hall@channellawgroup.com

*ALSO Admitted in Texas

January 12, 2020

VIA ELECTRONIC MAIL

City of Los Angeles
200 N. Spring Street
Los Angeles, CA 90012
ira.brown@lacity.org

Re: 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 - 2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-82288; CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-6667-SE

Honorable Members of the Deputy Advisory Agency and City Hearing Officer:

This firm represents Venice Vision with regard to the proposed development project known as the Reese Davidson Community and referenced above ("Project"). This letter supplements the objection letter submitted on October 21, 2020.

I. The City Had Failed to Provide Constitutionally Required Notice of What is Being Proposed and the Environmental Impacts of the Project

Important aspects of the project have yet to be determined or disclosed to the public (for example, the details regarding the construction and operation of east parking lot). Further, the City failed to provide the public with the environmental case file until a day before the hearing.¹ Government Code Section 66474(e) specifically requires an evaluation of the Project's environmental impacts and it is undisputed that the Project has environmental impacts as evidenced by the Initial Study that was conducted by the City. Venice Vision is prejudiced by the City's failure to provide this important information until a day before the public hearing for the Project.

"An elementary and fundamental requirement of due process in any proceeding which is to be accorded finality is notice reasonably calculated, under all the circumstances, to apprise

¹ It also appears that the City has failed to provide the public with the entire case file.

interested parties of the pendency of the action and afford them an opportunity to present their objections.” *Mullane v. Central Hanover Bank & Trust Co.*, 339 U.S. 306, 314 (1950); *Horn v. County of Ventura* (1979) 24 Cal.3d 605. In addition, notice must be sufficient to enable the recipient to determine what is being proposed and what he must do to prevent the deprivation of his interest. *Goldberg v. Kelly*, 397 U.S. 254, 267–68 (1970). Here, the City has failed to provide Venice Vision and other members of the public with the necessary information needed to prevent a deprivation of its constitutionally protected interests. The City simply cannot withhold fundamental details regarding what is being proposed and the impacts of the proposal. Nor can the City fail to provide essential details outlining the environmental impacts of the Project until a day before the public hearing. Both the United States and California Constitutions prohibit such behavior.

II. The Project is Likely to Cause Substantial Environmental Damage

As noted above, the Subdivision Map Act mandates denial of a tentative map if the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.” Govt. Code Section 66474(e). This provision of the Subdivision Map Act requires a governmental agency to deny a map application if the agency finds that subdivision design or improvements are likely to cause substantial environmental damage. “[T]he finding required by section 66474, subdivision (e) is in addition to the requirements for the preparation of an environmental impact report” or a negative declaration pursuant to the CEQA. (59 Ops.Cal.Atty.Gen. 129, 130 (1976).) *Topanga Ass’n for a Scenic Cmty. v. County of L.A.* (1989) 214 Cal.App.3d 1348, 1355-1356

The City has failed to conduct the environmental review that would be required by Government Code Section 66474(e). Further, the City’s one paragraph, conclusory analysis in the proposed findings for the Project (which relies almost exclusively on an asserted statutory exemption from CEQA) is not supported by substantial evidence - especially in light of the Initial Study that was previously conducted which reveals host of potentially significant environmental impacts.

Moreover, Venice Vision has commissioned two expert reports which details the substantial environmental damage and serious public health problems that the Project will cause. These expert reports supplement the letters and expert analysis that have previously been filed with the City by Venice Vision. The tentative tract map must be denied under Government Code Section 66474(e) and (f).

III. The City is Engaged in Spot Zoning

“Spot zoning describes an arbitrary and unreasonable zoning action by which a smaller area is singled out of a larger area or district and specifically zones for a use classification totally different from and inconsistent with the classification of surrounding land, and not in accordance with the General Plan. Spot zoning is a zoning for private gain designed to favor or benefit a particular individual or group and not the welfare of the community as a whole.” Spot zoning has variously been characterized as implicating substantive due process, takings and equal protection concerns. *Buckles v. King County*, 191 F.3d 1127, 1137 (9th Cir. 1999); *Arcadia Development Co. v. City of Morgan Hill* (2011) 197 Cal.App.4th 1526, 1536.

In this case, the City's spot zoning is not permissible. While there may be a need to provide housing for those experiencing homelessness, the City seeks to go beyond merely rezoning the parcel in question to allow for such uses. For example, the City seeks to increase the applicable height limits to authorize unique, specific and ultimately unnecessary components of the project (e.g. a campanile). The City has also proposed to create subareas within the new proposed zoning to authorize the design of this project. Again, this goes beyond what the law allows. The City cannot shield itself from a claim of illegal spot zoning simply by arguing that the public will generally benefit from the production of permanent supportive housing. The City could achieve such production without gifting the applicant with benefits that are entirely unrelated to the proposed new use. Further, there is strong evidence that demonstrates that construction of this Project within a designated flood and tsunami zone will not benefit the public. The City's own Bureau of Engineering recently is actively warning people of the extreme hazards of constructing in this flood zone.² The City just recently issued a publication to all residents with property in or near a special flood hazard area warning them of the risks of construction. See Attachment D. The Project is inconsistent with emerging findings of flood vulnerability, upcoming FEMA maps, sea level rise and new guidance regarding development on lots susceptible to inundation. Further, FEMA has established a National Risk Index which highlights the vulnerability of constructing within this precise flood zone.³

IV. The East Parking Garage is a Separate Project

The East Parking Garage ("Garage") is a separate project and requires environmental review under CEQA. This is because it has an independent purpose and utility. The Garage serves an entirely different purpose than the Project and can be implemented by the City with or without the proposed Project. *Communities for a Better Env't v City of Richmond* (2010) 184 Cal.App.4th 70, 101 ("The Project at issue here and the hydrogen pipeline project, are not interdependent. In fact, they perform entirely different, unrelated functions."). As such, the City cannot rely on AB11997 to deem the Garage exempt from CEQA. Additionally, the Garage is not "in furtherance of permanent supportive housing."

I may be contacted at 310-982-1760 or at jamie.hall@channellawgroup.com if you have any questions, comments or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Jamie T. Hall", written in a cursive style.

Jamie T. Hall

² See 2020 Floodplan Management Plan available at <https://eng2.lacity.org/projects/fmp/pdf/2020FMPSubmittalDraft.pdf>. Select pages from this plan are attached as Attachment C.

³ The Index can be accessed at <https://www.fema.gov/flood-maps/products-tools/national-risk-index>

ATTACHMENTS:

- A. Expert Report from RK Engineering Group, Inc. re Transportation Impacts
- B. Expert Report from Scott Cashen re Biological Resource Impacts
- C. Excerpts from 2020 Floodplan Management Plan
- D. Annual Newsletter re National Flood Insurance Program

Attachment A

December 30, 2020

Mr. Jamie Hall
CHANNEL LAW GROUP, LLP
8383 Wilshire Boulevard, Suite 750
Beverly Hills, CA 90211

**Subject: Reese Davidson Venice Community Project Transportation Review,
City of Los Angeles**

Dear Mr. Hall:

Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to submit this review of the transportation impacts of the Reese Davidson Community Project located in the Venice area of the City of Los Angeles. The project is being processed and reviewed by the City with a CEQA (California Environmental Quality Act) exemption and is proposing to not provide any significant mitigation measures, standard roadway/right-of-way dedications and pedestrian improvements which are normally required for this type of development. In addition, no improvements to the adjacent roadway and pedestrian facilities are being provided as part of the proposed project.

The project will eliminate 196 public parking spaces with convenient beach access during the 30-month construction period without providing any temporary parking facilities in close proximity to the existing beach area. This project has the potential for causing future safety impacts, inconvenience, and transportation impacts to existing/future residents and public visitors to the Venice Beach Community.

The building site is 2.65 acres on the median between North Venice Boulevard and South Venice Boulevard, straddling the Grand Canal, a block from Venice Beach and the Venice Boardwalk. It is currently a surface parking lot (LADOT Parking Lot 731) owned and operated by the City of Los Angeles which provides 196 standard spaces of public parking, primarily for beach access. The proposed project will include 140 residential units, 685 square feet of associated affordable resident services facilities, 3,155 square feet of community/arts meeting space and 4,565 square feet of retail/restaurant uses. The project

will provide up to 143 parking spaces in the west side of the project for the residential/retail/restaurant uses and up to 293 public parking spaces in the west side of the project.

Plans call for two "Texas-Donut" (fully enclosed) parking towers: one east of the Grand Canal (East Tower), and one west of the Grand Canal (West Tower). All public parking, including replacement of existing public parking spaces and new beach access parking, will be in the East Tower which will be owned and operated by the City of Los Angeles. There is no residential/retail/restaurant project parking in the East Tower. All parking for the project (residences, restaurant, retail and community center) will be in the West Tower.

The two towers combined will provide 436 parking spaces, approximately 1/3 of which will be "compact" spaces, as opposed to standard spaces which are needed by many of the existing and future beach visitors which use the Venice beaches.

RK has reviewed the available project's documents including the Initial Study (December 2018) prepared by Eyestone Environmental, the Traffic Impact Study (November 2019) prepared by KOA Corporation, the 2020 Venice Parking Study (June 2020) prepared by Tierra West Advisors for this area of Venice, the Venice Vision (October 21, 2020) Comments on the Project and other available project documents related to transportation/parking. The project has applied for an exemption from CEQA, even after a number of potentially significant transportation impacts were identified in the Initial Study for the project. RK has identified a number of significant technical transportation and parking issues related to the project that need to be addressed before the project can move forward.

The primary deficiencies include items within the Traffic Impact Study including inconsistencies in the parking evaluation, impacts of the project to other critical intersections in the study area, the VMT analysis, project trip generation, site access impacts, queuing analysis, traffic impacts during construction and lack of any recommended roadway, public transit or pedestrian improvements in the project area. The project is requesting a waiver of any required right-of-way dedications, sidewalk improvements or intersection improvements which are normally required as part of the City's General Plan and Venice Specific Plan.

A major deficiency of the project is related to the parking provided for both the private and public elements of the project. The amount of parking for both elements are not sufficient based upon the findings of the recently completed Venice Parking Study. The project

underestimates both the quantity and size of the parking spaces proposed for the project. Furthermore, the location of the public parking component is farther from the Venice beach areas than the currently provided in Parking Lot 731, and there is a lack of adequate sidewalks and many with obstructions which reduces both the capacity and safety for the numerous beach visitors that use this area for coastal beach access.

As noted above, coastal beach access is reduced with the project and no pedestrian improvements are being planned for the project, even though the project will generate substantially more beach vehicular and pedestrian traffic. The project is not consistent with the City's General Plan or the Venice Specific Plan, since it will not be providing any of the improvements associated with either of these two plans or the City's overall Mobility Plan. The design of the project has not been fully reviewed, since there has not been any review of the project's internal circulation and potential gate queuing at the project entrances/exits. In fact, the specific design and operating characteristics of the East Parking Tower has not been fully defined at this time. The project driveways could likely have overflow impacts to the adjacent public streets and neighborhood as a result of the gates and queuing needed for the parking garages. Finally, the design, number of parking spaces and operating characteristics (conventional or automated operation) of the East Tower Parking lot is still up in the air without any idea of how it will actually function.

All of these issues are discussed in further detail in the Comments section of this letter below.

Comments

1. Traffic Impact Study Comments: There are a number of comments that RK has with respect to the Traffic Impact Study prepared by KOA in November 2019. In the project description section of the Traffic Study, there are inconsistencies with the land-use assumptions for the retail/restaurant uses within the site. The Initial Study and other project documents indicate that there will be 4,565 square feet of retail/restaurant uses, whereas the Traffic Study analyzed 3,565 square feet of retail/restaurant uses. This would affect the VMT analysis project trip generation and traffic impacts (LOS and Queuing) caused by the project.

There is also an inconsistency with the proposed amount of parking provided by the project. The Traffic Impact Study indicates a total of 401 parking spaces, whereas 436 parking spaces are identified in the Initial Study. The inconsistency between quantities of parking provided needs to be reconciled.

The Traffic Study is missing two critical adjacent intersections that need to be analyzed. This includes the unsignalized intersection of Dell Avenue at South Venice Boulevard, and Dell Avenue at North Venice Boulevard. These intersections are directly adjacent to the project and the project will contribute a significant amount of peak hour trips to these locations. A level of service analysis, queuing review and traffic signal warrant analysis is required at these two critical adjacent study area intersections.

The VMT analysis included in the Traffic Study underestimates the retail uses proposed for the project, and the daily trip generation for the public parking uses of the project. The parking generation for the public use was based upon a survey of the existing peak parking demand at Lot 731. However, it does not appear that the survey dates represented peak parking demands expected for the public parking uses of the project. A review of the Venice Parking Study indicates that substantially greater parking demand occurs during other peak periods at Lot 731. According to the surveys included in the Venice Parking Study, peak parking demand exceeded 184 spaces out of the total 196 spaces provided during several days of their surveys. It did not appear that the data in the surveys included in the Traffic Impact Study reached this level of parking demand, therefore, the estimate of 558 daily additional project trips (two way) used in the VMT analysis may actually be significantly exceeded during peak usage of parking Lot 731. This has a direct impact upon the VMT projections and could significantly affect the conclusions of the VMT evaluation which indicated the project had no significant impact to VMT.

The pedestrian facilities on the adjacent streets to the project are not up to current City standards and need to be improved to accommodate the extensive beach traffic expected in the area as a result of the development and additional parking demand for the beach visitors. This will be further discussed in Comment #2, below. The trip generation for the live/work units underestimate the amount of traffic that could be generated as a result of the retail component of these residential units. It's expected that live/work units will also have visitation from substantially more users than typical low-income residential units. Therefore, additional trips need to be assumed for the live-work residential units.

The site access to the project driveways has not been adequately addressed in the Traffic Impact Study. It is anticipated that the driveways will need to be controlled by gates or some other form of entrance/exit controls. This will result in potential queuing and back-up on to the adjacent streets. This could affect traffic flow adjacent to the site. The LADOT (Los Angeles Department of Transportation) has a gate evaluation procedure for parking structures that needs to be evaluated to determine the adequacy of the gates with respect to queuing onto the adjacent streets. As previously mentioned, there are no pedestrian or bicycle upgrades to the adjacent transportation facilities. Again, this will be further discussed in Comment #2, below.

The Traffic Study analyzed vehicle queuing on page 44 (Table 16 - Vehicle Queuing Summary) for two intersections adjacent to the site. This included Intersection #3 (Pacific Avenue at North Venice Boulevard) and Intersection #4 (Pacific Avenue at South Venice Boulevard). This analysis did show that the project would add excess queuing at both of these intersections for several of the traffic movements. The queuing evaluation shows several cases where insufficient storage length has been provided for Existing conditions and the project could exasperate these conditions for several of the movements. No mitigation is included or recommended in the Traffic Study to accommodate these deficiencies. Furthermore, the Traffic Study indicates that for Intersection #8 (Pacific Avenue at Washington Boulevard) the southbound left turn volumes are extremely high for both Existing Plus Project and Future with Project conditions. No queuing assessment has been completed at this intersection to evaluate the very high traffic volumes expected for the southbound left turn movement. Typically, when traffic volumes exceed 300 vehicles for a left turn movement at a signalized intersection, dual left turn lanes or additional single left turn lane storage is required. As a result of the high turning movements, a queuing analysis is necessary to evaluate the traffic conditions and expected queuing at the intersection of Pacific Avenue at Washington Boulevard for all scenarios studied in the Traffic Study.

The construction impact analysis included in the Traffic Impact Study is not complete. The loss of 196 public parking spaces for Lot 731 for a period of 30 months is not adequately reviewed in the Traffic Impact Analysis. No specific location or evaluation of the availability of the required replacement parking during construction where visitors can park without totally inconveniencing the visitors to the Venice Beaches or adjacent neighborhood has been evaluated. A specific plan to accommodate beach parking during construction is necessary for the project to proceed. Furthermore, the number of employee trips during the construction is significantly underestimated in the evaluation of construction traffic on the adjacent streets and intersections. The construction traffic analysis assumed only a maximum of 10 on-site employees during the construction. For a project of this size, many more workers would be required and the additional trips and parking demand need to be assessed in the Traffic Study.

Finally, no recommended transportation improvements to the adjacent street system including the travel lanes, parking lanes, intersection corner cut-offs, pedestrian sidewalks or bicycle facilities is recommended in the Traffic Study. For a project of this size and scope, it appears that additional improvements are necessary to accommodate the expected traffic from all modes of transportation that will utilize the project.

2. Waiver of Roadway Dedications, Street and Sidewalk Improvements: The project proposes no improvements to the adjacent streets and sidewalks that are typically required for new developments as a result of City ordinances and typical development requirements. The existing street improvements do not meet City standards, including the narrow sidewalks, physical obstructions, roadway cross-sections and corner cut-offs

at intersections. The existing and future pedestrian traffic utilizing adjacent streets need wider sidewalks and removal of obstructions to safely travel to and from the Venice Beach areas. Visitors carrying beach equipment and traveling with young children need wider sidewalks to safely circulate to and from the beach areas. As required by the City adopted street standards, sidewalks along Venice North and South need to be a least 150-feet in width. The width of the existing street sections will affect the ability for vehicles to park on the adjoining streets, provide turning lanes and pedestrian access to the beach areas. The nonstandard corner-cuts off will impact sight distance and safety at the adjacent intersections.

3. Parking: The project has not determined the final configuration and number of parking spaces to be provided in the East Tower for the public parking component of the project. Therefore, it is not known whether the project will adequately provide parking for the replacement of the 196 existing parking spaces in Lot 731. As much as possible additional beach parking should be provided within the East Tower. The East Tower should not be relied upon to accommodate the project's residential and retail/restaurant which should be parked in the West Tower. Also, the project has not determined whether it will be providing the public parking in the East Tower based upon a conventional parking garage design or some form of automated parking system. The project needs to make these determinations before it proceeds further in the review process.

The proposed project will reduce beach pedestrian access as a result of the increased distance to the public parking located in the East Tower. The East Tower is located over 500 feet further from the existing parking facilities located in the West Tower area of the project. Furthermore, as identified in the Venice Parking Study, the project may be significantly over estimating the amount of additional parking capacity for public users in the East Tower. Again, this can't be fully assessed until the actual design and operation of the East Tower has been determined, which has not occurred at this time.

According to the Venice Parking Study, there is not sufficient parking in the West Tower to accommodate the residential and retail/restaurant uses proposed in the West Tower. Based upon assessment of more realistic parking generation rates identified by the ITE (Institute of Transportation Engineers), a parking demand of 170 spaces would be required in the West Tower. The proposed project only includes 143 parking spaces in the West Tower which is deficient to accommodate a more realistic parking demand for the proposed amount of development. Excess parking from these uses would then overflow onto the adjacent streets or would utilize the public parking within the East Tower.

Another problem with the proposed design is that the excessive amount of compact parking spaces, approximately 30% of all parking spaces. According to the City's parking code at least one full-size parking space per dwelling unit is necessary for the

residential uses which will result in an even greater percentage of compact spaces for the retail/restaurant and public uses. Given the fact that many beachgoers utilize SUVs (sport utility vehicles) which are larger which will inefficiently use compact spaces and will result in vehicles not fitting into spaces and utilizing more than one space within the parking lot.

As previously identified, there are inconsistencies in the available parking between the Initial Study, the Traffic Impact Study and the Venice Parking Study. These need to be reconciled and corrected to ensure the correct number of parking spaces are utilized and identified. Furthermore, the trip generation for the public parking spaces are underestimated for weekends and holidays. As identified in the Venice Parking Study this affects both the project trip generation/traffic impacts and the VMT analysis included in the Traffic Impact Study. It appears likely that the Traffic Impact Study parking surveys were not surveyed at peak demand times as opposed to the data included in the Venice Parking Study.

There is no assessment of the adequacy of the proposed design of the entrance/exit driveways to the project. No queuing analysis of the control gates at the project driveways has been provided in any of the studies. As previously noted, this could result in the back up of traffic along the adjacent streets including North and South Venice Boulevard. This could result in backups and queuing which would affect traffic flow on both these residential streets. Furthermore, no internal circulation review of the project's parking facilities has been included in the Traffic Study. Further evaluation and review of traffic flow within the project parking structures need to be provided to determine the adequacy of the circuit on-site circulation.

4. Coastal Beach Access, Elimination of the Existing Sites Pedestrian Circulation and Pedestrian Safety Hazards: As previously noted, the adjacent sidewalks are not up to City standards with respect to width and obstructions. This can present a hazard to pedestrians traveling to and from the site and from the adjacent areas to the Venice Beach areas. The existing sidewalks on Venice Boulevard North and South are 5 to 12 feet wide and include power poles and other obstructions which can cause pedestrian hazards. Sidewalks on Dell Avenue and Pacific Avenue are limited to 5 to 9 feet in width. The normal sidewalk width for Venice Blvd North and South should be 15 feet wide, however, the developer has requested a waiver from these typical City standard infrastructure improvements. The obstructions within the sidewalks make pedestrian travel difficult and with visitors carrying various beach supplies and small children this can create a safety hazard. The narrow sidewalks will also result in pedestrians walking in the adjacent streets which are subject to conflicts with vehicles.

As previously noted, the new public parking area is substantially further (500 feet from existing Lot 731), and therefore makes the beach parking within the East Tower less accessible to the beach and coastal areas. The existing project design eliminates the

existing internal public pedestrian circulation within Lot 731 and forces pedestrian traffic onto the existing narrow sidewalks containing obstructions. Under current conditions, pedestrians can use the existing Lot 731 for pedestrian circulation without having to use the existing narrow sidewalks.

5. Consistency with the City General Plan and Venice Specific Plan: As previously noted, the adjacent streets and roadways do not meet the City's General Plan and Venice Specific Plan standards required for these facilities. The developer has requested a waiver of these facilities which could result in impacts to both vehicular and pedestrian traffic from the site and the adjacent communities.

The project does not meet the parking standards of the Venice Specific Plan and results of the recent Venice Parking Study. All of these documents require more parking than is currently being proposed and provided as part of the project. The goals of this project should be to provide significantly more visitor parking in this area as opposed to only replacing some existing parking with an unknown amount of additional visitor parking for the beach communities. Furthermore, the project is not providing an increase in non-automobile improvements as identified in the City's Mobility Plan. Additional improvements for pedestrian accommodations, transit facilities such as bus stops/shelters and bicycle facilities other than the on-site bicycle parking are needed for the proposed project. A project of this magnitude should be providing substantially more improvements to the area to facilitate both vehicle and pedestrian circulation/safety.

6. Project Site Design and Potential Impacts to the Adjacent Streets and Residential Community: As previously noted, the project is not providing any off-site or adjacent pedestrian, public transit or bicycle improvements to the area. A project of this scope and magnitude needs to provide additional improvements beyond just the project itself.

There was no technical review or assessment of the driveways and the impacts to the adjacent streets as noted above. It is anticipated that the ingress or egress of the project parking facilities will require a form of gates to control traffic into and out of the project site. No assessment of the potential queuing and backup onto the adjacent streets has been provided in the traffic section on queuing or other project documents. The LADOT traffic guidelines include a section on gate queuing that needs to be addressed as part of the Traffic Study and review of the project to ensure that no backup will occur onto the adjacent streets that would affect the operation and safety of these facilities.

As previously mentioned, in Comment #3 (Parking) there is insufficient parking for the residential and retail/restaurant components of the project in the West Tower. This has been noted in the Venice Parking Study and needs to be adjusted in the proposed project design or a reduction in the project development intensity must be provided to properly provide sufficient parking for the project within the West Tower.

No sight distance analysis has been included in the Traffic Study or other project documents. The existing substandard corner cut-offs at the adjacent intersections can result in sight distance restrictions and must be evaluated. Furthermore, the sight distance at the project driveways needs to be reviewed to ensure that adequate sight distance is available when vehicles are leaving the project. It's unclear that with the size of the buildings if the sight distance would be restricted at these driveways or the adjacent intersections adjacent to the project.

Recommendations

As a result of RK's review of the project documents for the Reese Davidson Community Project, RK has a number of recommendations that we feel should be incorporated into the review and evaluation of the project prior to making any decision on the project with respect to transportation.

1. The Traffic Impact Study needs to be revised and updated pursuant to the items in Comment #1, above. This would affect the design of the project with respect to traffic impacts to the surrounding street system, parking requirements for both the residential and retail/restaurant and public parking for the project. These comments would result in changes in the traffic impact evaluation, including level of service analysis, VMT analysis, parking demand, queuing and construction impacts of the project.
2. No waiver of roadway right-of-way dedications and improvements, especially with respect to sidewalk enhancements, should be granted for safety reasons. The need for roadway improvements and corner cut-offs should be reviewed as a result of the potential impacts of the project to pedestrian safety, intersection sight distance and driveway requirements for the project.
3. Parking for the project needs to be re-evaluated based upon the findings of the Venice Parking Study and other requirements outlined in Comment #3, above. Finalization of the number of parking spaces in the West and East Towers need to be determined based upon additional information and the results of the Venice Parking Study. The parking for both the residential/retail/restaurant and public parking needs to be re-evaluated based upon more realistic parking demands for these uses, such as the ITE parking rates. Additional parking or a further reduction in the intensity of the proposed land uses needs to be considered before any approval of both the specific land uses and parking provided. The amount of compact parking spaces needs to be re-evaluated based upon the type of users of the facilities and the requirements of the City's parking codes. Given the context of the project and its relationship to the beach parking demand, less compact parking spaces should be considered.

4. In order to improve Coastal beach access of the project, improvements to the adjacent sidewalks must be considered. The project must provide additional pedestrian accommodations and improvements to ensure that pedestrians are adequately and safely accommodated on the adjacent street system.
5. The project must be brought into conformance with respect to the City's General Plan and Venice Specific Plan. This would include upgrading the street, pedestrian, bicycle and public transit systems/facilities in the area. The project must consider additional public beach parking while also meeting the parking demand for the proposed residential and retail/restaurant uses.
6. The site design for the project needs to be fully evaluated and reviewed with respect to improvements to the adjacent street system. The project must provide additional improvements for pedestrians and transit since they rely upon these facilities to accommodate the project and beach visitors. The type of control for the parking lots need to be determined and evaluated to ensure that queuing from the project does not back up onto the adjoining North and South Venice Boulevard. Finally, sight distance at the project driveways and intersections, adjacent to the project must be evaluated to determine whether they will adequately meet LADOT sight distance requirements.

Conclusions

RK Engineering Group, Inc, has reviewed the project documentation with respect to transportation/parking for the Reese Davidson Community Project located in the City of Los Angeles within the Venice area. RK has identified a number of issues with respect to the Traffic Impact Study, waiver of roadway dedications and improvements to parking, coastal beach access, consistency with the City General Plan, Venice Specific Plan and project site design. Based upon this review, the project documents need to be revised and re-evaluated as noted in the comments included in this letter. These revisions could most likely result in changes to the project land uses, parking, required right-of-way dedications and roadway improvements and site design.

RK would be happy to review any future changes to the project with respect to the transportation and parking aspects of the project.

If you have any questions regarding our comments or need additional review please call me at 949-293-9639.

Respectfully submitted,
RK ENGINEERING GROUP, INC.



Robert Kahn, PE
Founding Principal

Registered Civil Engineer 20285
Registered Traffic Engineer 0555



Robert Kahn, P.E., T.E

Founding Principal

Areas of Expertise

Traffic Engineering
Transportation Planning
Transportation Solutions
Traffic Impact Analysis
Circulation Systems for Planned Communities
Traffic Control Device Warrants
Traffic Calming
Traffic Safety Studies
Bicycle Planning
Parking Demand Studies
Transportation Demand Management
Traffic Signal, Signing and Striping Plans
Traffic Control Plans
Parking Lot Design
Acoustical Engineering
Noise Impact Studies
Expert Witness / Legal Services

Professional History

RK Engineering Group, Inc., Founding Principal
2001-Present
RKJK & Associates, Inc., Principal, 1990-2000
Robert Kahn and Associates, Inc., Principal, 1988-1990
Jack G. Raub Company,
Vice President Engineering Planning, 1977-1988
The Irvine Company, Program Engineer, 1972-1977
Caltrans CA Division of Highways, Assistant Engineer, 1968-1972

Representative Experience

Robert Kahn, P.E., has worked professionally in traffic engineering and transportation planning since 1968. He received his Master of Science degree in civil engineering from the University of California, Berkeley, Institute of Transportation and Traffic Engineering. Mr. Kahn received his Bachelors degree in Civil Engineering from the University of California, Berkeley.

Mr. Kahn started his career in California Division of Highways (Caltrans) and developed the first computerized surveillance and control system for the Los Angeles area. Mr. Kahn developed the California Incident Detection Logic which is utilized throughout California for the detection of traffic incidents on the freeway system.

Mr. Kahn has worked for a major land development company preparing Master Plans for infrastructure. He also has worked eleven years with a multi-disciplined consulting engineering firm in charge of the Engineering Planning Department. This included all facets of preliminary design, tentative map preparation, transportation and environmental engineering, and public agency coordination.

Mr. Kahn has provided traffic and transportation services to major planned communities including Aliso Viejo, Coto De Caza, Foothill Ranch, Highlands Ranch in Denver, Colorado, Mission Viejo, Talega Planned Community in San Clemente, and Wolf Valley Ranch in Temecula. He has also provided contract traffic engineering services to the Cities of Irvine, Norwalk, Perris and San Jacinto in Riverside County, California.

Mr. Kahn has prepared traffic impact studies for numerous communities throughout Southern California, Nevada and in Colorado. Major traffic impact studies include the Aliso Viejo Town Center, the Summit Development, the Shops at Mission Viejo, Kaleidoscope, Dana Point Headlands, Foothill Ranch, Talega, Majestic Spectrum, and Centre Pointe in the City of Chino.

His work in the area of parking demand studies and parking lot design has been extensive. Shared parking studies for the Aliso Viejo Town Center, Foothill Ranch Towne Centre, Trabuco Plaza and numerous commercial sites have been completed to accurately determine the peak parking demand for mixed use projects. Mr. Kahn has been able to make the most efficient utilization of parking lots by maximizing efficient and safe systems.

Robert Kahn, P.E., T.E

Founding Principal

Education

University of California, Berkeley, M.S., Civil Engineering, 1968

University of California, Berkeley, B.S., Civil Engineering, 1967

University of California, Los Angeles, Graduate Courses in Transportation Systems, 1970

Registrations

California Registered Civil Engineer
No. 20285 – April 1971

California Registered Professional Engineer
Traffic, No. 0555 – June 1977

Colorado Professional Engineer
No. 22934, November 1984

Nevada Professional Engineer Civil
No. 10722 – March 1994

County of Orange, California Certified Acoustical Consultant
No. 201020 - 1984

Affiliations

Institute of Transportation Engineers (ITE)

American Society of Civil Engineers (ASCE)

Urban Land Institute (ULI)

Orange County Traffic Engineers Council (OCTEC)

Teaching

UCI Graduate Urban Design Studio Class – Guest Instructor

ITS Berkeley – Tech Transfer
Fundamentals of Traffic Engineering – Instructor

UCI Senior Civil Engineering Mentoring Program (CE181)

Mr. Kahn has been an innovator in developing and implementing traffic calming techniques. Over twenty years ago, Mr. Kahn refined the design and implementation standards for speed humps for use in local neighborhoods. Most recently, he has been involved in the development of modern roundabouts in lieu of traffic signals or other traffic control devices at intersections. Mr. Kahn previously presented the use of traffic calming devices in newly developing communities to the Institute of Transportation Engineers Traffic Calming Conference in Monterey, California.

Mr. Kahn has been involved in the design of traffic signal systems, signing and striping plans on hundreds of projects for both the public and private sector. Most recently, he has completed the design of several traffic signals which will serve the renovated Shops at Mission Viejo Mall. Mr. Kahn was in charge of a major ITS project for the City of Irvine, which provided fiberoptic interconnect and closed circuit TV along Barranca Parkway, Alton Parkway and Lake Forest Drive.

Mr. Kahn has been involved in acoustical engineering since 1978. He was in responsible charge of the Aliso Viejo Noise Monitoring Program which redefined the 65 CNEL noise contours for MCAS El Toro. He has also developed computer applications of the FHWA Noise Model.

Mr. Kahn has prepared numerous noise impact reports in the Aliso Viejo, Mission Viejo, Foothill Ranch, Santa Margarita, Ladera and Talega Planned Communities. Noise impacts from stationery sources including car washes, loading docks, air conditioning compressors, drive-thru speakers and other sources have been evaluated in the Aliso Viejo Auto Retail Center Noise Study, Albertsons Store 606 Noise Study-Rancho Cucamonga, Pro Source Distribution Building Final Noise Study in Ontario. Major specific plan and zone change noise studies have been prepared for the Summit Heights Specific Plan in Fontana, Lytle Creek Land and Resources Property in Rialto, Tamarack Square in Carlsbad, California, International Trade and Transportation Center in Kern County, California, and Sun City/Palm Springs.

Mr. Kahn founded the firm of Robert Kahn and Associates in 1988, which was the predecessor to RKJK & Associates, Inc. in 1990. He has made presentations to the ITE and the California Public Works Conference. Mr. Kahn has published numerous articles on traffic impact assessment, traffic calming, striping and the status of Bicycle Sharing in the USA. He was awarded the Wayne T property award in 2011-2012. Mr. Kahn has been a mentor and advisor to the UCI Senior Civil Engineering Project (CE181) for the past several years. He provides students the opportunity to develop a real life transportation project for the program.

Robert Kahn, P.E., T.E.

Principal

Robert Kahn has been involved in numerous legal cases as an expert witness and providing legal assistance in the area of traffic and environmental engineering. This has included traffic/parking impact analysis, traffic/circulation/parking impacts of ROW takes, traffic engineering design review, traffic safety studies and noise/vibration impact assessments. A sampling of these projects include the following cases:

- Tustin Avenue/Rose Drive Grade Separation Impact to Del Cerro Mobile Estates, City of Placentia
- 9582 Chapman Avenue – ULI Shared Parking, City of Garden Grove
- Plantation Apartments Norwalk 12809 Kalnor Avenue I-5 Construction Noise Monitoring Assessment
- City of Huntington Beach vs. Alvarez, et al, Traffic Review of ROW taking
- Gene Autry Way Extension – Impacts to Anaheim Holiday Inn and Staybridge Suites Hotel, Anaheim
- UCSD Student Center Traffic and Parking Impact Review, City of San Diego
- Palma De La Reina Traffic Impact Analysis Review
- Newport Tech Center Traffic Study Review, Newport Beach
- City of Irvine Planning Area 18, 34 and 39 DEIR Traffic Impact Review, City of Irvine
- City of San Diego Big Box Ordinance, City of San Diego
- City of Yucaipa Big Box Ordinance, City of Yucaipa
- Electra Real Estates USA Mid Coast Corridor Transit Project Traffic/Circulation and Parking Impact Review, City of San Diego
- Rancho El Revino Specific Plan Traffic Impact Study Review
- President Hotel Santa Ana parking lot dispute
- Caceres vs. City of Fontana, represented City in an Intersection (Production at Santa Ana Ave.) Accident
- Corona vs. City of Fontana, represented City in an Intersection (Sierra Ave. and Summit Ave.) Accident
- Sunset and Gordon Mixed Use Site Traffic Review
- Baldwin Hills Crenshaw Plaza EIR and Traffic Study Review
- Saint Mary's University Wellness Pavilion EIR and Traffic Study Review
- 15 Degree South Residential Project Traffic Review
- Review of the OCTA Tustin Avenue Rose Drive Grade Separation Representing the Del Cerro Mobile Estates
- OCTA State College Blvd Grade Separation Representing the Fullerton Commerce Center and Fullerton Industrial Park

Attachment B

January 8, 2021

Mr. Jamie T. Hall
Channel Law Group, LLP
8383 Wilshire Blvd., Suite 750
Beverly Hills, CA 90211

Subject: Comments on Environmental Impacts Associated with the Reese Davidson Community Project

Dear Mr. Hall:

This letter contains my comments on the environmental impacts associated with the Reese Davidson Community Project (“Project”). The Project involves the demolition of an existing, two-story 1,970 square-foot building containing four residential dwelling units and a surface parking lot in order to construct an approximately 104,140 square-foot, mixed-use supportive housing development, on an approximately 115,674 gross square-foot (2.65 acres) site located within the Venice Coastal Zone of the City of Los Angeles. The Grand Canal, an Environmentally Sensitive Habitat Area, bisects the Project area.

I am an environmental biologist with 28 years of professional experience in wildlife biology and natural resources management. I have served as a biological resources expert for over 125 projects in California. My experience and scope of work in this regard has included assisting various clients with evaluations of biological resource issues, reviewing environmental compliance documents prepared pursuant to the California Environmental Quality Act (“CEQA”) and the National Environmental Policy Act (“NEPA”), and submitting written comments in response to CEQA and NEPA documents. My work has included the preparation of written and oral testimony for the California Energy Commission, California Public Utilities Commission, and Federal courts. My educational background includes a B.S. in Resource Management from the University of California at Berkeley, and a M.S. in Wildlife and Fisheries Science from the Pennsylvania State University. A copy of my curriculum vitae is attached hereto.

The comments herein are based on my review of documents prepared for the Project,¹ a review of scientific literature pertaining to biological resources known to occur in the Project area, a review of environmental documents associated with other projects on the Grand Canal, and the knowledge and experience I have acquired during my 28-year career in the field of natural resources management.

INTRODUCTION

Eyestone Environmental prepared an Initial Study for the Project in December 2018. Based on the results of the Initial Study, the City of Los Angeles (“City”) determined that the Project could

¹ I reviewed the following Project documents: (a) the Initial Study; (b) the Planning Application submitted by the Applicants; (c) architectural plans prepared by the Applicants’ architects; (d) the City’s Environmental Assessment Form; and (e) the Staff Report prepared by the City’s Planning Department (dated October 22, 2020).

have potentially significant impacts on the environment and that an Environmental Impact Report (“EIR”) was required. According to the Initial Study, the EIR would provide further analysis of the Project’s potentially significant impacts on biological resources.² The City subsequently determined that the Project is exempt from CEQA pursuant to Assembly Bill 1197 (which was approved in September 2019). As a result, the City did not prepare an EIR for the Project, nor did it conduct the additional environmental analysis stipulated in the Initial Study.

Irrespective of the Project’s exemption under CEQA, the Subdivision Map Act requires that: “the design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.” As described below, the City has failed to demonstrate compliance with this provision of the Subdivision Map Act.

PROJECT IMPACTS

The Initial Study determined the following:

1. The Project could have a substantial adverse effect, either directly or through habitat modifications, on special-status species.³
2. The Project could have a substantial adverse effect on riparian habitat or other type of sensitive natural community.⁴
3. The Project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act.⁵
4. The Project could impede the movement of migratory fish.⁶
5. The Project could impact protected biological resources.⁷
6. The Project could violate water quality standards or waste discharge requirements.⁸
7. The Project could substantially alter the existing drainage pattern of the site.⁹
8. The Project could conflict with the Venice Local Coastal Program Land Use Plan.¹⁰

The City concluded that each of these impacts was potentially significant under CEQA.¹¹ Consequently, the City concluded that an EIR was required.¹² According to the Initial Study, the EIR would provide further analysis of the Project’s potentially significant impacts on biological resources.¹³ However, an EIR was never prepared, and the only “further analysis” that has been

² IS, pp. B-11 and -12.

³ IS, pp. B-10 and -11.

⁴ IS, pp. B-10 and -11.

⁵ IS, pp. B-10 and -11.

⁶ IS, pp. B-10 and -12.

⁷ IS, pp. B-12 and -49.

⁸ IS, pp. B-24 and -25.

⁹ IS, pp. B-24 and -26.

¹⁰ IS, pp. B-12 and -29.

¹¹ IS, pp. B-10, -24, and -25.

¹² IS, p. ES-3.

¹³ IS, pp. B-11 and -12.

provided since publication of the Initial Study is in the Planning Department's Staff Report. The Staff Report's discussion of Project impacts to sensitive biological resources is limited to the following statements:

The Project Site is currently developed with a City-owned surface parking lot (containing 196 parking spaces) and a four-unit multi-family residential building. Neither area provides a natural habitat for either fish or wildlife. Although located adjacent to the Grand Canal, which is part of the larger, man-made Venice Canal system, the Project Site does not contain any natural open spaces, act as a wildlife corridor, contain riparian habitat, wetland habitat, migratory corridors, conflict with any protected tree ordinance, conflict with a Habitat Conservation Plan, nor possess any areas of significant biological resource value...Therefore, the design of the subdivision would not cause substantial environmental damage or substantially and avoidably injure fish, wildlife, or their habitat.¹⁴

These determinations are not supported by actual evidence or analysis, and in some instances, they conflict with the information provided in the Initial Study.

Staff's statement that the Project site does not possess any areas of significant biological resource value contradicts evidence. The Grand Canal provides numerous biological resource values. Among other values, it provides habitat for special-status species, including the endangered California least tern.¹⁵ This is reflected in the canal's designation as an Environmentally Sensitive Habitat Area ("ESHA").¹⁶ The California Coastal Act defines "environmentally sensitive area" as: "[a]ny area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."¹⁷ Thus, by definition, the Project site possesses an area with significant biological resource value. The City has not analyzed how the Project might affect the ESHA (i.e., the Grand Canal). This has implications on compliance with Section 30240 of the Coastal Act, which states:

(a) "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas."

(b) "Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."

Impacts on Special-Status Species

The Initial Study states: "as a segment of the Grand Canal traverses the Project Site, it is possible that a special status species listed by the California Department of Fish and Wildlife or by the U.S. Fish and Wildlife Service could be present in the Project area. Therefore, the EIR will

¹⁴ Staff Report, p. 24.

¹⁵ California Coastal Commission. 2001. Staff Report: Permit Amendment for Coastal Development Permit 5-92-377. Item Th20b for Application Number 5-92-377-A1.

¹⁶ IS, p. B-12.

¹⁷ California Coastal Act, Section 30107.5.

provide further analysis of the Project's potential to result in direct and indirect impacts to any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service."¹⁸ There has been no further analysis to determine whether special-status species are indeed present in the Project area. Staff's statement that the Project site does not provide "a natural habitat for either fish or wildlife" does not eliminate the issue because special-status species are not necessarily confined to "natural habitat."

Impacts on Riparian Habitat or Other Type of Sensitive Natural Community

According to the Initial Study: "it is possible that a riparian habitat or other sensitive natural community could be present in the Project area."¹⁹ The Staff Report fails to address the potential for an "other sensitive natural community" in the Project area. However, the Staff Report jumps to the conclusion that riparian habitat (and wetland habitat) is absent from the Project site. This conclusion is not supported by survey data or scientific analysis. As a result, Staff does not have the basis for its conclusion that the Project would not cause substantial environmental damage to riparian habitat or another type of sensitive natural community.

Impacts to Jurisdictional Waters

The Grand Canal is protected under the federal Clean Water Act, the State's Porter-Cologne Water Quality Control Act, and the California Coastal Act. According to the Initial Study, the Project could have a substantial adverse effect on the Grand Canal in three ways: (1) through direct removal, filling, hydrological interruption, or other means; (2) by altering the existing drainage pattern of the site; and (3) by violating water quality standards or waste discharge requirements.²⁰ The Grand Canal provides numerous important ecological functions and values. In addition to containing important wetlands, the canal system: (a) is a critical habitat area for the endangered California least tern and many other marine species,²¹ and (b) is connected with Ballona Lagoon, which is one of the last tidal wetlands remaining in southern California.²² For these reasons, any adverse impacts to the Grand Canal could cause substantial environmental damage.

The Initial Study admits:

Construction activities associated with the Project would have the potential to result in the conveyance of pollutants into the adjacent Venice Canals and municipal storm drains, particularly during precipitation events. In addition, potential changes in onsite drainage patterns resulting from Project operation and the introduction of new land uses could affect the quality and quantity of storm water runoff.²³

¹⁸ IS, p. B-11.

¹⁹ IS, p. B-11.

²⁰ IS, pp. B-10, -11, -24, -25, and -26.

²¹ California Coastal Commission. 2001. Staff Report: Permit Amendment for Coastal Development Permit 5-92-377. Item Th20b for Application Number 5-92-377-A1.

²² See <<https://www.ballonafriends.org/>>

²³ IS, p. B-25.

In addition to demolition and construction activities associated with the mixed-use development, the Project involves removal and replacement of the canal access boat ramp.²⁴ The City has not analyzed the environmental impacts of these activities, which presumably would require placement of fill (e.g., cement) in the ESHA.

Impacts to Movement of Migratory Fish and Wildlife

The Staff Report states that the Project site does not act as a migratory corridor. This determination is inconsistent with the Initial Study, which determined “it is possible that development of the Project could impede the movement of migratory fish.”²⁵ The reproductive success of California least terns appears to be correlated with the availability of prey resources (primarily fish) close to (within 1-2 miles) least tern nest sites.²⁶ Therefore, Project impacts to the movement of migratory fish could significantly impact reproductive success of the California least tern colony that occurs at Venice Beach (north of Ballona Creek).

Conflicts with the Venice Local Coastal Program Land Use Plan

The Initial Study stated that the EIR would provide further analysis of the Project’s potential to conflict with any local policies or ordinances protecting biological resources, including the Venice Local Coastal Program Land Use Plan.²⁷ This analysis was never conducted. Based on my independent analysis, the Project would not comply with the following policies established in the Venice Local Coastal Program Land Use Plan (“LUP”):

1. Policy IV. A. 3. (Venice Canals Landscape Buffer): *“To protect the marine habitat, a one and one-half to two-foot-wide safety landscape buffer strip shall continue to be provided and maintained between the canal banks and sidewalks. Landscaping in the buffer strip shall consist of native coastal strand marshland or wetland vegetation as specified in the Venice Canals Rehabilitation Plan approved by Coastal Commission Coastal Development Permit 5-91-584.”* The proposed Project includes landscaping in the form of five new trees on the west side of the canal, and mounded grass planters on the east side of the canal.²⁸ Neither of these landscape features would be comprised of native coastal strand marshland or wetland vegetation, nor would they be located between the canal banks and sidewalks (as required in the LUP). As a result, they do not protect (or provide) marine habitat.
2. Policy IV. A. 4. (Venice Canals Setback and Yard Area): *“In order to provide a setback for access, to protect visual quality and the biological productivity of the canals, and to limit water runoff, a setback with an average depth of 15 feet (and a minimum depth at any point of 10 feet) shall be provided and maintained in the front yard areas of private residences (adjacent to the canal property line). This setback shall provide a permeable*

²⁴ See Existing Plot Plan, Sheet A1.10. See also IS, p. A-12.

²⁵ IS, p. B-12.

²⁶ U.S. Fish and Wildlife Service. 2020. California least tern (*Sterna antillarum browni*) 5-year Review: 2020 Summary and Evaluation. Carlsbad Fish and Wildlife Office, Carlsbad, CA. 120 pp.

²⁷ IS, pp. B-12 and -29.

²⁸ See Landscape Plan-West and Landscape Plan-East, Sheets L1.10 and L1.11.

yard with an area at least 15 feet times the width of the lot line at the canal side.” The proposed Project fails to comply with the requirement for a permeable yard with an area at least 15 feet times the width of the lot line at the canal side: a considerable amount of the yard area would be comprised of concrete or other impervious materials.²⁹

3. Policy I. B. 7. (Commercial Development Standards): “*Lighting from commercial projects shall be directed away from residential properties and environmentally sensitive habitat areas (Exhibit 22).*” According to the Initial Study, the proposed Project would introduce new sources of light, including: “low-level accent lighting on the proposed buildings to highlight architectural features and signage; and low-level security, wayfinding lighting and landscape lighting throughout the Project Site.”³⁰ The Initial Study does not define “low-level,” nor has the City provided a lighting plan that identifies parameters pertaining to the new lights (e.g., abundance, locations, types, and lumens). At a minimum, the Project would increase the amount of lighting in the immediate vicinity of the canal,³¹ which in turn would degrade the habitat values of the ESHA.³²

MITIGATION

The Staff Report establishes the following mitigation measures (conditions of approval):³³

- “The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by grading and hauling, and at all times provide reasonable control of dust caused by wind.”
- “Hauling and grading equipment shall be kept in good operating condition and muffled as required by law.”
- “All loads shall be secured by trimming, watering or other appropriate means to prevent spillage and dust.”
- “All trucks are to be watered at the job site to prevent excessive blowing dirt.”
- “All trucks are to be cleaned of loose earth at the job site to prevent spilling. Any material spilled on the public street shall be removed by the contractor.”

The Staff Report does not establish any other measures to mitigate the Project’s potentially significant impacts on biological resources and water quality. Specifically, there are no measures to mitigate:

1. Direct and indirect impacts on wetlands and water quality due to accidental or intentional discharge of sediment (besides airborne dust), pollutants (e.g., oil, lubricants, chemicals,

²⁹ See 3D Views (Sheet G0.10) and Floor Plans-West (Sheet A2.10).

³⁰ IS, pp. B-3 and B-4.

³¹ IS, p. B-4.

³² Longcore T, Rich C. 2004. Ecological light pollution. *Frontiers in Ecology and the Environment* 2: 191–198. See also Perry G, Buchanan BW, Fisher RN, Salmon M, Wise SE. 2008. Effects of artificial night lighting on reptiles and amphibians in urban environments. Pages 239–256 in Jung RE, Mitchell JC, eds. *Urban Herpetology*. Society for the Study of Amphibians and Reptiles.

³³ Staff Report, p. 14.

cement residue and wash water), construction debris, and fill materials into the Grand Canal.

2. Direct and indirect impacts on the ESHA due to increased shading,³⁴ night lighting, and human activity.
3. Direct and indirect impacts on the ESHA due to changes in the quality and quantity of storm water runoff entering the canal.³⁵
4. Impacts on nesting birds and potentially other special-status species due to vegetation removal, grading, noise, and other construction activities.³⁶
5. Wildlife entrapment in pipes and trenches.³⁷

These impacts have the potential to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

CONCLUSION

The Initial Study that was conducted for the Project concluded the Project could have significant impacts on sensitive biological resources, and thus, that further analysis of these impacts was required. The City never conducted the additional analysis that it determined was necessary to assess potentially significant impacts to biological resources. In addition, the City has not incorporated mitigation measures to avoid, or substantially reduce, adverse effects on biological resources. As a result, the City does not have the basis for its determination that the design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Sincerely,



Scott Cashen, M.S.
Senior Biologist

³⁴ IS, p. B-3: “the new buildings would have the potential to shade sensitive land uses in the Project vicinity.”

³⁵ IS, p. B-25.

³⁶ Although the Trump administration recently revised the federal government’s enforcement powers under the Migratory Bird Treaty Act, California’s protections for migratory birds, including the prohibition against incidental take, remain clear and unchanged. *See* California Department of Fish and Wildlife and California Attorney General Xavier Becerra. 2018 Nov 29. Advisory: Affirming California’s Protections for Migratory Birds. 3 pp.

³⁷ Harris M, Clucas B, Stanek J, Whitfield M. 2019. Wildlife Mortalities in Open-Topped Pipes in Central California. *Western Wildlife* 6:50–60. *See also* Doody JS, West P, Stapley J, et al. 2003. Fauna by-catch in pipeline trenches: conservation, animal ethics, and current practices in Australia. *Australian Zoologist* 32(3):410-419.

Scott Cashen, M.S.

Senior Wildlife Biologist

Scott Cashen has 28 years of professional experience in natural resources management. During that time he has worked as a field biologist, forester, environmental consultant, and instructor of Wildlife Management. Mr. Cashen focuses on CEQA/NEPA compliance issues, endangered species, scientific field studies, and other topics that require a high level of scientific expertise.

Mr. Cashen has knowledge and experience with numerous taxa, ecoregions, biological resource issues, and environmental regulations. As a biological resources expert, Mr. Cashen is knowledgeable of the various agency-promulgated guidelines for field surveys, impact assessments, and mitigation. Mr. Cashen has led field investigations on several special-status species, including ones focusing on the yellow-legged frog, red-legged frog, desert tortoise, steelhead, burrowing owl, California spotted owl, northern goshawk, willow flycatcher, Peninsular bighorn sheep, red panda, and various forest carnivores.

Mr. Cashen is a recognized expert on the environmental impacts of renewable energy development. He has been involved in the environmental review process of over 100 solar, wind, biomass, and geothermal energy projects. Mr. Cashen's role in this capacity has encompassed all stages of the environmental review process, from initial document review through litigation support. Mr. Cashen provided expert witness testimony on several of the Department of the Interior's "fast-tracked" renewable energy projects. His testimony on those projects helped lead agencies develop project alternatives and mitigation measures to reduce environmental impacts associated with the projects.

Mr. Cashen was a member of the independent scientific review panel for the Quincy Library Group project, the largest community forestry project in the United States. As a member of the panel, Mr. Cashen was responsible for advising the U.S. Forest Service on its scientific monitoring program, and for preparing a final report to Congress describing the effectiveness of the Herger-Feinstein Forest Recovery Act of 1998.

AREAS OF EXPERTISE

- CEQA, NEPA, and Endangered Species Act compliance issues
- Comprehensive biological resource assessments
- Endangered species management
- Renewable energy development
- Scientific field studies, grant writing and technical editing

EDUCATION

M.S. Wildlife and Fisheries Science - The Pennsylvania State University (1998)

Thesis: *Avian Use of Restored Wetlands in Pennsylvania*

B.S. Resource Management - The University of California, Berkeley (1992)

PROFESSIONAL EXPERIENCE

Litigation Support / Expert Witness

Mr. Cashen has served as a biological resources expert for over 125 projects subject to environmental review under the California Environmental Quality Act (CEQA) and/or the National Environmental Policy Act (NEPA). As a biological resources expert, Mr. Cashen reviews CEQA/NEPA documents and provides his clients with an assessment of biological resource issues. He then submits formal comments on the scientific and legal adequacy of the project's environmental documents (e.g., Environmental Impact Report). If needed, Mr. Cashen conducts field studies to generate evidence for legal testimony, or he can obtain supplemental testimony from his deep network of species-specific experts. Mr. Cashen has provided written and oral testimony to the California Energy Commission, California Public Utilities Commission, and U.S. district courts. His clients have included law firms, non-profit organizations, and citizen groups.

REPRESENTATIVE EXPERIENCE

Solar Energy

- Abengoa Mojave Solar Project
- Avenal Energy Power Plant
- Beacon Solar Energy Project
- Blythe Solar Power Project
- Calico Solar Project
- California Flats Solar Project
- Calipatria Solar Farm II
- Carrizo Energy Solar Farm
- Catalina Renewable Energy
- Fink Road Solar Farm
- Genesis Solar Energy Project
- Heber Solar Energy Facility
- Imperial Valley Solar Project
- Ivanpah Solar Electric Generating
- Maricopa Sun Solar Complex
- McCoy Solar Project
- Mt. Signal and Calexico Solar
- Panoche Valley Solar
- San Joaquin Solar I & II
- San Luis Solar Project
- Stateline Solar Project
- Solar Gen II Projects
- SR Solis Oro Loma
- Vestal Solar Facilities
- Victorville 2 Power Project
- Willow Springs Solar

Geothermal Energy

- Casa Diablo IV Geothermal
- East Brawley Geothermal
- Mammoth Pacific 1 Replacement
- Orni 21 Geothermal Project
- Western GeoPower Plant

Wind Energy

- Catalina Renewable Energy
- Ocotillo Wind Energy Project
- SD County Wind Energy
- Searchlight Wind Project
- Shu'luuk Wind Project
- Tres Vaqueros Repowering Project
- Tule Wind Project
- Vasco Winds Relicensing Project

Biomass Facilities

- CA Ethanol Project
- Colusa Biomass Project
- Tracy Green Energy Project

Other Development Projects

- Cal-Am Desalination Project
- Carnegie SVRA Expansion Project
- Lakeview Substation Project
- Monterey Bay Shores Ecoresort
- Phillips 66 Rail Spur
- Valero Benecia Crude By Rail
- World Logistics Center

Project Management

Mr. Cashen has managed several large-scale wildlife, forestry, and natural resource management projects. Many of the projects have required hiring and training field crews, coordinating with other professionals, and communicating with project stakeholders. Mr. Cashen's experience in study design, data collection, and scientific writing make him an effective project manager, and his background in several different natural resource disciplines enable him to address the many facets of contemporary land management in a cost-effective manner.

REPRESENTATIVE EXPERIENCE

Wildlife Studies

- Peninsular Bighorn Sheep Resource Use and Behavior Study: (*CA State Parks*)
- "KV" Spotted Owl and Northern Goshawk Inventory: (*USFS, Plumas NF*)
- Amphibian Inventory Project: (*USFS, Plumas NF*)
- San Mateo Creek Steelhead Restoration Project: (*Trout Unlimited and CA Coastal Conservancy, Orange County*)
- Delta Meadows State Park Special-Status Species Inventory: (*CA State Parks, Locke*)

Natural Resources Management

- Mather Lake Resource Management Study and Plan – (*Sacramento County*)
- Placer County Vernal Pool Study – (*Placer County*)
- Weidemann Ranch Mitigation Project – (*Toll Brothers, Inc., San Ramon*)
- Ion Communities Biological Resource Assessments – (*Ion Communities, Riverside and San Bernardino Counties*)
- Del Rio Hills Biological Resource Assessment – (*The Wyro Company, Rio Vista*)

Forestry

- Forest Health Improvement Projects – (*CalFire, SD and Riverside Counties*)
- San Diego Bark Beetle Tree Removal Project – (*SDG&E, San Diego Co.*)
- San Diego Bark Beetle Tree Removal Project – (*San Diego County/NRCS*)
- Hillslope Monitoring Project – (*CalFire, throughout California*)

Biological Resources

Mr. Cashen has a diverse background with biological resources. He has conducted comprehensive biological resource assessments, habitat evaluations, species inventories, and scientific peer review. Mr. Cashen has led investigations on several special-status species, including ones focusing on the foothill yellow-legged frog, mountain yellow-legged frog, desert tortoise, steelhead, burrowing owl, California spotted owl, northern goshawk, willow flycatcher, Peninsular bighorn sheep, red panda, and forest carnivores.

REPRESENTATIVE EXPERIENCE

Biological Assessments/Biological Evaluations (“BA/BE”)

- Aquatic Species BA/BE – Reliable Power Project (*SFPUC*)
- Terrestrial Species BA/BE – Reliable Power Project (*SFPUC*)
- Management Indicator Species Report – Reliable Power Project (*SFPUC*)
- Migratory Bird Report – Reliable Power Project (*SFPUC*)
- Terrestrial and Aquatic Species BA – Lower Cherry Aqueduct (*SFPUC*)
- Terrestrial and Aquatic Species BE – Lower Cherry Aqueduct (*SFPUC*)
- Terrestrial and Aquatic Species BA/BE – Public Lands Lease Application (*Society for the Conservation of Bighorn Sheep*)
- Terrestrial and Aquatic Species BA/BE – Simon Newman Ranch (*The Nature Conservancy*)
- Draft EIR (Vegetation and Special-Status Plants) - Wildland Fire Resiliency Program (*Midpeninsula Regional Open Space District*)

Avian

- Study design and Lead Investigator - Delta Meadows State Park Special-Status Species Inventory (*CA State Parks: Locke*)
- Study design and lead bird surveyor - Placer County Vernal Pool Study (*Placer County: throughout Placer County*)
- Surveyor - Willow flycatcher habitat mapping (*USFS: Plumas NF*)
- Surveyor - Tolay Creek, Cullinan Ranch, and Guadacanal Village restoration projects (*Ducks Unlimited/USGS: San Pablo Bay*)
- Study design and Lead Investigator - Bird use of restored wetlands research (*Pennsylvania Game Commission: throughout Pennsylvania*)
- Study design and surveyor - Baseline inventory of bird species at a 400-acre site in Napa County (*HCV Associates: Napa*)
- Surveyor - Baseline inventory of bird abundance following diesel spill (*LFR Levine-Fricke: Suisun Bay*)

- Study design and lead bird surveyor - Green Valley Creek Riparian Restoration Site (*City of Fairfield: Fairfield, CA*)
- Surveyor - Burrowing owl relocation and monitoring (*US Navy: Dixon, CA*)
- Surveyor - Pre-construction burrowing owl surveys (*various clients: Livermore, San Ramon, Rio Vista, Napa, Victorville, Imperial County, San Diego County*)
- Surveyor - Backcountry bird inventory (*National Park Service: Eagle, Alaska*)
- Lead surveyor - Tidal salt marsh bird surveys (*Point Reyes Bird Observatory: throughout Bay Area*)
- Surveyor – Pre-construction surveys for nesting birds (*various clients and locations*)

Amphibian

- Crew Leader - Red-legged frog, foothill yellow-legged frog, and mountain yellow-legged frog surveys (*USFS: Plumas NF*)
- Surveyor - Foothill yellow-legged frog surveys (*PG&E: North Fork Feather River*)
- Surveyor - Mountain yellow-legged frog surveys (*El Dorado Irrigation District: Desolation Wilderness*)
- Crew Leader - Bullfrog eradication (*Trout Unlimited: Cleveland NF*)

Fish and Aquatic Resources

- Surveyor - Hardhead minnow and other fish surveys (*USFS: Plumas NF*)
- Surveyor - Weber Creek aquatic habitat mapping (*El Dorado Irrigation District: Placerville, CA*)
- Surveyor - Green Valley Creek aquatic habitat mapping (*City of Fairfield: Fairfield, CA*)
- GPS Specialist - Salmonid spawning habitat mapping (*CDFG: Sacramento River*)
- Surveyor - Fish composition and abundance study (*PG&E: Upper North Fork Feather River and Lake Almanor*)
- Crew Leader - Surveys of steelhead abundance and habitat use (*CA Coastal Conservancy: Gualala River estuary*)
- Crew Leader - Exotic species identification and eradication (*Trout Unlimited: Cleveland NF*)

Mammals

- Principal Investigator – Peninsular bighorn sheep resource use and behavior study (*California State Parks: Freeman Properties*)

- Scientific Advisor –Study on red panda occupancy and abundance in eastern Nepal (*The Red Panda Network: CA and Nepal*)
- Surveyor - Forest carnivore surveys (*University of CA: Tahoe NF*)
- Surveyor - Relocation and monitoring of salt marsh harvest mice and other small mammals (*US Navy: Skagg's Island, CA*)
- Surveyor – Surveys for Monterey dusky-footed woodrat. Relocation of woodrat houses (*Touré Associates: Prunedale*)

Natural Resource Investigations / Multiple Species Studies

- Scientific Review Team Member – Member of the scientific review team assessing the effectiveness of the US Forest Service's implementation of the Herger-Feinstein Quincy Library Group Act.
- Lead Consultant - Baseline biological resource assessments and habitat mapping for CDF management units (*CDF: San Diego, San Bernardino, and Riverside Counties*)
- Biological Resources Expert – Peer review of CEQA/NEPA documents (*various law firms, non-profit organizations, and citizen groups*)
- Lead Consultant - Pre- and post-harvest biological resource assessments of tree removal sites (*SDG&E: San Diego County*)
- Crew Leader - T&E species habitat evaluations for Biological Assessment in support of a steelhead restoration plan (*Trout Unlimited: Cleveland NF*)
- Lead Investigator - Resource Management Study and Plan for Mather Lake Regional Park (*County of Sacramento: Sacramento, CA*)
- Lead Investigator - Biological Resources Assessment for 1,070-acre Alfaro Ranch property (*Yuba County, CA*)
- Lead Investigator - Wildlife Strike Hazard Management Plan (*HCV Associates: Napa*)
- Lead Investigator - Del Rio Hills Biological Resource Assessment (*The Wyro Company: Rio Vista, CA*)
- Lead Investigator – Ion Communities project sites (*Ion Communities: Riverside and San Bernardino Counties*)
- Surveyor – Tahoe Pilot Project: Validation of California's Wildlife Habitat Relationships (CWHR) Model (*University of California: Tahoe NF*)

Forestry

Mr. Cashen has five years of experience working as a consulting forester on projects throughout California. Mr. Cashen has consulted with landowners and timber operators on forest management practices; and he has worked on a variety of forestry tasks including selective tree marking, forest inventory, harvest layout, erosion control, and supervision of logging operations. Mr. Cashen's experience with many different natural resources enable him to provide a holistic approach to forest management, rather than just management of timber resources.

REPRESENTATIVE EXPERIENCE

- Lead Consultant - CalFire fuels treatment projects (*SD and Riverside Counties*)
- Lead Consultant and supervisor of harvest activities – San Diego Gas and Electric Bark Beetle Tree Removal Project (*San Diego*)
- Crew Leader - Hillslope Monitoring Program (*CalFire: throughout California*)
- Consulting Forester – Forest inventories and timber harvest projects (*various clients throughout California*)

Grant Writing and Technical Editing

Mr. Cashen has prepared and submitted over 50 proposals and grant applications. Many of the projects listed herein were acquired through proposals he wrote. Mr. Cashen's clients and colleagues have recognized his strong scientific writing skills and ability to generate technically superior proposal packages. Consequently, he routinely prepares funding applications and conducts technical editing for various clients.

PERMITS

U.S. Fish and Wildlife Service Section 10(a)(1)(A) Recovery Permit for the Peninsular bighorn sheep

PROFESSIONAL ORGANIZATIONS / ASSOCIATIONS

The Wildlife Society

Cal Alumni Foresters

Mt. Diablo Audubon Society

OTHER AFFILIATIONS

Scientific Advisor and Grant Writer – *The Red Panda Network*

Scientific Advisor – *Mt. Diablo Audubon Society*

Grant Writer – *American Conservation Experience*

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Instructor: Wildlife Management - The Pennsylvania State University, 1998

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PUBLICATIONS

Gutiérrez RJ, AS Cheng, DR Becker, S Cashen, et al. 2015. Legislated collaboration in a conservation conflict: a case study of the Quincy Library group in California, USA. Chapter 19 *in*: Redpath SR, et al. (eds). Conflicts in Conservation: Navigating Towards Solutions. Cambridge Univ. Press, Cambridge, UK.

Cheng AS, RJ Gutiérrez RJ, S Cashen, et al. 2016. Is There a Place for Legislating Place-Based Collaborative Forestry Proposals?: Examining the Herger-Feinstein Quincy Library Group Forest Recovery Act Pilot Project. *Journal of Forestry*.

Reference Articles

CALIFORNIA LEAST TERN
(*Sternula antillarum browni*) (= *Sterna a. b.*)

5-YEAR REVIEW:

Summary and Evaluation



California least tern (*Sterna antillarum browni*). Photo credit: Matt Sadowski (least tern monitor).

**U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
Carlsbad, California**

July 7, 2020

5-YEAR REVIEW

California Least Tern (*Sternula antillarum browni*)

I. GENERAL INFORMATION

Purpose of 5-year Reviews:

The U.S. Fish and Wildlife Service (USFWS) is required by section 4(c)(2) of the Endangered Species Act (Act), as amended, to conduct a status review of each listed species at least once every 5 years. The purpose of a 5-year review is to evaluate whether or not the species' status has changed since listing (or since the most recent 5-year review). Based on the 5-year review, we recommend whether the species should be removed from the list of endangered and threatened species, be changed in status from endangered to threatened, or be changed in status from threatened to endangered. Our original listing of a species as endangered or threatened is based on the existence of threats attributable to one or more of the five threat factors described in section 4(a)(1) of the Act, and we must consider these same five factors in any subsequent consideration of reclassification or delisting of a species. In the 5-year review, we consider the best available scientific and commercial data on the species, and focus on new information available since the species was listed or last reviewed. If we recommend a change in listing status based on the results of the 5-year review, we must propose to do so through a separate rule-making process defined in the Act that includes public review and comment.

Species Overview:

The California least tern (*Sternula antillarum browni*) (= *Sterna a. b.*) is a subspecies of the least tern, a colonially nesting seabird. The California least tern was federally listed in 1969 under the Endangered Species Preservation Act of 1966; later, it was considered an endangered species under the Act. The State of California, pursuant to the California Endangered Species Act, listed the species in 1971.

Historically, the California least tern was considered abundant along the California coast. At the time of listing, the California least tern was known to nest at 15 sites in the United States, from San Mateo County to San Diego County, California. Shortly after listing it was estimated that only 256 pairs remained. Since listing, the minimum number of pairs steadily increased to over 7,100 pairs in 2009. In 2016, fledglings were observed at 21 nesting areas, and the breeding population estimated at 3989 pairs (Frost 2017). Preliminary estimates of 4095 pairs in 2017 were reported at 29 nesting areas (Sin 2019, pers. comm.). Surveys of the Pacific coast of the Baja California Peninsula documented 300 nesting pairs at eight nesting areas in 2018. The primary threats at the time of listing were development of nesting sites, disturbance, off-road vehicle use, and predation. Many of these threats are ongoing, but existing conservation measures have helped to reduce impacts. Despite these efforts, the California least tern remains a conservation-reliant species (Scott *et al.* 2010).

Methodology Used to Complete This Review:

The Carlsbad Fish and Wildlife Office prepared this review. We used survey information from experts who monitor nesting populations of the California least tern, information from published literature, and information from experts on the species.

This 5-year review contains updated information on the species' biology and threats, and an assessment of information compared to that known at the time of listing and since the last 5-year review. We focus on current threats to the species pursuant to the Act's five listing factors. This review synthesizes this information to evaluate the listing status of the species and provide an indication of its progress towards recovery. Finally, based on this synthesis and the threats identified in performing the five-factor analysis, we herein recommend a prioritized list of conservation actions to be completed or initiated within the next 5 years.

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Recommended Citation:

When citing this document, please use the following suggested reference:

U.S. Fish and Wildlife Service. 2020. California least tern (*Sternula antillarum browni*) 5-year Review: 2020 Summary and Evaluation. Carlsbad Fish and Wildlife Office, Carlsbad, CA. 120 pp.

Federal Register Notice Citation Announcing Initiation of This Review:

A notice announcing initiation of the 5-year review of this taxon and the opening of a 60-day period to receive information from the public was published in the *Federal Register* on June 18, 2018 (USFWS 2018, p. 28252). We received three responses with information relevant to the California least tern, which is incorporated in this review.

Listing History:

Federal Listing

FR Notice: 34 FR 5034 (USFWS 1969)*

Date of Listing: March 8, 1969

Entity Listed: California least tern (*Sternula antillarum browni*),[†] a subspecies of the least tern (*Sternula antillarum*)

Classification: Endangered

* The California least tern was first listed under the Endangered Species Preservation Act of 1966. Coverage was continued under the Endangered Species Conservation Act of 1969 and the Endangered Species Act of 1973.

[†] The scientific name currently used in the List of Endangered and Threatened Wildlife (50 CFR 17.11) is *Sterna antillarum browni*; see the Changes in Taxonomic Classification or Nomenclature section for more details.

State Listing

The California least tern was listed by the State of California as endangered in 1971.

Associated Rulemakings:

None

Review History:

The Service initiated 5-year status reviews for the California least tern in 1979, 1985, and 1991 (USFWS 1979, p. 29574; 1985a, p. 29906; 1991, p. 56886); all reviews were completed with no recommended change in status. Another 5-year review for the California least tern, completed in 2006, recommended a status change from endangered to threatened (USFWS 2006, p. 22). The Service also completed a Species Report for the California least tern in 2014 (USFWS 2014).

Species' Recovery Priority Number at Start of 5-year Review:

The recovery priority number for the California least tern is 15C, based on a 1 to 18 ranking system where 1 is the highest-ranked recovery priority and 18 is the lowest (USFWS 1983a, pp. 43098–43105; 1983b, p. 51985). This number indicates the listed entity is a subspecies that faces a low degree of threat and has a high potential for recovery. The “C” indicates conflict with construction or other development projects, or other forms of economic activity.

Recovery Plan or Outline:

Name of recovery plan: Revised California Least Tern Recovery Plan

Date: September 27, 1985

Date of previous revisions: April 2, 1980

II. REVIEW ANALYSIS

Application of the 1996 Distinct Population Segment (DPS) Policy:

The Act defines “species” as including any subspecies of fish or wildlife or plants, and any DPS of any species of vertebrate wildlife. This definition of species under the Act limits listing as distinct population segments to species of vertebrate fish or wildlife. The 1996 *Policy Regarding the Recognition of Distinct Vertebrate Population Segments under the Endangered Species Act* clarifies the interpretation of the phrase “distinct population segment” for the purposes of listing, delisting, and reclassifying species under the Act (USFWS 1996, p. 4722).

The California least tern is listed as a subspecies and not a DPS. However, an article has challenged the distinctiveness of several least tern subspecies (Draheim *et al.* 2010, pp. 815–816). Discussion of the applicability of the article and its possible effects on least tern subspecies is ongoing (see the *Subspecies-level Taxonomy* section below). As summarized by Patten and Erickson (1996, pp. 888–890), the currently recognized five subspecies include: *Sternula antillarum antillarum* (eastern least tern) that breeds along the Atlantic and Gulf Coasts; *S. a. athalassos* (interior least tern) that breeds in interior United States; *S. a. browni* (California least tern) that breeds along the Pacific Coast of California and the west coast of the Baja California Peninsula; *S. a. mexicana* (no accepted common name, although Mexican least tern is sometimes used) that breeds along the Pacific Coast of northern mainland Mexico and east coast of the Baja California Peninsula; and *S. a. staebleri* (no accepted common name) that breeds along the Pacific Coast of southern Mexico.

For the purposes of this status review, we will continue to recognize the California least tern as a distinct subspecies, noting that a review of taxonomy and possibly a DPS analysis may be necessary in the future.

Information on the Species and its Status:

Species Description

California least terns weigh approximately 40–50 grams (1.4–1.8 ounces), have an average length of 21–23 centimeters (cm) (8.3–9.0 inches (in)), and a wingspan of 48–53 cm (19–21 in) (Thompson *et al.* 1997, p. 2). Adult California least terns are characterized by white underparts; light-gray back and wings; short, orange-yellow legs; a straight, pointed bill that is mostly yellow except for a black tip; and a white, shallowly forked tail (USFWS 1985b, p. 2). Adults in breeding plumage have a black crown and nape, and a black line that extends (anteriorly) through the eye to the bill. The black crown and eye-line frames a distinctive white patch on the forehead that extends from the bill to the forecrown and continues back (posteriorly) forming a point over each eye. Immature birds have darker plumage with a less distinct smudgy crown and a black bill.

Species Biology and Life History

California least terns feed primarily on small fishes captured in estuaries, embayments, and shallow, nearshore waters, particularly at or near estuaries and river mouths (Massey 1974, p. 5;

Collins *et al.* 1979, pp. 10–11; Massey and Atwood 1982, p. IV-2; Atwood and Minsky 1983, pp. 63–64; Atwood and Kelly 1984, p. 36; Minsky 1984, pp. 12, 27; Copper 1986, p. 27) and on occasion krill and other invertebrates (Lewison and Deutschman 2014, p. 4). The depth of the water where the species forages is generally less than 8 meters (m) (25 feet (ft)) (Massey and Atwood 1982, Table IV-1; Baird 1997, p. 141). California least terns primarily forage on juvenile or larval anchovies (Engraulidae: deep-bodied anchovies (*Anchoa compressa*), slough anchovies (*A. delicatissima*), and northern anchovies (*Engraulis mordax*)), and on silverside smelt (Atherinidae: topsmelt (*Atherinops affinis*), and jacksmelt (*A. californiensis*)), that are less than 9 cm (3.5 in) long and occur in the upper 15 cm (6 in) of the water column, the depth that California least terns plunge-dive (Massey 1974, pp. 5–6; Atwood and Kelly 1984, Table 3 and pp. 37, 46; Furness and Monaghan 1987, p. 27; Baird 1997, pp. 75, 153; Thompson *et al.* 1997, p. 7). Chicks consume smaller food items (less than 4 cm (1.6 in) long) than adults or juveniles (Zuria and Mellink 2005, p. 175; Ehrler *et al.* 2006, pp. 1-1, 3-1, and Figure 9).

The California least tern nests primarily between May and August (Massey and Atwood 1981, pp. 598–599). In recent years, birds have arrived at nesting sites in the last week of March (Sin 2018, pers. comm.) to the first or second week of April (Marschalek 2010, p. 7; 2011, p. 7; 2012, p. 7). Breeding commences at 2 to 3 years of age (Massey and Atwood 1981, p. 599). An ongoing study in San Diego Bay found adults of up to 23 years of age at breeding sites, with an average breeding age of 9 years in recent seasons (Patton 2011, unpubl. report). California least tern nesting is typically characterized by two waves of nest initiation (Massey and Atwood 1981, pp. 598–599). Early season nesting attempts are made primarily by experienced breeders and are completed by mid-June. A second wave of nesting, composed of some birds that re-nest after their initial nests fail and young birds nesting for the first time, usually occurs from mid-June to early August (Massey and Atwood 1981, pp. 598–599 and Table 1). These two distinct waves of nesting occur only in some years and only at some nesting sites (Keane 1998, p. 4; Marschalek 2011, p. 23); in recent years, the pattern has been less apparent across the range of the species. California least terns exhibit a high degree of nest site fidelity from year to year. Individuals often return to breed where they previously bred successfully or to their natal sites (i.e., where they hatched) significantly more than would be predicted if birds nested randomly (Atwood and Massey 1988, pp. 391–393).

The nest of the California least tern is a simple scrape or depression in the sand that the birds sometime adorn with small fragments of shell or pebbles. Chicks are semi-precocial, meaning they are covered in down and out of the nest scrape at 1 to 2 days of age, but not able to feed themselves (Thompson *et al.* 1997, p. 20). The cryptically colored chicks will hide from predators by either flattening to the ground or, when they are older (i.e., 7 to 14 days), moving under structures (Massey 1974, pp. 17–18). Parents protect the eggs and chicks from weather and predators, and provide food to chicks and fledglings until they are proficient foragers.

California least terns typically forage within 1.6 to 3.2 kilometers (km) (1 to 2 miles (mi)) of their nest site, although foraging up to 8 km (5 mi) from nest sites has been occasionally documented (Atwood and Minsky 1983, Table 5 and pp. 62–63, 70). Parents typically forage close to their nest sites and make more frequent trips to find smaller fish needed by the chicks during brood rearing (Atwood and Minsky 1983, pp. 64, 70; Atwood and Kelly 1984, pp. 36, 38; Minsky 1984, p. 28; USFWS 1985c, pp. 11–12; Copper 1986, p. 28; Zuria and Mellink 2005, p. 175; Ehrler *et al.* 2006, pp. 3-6, 4-1, 4-6). Prior to migrating south, fledglings and attendant

adults are often observed at various shallow, fresh, or estuarine marshes characterized by calm water where juveniles can develop their foraging skills prior to the demands of migration (Atwood and Minsky 1983, pp. 63–64, 70; Minsky 1984, p. 28). Least terns appear highly opportunistic in the selection of foraging areas, with the location of foraging areas strongly linked to food availability (Atwood and Minsky 1983, p. 64; Minsky 1984, pp. 28–29). Certain areas may receive consistently higher levels of use, suggesting that some localities may be of greater importance (Atwood and Minsky 1983, p. 64).

Spatial Distribution

The subspecific status of Pacific coast least terns has been questioned (see the Changes in Taxonomic Classification or Nomenclature section, below). Depending on the interpretation, the California least tern subspecies could potentially include one or both of the other described subspecies of least tern that nest along the coastal periphery of the Sea of Cortez and the Pacific coast of mainland Mexico. Given that this question remains unresolved in the scientific literature, we continue to recognize the traditional circumscription of the California least tern. As such, the nesting range of the California least terns is predominantly the California coast and the Pacific coast of the Baja California Peninsula, Mexico (Massey and Atwood 1981, pp. 598–599). The vast majority of breeding California least terns nest in the United States; the rest nest along the Baja California Peninsula (Figures 1, 3).

Historically, the recorded breeding range of the California least tern extended along the Pacific coast from Moss Landing, Monterey County, California, in the north, to San Jose del Cabo, in the state of Baja California Sur, Mexico in the south (Dawson 1923, p. 1459; Grinnell 1928, p. 63; Grinnell and Miller 1944, p. 175; American Ornithologists' Union (AOU) 1957, p. 239). Within the United States, the California least tern was known from nesting sites located within or near 15 nesting bays, estuaries, or beaches at the time of listing in 1969. Nesting sites extended from Bair Island in San Mateo County to the Tijuana River Estuary in San Diego County, with a minimum of 256 pairs (Craig 1971, p. 5). Since listing, the California least tern's breeding range has extended northward, with additional nesting sites discovered or colonized in the San Francisco Bay area (USFWS 1985b, p. 3), and the Sacramento River Delta. In addition, isolated instances of nesting have been detected at more inland sites scattered in the Central Valley (Rogers *et al.* 2007, p. 575; Rogers *et al.* 2009, p. 614; Frost 2017, p. 10) (Figure 1), and in one instance in Arizona (Robertson 2009, *in litt.*; Marschalek 2010, p. 20). California least terns nested at 50 documented locations (including multiple sites within those locations) in 2016 (Frost 2017, p. 11).

Breeding populations in the United States: Since 1970, California least terns have been regularly documented nesting in California, at nesting sites ranging from the San Francisco Bay area to the mouth of the Tijuana River just north of the United States–Mexico border (Marschalek 2007, pp. 16–18). The California breeding range spans four biogeographic regions as defined in Blanchette *et al.* (2008), with breeding colonies located within San Francisco Bay (SFB), the Santa Maria Basin (SMB), north Southern California Bight (NSCB), and south Southern California Bight (SSCB). Today, California least tern nesting is confined to 29 nesting areas that total approximately 487 hectares (ha) (1,204 acres (ac)) of habitat along the California coast. The total acreage of nesting habitat is higher than the previous number reported in the 2014 Species Report (USFWS 2014) due to the use of a more quantitative assessment rather than

an expansion of nesting habitat. The number of California least tern pairs nesting at each nesting area is highly variable. For example, in 2016, the number of pairs estimated nesting at sites in California ranged from 1 (e.g., Sacramento Bufferlands, Pittsburg Power Plant) to 804 (e.g., Santa Margarita River–North Beach South) (Frost 2016, Appendix B-3). In 2016, the majority (approximately 85 percent) of California least tern breeding pairs were concentrated in southern California within the coastal Counties of Ventura, Los Angeles, Orange, and San Diego (Frost 2016, p. 11; Figure 2), and almost half of the birds in San Diego County nested within lands owned and managed by Marine Corps Base (MCB) Camp Pendleton.

In the last decade, a few California least terns have been discovered nesting in areas outside their known range. In 2009, two pairs of least terns, including one banded individual, nested in Glendale, Arizona, and produced one chick (Marschalek 2010, p. 20; Stevenson and Rosenberg 2009, p. 634). The birds were suspected to be of the California subspecies because the banded individual was banded as a chick in San Diego County (Robertson 2009, *in litt.*). This was the first documented California least tern nesting in Arizona (Marschalek 2010, p. 20) and we have not recorded birds nesting there since. In 2011 and 2013, least terns nested at the Salton Sea, Imperial County, California, where nesting had been suspected previously (McCaskie and Garrett 2012, p. 687; McCaskie 2013, pers. comm.). However, it is unclear whether these birds are *Sternula antillarum browni* or *S. a. mexicanus* (van Rossem and Hachisuka 1937, pp. 333–334; Patten *et al.* 2003, p. 192; but see Patten and Erickson 1996, pp. 888–890). Breeding of least terns has also been recorded in Hawaii, though the subspecific affinity of these birds is unclear.



Figure 1. U.S. nesting areas of the California least tern (*Sternula antillarum browni*) (2013–2017).

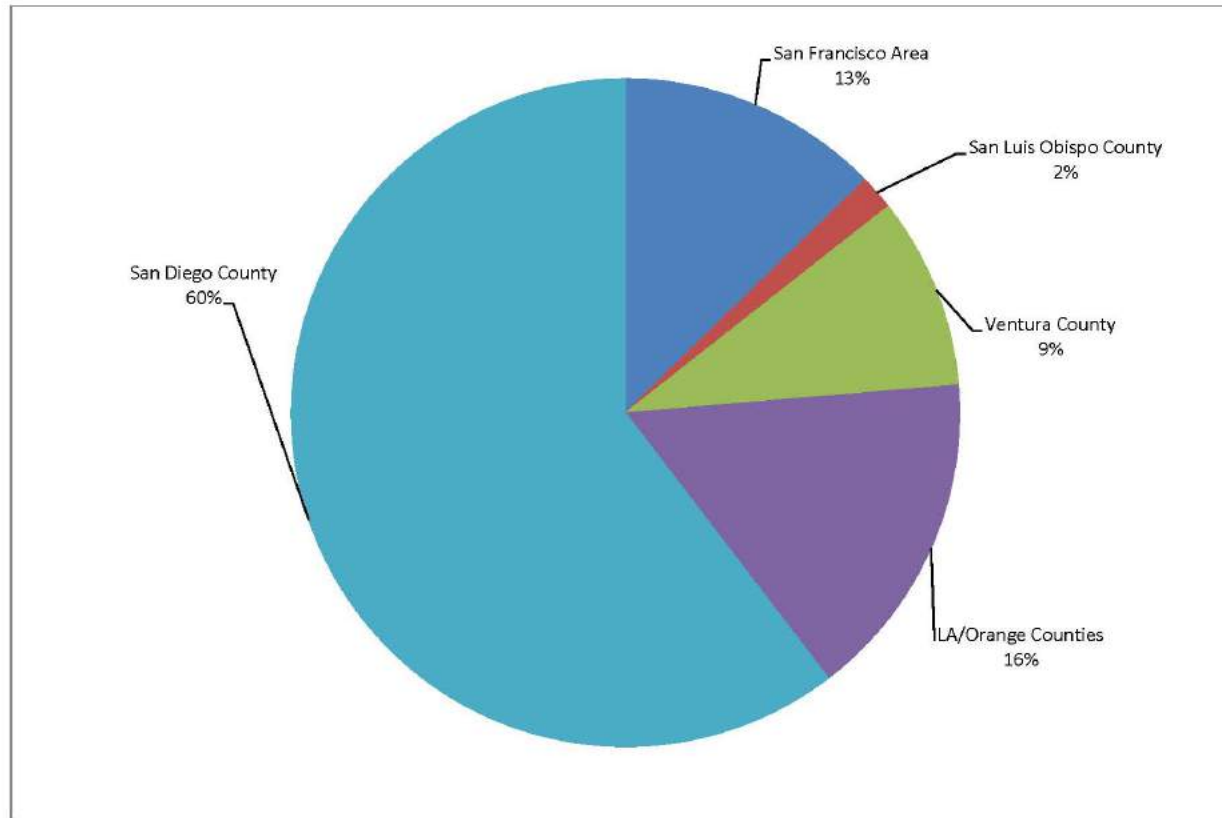


Figure 2. Distribution of 2016 California least tern (*Sternula antillarum browni*) nesting pairs by region in California. Data derived from minimum pair estimates in Frost 2017. “San Francisco Area” includes all nests in Solano, Alameda, and Contra Costa Counties, and the one nest in Bufferlands, Sacramento County.

Breeding populations in Mexico: Due to strong similarity of physical characteristics among least tern subspecies (Thompson *et al.* 1992, p. 257) and unclear genetics (see Changes in Taxonomic Classification or Nomenclature section below), the exact breeding range of the California least tern in Mexico is uncertain. Most studies consider that the California least tern breeds only along the Pacific coast of the Baja California Peninsula (Patten and Erickson 1996, p. 888).

Therefore, in this 5-year review, we consider only terns nesting along the Pacific Coast of the Baja California Peninsula, and not along the Gulf of California coast. Breeding California least terns along the Pacific Coast of the Baja California Peninsula have been documented from Ensenada Baja California in the north to San José del Cabo, Baja California Sur at the southern tip of the Peninsula (Lamb 1927, p. 155; Grinnell 1928, p. 63; Patten and Erickson 1996, p. 888). In 2017, there were six nesting areas with multiple nesting sites within those areas (Figures 3 and 4a) (Palacios 2018a). Monitoring of California least tern nesting areas in Mexico has been less intensive and less regular than in the United States.

Surveys of the Pacific coast of the Baja California Peninsula between 2002 and 2017 documented between 99 to 221 nesting pairs at 6 main nesting areas (Palacios 2018b, unpubl. data). In 2017, a total of 167 nesting pairs were recorded along the Baja California Peninsula at the following six nesting areas: Punta Banda (28 pairs), Figueroa (21 pairs), San Quintín (21 pairs), Ojo de Liebre (45 pairs), San Ignacio Lagoon (30 pairs), and Magdalena Bay (22 pairs) (see nesting areas indicated in Figure 3) (Palacios 2018b, unpublished data). In 2018, an estimated 300 pairs were documented at 8 nesting sites during one survey in June in Mexico (Palacios 2018a). Specific nesting sites are identified in Figure 4a, but not all sites are occupied in a given year.

Overall, the number of nesting pairs along the Baja California Peninsula at these nesting areas has been in decline since the early 2000s (Palacios 2018b, unpublished data). Other scattered surveys in the past decade recorded California least terns nesting from Cantamar and Estero Punta Banda to San Jose del Cabo on the tip of the Baja peninsula (Ruiz-Campos *et al.* 2005, Table 1; Perez *et al.* 2009, Appendix 1; Russo 2012, pers. comm.).

Winter distribution: The wintering range of the California least tern is not well known and what few data that are available are confounded by other least tern subspecies, which likely co-occur. Least terns of unknown subspecies have been occasionally seen in winter on the Baja California Peninsula, Mexico (Howell and Webb 2003, p. 213), and along the Pacific coast of mainland Mexico (Massey 1981, pp. 70–71; Ryan and Kluza 1999, p. 175; Howell and Webb 2003, p. 213), Guatemala (Massey 1981, pp. 70–71), Panama (Vaucher 1988, p. 1154; Ridgely and Gwynne 1989, pp. 158–159), and Costa Rica (Stiles and Skutch 1989, pp. 161–162). Scattered sightings of least terns of unknown subspecies have been recorded as far south as Peru during all seasons (Schulenberg *et al.* 1987, p. 271), including one seen in association with the closely related Peruvian tern (*Sterna lorata*) (Schulenberg *et al.* 1987, pp. 271–272). Observational data compiled by eBird further supports the information in the literature, with multiple least tern records from the Pacific coast of Central America and the northern Pacific coast of South America (Figure 4b; <https://ebird.org/science/citation>). These fragments of distributional information do not create a comprehensive picture of the migratory route and

winter range of the any of the Pacific coast least terns subspecies, let alone the California least tern in particular. While we recognize the need for more data, for the purposes of this evaluation, we consider the California least tern to winter predominately along the Pacific coast of mainland Mexico.



Figure 3. Distribution of 2017 California least tern (*Sternula antillarum browni*) nesting areas along Baja California Peninsula, Mexico. Figure courtesy of E. Palacios.

2020 5-year Review for the California Least Tern

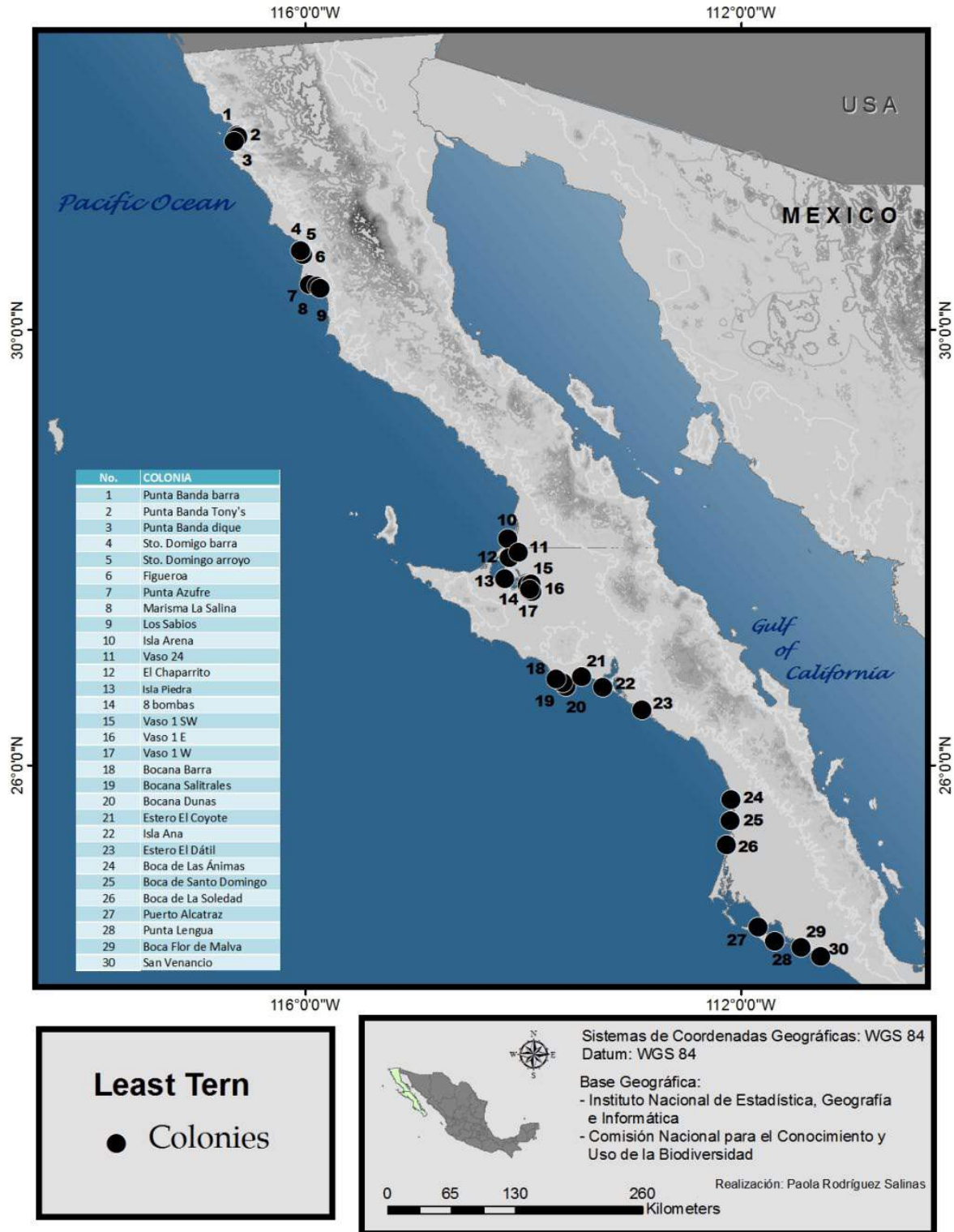


Figure 4. Locations of California least tern nesting sites along Baja California, Mexico. Not all sites are occupied in a given year. Figure courtesy of E. Palacios.

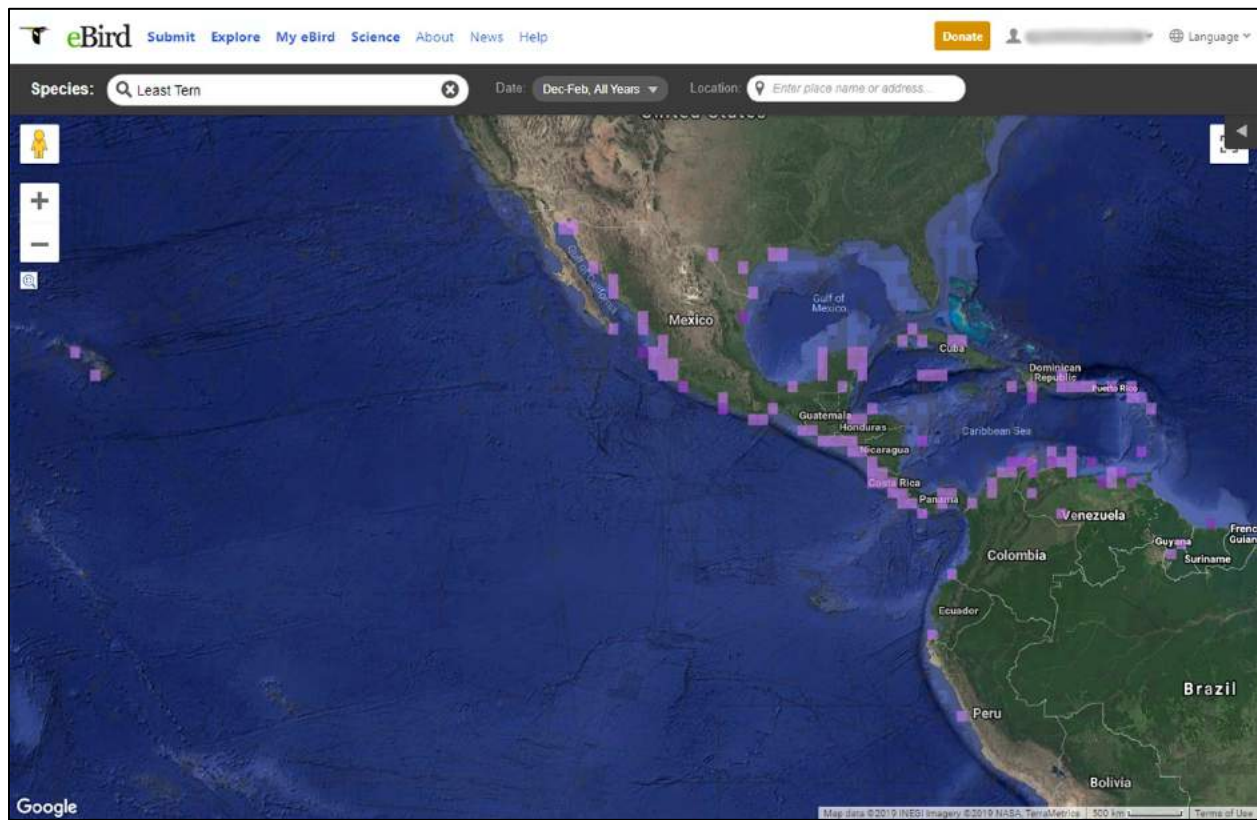


Figure 5. Locations of least tern observations from the Pacific coast of Central America and the northern Pacific coast of South America. Observational data compiled by eBird.

Abundance

In the early 20th century, California least terns were abundant and well distributed along the southern California coast (Shepardson 1909, p. 152; Sechrist 1915, p. 18). Scattered reports of nesting along the Baja California Peninsula also exist (Brewster 1902, p. 26; Bancroft 1927, pp. 38–39; Lamb 1927, p. 155). The development of the coastline (i.e., the building of coastal roadways and related buildings) reduced the amount of available nesting and foraging habitat and increased disturbance, pollution, and predation pressures that contributed to the gradual decline in California least tern populations (Chambers 1908, p. 237; Edwards 1919, pp. 65–68). By the 1940s, California least tern colonies were considered sparse and most beach areas within Orange and Los Angeles Counties were no longer used for nesting (Grinnell and Miller 1944, p. 175; Cogswell 1947, p. 189). The population continued to decline between the 1940s and 1970 (Craig 1971, pp. 4–7).

Shortly after listing, the California Department of Fish and Wildlife (CDFW; formerly known as California Department of Fish and Game (CDFG)) estimated that only 256 pairs nested at 15 nesting areas in San Mateo, Orange, and San Diego Counties (Craig 1971, p. 5). More extensive surveys from 1971 to 1973 found 624 pairs at 19 nesting areas in the United States (Bender 1974a, Table 1).

The increase in recorded population size immediately after listing was likely due in part to increased monitoring effort and location of existing nesting areas and not an actual increase in the number of birds (Obst and Johnston 1992, p. 4). As conservation measures were implemented throughout the 1970s and early 1980s, the number of California least tern pairs began a slow increase. In the late 1980s, the number of pairs began to increase at a much faster rate, reaching 2,400 pairs in 1993 and 4,500 pairs in 2000 (Caffrey 1994, p. 2) (Figure 5). This trend is believed to be due to increased management actions, particularly predator management, and years with abundant food supply; the change cannot be attributed to monitoring alone, as techniques remained constant throughout those years (Johnston and Obst 1992, pp. 6–7; Obst and Johnston 1992, p. 4; Caffrey 1993, p. 7; Shwiff *et al.* 2005, p. 285).

Though changes in breeding success may be a natural aspect of seabird dynamics, the increasing age of some California least tern populations and limited juvenile recruitment provides evidence that this decline may be more than a periodic fluctuation and may be indicative of a range-wide decline in numbers. Over the past decade, there has been a steady decline in the Statewide California least tern breeding population size. The estimated minimum number of pairs has dropped from 7,100 pairs in 2009 to 4,095 pairs in 2017 (Figure 5) (Sin 2019, pers. comm.).

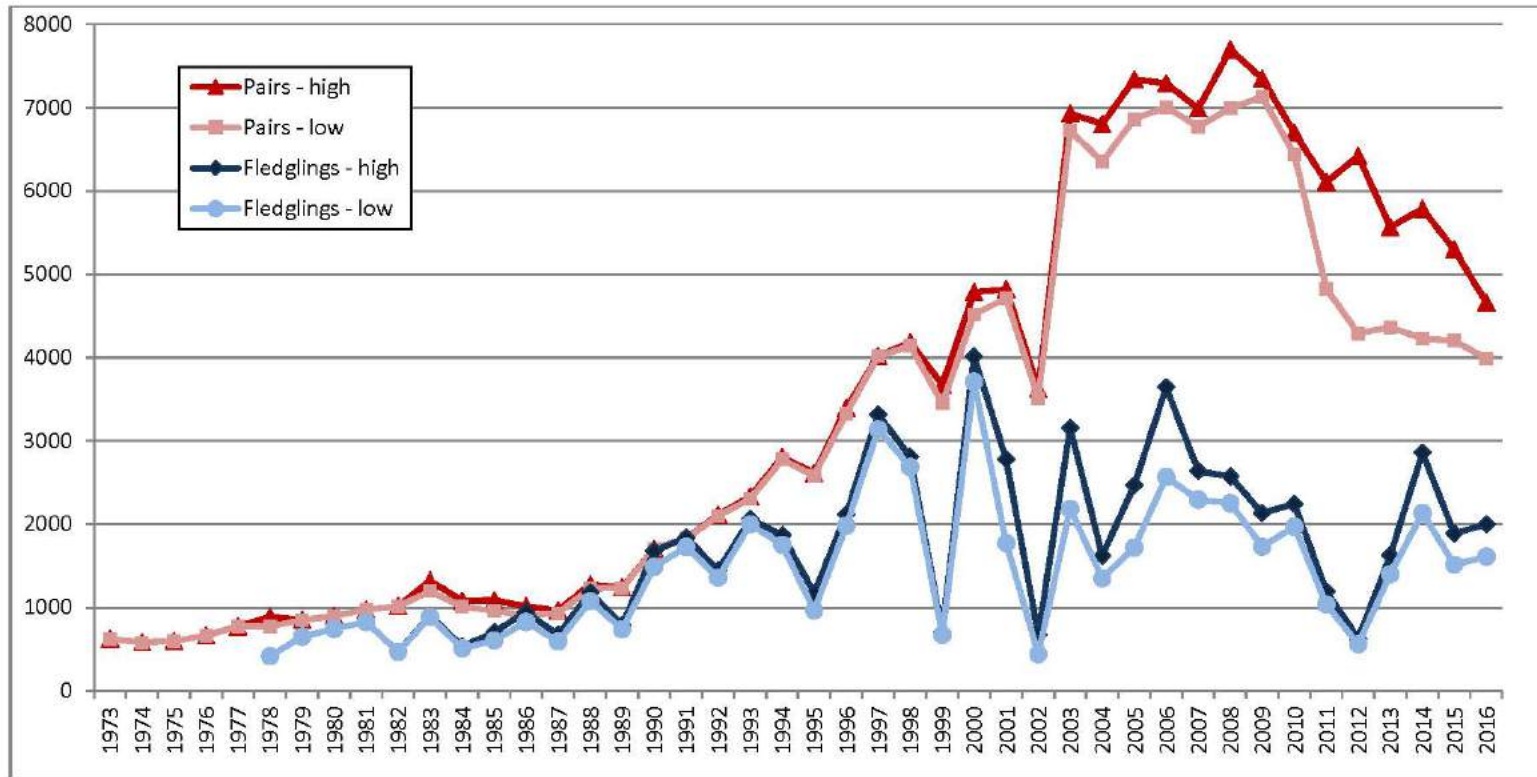


Figure 6. Minimum and maximum estimations of breeding pairs and fledglings produced for the California least tern (*Sternula antillarum browni*) in the United States from 1973–2016. Statewide surveys with unified methods began in 1973; reliable chick counts began in 1978. Data are from CDFW annual reports (Bender 1974a, Table 1; Bender 1974b, Table 1; Massey 1975, Table 1; Atwood *et al.* 1977, Table 1; Atwood *et al.* 1979, Table 1; Gustafson 1986, pp. 1–4; Collins 1983, p. 14; Collins 1984, Table 1; Collins 1987, Table 1; Massey 1988, Table 1; Massey 1989, Table 1; Johnston and Obst 1992, Table 1; Obst and Johnston 1992, Table 1; Caffrey 1993, Table 4; Caffrey 1994, Table 4; Caffrey 1995, Table 4; Caffrey 1997, p. 1; Caffrey 1998, Table 4; Keane 1998, Table 2a; Keane 2000, Table 2a; Keane 2001, Table 2a; Patton 2002, Table 1; Marschalek 2005, Table 2; Marschalek 2006, Table 2; Marschalek 2007, Table 2; Marschalek 2008, Table 2; Marschalek 2009, Table 2; Marschalek 2010, Table 2; Marschalek 2011, Table 1; Marschalek 2012, Table 1; Frost 2013, Table 1; Frost 2014, Table 1; Frost 2015, Table 1; Frost 2016, Table 1; Frost 2017, Table 1).

A study conducted by researchers at San Diego State University confirmed significant declining trends in the number of breeding pairs and reproductive success since ~2007 (Lewison and Deutschman 2014, p.10). The study also found a significant positive relationship between colony reproductive success and latitude (Lewison and Deutschman 2014, p. 3). The annual reproductive success for the San Francisco Bay region has been mostly above average and increasing in the Santa Maria Basin region, whereas the reproductive success has been consistently below average in the southern California regions for the past 15 years (Figure 6; Robinette *et al.* 2017, draft report, p. 5). The San Francisco Bay (SFB) region includes the colonies from Sacramento and the San Francisco Bay, the Santa Maria Basin (SMB) region includes the colonies at Vandenberg Air Force Base and Oceano Dunes, the north Southern California Bight (NSCB) region includes the colonies located in Ventura County, and the south Southern California Bight (SSCB) region includes colonies from Los Angeles County south to San Diego County.

In 2016, Alameda had an estimated 358 breeding pairs, approximately 9 percent of the total minimum number of nesting pairs. Pairs nesting at the site regularly fledge chicks at least twice the average statewide fledgling rate (Marschalek 2008, Table 1; 2009, Table 1; 2010, Table 1; 2011, Table 1; 2012, Table 1; Frost 2013, Table 1; 2014, Table 1; 2015, 2017, Table 1). Further, California least terns nesting at Alameda Point reached the recovery goal of one fledgling per pair in 2008, 2013, 2014, and 2016. This reproductive success is in part attributed to consistent prey availability (Robinette *et al.* 2017, draft report, p. 23).

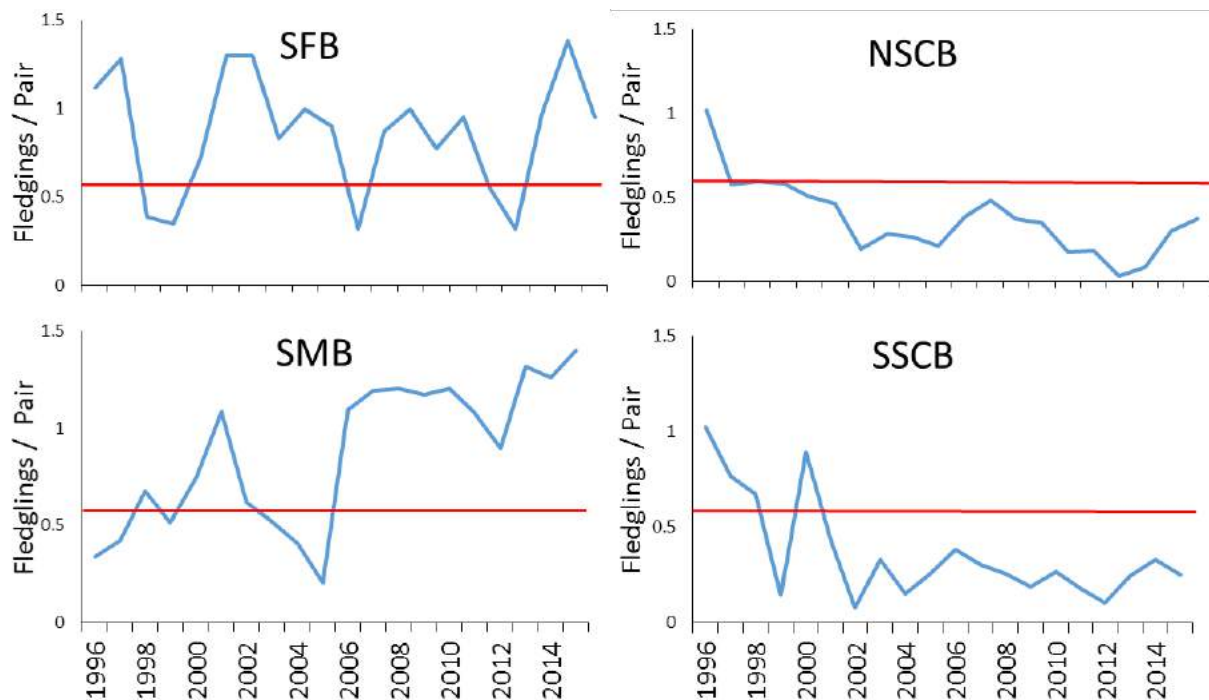


Figure 7. Annual rates of reproductive success for colonies in four regions of the California least tern breeding range: San Francisco Bay (SFB), Santa Maria Basin (SMB), north Southern California Bight (NSCB), and south Southern California Bight (SSCB). Red lines show the state average for 1996–2015. Taken from Robinette *et al.* 2017, draft report, p. 2.

Researchers have suggested that changes in prey availability and elevated predator pressure may contribute to the observed decline in least tern reproductive success and population size, although the exact causes of the observed declines remain unknown and may vary by site. Resource limitation during the breeding season, elevated predation pressure, or stressors on non-breeding population may all contribute to population decline in seabirds. Intervals of low and high breeding success are normal for seabirds; however, fluctuations in forage fish biomass can interrupt these breeding cycles and result in long-term declines (Cury *et al.* 2011, p. 1704).

It is unclear if the changing California least tern trends are due to changing food resources, habitat and predation-based threats, or both, though in either case, the decline is increasingly severe and has continued over the past decade. The listing of the California least tern resulted in increased monitoring and management at nesting sites in the United States. The number of conserved and managed least tern nesting areas has also increased, though some previously occupied nesting areas are no longer active (see **FACTOR A** below).

California least terns nest at discrete nesting sites, and in some instances multiple nesting sites occur within larger nesting areas (typically bay, estuary, salt flat, or beach). Least terns may relocate to another nest site within the nesting area in response to reduced site suitability, nest failure, or disturbance. As urbanization and intensified human uses have occurred along the coast, many known nesting sites have been protected, often with fencing to reduce disturbance, and vegetation management to assure continued suitability. Nesting areas that support multiple protected nesting sites, as described above, include: Mission Bay (four currently active nest sites); Naval Base Ventura County (NBVC) Point Mugu (four currently active nest sites); Batiquitos Lagoon (three currently active nest sites), MCB Camp Pendleton (five currently active nest sites), and San Diego Bay (two currently active nest sites in north part, five nesting sites in south part). Based on these groupings, there were 29 currently occupied nesting areas in California in 2017 (Figure 1, Appendix A). An occupied nesting area is defined as having nesting between 2012–2017. In 2017, 20 of these nesting areas produced fledglings (Sin 2019, pers. comm.). For the remainder of this document, *nest site* is used to identify a discrete nest site location, and a collective grouping of nest sites is referred to as a *nesting area*.

Habitat or Ecosystem

The California least tern traditionally nested on sandy beaches close to estuaries and coastal embayments relatively free from human disturbance (Grinnell and Miller 1944, p. 175; Garrett and Dunn 1981, pp. 194–195). Today, fluvial, wave, and aeolian (wind) processes that create suitable nesting conditions for California least tern are absent from or altered at most nest sites, and many of the coastal areas upon which least terns historically depended have been largely modified or lost. The majority of current nest sites are on developed lands, such as dikes (e.g., South Bay Unit of the San Diego National Wildlife Refuge (NWR), Pittsburg Power Plant), dredge spoils (e.g., Terminal Island, Anaheim Bay, Fiesta Island, Mariner’s Point, Delta Beaches, and the Sweetwater Marsh Unit of the San Diego Bay NWR), sand-topped islands specially created for California least terns around bays and estuaries (e.g., Hayward Regional Shoreline, Bolsa Chica, Upper Newport Bay, Batiquitos Lagoon, Seal Beach/Anaheim Bay, Montezuma Wetlands), and airports (e.g., Alameda Point, San Diego International Airport, Naval Air Station, North Island).

California least terns prefer beachfront habitat with sparse or low-lying vegetation and low disturbance from humans and mammalian predators. California least terns preferentially nest on unconsolidated fine to coarse sand that is interspersed with larger fragments of material and sparse ground vegetation (i.e., 0 to 20 percent total ground cover less than 40 cm (16 in) tall) (USFWS 1985c pp. 14–16; Kotliar and Burger 1986, p. 6). Ceramic roofing tiles are provided at some nest sites to provide chicks cover or protection from sun and predators.

Foraging habitat used by terns includes nearshore waters, estuarine channels, narrow bays, and other shallow water marine habitat (Atwood and Minsky 1983, p. 64; Atwood and Kelly 1984, p. 35). Terns frequently shift foraging areas within and between nesting seasons based on prey availability (Atwood and Minsky 1983, p. 63; Baird 1997, pp. 57, 66). Typical foraging habitat is within two miles of colony sites in "relatively shallow nearshore ocean waters in the vicinity of major river mouths..." (Atwood and Minsky 1983). Information on the wintering habitat of California least terns is limited and further study is required to understand the wintering range.

Changes in Taxonomic Classification or Nomenclature

Species-level Taxonomy

The California least tern was listed as a subspecies in 1969 with the scientific name (*Sterna albifrons browni*) (USFWS 1969, p. 5034; 34 FR 5034). Since listing, the taxonomy has been revised. Studies on vocalizations and behaviors suggested that least terns in the Old World and New World were distinct species (Massey 1976, pp. 760–773; Massey 1998, entire). In 1983, the American Ornithologist's Union (AOU) Committee on Classification and Nomenclature (AOU Committee), the generally accepted authority on avian nomenclature in North America, recognized the change and adopted *Sterna antillarum* as the species name for all of the American least terns (AOU 1983, pp. 232–233), which would include the California least tern. The Old World form of the taxon, under the common name little tern, retained the scientific name *Sterna albifrons*. In 1983, we updated 50 CFR 17.11, the List of Endangered and Threatened Wildlife, changing the scientific name of the California least tern to *Sterna antillarum browni* (USFWS 1983c, p. 34189; 48 FR 34182). This species-level separation was subsequently supported by a phylogenetic analysis of mitochondrial DNA (mtDNA) (Bridge *et al.* 2005, p. 462).

Furthermore, Bridge *et al.* (2005, Figure 1 and pp. 465–467) derived a phylogeny of nearly all tern species based on sequencing mtDNA. This phylogeny classified a group of small tern species, including *Sterna antillarum*, as a clade that was distinct from other tern species (a clade is a group of animals descended from a common ancestor). Bridge *et al.* (2005, p. 467) recommended resurrecting the genus *Sternula* for the small tern species. The AOU Committee accepted this revision (Banks *et al.* 2006, p. 927), as did the British Ornithological Union (Sangster *et al.* 2005, p. 824). Thus, in the scientific literature, the least tern became *Sternula antillarum*—and by extension the California least tern became *Sternula antillarum browni*.

None of these revisions affected the listed entity beyond changes to the scientific name. However, as of the writing of this review, the List of Endangered and Threatened Wildlife still refers to the California least tern as *Sterna antillarum browni* and has not been updated to reflect the nomenclature currently used in the scientific literature. We use *Sternula antillarum browni* for the California least tern in this document.

Subspecies-level Taxonomy

As noted previously, five subspecies of *Sternula antillarum* have been described in the scientific literature based on subtle differences in morphological features (i.e., overall size; bill, leg, and wing lengths; and plumage coloration). As summarized by Patten and Erickson (1996, pp. 888–890), these five subspecies include (1) *S. a. antillarum* (eastern least tern) that breeds along the Atlantic and Gulf Coasts, (2) *S. a. athalassos* (interior least tern) that breeds in interior United States, (3) *S. a. browni* (California least tern) that breeds along the Pacific Coast of California and the west coast of the Baja California Peninsula, (4) *S. a. mexicana* (no accepted common name, although Mexican least tern is sometimes used) that breeds along the Gulf of California coast of northern mainland Mexico and east coast of the Baja California Peninsula, and (5) *S. a. staebleri* (no accepted common name) that breeds along the Pacific Coast of southern mainland Mexico.

Many authors have questioned the distinctiveness of one or more subspecies of *Sternula antillarum* (Willet 1933, p. 78; Burleigh and Lowery 1942, p. 175–177; Massey 1976, p. 768; Thompson *et al.* 1992, p. 259; Gochfeld and Burger 1996, p. 657; Patten and Erickson 1996, pp. 888–890; Palacios and Mellink 1996, p. 49; Massey 1998, p. 181; Draheim 2006, pp. 33, 74; Whittier *et al.* 2006, p. 182; Pyle 2008, p. 704; Draheim *et al.* 2010, pp. 807). The methodologies for these studies varied, but included morphological and genetic analyses, depending on the study.

In particular, Massey (1998, p. 181) questioned whether *Sternula antillarum browni* was distinguishable from the two other west Mexico subspecies *S. a. mexicana* and *S. a. staebleri*. While some authors have merged all the Pacific coast subspecies (e.g., Draheim *et al.* 2010, p. 808; Draheim *et al.* 2012, pp. 147), there have been few studies that address the taxonomic status of the other west Mexico populations. Similarly, few studies have examined the east Mexico or Caribbean populations, although the least terns are widely considered to be the nominate subspecies. Instead, authors have mostly focused their attentions on least tern populations in the United States. Massey (1976, p. 772) did not find distinct vocalizations or behavior between the eastern and California subspecies. Thompson *et al.* (1992, p. 259) did not find consistent differences in morphology or coloration between specimens of all three U.S. subspecies collected throughout the breeding season. In contrast, Johnson *et al.* (1998, pp. 19–23) found all three U.S. subspecies distinguishable on the basis of color by only using specimens in fresh plumage collected early in the breeding season (before feathers may have faded). However, Whittier *et al.* (2006, p. 177) countered that the findings by Johnson *et al.* (1998) were potentially a function of wintering site or food, and not an inherited feature.

More recently, molecular or genetic analyses using both mtDNA and nuclear DNA have been used to assess the distinctiveness of the U.S. subspecies of the least tern (again, without including the west Mexico populations where there are other described subspecies). In general, research analyzing mtDNA shows historical separation of the subspecies or groups examined and yields less variable results, while nuclear DNA is more receptive to natural selection processes (i.e., adaptive divergence) and shows more recent population-level differences (Whittier *et al.* 2006, p. 178; Fallon 2007, pp. 1190–1191). Whittier *et al.* (2006, pp. 180–181) found no difference between California, interior, and eastern least terns using mtDNA, but found distinctiveness between interior and California least terns using nuclear DNA. Alternatively, Draheim *et al.* (2010, pp. 807–819) examined mtDNA and microsatellite DNA from least terns across the continental U.S. using sequences from two mtDNA genes (i.e., 1,400 base pairs) and 10 microsatellite loci (nuclear DNA) of at least 417 least terns from 20 nest sites. The authors

concluded there was little evidence to support the distinctiveness of the three U.S. subspecies, with weak support for traditional subspecies from analyses of microsatellite DNA data and no support from mtDNA.

However, mtDNA data is relatively insensitive at distinguishing differences at the subspecific rank in birds, which are primarily based on phenotypic variation in plumage, morphology, or both (Greenberg *et al.* 1998, pp. 706–712; McKay and Latta 2002, pp. 285–291; Pruett and Winker 2010, pp. 162–171; McCormack and Maley 2015, pp. 380–388). Draheim *et al.* (2010, pp. 809) concluded that there are detectable differences in genetic structure between the California and interior/eastern subspecies, but that there are also genetic similarities between the three subspecies examined. However, as Draheim *et al.* (2010, pp. 816) note, mtDNA and microsatellite loci may not necessarily reflect adaptive variation that may be relevant in different environments, noting further that the three U.S. subspecies of least terns “may continue to function as demographically independent populations.” Moreover, it is difficult to interpret negative results (such as failure to detect structure), which can be interpreted as either the true absence of genetic structure or as simply inconclusive. Species with high dispersal rates, such as birds, require additional information beyond molecular markers (i.e., reproductive isolation, adaptive divergence, spatial patterns of local adaptation) to evaluate designation of subspecies (Haig *et al.* 2006, pp. 1590–1591).

Given the equivocal information in the taxonomic literature, we examined the available information on movement of individual least terns between the ranges of the other subspecies. In our 2014 species review, we examined banding data for evidence of least tern movements (USFWS 2014, p. 14). That assessment suggested that there was little exchange of individuals between the California and other populations of least terns. We retrieved band and recapture data from the U.S. Geological Survey’s Bird Banding Laboratory (BBL) (Liddick 2007, pers. comm.) to evaluate movement of least terns between geographic ranges of currently classified least tern subspecies. The BBL had records of birds banded and resighted on the west coast, interior, and eastern United States. From 1923 through 2004, a total of 799 banded least terns were sighted and reported to the BBL (USGS 2007, no page number). All least terns recaptured in California during the breeding season (217 birds) were initially banded in California, including eight birds recaptured two times and two birds recaptured three times (USGS 2007, no page number). Five birds (2.2 percent of total recaptures) initially banded in California were recaptured outside of California: four were sighted within the California least tern’s suspected breeding range in Mexico and one was found dead early in the breeding season (May 10) (USGS 2007, no page number).

As noted in the Spatial Distribution section above, a banded least tern was one of four birds (two pairs) of least terns that nested in Maricopa County, Arizona. This 2009 attempt (by the two pairs) was the first and so far only nesting of least terns recorded for Arizona. This was the farthest east that a California least tern has been found. More recently, a study has been initiated to increase the number of band returns through recapturing banded least terns in California and northwestern Mexico. As of the writing of this review, the data from that effort are not available. Thus, there appears to be little movement of least terns between subspecies ranges.

Summary

The best scientific data available regarding California least tern taxonomy, including information on vocalizations, morphology and other phenotypic characteristics, and mtDNA, indicates that *Sternula antillarum* is the species-level combination recognized in the scientific literature.

While there have been several publications that question the distinctiveness of *Sternula antillarum browni*, most studies have focused only on the three U.S. subspecies (California least tern, interior least tern, and eastern least tern); none have comprehensively examined the species throughout its range, with a glaring absence of data from populations in west Mexico where two other subspecies have been described. The criteria used to distinguish subspecies should include multiple lines of evidence, such as morphology, genetics, and ecology. Based on current known information, we conclude that the California least tern subspecies is not freely interbreeding with members of other least tern subspecies. In the absence of compelling evidence to the contrary, we continue to recognize the California least tern subspecies for the purposes of the Act.

Habitat Protection

Management actions contributing to California least tern protection and recovery after the species was listed included the establishment of Huntington Beach State Park Tern Sanctuary, Seal Beach NWR, Buena Vista Lagoon Ecological Reserve, Border Field State Park, California protected nesting areas at Mission Bay Park and Sunset Aquatic Park, and acquisition of Bair Island by the State of California (CDFG 1974, p. 23).

Species-specific Research and/or Grant-supported Activities

In 2011, CDFW was awarded a traditional Section 6 grant (\$179,151) for the purpose of analyzing the long-term, historical California least tern nesting data set. With the assistance of San Diego State University, least tern experts, and agency representatives, this effort focused on the: 1) identification of California least tern population trends and drivers of those trends, and 2) evaluation of current monitoring and management practices (Lewison and Deutschman 2014, p. 5). The analysis focused on 24 sites that have been consistently monitored from 1990 to 2013. One of the recommendations from this study was the adoption of new data collection and reporting protocols deployed by CDFW in 2013 (Lewison and Deutschman 2014, p. 28). Monitors began using the revised protocols during the 2016 breeding season (Frost 2017, p. 6).

Lewison and Deutschman (2014) also developed a conceptual model that identified a number of critical uncertainties that drive tern population size and distribution, and reproductive success. These uncertainties include survival, movement, and food availability, which are influenced by climate, nest attendance, age structure, and overwintering. In order to further investigate these uncertainties, in fiscal year 2014 and 2017, CDFW was awarded traditional Section 6 grants (\$260,000 and \$348,232, respectively) for the project: *A study of critical uncertainties that influence the population and breeding success of the endangered California least tern (Sterna antillarum browni)*. The goals of this 3-year study (2015–2017), conducted by Point Blue Conservation Science, are to: 1) assess spatio-temporal variability in least tern diet and combine with video monitoring to assess potential impacts on adult nest attendance and chick food provisioning rates, 2) use video monitoring to identify predators and document rates of predation at nests and study methods to better document predation, 3) assess the impact of habitat availability and suitability on nesting success, and 4) band and recapture adult least terns to determine age structure, survival, and movement (Robinette *et al.* 2017, draft report).

Ongoing Nesting Site Management

Most active nest sites in California are managed through pre-season preparation of the nest site (e.g., removal of vegetation, erection or repair of fencing), protection from human disturbances,

monitoring and management of predators, and breeding surveys (Table 1). Least tern numbers have increased since listing under this general management approach (see Abundance section above).

In 2016, pre-season visits and preparation of nest site substrate by managers and volunteers were conducted at 93 percent (42 of 45) of the active nesting sites where we have data (Table 1) to maintain suitable habitat characteristics attractive to nesting California least terns. As described above, California least terns preferentially nest on unconsolidated fine to coarse sand that is interspersed with larger fragments of substrate material (shell; gravel; debris) and sparse ground vegetation (i.e., 0 to 20 percent total ground cover less than 40 cm (16 in) tall) (USFWS 1985c, pp. 14–16; Kotliar and Burger 1986, p. 6). This percent cover and height of vegetation allows for unfettered chick movement and protects chicks from exposure to sun and predation but does not provide cover or perches for predators (Buckley and Buckley 1980, p. 75). At some sites, high density mesh fencing is installed or repaired prior to the start of the nesting season to prevent chicks from leaving the nest site and entering areas where they could be killed by falling into rip-rap (e.g., Mission Bay), or crushed by military training activities (e.g., MCB Camp Pendleton), air traffic (e.g., Lindberg Field), or recreational users (e.g., Venice Beach, Huntington Beach, San Diego River Mouth).

In 2016, predator control was conducted at 73 percent of nesting areas where we have data (Frost 2017, Appendix B-1). Summary reports are not available for 2017 and 2018 predator activities. Predator control activities are conducted both before and during nesting activity, although the frequency, intensity, target species, and effectiveness of predator control efforts vary between different sites. Pre-nesting predator control activity includes ensuring that protective fencing is intact, providing items that chicks may use for cover, and monitoring for and potentially removing predatory animals. During the nesting season, monitors or predator management personnel conduct regular visits and look for signs of predation. If predation is detected, the impact to the least terns is assessed, and predators may be hazed or removed from the nest site to support least tern productivity. Frequent and regular visits by monitors are very effective for early detection and correction of predation and disturbance problems.

Monitoring to document breeding success of California least terns continued in 2016 at nearly all known active nest sites in California (Frost 2017, and Table 1). Established conservation and monitoring methods have been used for least terns since the 1998 nesting season to standardize data collection throughout the State. The reporting spreadsheet was updated in 2013 to include more information related to seasonal chronology. This revised data collection and reporting protocol was used by monitors in 2016 (Frost 2017, p. 6). Most recently published data and their collection methods are available in California least tern breeding report (Frost 2017, entire). Data for 2017 are in preparation.

Table 1. Coastal Management Areas (identified in the 1985 Recovery Plan (Table 3) and subsequent to the plan), management activity, and measure of productivity. Data from Frost 2017, Table 1 and Appendix B-1. Management data for 2017 not yet available.

A. San Francisco Bay

| Coastal Mgmt. Area ¹ | Nest Site ² | Management Activity Reported for 2016 ³ | Minimum of 20 Nesting Pairs Reported for 2016 | Minimum of One Fledgling per Pair for 2016 | Type of Ownership ⁴ | Secure site with min of 20 pairs? ⁵ |
|---------------------------------|---|--|---|--|--------------------------------|--|
| | Pittsburg Power Plant | Yes | | | Private | |
| A | Alvarado Salt Ponds (Currently known as Eden Landing) | - | - | - | State | |
| A | <i>Oakland Airport</i> | | | | Port | |
| A | Alameda Point | Yes | Yes | Yes | Federal | Yes |
| *6 | Hayward Regional Shoreline | Yes | Yes | Yes | Local | Yes |
| | Montezuma Wetlands | Yes | | | Private | |
| *6 | Napa Sonoma Marsh Wildlife Area | | Yes | | State | Yes |

B. San Luis Obispo/Santa Barbara Counties⁵

| Coastal Mgmt. Area ¹ | Nest Site ² | Management Activity Reported for 2016 ³ | Minimum of 20 Nesting Pairs Reported for 2016 | Minimum of One Fledgling per Pair for 2016 | Type of Ownership ⁴ | Secure site with min of 20 pairs? ⁵ |
|---------------------------------|---|--|---|--|--------------------------------|--|
| B | Pismo Beach | - | - | - | UNK | |
| B | Oso Flaco Lake | - | - | - | State | |
| C | Guadalupe-Mussel Rock (2 sites) (Santa Maria River) | | | | State & Federal | |
| *6 | Oceano Dunes SVRA | Yes | Yes | Yes | State | Yes |
| | Coal Oil Point Reserve | Yes | | | State | |
| D | Vandenberg AFB (5 sites) | Yes | Yes | | Federal | Yes |

C. Ventura County

| Coastal Mgmt. Area ¹ | Nest Site ² | Management Activity Reported for 2016 ³ | Minimum of 20 Nesting Pairs Reported for 2016 | Minimum of One Fledgling per Pair for 2016 | Type of Ownership ⁴ | Secure site with min of 20 pairs? ⁵ |
|---------------------------------|---|--|---|--|--------------------------------|--|
| E | Santa Clara River / McGrath State Beach | Yes | Yes | | State | Yes |
| F | Ormond Beach | Yes | | | County | |
| | Hollywood Beach | | | | State | |
| F | NBVC Pt Mugu (4 sites) | Yes | Yes | | Federal | Yes |

D. Los Angeles County

| Coastal Mgmt. Area ¹ | Nest Site ² | Management Activity Reported for 2016 ³ | Minimum of 20 Nesting Pairs Reported for 2016 | Minimum of One Fledgling per Pair for 2016 | Type of Ownership ⁴ | Secure site with min of 20 pairs? ⁵ |
|---------------------------------|--|--|---|--|--------------------------------|--|
| G | Venice Beach | Yes | | | County | |
| G | Playa del Rey | - | - | - | UNK | |
| H | L.A. Harbor / Pier 400 / Terminal Island | Yes | Yes | | Port | Yes |
| I | Cerritos Lagoon | - | - | - | UNK | |

E. Orange County

| Coastal Mgmt. Area ¹ | Nest Site ² | Management Activity Reported for 2016 ³ | Minimum of 20 Nesting Pairs Reported for 2016 | Minimum of One Fledgling per Pair for 2016 | Type of Ownership ⁴ | Secure site with min of 20 pairs? ⁵ |
|---------------------------------|--|--|---|--|--------------------------------|--|
| J | Surfside Beach | - | - | - | UNK | |
| J | Seal Beach NWR / NASA Island / Anaheim Bay | Yes | Yes | | Federal | Yes |
| K | Bolsa Chica ER | Yes | Yes | | State | Yes |
| L | Huntington State Beach | Yes | Yes | | State | Yes |
| | Burris Sand Pit | Yes | | | Utility | |
| M | Upper Newport Bay ER | Yes | | | State | |
| | Anaheim Lake | | | | | |

F. San Diego County

| Coastal Mgmt. Area¹ | Nest Site² | Management Activity Reported for 2016³ | Minimum of 20 Nesting Pairs Reported for 2016 | Minimum of One Fledgling per Pair for 2016 | Type of Ownership⁴ | Secure site with min of 20 pairs? ⁵ |
|---------------------------------------|---|--|--|---|--------------------------------------|---|
| N | MCBCP - San Mateo Creek | - | - | | Federal | |
| | MCBCP - Red Beach | | | | Federal | |
| N | MCBCP - White Beach (Aliso Creek) | Yes | Yes | | Federal | Yes |
| N | MCBCP - North Beach North | Yes | Yes | | Federal | |
| N | MCBCP - North Beach South | Yes | Yes | | Federal | Yes |
| | MCBCP - Saltflats | Yes | | | Federal | |
| | MCBCP - Saltflats Island | Yes | | | Federal | |
| O | Buena Vista Lagoon | - | - | - | State | |
| P | Agua Hedionda Lagoon | - | - | - | State | |
| Q | Batiquitos Lagoon ER (3 sites) | Yes | Yes | | State | Yes |
| R | San Elijo Lagoon ER | Yes | | | State | |
| S | San Dieguito Lagoon | Yes | | | State, 22 nd Ag District | |
| T | Los Penasquitos Lagoon | - | - | - | State | |
| U | Mission Bay - FAA Island | Yes | Yes | | State Owned-leased to FAA | Yes |
| U | Mission Bay - North Fiesta Island | Yes | | | City | |
| | Mission Bay - Mariner's Point | Yes | Yes | | City | Yes |
| U | Mission Bay - Stony Point | Yes | | | City | |
| | Mission Bay - San Diego River Mouth | Yes | | | City | |
| U | Mission Bay - South Shores | - | - | - | City | |
| U | Mission Bay - <i>Cloverleaf</i> | - | - | - | City | |
| V | San Diego Bay <i>Naval Training Center</i> | Yes | Yes | | Port | |
| V | San Diego Bay Lindbergh Field (San Diego International Airport) | Yes | Yes | | Port | Yes |

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| Coastal Mgmt. Area ¹ | Nest Site ² | Management Activity Reported for 2016 ³ | Minimum of 20 Nesting Pairs Reported for 2016 | Minimum of One Fledgling per Pair for 2016 | Type of Ownership ⁴ | Secure site with min of 20 pairs? ⁵ |
|---------------------------------|--|--|---|--|--------------------------------|--|
| V | San Diego Bay NBC North Island | Yes | Yes | | Federal | Yes |
| V | San Diego Bay NBC Delta Beach North | Yes | Yes | | Federal | Yes |
| | San Diego Bay NBC Delta Beach South | Yes | Yes | | Federal | Yes |
| | San Diego Bay NBC NAB Ocean | Yes | Yes | | State- leased to Navy | Yes |
| V | San Diego Bay Sweetwater Marsh Unit NWR | Yes | Yes | | Federal/Port | Yes |
| V | San Diego Bay South San Diego Bay Unit NWR | Yes | | | Federal | |
| V | San Diego Bay Chula Vista Wildlife Reserve | Yes | Yes | | Port | Yes |
| V | San Diego Bay <i>Coronado Cays</i> | - | - | | Private/Port | |
| | San Diego Bay Silver Strand State Beach | - | - | | State | |
| W | San Diego Bay Tijuana Estuary NERR | Yes | Yes | | State & Federal | Yes |

- 1 For the Coastal Management Area column, we use the capital letters as used in the Recovery Plan to distinguish different nesting areas. Blank cells indicate nesting sites that were not identified at the time of listing, and therefore, not included in Coastal Management Areas. Sites outside of coastal management areas (Sacramento, Kings, and Imperial Counties) not included.
- 2 Italicized nest sites are those identified in the recovery plan as essential, but have since become unsuitable for California least tern nesting or have been abandoned for decades.
- 3 Management Activity includes control of vegetation, protective measures against anthropogenic disturbance, chick shelters, or predator control.
- 4 UNK indicates an absence of data.
- 5 Secure nest site defined as site where “land ownership and management objectives are such that future habitat management for the benefit of least terns at those locations can be assured”, plus minimum of 20 breeding pairs in 2016.
- 6 Blank and dashed cells represent “No” in columns related to management activity, minimum number of 20 nesting pairs reported, minimum number of one fledgling per pair reported, and secure sites with a minimum of 20 pairs. In addition, the dash (-) indicates that nesting has not occurred within the last 5 years at that site.
- 7 Thirteen Coastal Management Areas contained at least 1 secure (as defined in the 1985 Recovery Plan) nest site managed to conserve California least terns, occupied by a minimum of 20 breeding pairs in 2016: Coastal Management Areas A, D, E, F, H, J, K, L, N, Q, U, V, and W. Integrating new nest sites established since 1985 brings the total number of Coastal Management Areas occupied by at least 1 nest site with 20 breeding pairs (in 2016) to 16 (adding Hayward Regional Shoreline, Napa Sonoma Marsh Wildlife Area, and Oceano Dunes).

Recovery Activities in Mexico

Since listing, California least tern nesting sites in Mexico have been identified (Zuria and Mellink 2002, p. 617), monitored, and mapped (Palacios 2018). Human disturbance and predator impacts continue to threaten California least terns nesting in Mexico; however, efforts to protect and manage nesting sites have begun, as evidenced by efforts to protect nests from flooding by elevating them (Palacios 2018, p. 1; Amador *et al.* 2008, p. 1), site fencing in 2018 at Punta Banda (supported with CDFW grant), and other education and protection programs conducted by individuals and non-government organizations (Zuria and Mellink 2002 p. 617). Although there are some locations that have educational outreach about protecting California least terns, additional, unimplemented recovery actions remain (e.g., fencing, outreach and education, monitoring).

Five-factor Analysis

The following five-factor analysis describes and evaluates the threats attributable to one or more of the five listing factors outlined in section 4(a)(1) of the Act. When the California least tern was first listed under the Endangered Species Preservation Act of 1966, and then under the Endangered Species Conservation Act of 1969 and the Endangered Species Act of 1973, there was no threats analysis because at that time, there was no statutory requirement to do an analysis of the five-factors. Thus, when we conducted the 2006 5-year review, the first status review conducted since 1991, we focused on summarizing all historical threats information gathered since that time, as based on older monitoring reports and the 1985 Recovery Plan. This 5-year review focuses primarily on information published since the 2006 5-year review and the 2014 Species Report. As the wintering range of California least terns is poorly defined, we do not discuss potential threats in the wintering range.

FACTOR A: Present or Threatened Destruction, Modification, or Curtailment of Habitat or Range

In this analysis, we distinguish between destruction of nesting habitat, which permanently renders habitat unsuitable for nesting, and degradation of habitat, which reduces the suitability or quality of nesting habitat, but might be reversible with active management. At the time of listing, scientists recognized destruction and degradation of nesting habitat as two of the primary threats facing the California least tern at its 15 known nesting sites (Longhurst 1969, pp. 3–4; Craig 1971, p. 3). Since listing, habitat at five historical nesting areas was destroyed by urban development, including San Gabriel River and Reeves Field in Los Angeles County, and Huntington Harbor in Orange County (Bender 1974a, p.13; Atwood *et al.* 1977, p. B-7; Collins 1987, p. 7). Both destruction and degradation of least tern nesting habitat were considered threats in the 2006 5-year review and continue to threaten tern habitat today. Additionally, climate change and resulting sea level rise which were not considered in previous status reviews will impact California least tern nesting habitat (see below).

Development

At the time of listing, urban development was identified as one of the primary threats to California least tern nesting habitat, because few protections were in place to preserve this

habitat and urbanization and development were underway along the California coast. Decreasing habitat availability has been linked with observed declines in the California least tern and in other least tern subspecies (Massey 1974, pp. 1–2; Fisk 1975, p. 1; Galli 1979, p. 96). Reduced nesting habitat availability has likely affected the nesting distribution of least terns, which resulted in larger, more concentrated least tern colonies, where risk of predation by some species is greater (Brunton 1999, p. 612). Therefore, any further loss of California least tern nesting habitat could increase the risk of further declines in numbers of breeding pairs.

Today, the majority of California least tern nesting habitat is on public lands. Of these public lands, a subset of these are under Federal ownership (e.g., habitat on military bases) where Department of Defense (DOD) provides management oversight and increased protection through current Integrated Natural Resource Management Plans (INRMPs) and Memoranda of Understanding (MOUs) (more information on protections afforded by these documents is discussed in **FACTOR D**). In total, 25 of the 29 (86 percent) currently occupied nesting areas are protected by local, State, and Federal law (Appendix A). Only a few colonies (Sacramento Bufferlands, Hollywood Beach, Anaheim Lake, and Salton Sea) lack habitat protection measures to ensure future availability of the colonies for breeding terns. These sites represent a small fraction of the nesting least tern population.

Although a significant proportion of the least tern nesting population is currently found in only a few large sites, even small and infrequently used colonies can be crucial for the success of nesting California least terns. Though California least terns exhibit a high degree of nest site fidelity, individuals or an entire colony may abandon a nest site in response to heavy predation and re-nest at another nearby nest site (Atwood and Massey 1988, p. 392; Massey and Fancher 1989, pp. 353–355; Jurek 1992, p. 7; Caffrey 1994, p. 5). Movement between sites may be effective in discouraging the habituation of predators to a site. Shifting California least tern use patterns likely associated with behavioral response to predation or changing conditions on nest sites has been observed in recent years. For example, researchers report that nesting pairs frequently move between Naval Air Station North Island and Lindberg Field, in North San Diego Bay, likely selecting the site that has the most favorable conditions at any given point in time. Similarly, the number of least terns nesting at MCBP dropped significantly during 2017 when the site was faced with severe predator (coyote) pressure and in the following days and weeks, the number of least terns nesting at the closest nest site (Baticuitos Lagoon) rose significantly. Availability of multiple managed nest sites in Mission Bay has allowed California least terns to shift between sites, apparently in response to predator presence. For example, when California least terns abandoned North Fiesta Island in 2004, reportedly to avoid predation by a peregrine falcon using the site, the San Diego River Mouth was colonized, which suggests that the terns moved (Marschalek 2006, pp. 16–17). In 2006, the terns abandoned the San Diego River mouth and Mariner’s Point reportedly due to predation by crows, ravens, and rats; this abandonment coincided with the first nesting reported at Stony Point since 1976, and increased use of North Fiesta Island (Marschalek 2007, pp. 16–17). Availability of unoccupied nesting sites has also been important to California least terns outside of the San Diego area. In 2012, when American kestrels and peregrine falcons were frequently present at the Alameda Point least tern colony, many California least terns pairs are believed to have relocated to Hayward Regional Shoreline (Euing 2012, pers. obs.). In 2013, in response to heavy predation pressure at Point Mugu, several hundred pairs of California least terns relocated to the nearby Hollywood Beach nest site.

California least terns may also relocate to new suitable sites or previously abandoned sites. For example, discovery of California least tern nest sites at Hayward Shoreline (southern San Francisco Bay) and Montezuma Wetlands (northern San Francisco Bay) in 2006 coincided with predation by burrowing owls and subsequent temporary abandonment of Alameda Point (Euing 2007a, pers. obs., 2007b, pers. obs.). Efforts to restore nesting habitat and re-establish least tern nesting in San Dieguito Lagoon had a small measure of success in 2013, when three pairs of least terns nested on created nest sites- the first nesting reported in San Dieguito Lagoon since 1992 (Massey 1975, p. A-7; Caffrey 1993, p. 21; Frost 2014, Table 1). Least terns also recently colonized habitat at Malibu Lagoon in 2017. Thus, having multiple sites with suitable nesting habitat that are secure from development—even if not always occupied—will reduce the magnitude of threats posed by habitat loss and predation (see **FACTOR C** for more information on predation).

In 2017, 25 of 29 currently occupied nesting areas occur on lands currently protected from development by local, State, and Federal law (see **FACTOR D** for more information on site protections). Four of these sites (Naval Amphibious Base (NAB) Coronado, MCB Camp Pendleton, NBVC Point Mugu, and Vandenberg Air Force Base (AFB)) occur on military lands, where conservation measures have been achieved through INRMPs and Biological Opinions (BOs) for protection of the least terns. Although habitat destruction has the potential to threaten the continued existence of the California least tern, the threat is currently alleviated by protections already in place for least tern nesting habitat.

As discussed above, data are limited on California least tern nesting on the Baja California Peninsula. Though some known least tern nesting sites are within protected areas (such as Ensenada de la Paz), other nesting sites that could contribute to the resiliency of the species have various levels of protection. Coastal development is a concern along the peninsula, as the development of planned desalinization facilities will enable increased development in areas previously unsuitable due to lack of water (Palacios 2018). However, the magnitude of the threat of habitat destruction in Mexico is uncertain.

Habitat Modification Due to Encroaching Vegetation

Encroaching vegetation continues to modify California least tern nesting habitat at 19 of 29 (66 percent) currently occupied nesting areas (Appendix A). As discussed in the Habitat or Ecosystem section above, many current California least tern nest sites in the United States are small and largely removed from the natural disturbance regimes that prevent or limit plant growth. Though sparse or low-lying vegetation can be used by chicks for shade or shelter (Thompson and Slack 1982, p. 165; Burger and Gochfield 1990, p. 38), terns will avoid or abandon areas with dense or tall vegetation as it has the potential to conceal predators (Burger and Gochfeld 1990, p. 38; Mazzocchi and Forsys 2005, p. 74). Currently, multiple sites throughout the U.S. breeding range of the California least tern face impacts from vegetation.

The threat of encroaching vegetation has been decreased through pre-breeding season nesting site preparation. At many sites, this involves vegetation removal prior to the nesting season (Frost 2017, Appendix B-1). This necessary management is identified in INRMPs (for sites on military installations), in BOs and in Habitat Conservation Plans (HCPs). For example, the HCP for the City of San Diego, known as the City of San Diego Subarea Plan under the MSCP

(Multiple Species Conservation Plan) recommends vegetation management at sites under its ownership, and recommends measures to reduce edge effects that could degrade nesting habitat (City of San Diego 1997, p. 160). Many additional sites implement vegetation management on a yearly basis through local funding.

Lack of funding, lack of personnel, or contractual delays sometimes hinder pre-breeding season site preparation. For example, FAA Island is a dredge spoil site, and requires intensive management to maintain conditions conducive to nesting. Although CDFW had managed the site for several years, limitations on personnel and budgetary constraints precluded CDFW efforts from 2007 to 2012. In the absence of consistent management, the island became overgrown with predominantly nonnative vegetation, and tern numbers declined. If funding and/or personnel are not directed towards site preparation, many areas within the range of the species could become unsuitable to nesting. Therefore, vegetation encroachment at 19 of 29 occupied nesting areas remains a serious concern that could be significantly reduced by active management directed at pre-breeding season site preparation.

Today, several California least tern nest sites in Mexico still occur in coastal beach areas with natural sand transport systems. We were unable to find any reports of nest sites being rendered unsuitable through encroachment of vegetation. Therefore, based on the best available information, we do not expect encroachment of vegetation to pose a threat to least tern nesting habitat in Mexico in the immediate future. However, given the potential for development in some of these areas (which carries the risk of introduction of exotic vegetation); it is something that should be considered in future reviews.

Climate Change

A growing concern for the California least tern since the completion of the 2006 5-year review is impacts to the habitat resulting from climate change. The terms “climate” and “climate change” are defined by the Intergovernmental Panel on Climate Change (IPCC). “Climate” refers to the mean and variability of different types of weather conditions over time and the term “climate change” refers to a change in the mean or variability of one or more measures of climate (for example, temperature or precipitation) that persists for an extended period, whether the change is due to natural variability or human activity (IPCC 2013a, p. 1450).

Scientific measurements spanning several decades demonstrate that changes in climate are occurring, and that the rate of change has been faster since the 1950s. Examples include warming of the global climate system, substantial increases in precipitation in some regions of the world, and decreases in other regions (for these and other examples, see Solomon *et al.* 2007, pp. 35–54, 82–85; IPCC 2013b, pp. 3–29; IPCC 2014, pp. 1–32). Results of scientific analyses presented by IPCC show that most of the observed increase in global average temperature since the mid-20th century cannot be explained by natural variability in climate, and is “very likely” (defined by the IPCC as 90 percent or higher probability) due to the observed increase in greenhouse gas concentrations in the atmosphere as a result of human activities, particularly carbon dioxide emissions from use of fossil fuels (Solomon *et al.* 2007, pp. 21–35; IPCC 2013b, pp. 11–12 and figures SPM.4 and SPM.5).

Scientists use a variety of climate models, which include consideration of natural processes and variability as well as various scenarios of potential levels and timing of greenhouse gas emissions, to evaluate the causes of changes already observed and to project future changes in temperature and other climate conditions (e.g., Meehl *et al.* 2007, entire; Ganguly *et al.* 2009, pp. 11555, 15558; Prinn *et al.* 2011, pp. 527, 529). All combinations of models and emissions scenarios yield very similar projections of increases in the most common measure of climate change, average global surface temperature (commonly known as global warming), until about 2030. Although projections of the magnitude and rate of warming differ after about 2030, the overall trajectory of all the projections is one of increased global warming through the end of this century, even for the projections based on scenarios that assume that greenhouse gas emissions will stabilize or decline. Thus, there is strong scientific support for projections that show warming will continue through the 21st century, and that the magnitude and rate of change will be influenced substantially by the extent of greenhouse gas emissions (Meehl *et al.* 2007, pp. 760–764, 797–811; Ganguly *et al.* 2009, pp. 15555–15558; Prinn *et al.* 2011, pp. 527, 529; IPCC 2013b, pp. 19–23). See IPCC 2013b (entire), for a summary of other global projections of climate-related changes, such as frequency of heat waves and changes in precipitation.

Pierce *et al.* (2013) used different methods to produce downscaled climate change models for California, using climate data from the period of 1985 to 1994, and predicted future temperature and precipitation changes for the future period of 2060 to 2069. The models suggest that by the 2060s, average State temperatures could increase 2.4 degrees Celsius (°C) with coastal temperatures rising about 1.9°C and inland areas warming almost 2.6°C. Increased temperatures will be more pronounced during the summer (June–August) compared to the winter (December–February) (Pierce *et al.* 2013, p. 844). In addition to temperature increases, the models predict a small annual decrease in precipitation in southern California and a negligible decrease in the north; however, precipitation patterns between seasons will be much more pronounced. Northern California is predicted to have wetter conditions in the winter with drier conditions during the rest of the year. In contrast, the southern portion of the state will experience a decrease in precipitation in every season except the summer, when projections show an increase in the amount of precipitation (Pierce *et al.* 2013, pp. 848–850). Precipitation projections also suggest there will be increased chances of flooding due to an increase in the 3-day maximum precipitation rate, especially in the northern portion of the State. It should be recognized that the projected seasonal changes are relatively small when compared to the State’s natural variability (Pierce *et al.* 2013, p. 855).

Although many species already listed as endangered or threatened may be particularly vulnerable to negative effects related to changes in climate, we also recognize that, for some listed species, the likely effects may be positive or neutral. In any case, the identification of effective recovery strategies and actions for recovery plans, as well as assessment of their results in 5-year reviews, should include consideration of climate-related changes and interactions of climate and other variables. These analyses also may contribute to evaluating whether an endangered species can be reclassified as threatened, or whether a threatened species can be delisted.

Global sea level rise due to climate change could pose a threat to California least tern nesting areas. Most nesting areas are found on low-lying areas along estuaries or ocean beaches (i.e., southern San Diego Bay, MCB Camp Pendleton, Batiquitos Lagoon, Mission Bay, NBVC Point Mugu, Bolsa Chica, and Tijuana Estuary National Estuarine Research Reserve (NERR)).

Given that water expands as its temperature increases, sea-surface elevation can experience a corresponding rise as global temperatures increase (Karl *et al.* 2009, p. 18). Increased global temperatures have contributed to an accelerated decline in Arctic sea ice, further increasing sea levels across the globe (Comiso *et al.* 2008, pp. 3, 6). Researchers recorded increased sea surface temperatures of 0.8°C (1.4 degrees Fahrenheit) to a depth of 100 m (328 ft) along the coast of southern California between 1950 and 1992 (Roemmich 1992, p. 373). A persistent sea level rise of 10 to 20 cm (4 to 8 in) was detected over the past century off the California coast (Moser and Tribbia 2007, pp. 35–36 and Figure 1) and of 0.9 mm (0.04 in) a year between 1950 and 1992 off the coast of southern California (Roemmich 1992, p. 374 and Figure 2(A)). Tide gauge analyses indicate that Global Mean Sea Level rose at a rate of about 3 mm/year (0.12 inches/year) since 1993, a result supported by satellite data indicating a trend of 3.4 ± 0.4 mm/year (0.13 ± 0.02 inches/year) over 1993–2015 (Sweet *et al.* 2017, p. 339). Sea level rise is projected to continue with a global average increase of 0.9–1.6 m (3–5.2 ft) by 2100 (AMAP 2011, p. 11). Regionally specific climate models predict a similar level of rise along the California coast of 1.0–1.4 m (3.3–4.6 ft) by 2100 (CCCC 2009a, p. 8). A summary of climate change findings by Point Reyes Bird Observatory predicts a smaller increase, of 0.1–0.72 m (0.33–2.4 ft) across several models (PRBO 2011, pp. 37, 41).

In the past five years (2012–2016), loss of California least tern nests and eggs has been attributed to flooding at nine nest sites in the United States (Frost 2013, Appendix B–5; Frost 2014, Appendix B–5; Frost 2015, Appendix B–5; Frost 2016, Appendix B–5; Frost 2017, Appendix B–5). Those sites included Santa Clara River, NBVC Point Mugu, Bolsa Chica, MCB Camp Pendleton, Batiquitos, Lindbergh Field, Saltworks, Naval Base Coronado, and Tijuana Estuary. Of these sites, NBVC Point Mugu and MCB Camp Pendleton experienced the highest loss of nests due to flooding. During the 2015–2016 winter, several severe high tide and flooding events occurred at NBVC Point Mugu. This recontoured sections of the beach and made nesting areas more prone to flooding. During the 2016 nesting season, 56 nests at Point Mugu were lost to flooding (Frost 2017, Appendix B–5). In 2016, MCB Camp Pendleton lost 42 nests, primarily at White Beach and Blue Beach (Frost 2017, Appendix B–5). In Mexico, flooding of nest sites is known to cause nest failure (Amador *et al.* 2008, p. 272; Palacios 2008, unpublished data), though the numbers lost each year are poorly understood due to infrequent survey efforts.

Future Threat of Sea Level Rise

Based on current climate predictions, the amount of habitat impacted by sea level rise is expected to increase in coming decades. A study by the California Climate Change Center (CCCC) predicted specific sea level rise within San Diego County. The study projected a rise of 0.31–0.46 m (1.0–1.5 ft.) by 2050, which would result in beach loss (CCCC 2009b, pp. 14, 16–18). These studies project that rising tides could impact areas currently used by nesting California least terns, including Tijuana Estuary, multiple sites at Naval Air Station (NAS) Coronado, and breeding sites at the San Diego Bay NWR. Loss of California least tern breeding habitat in San Diego County, which has the largest portion of least terns in the State (see Figure 2 above), could have a significant detrimental impact on California least tern productivity and on availability of nest sites.

In order to assess the future threats of sea level rise on the California least tern, we first mapped nesting sites that were occupied between 2013–2017. Then we analyzed the potential loss of

nesting habitat under various scenarios of sea level rise at 2050 (a 30-year timeframe) and at 2080 (a 60-year timeframe). We selected the levels of sea level rise based on recent projections outlined in the State of California Sea-Level Rise Guidance document (COPC 2018). Since San Diego supports the largest tern nesting sites and is central to the overall nesting range of the species, we selected recent sea level rise projections for that area as a basis for our analysis (COPC 2018, Table 34, p. 38). For 2050, we analyzed a 1-foot sea level rise (a scenario that was captured by the upper end of the range where inundation was considered likely in that 30-year timeframe) and a 2-foot rise (which represented inundation that had a 1-in-200 chance of occurring in that 30-year timeframe). For 2080, we analyzed a 3-foot sea level rise (again, the scenario represented by the upper end of what was defined as likely in the 60-year timeframe) and 5-foot rise (representing a 1-in-200 chance of inundation in that longer timeframe). Therefore, for each nesting site in California, we analyzed the potential loss of nesting habitat at 1- and 2-foot sea level rise for 2050, and 3- and 5-foot sea level rise representing 2080. Results from this analysis are detailed in Table 2 and Appendix B.

In order to visualize and understand potential impacts of sea level rise to California least tern nesting habitat, we used the Sea Level Rise and Coastal Flooding Impacts Viewer, developed by the National Oceanic and Atmospheric Administration's (NOAA's) Office for Coastal Management (NOAA 2017). This tool offers access to data and information about the risks of sea level rise, storm surge, and flooding along the coastal U.S., including California. The NOAA data show the modeled extent and relative depth of inundation from 0 to 6 feet above the mean higher high water mark (MHHW), as well as confidence levels representing the known error in the elevation data and tidal corrections. Areas are assigned a high confidence of inundation, a low confidence of inundation, or a high confidence that these areas will not be inundated (i.e., remain dry) given the chosen water level represented by the scenario and time frame discussed above. A high degree of confidence was assigned to the results for locations that may be correctly mapped as "inundated" or "not inundated" at least 8 out of 10 times (i.e., 80 percent). A low degree of confidence was attributed to locations that may be mapped correctly (either as inundated or dry) fewer than 8 out of 10 times. In this analysis, we calculated the amount of inundation probability using both the high confidence (80 percent inundated or not *inundated*) and the low confidence (20–80 percent) levels that fell in between (Appendix B). However, we only categorized probabilities of impacts to nesting areas based on results for inundation with high confidence (80 percent) at the MHHW using 1- and 2-foot sea level rise projections for 2050, and 3- and 5-foot sea level rise projections for 2080 (Appendices C and D).

Table 2. Summary of impacts to California least tern nesting sites in the United States at sea level increases considered likely in 2050 and 2080.

A. 1-ft Sea Level Rise (2050)

| Probable Inundation | Number of nesting sites | Total acres at sites | Percent of total CLT habitat (1,204 ac) |
|---------------------|-------------------------|----------------------|---|
| None (<1%) | 24 | 643 | 53.4% |
| Minimal (1–20%) | 7 | 248 | 20.6% |
| Moderate (21–50%) | 5 | 132 | 10.9% |

| Probable Inundation | Number of nesting sites | Total acres at sites | Percent of total CLT habitat (1,204 ac) |
|----------------------|-------------------------|----------------------|---|
| Significant (51–99%) | 2 | 178 | 14.8% |
| Complete (100%) | 2 | < 1 | 0.1% |

B. 3-ft Sea Level Rise (2080)

| Probable Inundation | Number of nesting sites | Total acres at sites | Percent of total CLT habitat (1,204 ac) |
|----------------------|-------------------------|----------------------|---|
| None (<1%) | 18 | 418 | 34.7% |
| Minimal (1–20%) | 10 | 358 | 29.8% |
| Moderate (21–50%) | 5 | 131 | 10.9% |
| Significant (51–99%) | 4 | 117 | 9.7% |
| Complete (100%) | 3 | 177 | 14.7% |

Impacts to Specific Nesting Sites

Although nesting sites for the California least tern are dispersed along the California coast and Baja California Peninsula, the majority of nesting occurs at a handful of sites, including MCB Camp Pendleton, NAB Coronado, Batiquitos Lagoon, Alameda, and Huntington State Beach. Therefore, it is particularly important to understand the potential impact to these specific sites from sea level rise.

MCB Camp Pendleton

2050 Timeframe: Based on the projections for the 1-foot rise in sea level and resulting inundation, impacts to nesting areas on MCB Camp Pendleton range from none (Red Beach and White Beach South), to minimal (Salt Flats and White Beach North (1 percent)), to moderate (Blue Beach (32 percent)). Based on the projections of a 2-foot rise in sea level and resulting inundation, impacts to nesting areas on MCB Camp Pendleton range from none (White Beach South; 0 percent), to minimal (White Beach North (4 percent), Red Beach (2 percent), Salt Flats (8 percent)) to moderate (Blue Beach (37 percent) (Appendix B).

2080 Timeframe: All nesting sites on MCB Camp Pendleton will be impacted to some degree with a 3-foot or a 5-foot level sea rise. Impacts to nesting areas range from minimal (White Beach North (6 percent at 3 feet or 17 percent at 5 feet), White Beach South (3 percent at 3 feet or 15 percent at 5 feet), Red Beach (5 percent at 3 feet or 14 percent at 5 feet)) to moderate (Blue Beach in the 3-foot scenario (42 percent)) to significant (Salt Flats (51 percent at 3 feet or 93 percent at 5 feet), Blue Beach (62 percent at 5 feet)) (Appendices B and C). In 2016, the majority of the nests (804) and nesting pairs (778) were documented at Blue Beach (Frost 2017,

Table 1). Of the approximately 89-acre nesting site at Blue Beach, 37 to 55 acres are projected to be inundated. The adjacent Salt Flat nesting area (111.72 ac) will be halfway to almost entirely inundated and unavailable for nesting (Appendix D). Although some nesting habitat will remain at the Blue Beach site, terns will need to shift to other nesting areas on MCB Camp Pendleton such as White Beach (51.13 ac currently) and Red Beach (7.54 ac currently). These sites, however, are smaller than Blue Beach and will be even more reduced in size in 2080 with sea level rise. The ability of these sites to support the majority of nesting pairs on MCB Camp Pendleton is uncertain and of concern.

NAS North Island/NAB Coronado

2050 Timeframe: Based on the 1-foot sea level rise and associated inundation, there will be no (NAS North Island and NAB Delta beaches) or minimal impacts (NAB Oceans (9 percent)). Based on the projections of a 2-foot rise in sea level and resulting inundation, impacts to these nesting areas range from none (NAS North Island) to minimal (NAB Delta Beaches (3 percent), NAB Oceans (13 percent))(Appendices B and C). In light of the projected amount of inundation, terns will likely be minimally impacted by a 1- or 2-foot rise in sea level over the next 30 years and will be able to continue to nest at these important sites.

2080 Timeframe: With a 3- or 5-foot level sea rise, impacts to nesting areas range from none (NAS North Island), to minimal (Delta Beaches (5 percent at 3 feet or 18 percent at 5 feet), NAB Oceans (15 percent at 3 feet)), to moderate (Oceans (22 percent at 5 feet))(Appendices B and C). Of the nesting habitat currently available at Delta (46.92 ac) and Oceans (109.45 ac), 2.35 ac and 16.42 ac are projected to be inundated in the 3-foot scenario and 8.42 ac and 23.57 ac, respectively, are projected to be inundated in the 5-foot scenario. Although the impacts increase at the 2080 timeframe, the majority of the nesting habitat will still be available for terns at these sites.

Batiquitos Lagoon

2050 and 2080 Timeframe: Based on the projections, there is high confidence that the nesting sites will not be impacted at the 1-, 2- (both 2050 projections) and 3-foot (2080 projection) inundation levels and only minimally impacted at the 5-foot inundation in 2080 (1 percent) (Appendices B and C).

Alameda

2050 and 2080 Timeframe: Based on the projections of a 1- or 2-foot (in 2050) and 3-foot (2080) rise in sea level rise, there is high confidence that the nesting sites will not be impacted. In the event of a 5-foot sea level rise in 2080, the nesting area will be only minimally impacted (2 percent) (Appendices B and C). We therefore expect that terns will be able to nest at this site into the future.

Although we are basing our analysis on the high confidence (80 percent) levels, it is important to note that there is a high degree of uncertainty associated with a 5-foot rise in sea level for this site in the 20–80% confidence interval. Should that level of inundation occur (though unlikely), the loss of up to 39% of nesting habitat could result.

Huntington State Beach

2050 and 2080 Timeframe: Based on the projections for all sea level rise scenarios, there is high confidence that the nesting sites will not be impacted in 2050 nor in 2080 (Appendices B and C). We therefore expect that terns will be able to nest at this site into the future. However, it is important to note that there is a high degree of uncertainty associated with a 5-foot rise in sea level for this site at the 20–80 percent confidence level. Should that level of inundation occur (though unlikely), the loss of up to 32 percent of nesting habitat could result.

Under natural conditions, nesting sea or shorebirds would relocate to higher or more inland areas. However, adaptation by California least tern to rising sea level is restricted by existing development and high recreational, economic, or military usage of areas proximal to nest sites (Moser and Tribbia 2007, p. 38). While the current constraints associated with existing uses is known, what we cannot anticipate are the specifics in regard to whether and how much these uses may change with the changes associated with sea level rise. Therefore, though inundation is currently only impacting a small percentage of nesting habitat, it could become a significant threat to the species within the future, particularly at key sites like MCB Camp Pendleton. The magnitude of this threat depends on the future climate of California, as discussed in **FACTOR E**, and whether or to what extent management of nest sites or identification of new nesting sites can minimize the impact.

Summary of Future Threat of Sea Level Rise

We analyzed the potential loss of nesting habitat at 1- and 2-foot sea level rise for 2050, and 3- and 5-ft sea level rise for 2080 for each nesting site in California. The more likely scenario is a 1-ft rise in sea level by 2050 and a 3-ft rise by 2080. Results from this analysis suggest that the majority of nesting sites will not be inundated at the 1-ft and 3-ft predictions. A total of 31 of the 40 nest sites (74 percent of habitat) may be up to 20 percent inundated at the 1-ft level, compared to 28 of 40 nest sites (64.6 percent of habitat) at the 3-ft level. This means that 26 percent of habitat at 1-ft and 35.4 percent at 3-ft is more than 20 percent inundated by 2050 and 2080, respectively. Under this scenario there is likely to be ongoing loss of habitat in the future, though the majority of existing nesting sites are not likely to be severely inundated over the next 60 years. More information for both scenarios can be found in Appendices C and D.

Summary of Factor A

Development of nesting habitat, encroaching vegetation, and rising sea levels contribute to the destruction, modification, and curtailment of suitable nesting habitat of the California least tern. However, the magnitude of threats attributed to development of nesting habitat and encroaching vegetation has decreased since the time of listing, and has remained relatively constant since the 2006 5-year review. The majority of currently occupied nesting areas are currently afforded protection through management actions through coordinated efforts with our partners and are implemented through ongoing management plans (i.e., INRMPs) and MOUs (Appendix A). These management activities have helped to reduce threats currently affecting California least terns, such as threats from encroaching vegetation and development of nesting habitat. Therefore, we do not consider development or habitat modification due to encroaching vegetation to be significant threats at this time. Rising sea levels as a result of climate change do not pose significant threats to low lying nesting areas across the range of the species in United

States and Mexico in the short term, at least based on current and near-term modeling. However, rising sea levels could pose a significant threat in the longer-term future by limiting the amount of available California least tern nesting habitat and potentially changing the way anticipated uses affect that amount of habitat.

FACTOR B: Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

The California least tern's historical decline has been partially attributed to use of the species' feathers for hat production (i.e., millinery) during the early 1900s (Fisk 1975, p. 1; USFWS 1985b, p. 20; Birdsall 2002, p. 1). However, a number of factors worked together to end this threat: protection of the species under the Migratory Bird Treaty Act of 1918, a change in the use of wild-killed feathers in millinery, and a change of fashion (Birdsall 2002, p. 1). In California, scientists are continually conducting research and performing recovery efforts through USFWS-issued 10(A)(1)(a) recovery permits. Federal recovery permits contain provisions to minimize and mitigate impacts to California least terns. Given these protections, these research activities are not posing a threat to the California least tern. Additionally, we are not aware of any substantive threats under this factor to the species within Mexico. Therefore, we have no information to suggest that overutilization is currently a threat to California least tern throughout its range, nor that it is likely to become a threat within the foreseeable future.

FACTOR C: Disease or Predation

At the time of listing, nest predation was considered a significant threat to the California least tern, and a major cause of nest failure. Despite multiple predation management strategies in place at the time of the 2006 5-year review, we found that predation remained a significant threat. Disease was not considered a threat at the time of listing or in the 5-year review.

Disease

Colonial nesting waterbirds with similar life history traits to the California least tern are known to be subject to disease outbreaks (Brand *et al.* 1983, p. 269; Friend 2002, p. 293). The flocking nature of tern species, exacerbated by loss of habitat and the concentration of large numbers of least terns at just a few nesting sites, may increase their vulnerability to disease and mass die-offs (Lafferty and Gerber 2002, p. 595; Lafferty and Holt 2003, p. 663). However, no such die-offs have been documented within the range of the California least tern, nor are we aware of any major die off in any least tern subspecies. Therefore, disease does not seem to be affecting California least terns on a large scale.

Disease may still be affecting California least terns on a smaller scale. Several California least tern deaths due to viruses have been documented since the 2006 5-year review. For example, in 2008 West Nile Virus was detected in a dead California least tern (Foster 2008, pers. comm.). Additionally, necropsy analyses have identified bacteria as the cause of death in several California least terns; pathogens detected included *Vibrio cholera*, *Escherichia coli*, and *Streptococcus* strains (Caffrey 1997, p. 9). The overall disease rate in California least terns is unknown, as few individuals are tested for the presence of disease. Funds for this type of testing are limited, and testing is further complicated because many strands of bacteria are no longer detectable once the body reaches the necropsy site (Foster 1996, p. 59). Nevertheless, some data

are available. Necropsy results of chick and adult carcasses identified bacterial pathogens in three of five individuals examined from MCB Camp Pendleton, in one of one individual examined from NAB Coronado North Island, in two of three individuals examined from Mariner's Point in San Diego Bay, and in one of two individuals examined from Oceano Dunes State Vehicular Recreation Area (Caffrey 1997, p. 9; Marschalek 2007, Appendix B-5).

Despite those results, it is not certain that disease was the cause of death for these California least terns. While emaciated birds may more easily contract bacterial diseases due to poor health, illness due to bacteria may also cause birds to be unable to forage (Foster 1996, p. 58). This may cause the death of the bird to be misdiagnosed, making it appear to have died from inadequate food resources rather than disease (Foster 1996, p. 58). It is therefore difficult to pinpoint the exact cause of some deaths and thus the impact of disease on the California least tern population.

The introduction of West Nile Virus and avian influenza into the range of the California least tern is a cause for concern. Though few specimens are regularly analyzed, we have not seen any evidence of large-scale impact on any tern populations in California or in other parts of the United States. Given the lack of evidence of significant impacts, and the low number of deaths attributable to other viral and bacterial pathogens, disease does not likely pose a threat to the California least tern now or in the future in any portion of its range.

Nest Predation

Nest predation is a natural aspect of the California least tern's breeding ecology. However, nests were historically much more widely scattered and hard for predators to detect (Massey 1974, pp. 17–18). Today, most of the California least tern population is densely packed into relatively small, static, colony sites (average of 5.3 ha (13 ac); median of 3.2 ha (8 ac)). These dense populations with large numbers of birds can be subject to frequent and high levels of predation because they present a large food source concentrated in a small area (Massey and Atwood 1982, p. III–6; Burger 1984, p. 66). Predators can devastate California least tern reproductive success by causing nest failure or abandonment, site abandonment, and mortality (Massey and Fancher 1989, pp. 352–353). Chicks and eggs are the prey of choice; both are vulnerable and provide an easy source of food for invertebrates, rodents, skunks, opossums, raccoons, feral cats, and some species of birds (Marschalek 2010, Table 6). Predation is a rangewide threat that can impact California least terns beyond just direct mortality. Nesting birds exposed to signs of predator presence displayed decreased egg-laying, decreased chick feeding rates, and decreased fledgling success (Zanette *et al.* 2011, pp. 1399–1400). Predator control activities became more intensive after the time of listing. However, predator pressure continued to affect the species, so in the 2006 5-year review we recognized predation as a significant and ongoing threat across the range of the taxon.

At least 54 taxa (33 birds, 18 mammals, 1 reptile, and 2 invertebrates) are known to prey on California least tern eggs or chicks (Marschalek 2009, Table 6; 2010, Table 6). Although the list of known and suspected predators is long, a small number of species pose consistent threats. The northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), burrowing owl (*Speotyto cunicularia*), American crow (*Corvus brachyrhynchos*), loggerhead shrike (*Lanius ludovicianus*), van Rossem's gull-billed tern (*Gelochelidon nilotica vanrossemi*), coyote (*Canis latrans*), peregrine falcon (*Falco peregrinus*), red fox (*Vulpes vulpes*), domestic cat (*Felis catus*), and

old-world rat species (*Rattus* spp.) are the most common predators, and cause the most significant impacts (Fancher 1992, p. 62). These species hone in on a site, move between nests taking eggs or chicks, and return repeatedly until the food supply is reduced to a volume not worth pursuing. These predators can cause significant loss to a California least tern nest site in a matter of hours or days (Fancher 1989, pp. 3–6; Massey *et al.* 1992, pp. 980–981). Examples of such predation events are plentiful and include, but are not limited to:

- One or more American kestrels killed approximately 100 chicks within a week at Venice Beach in 1982 (Massey and Atwood 1982, pp. III-6; Massey *et al.* 1992, p. 980).
- One red fox took eggs from 31 nests at Huntington Beach in just a few days (Fancher 1989, p. 5).
- Gull-billed terns took 10 to 12 chicks at NAB Coronado in a day in 2007 (Copper 2007, pers. comm.).
- A single coyote depredated 260 nests within 10 days at MCB Camp Pendleton in 1999 (Foster 2007, pers. comm.).
- From 2002–2005, and again in 2009, 2011, 2012, 2013, 2015, and 2016 there was zero productivity within the Venice Beach nest site due to disturbance or complete predation of the colony (Ryan and Vigallon 2009, p. 3; Marschalek 2011, Table 1; Marschalek 2012, Table 1; Frost 2013, Table 1; Frost 2014, Table 1; Frost 2016, Table 1; Frost 2017, Table 1).
- Due to lack of predator management in 2017 at MCB Camp Pendleton, 85 percent of the nests were depredated and only 4 fledglings were documented (Murbock 2018).

Development and existing urban sprawl may introduce more predators to proximal nest sites. Populations of native predatory species, such as American crow, common raven (*Corvus corax*), American kestrel, Cooper’s hawk (*Accipiter cooperii*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*), can be artificially high around urban areas and urban interfaces due to their ability to exploit garbage and other food sources attributable to humans (Garrott *et al.* 1993, pp. 946, 948; Bolger *et al.* 1997, pp. 411 and 416). Existing urban development also increases the presence of nonnative predators, such as Virginia opossum (*Didelphis virginiana*), rats, and domestic cats. Furthermore, development and landscaping adjacent to nest sites can introduce predator perches with a line-of-sight into the nest site, thus making nesting California least terns more susceptible to avian predators. Habitat loss and fragmentation resulting from development also decreases the availability of forage habitat for resident predators, and thus increases resident predator concentrations on the small remaining forage habitat, which includes California least tern nest sites. Additionally, as discussed in **FACTOR A**, habitat loss and fragmentation can also affect the impacts predators have on the survival and productivity of California least terns. California least terns often abandon a site for one or more seasons if they sustain heavy losses of eggs, chicks, or adults. Therefore, development and urban sprawl can increase the impacts of predation on California least terns.

Management activities at the majority of nest sites have reduced the magnitude of the threat of predation; however, efforts to implement predator management have become more complicated

by the increased public awareness and efforts to reduce potential effects to sensitive avian predators (see the Predation by Special Status Species below). Additionally, predator management techniques, target species, and effectiveness vary among sites. In 2016, 71 percent of nesting sites had predator management (Frost 2017, p. 14). Predation of California least terns is occurring at all 29 currently occupied nesting areas (Appendix A).

Much of California least tern management is conducted or overseen by Federal action agencies as a result of consultation under section 7 of the Act. Multiple military institutions, including MCB Camp Pendleton, NAB Coronado, and NBVC Point Mugu all provide for predator management at least tern sites they oversee. These management activities include fencing of nest sites, and lethal and non-lethal control of predators. The City of San Diego Subarea Plan under the MSCP also provides important predator management within the plan area (City of San Diego 1997, pp. 159–160).

As a result of predator management at military sites and other areas, California least tern reproductive success and survival increased in the late 1980s and early 1990s, greatly contributing to the overall breeding population (Fancher 1992, p. 62). Initiation of predator control mechanisms at most nest sites in the United States in the late 1980s is associated with an increased rate of population growth (Figure 5) (Fancher 1992, p. 62 and Figure 1). Shwiff *et al.* (2005, p. 285) performed a cost-benefit analysis and found a positive relationship between funds invested in predator management and reproductive success of terns at MCB Camp Pendleton. The numbers of California least tern pairs tripled 6 years after predator management began in 1995 (Shwiff *et al.* 2005, p. 285). Therefore, though high predation levels continue even on managed sites, predator management has resulted in increased California least tern population numbers and higher productivity.

On military-owned lands, predator control has been continuously funded in all years (with the notable exception of MCB Camp Pendleton in 2017), increasing productivity and preventing California least terns from abandoning sites in the middle of the season due to predator pressure. Some contractual delays have resulted in late initiation of predator management efforts in some years. Predator control on all public lands (Table 2) is subject to annual budgets and other State and Federal requirements. The closure of multiple California State Parks, including McGrath State Beach highlights the unpredictability of funding on some public lands (Van Oot 2011, pp. 1–3). Nesting has largely failed at sites that lack predator control (e.g., San Elijo Lagoon). In 2011, contractual delays resulted in the elimination of predator control and site monitoring activities at Batiquitos Lagoon. Subsequently, all nests were lost at the most productive site at the lagoon, and decreased productivity occurred across the rest of the site (Foster 2011b, pers. comm.). In 2017, predator management was not conducted on MCB Camp Pendleton due to contracting issues. The lack of predator control resulted in essentially zero productivity for the year with only four fledglings in 2017. Any further cessation or interruption of predator control could cause continued declines in productivity, and eventually significant decreases in population size of the California least tern.

In Mexico, nest predators (dogs, coyotes, and ravens) are a problem at certain California least tern nesting sites (Palacios 2008, unpublished data; Palacios 2018a), but not all (Zuria and Mellink 2002, p. 619). However, we are not aware of any annual active predator control programs at nest sites in Mexico and data on annual rates of predation are not available. Many

sites in Mexico lack the same degree of urbanization that characterizes many California least tern nesting areas in the United States. Therefore, though predation is likely affecting California least terns nesting in Mexico, it is likely that predation rates are lower compared to United States nesting areas.

Predators continue to impact California least terns, particularly at the egg and chick stage. However, the magnitude of this threat has been greatly reduced in the United States by the continued implementation of predator management at the majority of nesting sites. Even if predation cannot be eliminated completely through control methods, the currently implemented predator control provides a strong benefit to the California least tern such that predation poses a moderate risk to California least terns in the United States at this time. Predation also likely poses a threat within the Mexican range of the species but the level and effect of predation is potentially lower given the reduced level of urbanization in these more remote area, compared with the United States. We anticipate that some nest predation may be locally high and significant in some colonies in Mexico given the lack of predator control program, specifically where predators have keyed into productive tern nesting areas. However, least terns are also adapted to predation by their ability to relocate and renest when nests are depredated. We expect these levels of threat to continue into the future.

Predation by Special Status Species

Reduction and fragmentation of available habitat for special status species can create predator management conflicts, particularly when one species preys on the other (Garrott *et al.* 1993, p. 948). The burrowing owl, gull-billed tern, and peregrine falcon are each identified by the USFWS as a “Bird of Conservation Concern” (USFWS 2008, Tables 30, 48). The State of California lists both the gull-billed tern and burrowing owl as “Bird Species of Special Concern” (Shuford and Garibaldi 2008, Table 1). Burrowing owls have preyed on California least terns at NAS North Island, Alameda Point, and Los Angeles Harbor (Marschalek 2006, Appendix B–6). One of two remaining coastal nesting populations of burrowing owls is located on NAS North Island in close proximity to nesting California least terns. When present, burrowing owls have the potential to significantly impact California least terns. However, in recent years, burrowing owls have not been identified as a significant predator (Frost 2015; 2017). Therefore, limited control options for burrowing owls are not likely to pose a substantial threat to California least terns, in part because the owls are absent from most current sites.

Gull-billed terns are an increasingly common predator of California least tern eggs and chicks. In 2009, the gull-billed tern emerged as one of the most prevalent predators of the California least tern, where 40 percent of all documented predation was attributed to the species (Marschalek 2010, p. 12). Gull-billed terns began nesting in San Diego Bay in 1987 (Patton 2009a, p. 1), and the colony increased to 57 pairs nesting in 2009 (Patton 2009a, Table 3). The first predation incident by gull-billed terns was recorded in 1992 at the Saltworks in San Diego Bay (Caffrey 1993, p. 31). In 2006, only two California least tern chicks were confirmed as depredated by gull-billed terns (Patton 2006, p. 13). However, the number of recorded predation events increased in 2007, when 11 percent of all predation recorded in the State was attributed to the gull-billed tern, and in 2009, it became the number one predator of California least tern eggs and chicks (Marschalek 2008, Table 7; 2010, Table 7). However, the number of least terns suspected or documented to have been depredated by gull-billed terns has decreased over the last

several years with 813 individuals depredated in 2009, 222 in 2010, 149 in 2011, 87 in 2012, 2 in 2013, 7 in 2014, 14 in 2015, and 9 in 2016 (Frost 2017, p. 14).

The magnitude of gull-billed tern predation on population growth of the California least tern is difficult to separate from other factors impacting chick survival, such as low food availability (Factor E), abandonment, and predation by other species. Annual predation rates in the annual State reports include both documented and suspected predation events (Marschalek 2010, p. 11); thus, the number of actual predation events by gull-billed terns could be higher or lower than the number given in the report. Gull-billed terns hunt from the air and do not always leave characteristic marks after predation occurs (Foster 2011a, pp. 73–74).

The protected status of gull-billed terns under the Migratory Bird Treaty Act limits predator control options. Currently, gull-billed terns cannot be removed from a nesting site, as can mammalian predators. Furthermore, no lethal control methods have been approved for controlling gull-billed terns that prey upon California least terns. Other efforts that could be used to harass gull-billed terns, such as noise, cannot be used as gull-billed terns nest in close proximity to least terns and other protected species.

The threat of gull-billed terns to nesting California least terns drastically changed after an unprecedented die-off of at least 92 adult gull-billed terns in San Diego Bay in the summer of 2013 (Patton *et al.* 2017). Necropsy results determined the birds had perished due to peritonitis due to perforations of the intestine by a large quantity of the parasitic worm *acanthocephala* (*Profilicollis* [*Polymorphus*] *altmani*) (Patton *et al.* 2017). Mole crabs (*Emerita analoga*), the intermediate host for *P. altmani* and a major component of the gull-billed tern diet in San Diego, were found in the stomachs of necropsied terns along with cystacanths, and are the presumed source of the parasite infection (Patton *et al.* 2017). This mortality event likely significantly decreased the impact of gull-billed tern predation on California least terns from 2013–2016 (Frost 2017, p. 14).

Since the publication of the 2006 5-year review, the peregrine falcon, which is considered a fully protected species by the State of California, has become an increasingly common predator at California least tern nesting sites. The number of adult California least terns documented as depredated by peregrine falcons in 2012 (80 adults) has drastically increased from 2007 levels (3 adults). In the 2016 season, peregrine falcons were likely predators at a number of nesting locations throughout the range, including Alameda Point, Hayward Regional Shoreline, Santa Clara River, MCB Camp Pendleton, Mission Bay, and Naval Base Coronado. The peregrine falcon presents a unique challenge for predator management in large part because it preys primarily on adult or fledgling California least terns. Predation of adults and fledglings is more serious than predation of eggs and chicks because adult survival is one of the most influential factors on population growth of beach-nesting birds (Hitchcock and Gratto-Trevor 1997, p. 530). Raptors that habitually prey on least terns can be moved by permitted individuals to locations away from breeding colonies, lessening the impact of the threat on the species. However, any measures to decrease predation by peregrine falcons must take into consideration the protections afforded to the species through the Migratory Bird Treaty Act. Furthermore, if the release locations are not at a significant distance, the raptors can quickly return to their point of capture. Currently, the permitting process for removal of raptor species that impact nesting California

least terns is undergoing change on both State and Federal levels. Inability to control any predators has the potential to increase the impact of predation events on California least terns.

Long-term presence of predators, particularly predators of adult California least terns such as peregrine falcons or American kestrels, can have a colony-wide impact. In some cases, sustained predation by a raptor such as a peregrine falcon can cause many California least terns to abandon their nests, as happened in Alameda Point in 2012 (Euing 2012, pers. obs.). Therefore, the impact of peregrine falcons on least tern breeding colonies has increased since the last 5-year review, and unless management actions can be developed that are not detrimental to peregrine falcons, the problem may continue to increase.

Therefore, based on the best available scientific information, special-status predators pose a considerable threat affecting productivity of nesting sites and may potentially increase in the future.

Summary of Factor C

Based on the best available scientific information, disease is not a threat to the California least tern, nor do we expect it to become a threat within the foreseeable future throughout the range of the species. As nesting California least terns continue to concentrate in limited nesting locations, management of predators becomes increasingly more important than it was at the time of listing. Predator management is especially complicated when other sensitive species are involved. Therefore, in consideration of the overall effects, predation by all species (including special status species) continues to pose a significant threat across the range of California least terns and is a threat at each nesting area. In 2016, predator control measures were employed at the majority (71 percent; Frost 2017, p. 14) of least tern sites in the United States and have helped to reduce impacts throughout much of the range. However, this rangewide threat is difficult to manage effectively and impacts are likely to continue in the future.

FACTOR D: Inadequacy of Existing Regulatory Mechanisms

At listing in 1969, regulatory mechanisms that provided some protection for the California least tern included: (1) land acquisition and management by State, Federal, or local agencies or by private groups and organizations; (2) the Migratory Bird Treaty Act, and (3) local laws and regulations. The previous 5-year review analyzed the potential level of protection provided by these regulatory mechanisms and those enacted since listing, finding that though a number of State and Federal laws may afford protection, it may not always be adequate to prevent loss and degradation of California least tern habitat (USFWS 2006, p. 20). This review provides an updated summary on State, local, and Federal mechanisms that provide a conservation benefit to the California least tern.

State Protections in California

State laws potentially providing protection to the California least tern include the California Endangered Species Act (CESA), California Environmental Quality Act (CEQA), and Natural Community Conservation Planning Act enacted in 1991. The California least tern was State listed as endangered in 1971.

California Endangered Species Act

The California least tern is listed as an endangered species under the CESA of 1984 (CESA–California Fish and Game Code sections 2050 *et seq.*, and California Code of Regulations, title 14, subdivision 3, chapter 6, article 1, commencing with section 783) and a fully protected species pursuant to section 3511 of the Fish and Game Code. This legislation requires State agencies to consult with CDFW on activities that may affect a State-listed species. While CESA allows for take incidental to otherwise lawful development projects, fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research, with two exceptions. Incidental take of fully protected species is authorized in relation to Natural Community Conservation Plans (NCCPs), when the plan is approved by the State and results in conservation and management for the protected species (California Fish and Game Code, section 2835). Additionally, take is authorized in relation to implementation of the Quantification Settlement Agreement, which mandates preservation of the Salton Sea. In the latter case, take is only authorized when an adaptive management plan occurs that results in substantial conservation benefit for the fully protected species (California Fish and Game Code, section 2081.7). Given the limited nesting of terns at the Salton Sea, and protections authorized under existing NCCPs (see the Natural Community Conservation Planning Act section below), those exceptions are not likely to pose a significant threat to the California least tern.

California Environmental Quality Act (CEQA)

The CEQA is the principal statute mandating environmental assessment of projects in California. The purpose of CEQA is to evaluate whether a proposed project may have an adverse effect on the environment, and if so, to determine whether that effect can be reduced or eliminated by pursuing an alternative course of action or through mitigation. CEQA applies to projects proposed to be undertaken or requiring approval by State and local public agencies (CRA 2005, p. 1). CEQA requires disclosure of potential environmental impacts and a determination of significant if a project has the potential to reduce the number or restrict the range of a rare or endangered plant or animal; however, projects may move forward if there is a statement of overriding consideration. If significant effects are identified, the lead agency has the option of requiring mitigation through changes in the project or to decide that overriding considerations make mitigation infeasible (CEQA section 2100.2). Protection of listed species through CEQA is, therefore, dependent upon the discretion of the lead agency involved. Therefore, it is unlikely that this law would be adequate to protect the U.S. population of the California least tern in the absence of protections afforded it by the Act.

Natural Community Conservation Planning Act (NCCP)

In 1991, the State of California passed the Natural Community Conservation Planning Act to address the conservation needs of natural ecosystems throughout the State (California Fish and Game Code, section 2800 *et seq.*). The Natural Community Conservation Planning program is a cooperative effort involving the State of California and numerous private and public partners to protect regional habitats and species. The primary objective of NCCPs is to conserve natural communities at the ecosystem scale while accommodating compatible land uses. NCCP helps identify, and provide for, the regional- or area-wide protection of plants, animals, and their

habitats while allowing compatible and appropriate economic activity. Many NCCPs are developed in conjunction with HCPs prepared pursuant to the Act. Regional NCCPs may provide protection to federally listed species by conserving native habitats upon which the species depend.

California least terns are a covered species under the MSCP (City of San Diego Subarea Plan). They are also covered by the Carlsbad Habitat Management Plan (Carlsbad HMP) under the Multiple Habitat Conservation Plan (MHCP). These NCCPs/HCPs are further discussed under the **Federal Protections** section below.

Federal Protections

National Environmental Policy Act (NEPA)

NEPA (42 U.S.C. 4371 *et seq.*) provides some protection for listed species that may be affected by activities undertaken, authorized, or funded by Federal agencies. Prior to implementation of such projects with a Federal nexus, NEPA requires the agency to analyze the project for potential impacts to the human environment, including natural resources. NEPA does not impose substantive environmental obligations on Federal agencies; it merely prohibits an uninformed, rather than unwise, agency action, and its public notice provisions provide an opportunity for the USFWS and others to review proposed actions and provide recommendations to the implementing agency. However, if an Environmental Impact Statement is developed for an agency action, the agency must take a “hard look” at the consequences of this action and must consider all potentially significant environmental impacts. In cases where that analysis reveals significant environmental effects, the Federal agency must propose mitigations that could offset those effects (40 CFR 1502.16). These mitigations usually provide some protection for listed species. However, NEPA does not require that adverse impacts be fully mitigated, only that impacts be assessed and the analysis disclosed to the public.

Clean Water Act (CWA)

Under section 404 of the CWA, the U.S. Army Corps of Engineers (Corps) regulates the discharge of fill material into waters of the United States, which include navigable and isolated waters, headwaters, and adjacent wetlands (33 U.S.C. 1344). In general, the term wetland refers to areas meeting the Corps’ criteria of having hydric soils, hydrology (either sufficient flooding or water on the soil surface), and hydrophytic vegetation (plants specifically adapted for growing in wetlands). Any actions within California least tern habitat that have the potential to impact waters of the United States would be reviewed under the CWA, as well as NEPA. These reviews require consideration of impacts to the California least terns and their habitat, and when significant impacts could occur, compensation to offset the proposed action would be recommended. Given that the California least tern is a coastal species that forages over water, it is likely that agencies proposing actions subject to the CWA near nest sites would review impacts to the tern. However, it is unlikely that this law would be adequate to minimize threats to the U.S. population of the California least tern in the absence of protections afforded by the Act.

Coastal Zone Management Act (CZMA)

The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 *et seq.*) created a broad program based on land and seaward development controls within coastal zones, incorporating State involvement through the development of programs for comprehensive State management. The CZMA requires Federal agencies or licensees to carry out their activities in such a way that they conform to the maximum extent practicable with a State's coastal zone management program. One of the most significant provisions of the federal CZMA gives state coastal management agencies, such as the California Coastal Commission (see below), regulatory control (federal consistency review authority) over all Federal activities and federally licensed, permitted or assisted activities, wherever they may occur within respective coastal zone boundaries fixed under state law.

The California Coastal Commission was established by voter initiative and later made permanent by the California State Legislature through adoption of the California Coastal Act of 1976. The California Coastal Commission considers the presence of federally listed species in determining "environmentally sensitive habitat" lands subject to section 30240 of the California Coastal Act, which requires their protection. Coastal habitats occupied by federally listed species within the coastal zone in California are environmentally sensitive areas under Section 30107.5 of the California Coastal Act; in such the act provides protection to California least tern in those cases where they would be affected by a proposed project requiring a coastal development permit. However, state regulations, policies, and goals include mandates both for protection of beach and dune habitat and for public recreational uses of coastal areas; consequently they may conflict with protection of California least tern in some cases.

Certain local jurisdictions have developed their own Local Coastal Programs or Land Use Plans that have been approved by the California Coastal Commission. However, the CZMA and the California Coastal Act does not wholly address the injury or death of California least terns, and only reduces loss or degradation of habitat absent. Therefore, it is unclear what, if any, protections the species would receive from this law in the absence of protections afforded it by the Act.

Migratory Bird Treaty Act (MBTA)

Prior to the issuance of M-Opinion 37050, the interpretation of the Migratory Bird Treaty Act was that incidental take of birds, including active bird nests in native nesting substrates containing eggs or nestlings, would have been prohibited without a permit. Since the removal of native habitats that contain eggs and nestlings ultimately results in the destruction of those eggs and nestlings, the prior interpretation of the MBTA provided a temporary protection to native habitats that were actively being used for nesting until the colony was independent of it. Once those individuals become independent of their nests the habitat could be destroyed without violating the MBTA.

Again, the habitat of migratory birds in of itself were not actually protected by the MBTA, it was the individuals (i.e., eggs or nestlings) dependent on that substrate that were protected; the habitats they used were indirectly protected. Since the issuance of M-Opinion 37050 (DOI 2017, entire), the current interpretation of the MBTA only prohibits the purposeful take of birds without a permit and not the incidental take of birds. Therefore, if the removal of active native

nesting habitat results in the destruction of eggs or nestlings, but the destruction of those eggs and nestlings is not the purpose of the action, then the removal of native nesting habitats resulting in the loss of nestlings or eggs is no longer considered a violation of the MBTA.

Since California least tern habitat with eggs present can be destroyed without a permit, the MBTA in its current form does not ameliorate the threats to the species from development and human disturbance.

National Wildlife Refuge System Improvement Act

The National Wildlife Refuge System Improvement Act of 1997 (Pub. L. 105–57) establishes the protection of biodiversity as the primary purpose of the National Wildlife Refuge System. This has led to management actions that benefit the California least tern (particularly in southern California) that are an important component of the recovery strategy for the California least tern. There are 70 acres (28 ha) of California least tern nesting habitat supporting 12 percent of the U.S. breeding population on National Wildlife Refuge System lands managed by the USFWS.

Protection on Department of Defense Lands

The Sikes Act (16 U.S.C. 670 *et seq.*) authorizes the Secretary of Defense to develop cooperative plans for conservation and rehabilitation programs on military reservations and to establish outdoor recreation facilities. The Sikes Act provides for the Secretaries of Agriculture and the Interior to develop cooperative plans for conservation and rehabilitation programs on public lands under their jurisdiction. While the Sikes Act was in effect at the time of the California least tern's listing, it was not until the amendment of 1997 (Sikes Act Improvement Act) that Department of Defense (DOD) installations were required to prepare INRMPs. Consistent with the use of military installations to ensure the readiness of the Armed Forces, INRMPs provide for the conservation and rehabilitation of natural resources on military lands. They incorporate, to the maximum extent practicable, ecosystem management principles and provide the landscape necessary to sustain military land uses. INRMPs address the conservation of natural resources on military lands and can be a proactive conservation tool promoting the recovery of endangered and threatened species. INRMPs are subject to USFWS and State review. Depending on how the INRMP is configured, it also may be used to implement actions addressing federally listed species included as part of section 7 consultations under the Act. The active military installations occupied by nesting California least terns are MCB Camp Pendleton, NAS North Island/NAB Coronado, NBVC Point Mugu, and Vandenberg Air Force Base (AFB). California least terns also nest at the former Naval Air Station Alameda. The property, now known as Alameda Point, is still owned by the Navy, but under management by USFWS. All these installations and organizations have breeding populations of California least terns, and have INRMPs that address the species and provide monitoring and species management funding for the species. Additionally, Navy Region Southwest/Naval Facilities Engineering Command Southwest and San Diego Unified Port District (SDUPD) collaborated to draft the San Diego Bay INRMP to provide “the goal, objectives, and policy recommendations to guide planning, management, conservation, restoration, and enhancement of the San Diego Bay ecosystem” (Navy and SDUPD 2000, p. 1-5). The San Diego Bay INRMP covers both military and non-military lands. The Alameda Point nesting area is still owned by the DOD, but it is not an active military site and thus does not have an INRMP.

NAB Coronado funds a full-time predator manager from the U.S. Department of Agriculture Animal and Plant Health Inspection Service to conduct predator control on its California least tern and snowy plover colonies on NAB Coronado and NAS North Island (USFWS 2010, p. 23). Management goals for the California least tern on these facilities also include monitoring and management of nesting sites within their boundaries (USFWS 2010, p. 26).

The DOD is authorized by regulation under the MBTA to take migratory birds incidental to military readiness activities (50 CFR 21.15). However, this authorization is contingent upon the DOD conferring and cooperating with the USFWS to develop and implement appropriate conservation measures to minimize and mitigate any significant adverse effects on a population of a migratory bird species that the DOD determines may result from those activities. Further, in 2001, the President signed Executive Order 13186, “Responsibilities of Federal Agencies to Protect Migratory Birds,” requiring Federal agencies to incorporate migratory bird conservation measures into their agency activities. Under this Executive Order, each Federal agency whose activities may adversely affect migratory birds was required to enter into a MOU with the USFWS, outlining how the agency will promote conservation of migratory birds. The Executive Order has a number of provisions that specifically relate to habitat, including the requirement for agencies, as practicable, to:

1. Restore and enhance habitat;
2. Prevent or abate the pollution or detrimental alteration of the environment;
3. Design habitat conservation principles, measures, and practices into agency plans and planning processes;
4. Ensure that NEPA analyses evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern; and
5. Identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors.

The DOD entered into a MOU with the USFWS under Executive Order 13186 on July 31, 2006 (71 FR 51582). The MOU emphasizes a general collaborative approach to conservation of migratory birds. Conservation measures include minimizing disturbance to breeding, migration, and wintering habitats. While this MOU is non-binding and it does not authorize the take of migratory birds, it does provide an additional opportunity for us to continue to reduce the threat of habitat loss to the California least tern on lands owned and managed by the DOD. In 2016, of the approximately 4,000 nesting pairs, approximately 55 percent of the California least tern U.S. breeding population nested on DOD lands (i.e., MCB Camp Pendleton (19 percent), NAS North Island/NAB Coronado (19 percent), Alameda Point (9 percent), NBVC Point Mugu (8 percent), and Vandenberg AFB (less than 1 percent) (Frost 2017, Table 1)).

Military activities continue in close proximity to California least tern nesting sites; however, the military works with the USFWS to minimize and mitigate training actions that could impact nesting terns. The Navy expanded training activities into the nesting areas at NAS North

Island/NAB Coronado that had been protected and used for California least tern nesting (Navy 2008, p. ES-3). This site, in large part due to the Navy's management, represents 47 percent of the nesting population in San Diego Bay and 17 percent of the U.S. population (Table 1). The USFWS completed a BO (FWS-SDG-08B0503-09F0517) on the expanded training that included conservation measures, such as a creation of a Long Term Habitat Enhancement Plan, which is expected to improve the nesting conditions for terns in select areas of the nesting beaches (USFWS 2010, pp. 125–127); we believe the conservation measures in this BO will allow for the persistence of the colonies at NAS North Island/NAB Coronado, and we will continue to work with the Navy to monitor the progress of the colonies and reduce any impacts to nesting terns (USFWS 2010, p. 128). At MCB Camp Pendleton, the USFWS is currently in consultation regarding impacts to nesting California least terns on training beaches.

In all, the stewardship of natural resources and migratory birds under the respective INRMPs and the MOU provide a benefit to the California least tern on the DOD installations covering approximately 55 percent of the U.S. nesting populations. Additionally, as described above, many DOD installations are implementing intensive management for the species resulting from previous consultations under section 7 of the Act. Nevertheless, in the absence of protections afforded by the Act, the level of management benefitting the California least tern may not be sustainable as other funding priorities may override management needs for the species.

Endangered Species Act of 1973, as amended (Act)

Since listing, the Act is the primary Federal law providing protection for the California least tern. The USFWS's responsibilities include administering the Act, including sections 7, 9, and 10. Section 7(a)(1) of the Act requires all Federal agencies to utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation of endangered and threatened species. Section 7(a)(2) of the Act requires Federal agencies, including the USFWS, to satisfy two standards in carrying out their program. Federal agencies must ensure that actions they fund, authorize, or carry out are not likely to (1) jeopardize the continued existence of any listed species or (2) result in the destruction or adverse modification of designated critical habitat. A jeopardy determination is made for a project that is reasonably expected, either directly or indirectly, to appreciably reduce the likelihood of both the survival and recovery of a listed species in the wild by reducing its reproduction, numbers, or distribution (50 CFR 402.02). A non-jeopardy opinion may include reasonable and prudent measures that minimize the amount or extent of incidental take of listed species associated with a project. Critical habitat has not been designated for this species.

Section 9 prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of the Act defines "take" to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS regulations (50 CFR 17.3) define "harm" to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harassment is defined by the USFWS as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species. Incidental take refers to taking of listed species that results

from, but is not the purpose of, carrying out an otherwise lawful activity by a Federal agency or applicant (50 CFR 402.02). Section 10(a)(1)(B) of the Act allows for exceptions to take prohibitions under section 9 for animals. To qualify for an incidental take permit, applicants must develop, fund, and implement a USFWS-approved HCP that details measures to [avoid] minimize and mitigate the project's adverse impacts to listed species, including listed plants. Issuance of an incidental take permit by the USFWS is subject to section 7 of the Act; thus, the USFWS is required to ensure that the actions proposed in an HCP are not likely to jeopardize the animal or plant species or result in the destruction or adverse modification of critical habitat. Therefore, HCPs may provide an additional layer of regulatory protection. Many NCCPs are developed in conjunction with HCPs prepared pursuant to the Act. The California least tern is currently covered by the MSCP (City of San Diego Subarea Plan) and the MHCP (Carlsbad HMP).

MSCP (City of San Diego Subarea Plan)

The MSCP is a sub-regional HCP and NCCP made up of several subarea plans that have been in place for more than a decade. Under the umbrella of the MSCP, each of the 12 participating jurisdictions is required to prepare a subarea plan that implements the goals of the MSCP within that particular jurisdiction. The City of San Diego Subarea Plan under the MSCP covers 206,124 ac (83,415 ha) within San Diego County. HCPs and multiple species conservation plans approved under section 10 of the Act are intended to protect covered species and their habitat by avoidance, minimization, and mitigation of impacts.

The City of San Diego Subarea Plan under the MSCP includes the California least tern as a covered species. Approximately 93 percent of California least tern habitat within plan boundaries is conserved (City of San Diego 1997, p. 160). The subarea plan mandates beach maintenance, predator control, and protection from human disturbance and edge effects for its least tern nesting areas within Mission Bay.

MHCP (Carlsbad HMP)

The MHCP is a sub-regional HCP and NCCP that covers seven cities in northwestern San Diego County. Under the umbrella of the MHCP, each of the participating jurisdictions is required to prepare a subarea plan that implements the goals of the MHCP within that particular jurisdiction. The MHCP covers 45,290 ha (110,100 ac) that includes the Cities of Oceanside, Carlsbad, San Marcos, and Solana Beach.

The City of Carlsbad is the first to have an approved Habitat Management Plan (Carlsbad HMP) under the MHCP. Under the Carlsbad HMP, least tern nesting habitats are managed to control nonnative plants and predators, maintain water quality, and minimize disturbance to nesting colonies (City of Carlsbad 2004, Table 9). The Carlsbad HMP preserves 100 percent of the current breeding habitat of Batiquitos Lagoon and 100 percent of historical breeding locations of Agua Hedionda and Buena Vista lagoons (City of Carlsbad 2004, Appendix C–39). Both lagoons are among the coastal management areas identified in the 1985 Recovery Plan (Table 2). The nesting sites at Batiquitos Lagoon, while on city property and covered by the Carlsbad HMP, are managed by CDFW (City of Carlsbad 2004, Table 9).

The City of Oceanside is currently evaluating their draft Subarea Plan under the MHCP, and is considering whether to include the California least tern as a proposed species for coverage. No major nesting areas occur within the City of Oceanside, though it contains foraging areas in portions of Buena Vista lagoon (Ogden Environmental 2000, Figure 3-4). The draft Subarea Plan for Oceanside has not been approved; therefore, no protection to the California least tern is currently provided by the plan.

We expect that protections afforded the California least tern under the MSCP and MHCP would continue even if the species was delisted as it is a covered species under these plans. The MSCP and MHCP provide crucial protections to California least terns and their current and historical nesting areas.

Protections in Mexico

Prior to 2010, the species was categorized as “*Peligro*” in Mexico (in danger of extinction under Mexican Law NOM–059–ECOL–2001. However, in 2010, it was downlisted to “*Sujetas a Protección Especial*” (Subject to Special Protection), which is the lowest risk category (SEMARNAT 2010, p. 27). Species with that status are defined as those that require recovery, preservation, restoration, and conservation (SEMARNAT 2010, p. 5). We have little information on the adequacy and effectiveness of this law for recovering breeding or wintering populations of California least terns in Mexico, other than information discussed below under **FACTOR E**. This information indicates that breeding populations continue to be subject to human disturbance, pressures from development, and predators at nest sites (we know of no ongoing predator management programs in Mexico). However, only a small percentage of the California least tern breeding population nests in Mexico.

Summary of Factor D

Since the time of listing, the number of regulatory mechanisms providing protection for the California least tern and its nesting habitat has increased. In the United States, the Act is the primary Federal regulation governing protection, management, and recovery of the California least tern. As noted above, the U.S. population of California least tern has increased from 256 pairs at listing to an estimated 4,095 pairs in 2017 (Figure 5 and references within). A large percentage of this growth is likely attributable to conservation measures enacted by Federal action agencies in response to consultations under section 7 of the Act. A number of State and Federal laws also provide some protection to the California least tern and its habitat. Currently, California least terns are afforded protection at 70 percent of the breeding populations through implementation of existing INRMPs and HCPs. Additional nest sites are protected on state or Federal lands, such as state parks and National Wildlife Refuges, for a total of 86 percent. Though existing regulatory mechanisms are currently reducing the magnitude of threats facing the species, absent the Act, it is unlikely that existing mechanisms would be sufficient to assure the necessary protection and management for the California least tern. Only a small proportion of the U.S. breeding population has assured management, in the absence of the protections afforded by the Act, based on protections afforded by HCPs and long-term conservation agreements. Therefore, based on the need of California least terns for multiple nesting sites and their strong dependence on predator management programs, existing regulatory mechanisms in

the United States continue to reduce the magnitude of current threats, but are likely not sufficient to protect California least terns without protections afforded under the Act.

In Mexico, the California least tern is a protected species; however, we have little information on the effectiveness of laws to protect the species from the various threats to this species and its habitat. Therefore, it is unclear if inadequate regulatory mechanisms in Mexico result in increased threats to the California least tern.

FACTOR E: Other Natural or Manmade Factors Affecting Its Continued Existence

At the time of listing, anthropogenic disturbance was considered a significant threat to the nesting success of California least terns. Prior to listing and at the time of listing, high levels of human disturbance contributed to the decline of the California least tern (Chambers 1908, p. 237; Edwards 1919, pp. 65–68; Craig 1971, pp. 4–7), such as off-highway vehicles (OHVs) driving near or through nesting sites (Longhurst 1969, pp. 1, 3). The 2006 5-year review identified anthropogenic disturbance as a continuing threat to the tern, and identified new threats from food shortages and environmental contamination. We discuss those threats below and explore the link between climate change and food availability.

Human Disturbance

The 2006 5-year review considered human disturbance to threaten the continued existence of the California least tern. Humans can destroy or kill California least tern eggs and chicks by inadvertently stepping on them or by OHV and beach grooming activity (Cowgill 1989, pp. 83–85; Lingle 1993, pp. 131–132; Smith and Renken 1993, pp. 41–42; Kirsch 1996, pp. 26–28; Muñoz del Viejo and Vega 2002, p. 235; Zuria and Mellink 2002, pp. 619–621). However, the greatest impact of human activities on least terns is through indirect impacts. Seabirds respond to humans as they do to predators (Frid and Dill 2002, p. 1), resulting in altered foraging behavior, decreased incubation time, and reduced feeding of young (Verhulst *et al.* 2001, p. 379; Ruhlen *et al.* 2003, p. 303). These alterations in behavior can result in decreased fitness of adults and chicks or cause complete colony failure (Burger 1984, p. 66; Frid and Dill 2002, p. 1). Humans can have indirect effects on nesting least terns through helicopter use, paragliding, noise from nearby recreation or construction sites, or military training exercises (USFWS 2006, pp. 14–15).

The California least tern Recovery Plan recommends a combination of fencing and visitor education to reduce the threat of human disturbance to nesting California least terns (USFWS 1985b, p. 36). Of those for which we have data, 76 percent of active nest sites have some type of barrier (either literal or symbolic) to minimize access to nesting sites and reduce impacts to terns (Table 1). The nest sites near areas with high levels of recreational use, like Venice and Huntington Beach, are completely fenced to reduce human encroachment. Symbolic barriers do not exclude human encroachment into the nest sites, but do provide a deterrent. Outreach programs can help educate the public on the role of fencing and the importance of undisturbed areas for nesting birds. Visitors that receive education on conservation issues are more likely to act in environmentally responsible ways (Orams 1997, p. 304). For California least terns, efforts to educate and direct the public, such as posting signs and fencing at access points, has helped reduce the threat of disturbance to tern colonies (Patton 2009b, p. 11).

Despite efforts to protect nesting sites from human disturbance, indirect and direct human disturbance continue to impact the California least tern at nest sites throughout its breeding range. In recent years, nests and chicks have been impacted by:

- Equestrian, pedestrian, and border patrol activity at the Tijuana Estuary (Collins 2007, p. 1; Collins 2018, pers. comm.);
- Regular ingress by fishermen and pedestrians into nesting areas at Batiquitos Lagoon (Squires 2010, pp. 16–17; Wolf 2010, p. 17), including at least one egg crushed by a pedestrian (Squires and Wolf 2010, p. 17);
- Unauthorized access and vandalism of fencing and signs at the NAB Coronado Ocean nesting site in 2007 and 2008 by unknown individuals (Copper 2008, pers. comm.);
- Unauthorized ingress by the public and military personnel from the unfenced side of the Sweetwater Marsh Unit of the San Diego Bay NWR (Collins 2008, p. 1);
- Regular disturbance at Huntington Beach colonies due to low flights from helicopters and airplanes (Marschalek 2008, p. 17; Sea and Sage Audubon 2010, no page number);
- Intentional release of feral cats near the D Street fill colony in National City/Chula Vista (Collins 2018, pers. comm.); and,
- Ultralight aircraft and drones entering air space just above tern colonies in south San Diego Bay and at Tijuana Estuary (Collins 2018, pers. comm.).

Impacts to breeding California least terns also are known to occur in association with authorized military training activities adjacent to nest sites. Military training activities may result in disturbance that reduces the suitability of nesting areas, and may also result in harm or death of some individuals. These training activities are necessary to maintain levels of military readiness in accordance with the mission of the Navy and the U.S. Marine Corps to provide critical national security functions (USFWS 2010, p. 4). We have consulted with the Marine Corps at MCB Camp Pendleton (USFWS 1995, p. 31), Navy at NAB Coronado (USFWS 2005, p. 31; USFWS 2007a, pp. 4–5, USFWS 2010, entire) and NBVC at Pt. Mugu, and the Air Force at Vandenberg AFB under section 7 of the Act. We have determined that military training activities result in incidental take of California least terns; however, avoidance and minimization measures reduce the impact of incidental take (USFWS 2010, p. 120, Table 12). Additionally, nest sites on military installations experience reduced disturbance from recreational activities, since the general public is largely restricted from these sites, and they have benefited from consistent funding to support active management (pre-breeding season site preparation, predator management, and monitoring).

Several proposed projects near least tern nesting areas could result in higher levels of disturbance to breeding birds. For instance, the Navy is also building a 1.5 million square foot Silver Strand Coastal Training Complex, located just west of the south bay unit of San Diego Bay NWR. The project contains measures to decrease impacts resulting from human disturbance activities, such as construction of fencing to separate the project area from the adjacent wildlife refuge and

measures to decrease perching by raptors on building signs. However, the project may still impact terns by drawing predators (such as crows) to the area; crows are frequently associated with people and have a strong negative effect on tern nesting (see **FACTOR C** above). Additionally, while the nest site at Delta Beach South is currently protected with fencing and signage, the NAB Coronado Ocean nesting site is not fully fenced and is subject to human disturbance.

The Veterans Administration is in the process of developing a proposal to construct a clinic, columbarium, and other associated facilities on lands at Alameda Point in close proximity to the California least tern nesting area (USFWS 2012, pp. 9–11). In late August 2012, USFWS finalized a BO related to the proposed project. The BO includes substantial measures to minimize and mitigate for the effects of the proposed project, including restrictions on building height, vegetation height, noise, nighttime lighting, and dredging activities during the breeding season (USFWS 2012 pp. 15–16; 19–33). The project proponent will implement nest site management and predator management at the same or greater levels than currently occur, as well as restrictions on transfer of the land that supports the tern colony (USFWS 2012, pp. 22–26). These measures will greatly decrease the impact of the proposed project on California least terns.

In Mexico, uncontrolled human use of beaches is the primary conservation problem for nesting California least terns. At Punta Banda, a nesting colony in Baja California, tourist use of beaches caused least terns to abandon their preferred nesting site for a secondary area (Zuria and Mellink 2002, p. 620). Though specific information is lacking on OHV use of California least tern nesting beaches in Mexico, heavy use of recreational OHVs has forced other nesting least tern subspecies into less favorable sites (Palacios and Mellink 1996, p. 54). More recent information on tourist development and OHV use from known least tern nesting areas in Mexico is limited. We are unaware of any laws or regulations restricting human use of beaches. Therefore, human disturbance likely continues to negatively impact California least terns nesting in Mexico.

In summary, human disturbance effects can pose a direct threat to California least terns through crushing of eggs and young as well as cause detrimental effects on nesting behavior. However, active management, conservation measures, and fencing of nesting sites have greatly reduced the impacts from this threat in the United States since the time of listing. Therefore, though human disturbance does affect the species, we do not expect those effects to pose a significant threat to the California least tern in the United States now or in the future, due in large part to current conservation efforts and current regulatory mechanisms. However, in Mexico where less active management is implemented, human disturbance continues to pose a significant threat to the California least tern, something that will likely continue into the future.

Food Availability

Studies have highlighted a potential link between food availability for breeding California least terns and changes in regional weather patterns, particularly ocean surface temperature changes known as the El Niño Southern Oscillation (ENSO) (Massey *et al.* 1992, pp. 982–983; Caffrey 1993, pp. 5, 8). Following the 1982–83 ENSO, there was a drastic reduction in California least tern breeding success in southern California (Fancher 1992, p. 62; Massey *et al.* 1992, pp. 980 and 982). The population of adults returning to nest in subsequent years was reduced (Massey *et al.* 1992, pp. 980 and 982). Production of fledglings was lower statewide

during the years following the 1991–92, 1994–95, 1997–98, and 2009–2010 ENSO events, though the effect of the 1982–83 event is less clear (Figure 3). The population of adults returning to nest a year after the 1997–98 ENSO was reduced by approximately 1,300 adults, and the statewide production of fledglings also was significantly reduced (0.2 fledgling per pair; Figures 2 and 3) (Keane 2001, p. 7). Sea surface temperatures related to ENSO may, therefore, be linked to reduced California least tern productivity.

The primary effect of ENSO on tern populations may be related to food availability for nesting terns. Major ENSO events, such as in 1982–83, are associated with large-scale mortality of fish and marine plants (Tegner and Dayton 1987, p. 267 and Table 2; Ahrens 1991, p. 322). An inadequate prey base has been found to contribute to strong decreases in nesting success of other tern species. In a 14-year study, Crawford (2003, p. 49) found that significantly fewer swift terns (*Thalasseus bergii*) bred during periods of low food availability. Additionally, monitors for the California least tern have frequently observed decreased success of nests in years when adult birds bring inadequate or inappropriate fish sizes to feed to mates and chicks (Massey *et al.* 1992, p. 980; Caffrey 1993, p. 5; Caffrey 1997, pp. 8–9; Keane 2001, pp. 9–10).

The impact of low suitable food availability continues to impact nesting California least terns. In 2006, weather and food issues were believed to be the cause of 22 to 55 percent of chick mortality (Marschalek 2007, p. i; Marschalek 2010, p. 20). Due to a lack of regular and consistent population surveys in Mexico during the same period, we are uncertain if the same population fluctuations occurred on the Baja California Peninsula. However, despite these apparent patterns, Schuetz (2011, p. 6) failed to find a statistically significant pattern between ENSO events (which affect winter sea surface temperatures) and decreased productivity of California least terns. However, he did find a pattern between summer sea surface temperatures linking higher least tern productivity with warmer summer sea surface temperatures (Schuetz 2011, p. 6). Therefore, the link between ENSO events and food availability might not be as straightforward as previously hypothesized.

Sea surface temperatures, particularly those attributable to ENSO events, can impact California least tern nesting through general effects on weather. Increased storm events associated with higher sea surface temperatures can cause an increase in mortality during and after the breeding season. A heavy storm event during the 1995 ENSO caused chick mortality across the State (Caffrey 1997, p. 9). All five significant ENSO events that have occurred since 1980 were associated with declines in California least tern reproductive success or adult survival (Figure 3). Any increase in ENSO strength or frequency could cause chick mortality and corresponding population declines, however we lack reliable forecasts on which to estimate the impact of storm changes.

The 2013 IPCC climate report predicts, “there is *high confidence* that ENSO will remain as the dominant mode of interannual variability...Due to increased moisture availability, ENSO-related precipitation variability on regional scale *will likely* intensify. Natural variations of the amplitude and spatial pattern of ENSO are large and thus *confidence* in any specific projected change in ENSO and related regional phenomena for the 21st century remains *low*” (Chapter 14, Executive Summary, IPCC 2013b, p. 21). However, an analysis conducted by Lenton *et al.* (2008, p. 1790) found that based on past climate trends, an increase in ENSO amplitude (magnitude of both strong and weak events) was significantly probable, though the forecast is uncertain. Any

increase in ENSO amplitude could affect food availability and thus impact reproductive success of California least terns.

As discussed in **FACTOR A**, there is much uncertainty to make reliable predictions of the future impacts of climate change. However, changing food availability, whatever its cause, has the potential to severely impact reproductive efforts and thus continued persistence of the species. California least terns have been periodically sighted in low numbers far offshore during the breeding season. It is unknown, however whether or not the individuals sighted were breeding. In addition, Pacific saury, typically an offshore species, is sometimes observed as part of the diet, which implies that least terns sometimes forage farther offshore. When prey resources are scarce, it appears that least terns will spend more time foraging at distances farther from the colony, resulting in less parental attendance, lower food delivery rates, and poor productivity.

Therefore, we find decreased food availability is likely to continue to impact California least terns across their range within the future.

Environmental Contamination

Contaminants such as DDT (dichlorodiphenyltrichloroethane), selenium, oil, and mercury have historically been identified in nesting areas throughout the range of California least terns. Boardman (1988, Table 3) detected DDT and its metabolites in California least tern eggs and liver samples from adult birds and nest sites throughout southern California in the 1980s (e.g., Bolsa Chica, Costa Del Sol, MCB Camp Pendleton, Chula Vista, Terminal Island). High levels of pesticides and heavy metals are known to cause reproductive harm in breeding birds (Longcore *et al.* 1971, p. 486; King *et al.* 1978, p. 17). The organochlorine pesticide DDT breaks down in the environment to form DDE (dichlorodiphenyldichloroethylene), a compound that causes thinning of eggshells and decreased reproductive success in many species of birds (Longcore *et al.* 1971, pp. 486, 489). Selenium is a naturally occurring element that may also act as a contaminant and affect birds under certain conditions. At low levels, selenium is an essential trace nutrient that serves multiple metabolic functions in animals (Arthur and Beckett 1994, p. 620), but at higher concentrations it can cause embryo malformation and death (Hoffman *et al.* 1988, p. 521). Mercury causes both decreased fledgling success and decreased parental care in waterbirds (Evers *et al.* 2008, pp. 74–75).

Birds are exposed to contaminants mainly through the food they eat. For substances that bioaccumulate, like DDT and mercury, fish-eating birds are exposed to higher dietary concentrations and accumulate higher levels of contaminants in their tissues than birds that feed on seeds or invertebrates (Frank *et al.* 1975, p. 214; Focardi *et al.* 1988, p. 253; Ruelas-Inzunza *et al.* 2009, p. 418). For example, past studies have linked reproductive failure with heightened pesticide levels in the common tern (*Sterna hirundo*) and the roseate tern (*Sterna dougallii*), both fish-eating species (Hays and Risebrough 1972, p. 21; Fox 1976, p. 470), but these effects were less pronounced in the black tern (*Chlidonias niger*), which is primarily insectivorous (Frank *et al.* 1975, pp. 211, 214). Therefore, the California least tern may be at more risk of exposure and subsequent contaminant-related impacts than many other bird species because of their diet.

Several California least tern nesting areas are in proximity to areas known to be contaminated with heavy metals or pesticides. For example, environmental concentrations of lead at Seal

Beach National Wildlife Refuge are high enough to potentially result in reproductive harm to nesting birds (Naval Facilities Engineering Command 2005, p. 49). In San Francisco Bay, mercury is the contaminant of highest concern to nesting birds. Fish-eating terns in San Francisco Bay had high blood and liver concentrations of mercury, the highest concentration of all species studied (Eagles-Smith *et al.* 2009, p. 1998). However, we were unable to find any studies that quantified effect levels of contaminants on California least terns. Results of field studies on exposure and effects are often site- and species-specific that is a source of uncertainty when extrapolating across sites or species. Mercury exposure was highly site specific for Forster's terns (*Sterna forsteri*) in San Francisco Bay (Ackerman, Eagles-Smith, Takekawa, Bluso, and Adelsbach 2008, p. 903). The study did examine two sites where least terns nest: Eden Landing Ecological Reserve and Napa-Sonoma Marsh Wildlife Area. At those sites, Forster's terns had mean blood levels of mercury below a moderate level of concern (1 microgram (µg)/gram (g) wet weight), but with some confidence intervals extending above that level (Ackerman, Eagles-Smith, Takekawa, Bluso, and Adelsbach 2008, Figure 2). However, despite elevated levels, mercury-related effects such as decreased chick and fledging survival at those areas have not been observed (Ackerman, Eagles-Smith, Takekawa, and Iverson 2008, p. 798). Because least terns have lower levels of mercury exposure than Forster's terns (Ackerman *et al.* 2016), we do not expect mercury concentrations in San Francisco Bay to pose a threat to the California least tern.

San Diego Bay, which hosted approximately 24 percent of all nesting California least terns in 2013, has historically had high levels of DDE and polychlorinated biphenyls (PCB) exposure, measured as concentrations in eggs (Ohlendorf *et al.* 1985, p. 47). Potential DDT-related eggshell thinning has been reported by field monitors for seabird species nesting at San Diego Bay (USFWS 2008, p. 7). Caspian tern eggs collected in 2005 exhibited some eggshell thinning, which may be attributed to DDE at the concentrations measured in the eggs (USFWS 2008, p. 21). Contaminant levels measured in Caspian tern eggs are consistently higher than contaminant levels measured in California least tern eggs. Although still elevated, concentrations of DDE and PCBs have declined for both species since the 1980s (USFWS 2008, pp. 18–19). Most recently measured concentrations of DDE and PCBs in California least tern eggs are well below levels associated with serious reproductive impairments in seabirds (USFWS 2008, pp. 21–22). Least tern colonies in San Diego Bay are closely monitored for productivity, and no widespread nest failure due to eggshell cracking (caused by DDE) or embryo mortality (caused by PCBs) has been reported. Therefore, though DDE and PCBs are present in San Diego Bay, the best available scientific information does not show that these contaminants are resulting in adverse effects on California least terns at this time.

California least tern populations could also be negatively impacted by oil spills from offshore oil platforms or marine tankers. Oiled birds lose their ability to regulate their body temperature because of loss of feather loft, and often die of hypothermia or exposure (U.S. Coast Guard 2007, p. 1). Additionally, oiled adults can transfer oil onto eggs they are incubating (U.S. Coast Guard 2007, p. 1). Oil on eggs reduces the amount of gas exchange (in a sense, the egg's ability to breathe) and introduces toxic hydrocarbons into the egg. Likewise, oiled adults inhale and ingest toxic hydrocarbons when they preen (Hartung 1963, p. 51). Thus, should an oil spill occur during the California least tern breeding season and in close proximity to a high density nesting area, the oil spill could have detrimental impacts on that colony's survival and productivity.

The magnitude of the impact of oil spills on the California least tern's status in the future is dependent on how often the spills might occur. The former Mineral Management Services calculated the risk of spills occurring from offshore oil activities, including drilling platforms and pipelines. They found that there is a 41.2 percent chance of a spill occurring due to Federal offshore oil drilling and pipelines and an 8.4 percent chance of an oil spill occurring from state lands in the next 28 years (McCrary *et al.* 2003, pp. 45–46). These numbers do not take into account the risk of spills from oil tankers traversing the California coast (McCrary *et al.* 2003, p. 48). That risk, however, applies to the entire stretch of the coast where oil platforms occur; therefore, the risk of an oil spill impacting an individual nesting colony along the California coast would be lower.

Oil spills have previously occurred in close proximity to California least tern nesting areas. In the past two decades, two large oil spills occurred in San Francisco Bay (USFWS 2007b, p. 1), but neither occurred during the California least tern breeding season. Smaller spills occur as a result of leaks from pipelines, operations at on-shore facilities, and tanker truck accidents in areas adjacent to lagoons and beaches with least tern colonies (California Emergency Management Agency Hazardous Materials Release/Spill reporting system). California least terns may also be affected by chronic oil pollution not easily attributable to specific spills. Intermittent oil spills from unknown sources have been noted on southern and central California beaches for decades (Carter 2003, p. 2 and Table 1). The cause of some of these spills, such as those related to periodic oil leakages from the sunken vessel S.S. Jacob Luckenbach, have recently been identified, while the source of others remains a mystery (Carter 2003, pp. 1–3; Hampton *et al.* 2003, pp. 35–37). Natural occurring oil seeps also occur in the waters off southern California. Therefore, oil spills have the potential to result in decreased productivity and survival in affected colonies.

California least terns may face greater exposure to contaminants in Mexico than in the United States. Although DDT was banned in the United States in the 1970s, it was used for malarial control in Mexico until the early 1990s (García-Hernández *et al.* 2006, p. 1640). Coastal lagoons in Mexico have widely varying levels of pesticides (Páez-Osuna *et al.* 2002, p. 1305), but specific data for areas where least terns nest in Mexico are unavailable. In addition, there are no data on DDT concentrations in least tern eggs or in forage fish where least terns nest in Mexico. Therefore, the best available scientific information does not show a detrimental effect of contaminants on nesting California least terns in Mexico.

Contaminants of emerging concern are among the many new chemicals developed and put into production every year. These include polybrominated diphenyl ethers (PBDEs) or flame retardants, which, through bioaccumulation are now known to occur in tern eggs at concentrations exceeded only by DDTs and PCBs (USFWS 2008, pp. 35, 53). Polybrominated diphenyl ethers alter blood thyroid hormone homeostasis and vitamin A stores, which in turn can alter development, ability to fight infection, reproductive success and other physiological processes. Concentrations observed in California least tern eggs are well below concentrations associated with adverse effects in kestrels (USFWS 2008, p. 23). Whether PBDE concentrations in tern eggs are sufficient to impact these species is unknown because data on effect levels for seabirds are lacking. However, the prevalence and relatively high concentrations at which PBDEs occur compared with organochlorine compounds, warrant monitoring and underscore an ongoing need to consider contaminants of emerging concern in future evaluations of the species' status. The uncertain future effects of contaminants is enhanced by the complex effects of climate change on

the presence and concentration of contaminants (Schiedek *et al.* 2007, p. 1852, Figure 2) and the continual discovery of new contaminants in the environment.

Contaminants have the potential to pose a threat to California least terns. However, though moderate or high levels of contaminants are present in several high-density least tern nesting areas (such as sites around San Francisco Bay and San Diego Bay); we were unable to find any studies documenting mortality or reproductive harm from contaminants. Oil spills have the potential to have detrimental impacts on nesting California least terns, despite their rarity. However, the impact would likely be limited to one or two seasons. Furthermore, the Service is an active participant in the southern California area contingency planning efforts (USCG Sector Los Angeles/Long Beach Area Contingency Plan (ACP 4 and ACP5) and U.S. Coast Guard Sector San Diego Area Contingency Plan (ACP) 6) (Department of Homeland Security *et al.* 2011a, 2011b, entire). In the event of a spill, our pre-planning efforts serve to avoid and minimize impacts from both spills and response actions. Therefore, though oil spills have the potential to pose a threat to California least terns in the future, the magnitude of this threat is low. Overall, based on the best scientific and commercial information, we do not expect contaminants to pose a significant threat to the continued existence of the California least tern throughout its range now or in the future.

Summary of Factor E

Based on a review of the best scientific and commercial data available regarding human disturbance, sea surface temperature and food availability, and contaminants, we find that only food availability poses a substantial threat to the California least tern across the range of the species, and human disturbance poses a substantial threat in its Mexico breeding areas. Neither of these threats was assessed at the time of the 2006 5-year review. Impacts from human disturbance have been reduced through active management and conservation measures in the U.S. Furthermore, we find that oil spills pose a minimal threat to the species; we reached a similar conclusion in the 2006 5-year review. There is insufficient evidence to support that contaminants other than oil currently pose a threat to the species.

Cumulative Impacts

Several of the threats discussed in this review have the potential to work in concert with each other. For example, human development can interact with multiple other threats affecting the California least tern. Between 2016 and 2060, California is projected to grow by 30 percent: from 39.4 million to 51.1 million people (DOF 2017). Current uses of coastal areas may likely see increased demands due to this population growth for development, access, and recreational purposes. As a result, at areas that have not previously been afforded permanent protection, California least terns may be forced into lower quality habitat types or a more limited number of sites. As discussed in **FACTOR A**, reduced availability of nesting sites may decrease the California least tern's natural ability to shift between colonies in response to predator pressure or human disturbance. This shift in colony location and character may also impact food availability, as increased intraspecific competition for food may decrease success in large waterbird colonies. Hunt *et al.* (1986) found a link between increased colony size and decreased fledgling success in several waterbird species. At the larger colonies, chicks about to fledge were up to 59 percent lower in body weight than chicks of similar age at the smaller colony (Hunt *et al.* 1986, pp. 308–309).

Therefore, larger colony size may lead to decreased food availability for chicks or longer duration of foraging trips by adults.

Limited food availability and longer foraging trips may also increase the threat of predation to California least tern colonies. With adults gone from the area, they are unable to defend the colony, and thus more chicks may be lost to predation (Suddaby and Ratcliffe 1997, p. 528). Therefore, limited food availability can increase the threat of predation by disrupting the least terns' natural colony defense against predators. Additionally, as discussed in **FACTOR C**, as the amount of human development around a colony increases, so does the number of predators in an area.

Development, urbanization, limited food availability, and predation can act in concert to decrease the population numbers and viability of the California least tern. With urbanization rates and human population numbers in California still growing, the best available scientific and commercial data indicate that the magnitude of these threats will continue to increase. Therefore, we find that cumulative impacts may provide a substantial threat to the California least tern across its range now and in the future.

III. RECOVERY CRITERIA

Pursuant to section 4(f) of the Act, recovery plans are developed to provide guidance to the USFWS, States, and other partners and interested parties on ways to minimize threats to listed species, and on criteria that may be used to determine when recovery goals are achieved. Recovery plans are required to contain objective, measurable criteria, which, when met, would result in a determination that the species be downlisted or delisted. Conservation (i.e., recovery) is defined in section 3 of the Act as the "use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." In accordance with section 4(a)(1) of the Act, we determine if any species is an endangered or threatened species because of any of the five threat factors identified in the Act and evaluated in this 5-year review. Therefore, we revise the listed status of a species based on the outcome of an analysis of these five factors.

Although recovery plans are not regulatory documents, they provide a guide on how to achieve recovery based on information available at the time the recovery plan is finalized. Recovery criteria describe measurable projected outcomes or an estimated species response to a reduction or removal of the threats to a species as described in a five-factor analysis. However, reduction or removal of threats may occur without meeting all recovery criteria contained in a recovery plan, as there are many paths to accomplishing recovery of a species and recovery may be achieved without fully meeting all recovery plan criteria. For example, one or more criteria may have been exceeded, while other criteria may not have been accomplished. In other cases, recovery opportunities may have been recognized that were not known at the time the recovery plan was finalized. Likewise, we may learn information about the species or threats that was not known at the time the recovery plan was finalized. Overall, recovery is a dynamic process requiring adaptive management, and assessing a species' degree of recovery is likewise an adaptive process that may, or may not fully follow the guidance provided in a recovery plan.

Consistent with section 4 of the Act, determinations whether any federally listed species should be: (i) removed from the list; (ii) changed in status from endangered to threatened; or (iii) changed in status from threatened to endangered, will be made in accordance with an

analysis of the five factors. Therefore, although we expect at the time a recovery plan is published that recovery criteria will be met, the actual determination of appropriate listing status is not based solely on whether recovery criteria have been met. Rather, progress towards fulfilling recovery criteria serves to indicate the extent to which threats have been reduced or eliminated. In absence of meeting recovery plan criteria, the USFWS may judge in some cases that overall the threats have been reduced sufficiently and the species is sufficiently robust to either reclassify the species from endangered to threatened, or delist the species.

The criteria to assess recovery of the California least tern provided in the 1985 Recovery Plan do not reflect the most current information available. The recovery criteria are not threats-based, which is current policy for recovery plan development, but the criteria speak indirectly to the threats outlined in the five-factor analysis section of this review and the 2006 5-year review. Overall, progress is being made toward satisfying the recovery criteria. However, as we concluded in the 2006 5-year Review and based on recent data, the Recovery Plan should be revised and updated to provide threats-based recovery criteria and address the other shortcomings of the Recovery Plan. Areas of the plan that need updating include inclusion of Mexico populations of California least terns, further analysis of the fledgling per pair ratio, and future impacts from a changing climate, such as sea level rise.

Recovery Criteria for Downlisting

The 1985 revised Recovery Plan outlines the criteria for the downlisting of California least terns as three objectives (USFWS 1985b, pp. 25–26). The recovery objectives for stabilizing and downlisting California least terns are as follows:

Objective 1: *The annual breeding population in California must increase to at least 1,200 breeding pairs.*

The breeding population of California least terns currently exceeds Objective 1. The estimated number of California least tern breeding pairs has increased from approximately 624 pairs in 1973 to a peak of approximately 7,100 pairs in 2009 (Figure 2). The number of breeding pairs has dropped in the past few years from the peak to estimates of 3,989 pairs in 2016 and 4095 pairs in 2017. In the 2006 5-year Review, we acknowledged the species had far exceeded this population objective (USFWS 2006, p. 3).

Recovery Objective 1 does not identify specific threats to be alleviated but is a proxy for whether overall threats are being reduced. We interpret the intent of this objective to be that threats would have had to be sufficiently reduced in order for the population to reach 1,200 pairs (from the 745 pairs breeding in the state when the Recovery Plan was first drafted in 1980).

However, due to variable methodologies in estimating the number of California least tern pairs between nest sites and years (Marschalek 2006, pp. 2–5), the estimated breeding population may not accurately reflect the actual size of the California least tern breeding population. We use the estimated breeding pair population from the CDFW statewide annual reports, which compile data reported from each nest site. The number of breeding pairs is calculated based on the historical frequency of California least tern pairs nesting in a second wave (Massey and Atwood 1981, pp. 598–604; Marschalek 2012, p. 3). However, monitors have the option of using one of three different formulas to calculate total number of pairs (see Marschalek 2012, p. 3 and

Appendix B-3 for more details), which creates some inconsistency in reported pair numbers. On occasion, there may also be undiscovered and unmonitored nest sites that are not reflected in reported data. For instance, 32 pairs were documented nesting at Montezuma Wetlands at San Francisco Bay Area in 2006 (Euing 2007b, pers. obs.), but were not included in the annual statewide report. Additionally, California least tern populations in Mexico are not regularly monitored; as such, the CDFW reports only reflect U.S. tern populations.

Regardless of possible error in the minimum breeding pair estimate, the current California least tern breeding population in the United States substantively exceeds the numeric goal of 1,200 breeding pairs in the 1985 Recovery Plan for downlisting and delisting. The minimum breeding pair estimate has exceeded this numeric goal since 1988, after which time it generally increased and then began to fluctuate after 2003, beginning a downward trend after 2010. In summary, we again affirm that Objective 1 has been met and exceeded for downlisting.

Objective 2: Fifteen [of 23] Coastal Management Areas support viable and secure California least tern nest sites and are managed to conserve California least terns. Further, San Francisco Bay, Mission Bay, and San Diego Bay have at least three, five, and four secure and viable nest sites, respectively.

The 1985 Revised California Least Tern Recovery Plan states that the chief limiting factor influencing the number of breeding pairs is the availability of undisturbed suitable habitat for breeding (USFWS 1985b, p. 26). Meeting the criteria of Objective 2 would reduce threats associated with destruction and modification of nesting habitat (Factor A), predation at nest sites (Factor C), and regional weather conditions (Factor E) through protection and management of nest sites across a wide geographic range. The adequacy and appropriateness of this objective were not discussed in the 2006 5-year review.

This objective requires that sites within 15 Coastal Management Areas be both secure and viable; we will first discuss the “secure” portion of the objective. The Recovery Plan defines a secure nest site as a site where, “land ownership and management objectives are such that future habitat management for the benefit of least terns at those locations can be assured” (USFWS 1985b, p. 26). We interpret this to mean that such management will be in place after the time of downlisting. Coastal Management Areas are distinguished here and in the 1985 Recovery Plan by the letters A–W (Table 1). Thirteen Coastal Management Areas contained at least 1 secure (as defined in the 1985 Recovery Plan) nest site managed to conserve California least terns, occupied by a minimum of 20 breeding pairs in 2016: Coastal Management Areas A, D, E, F, H, J, K, L, N, Q, U, V, and W (Table 3). Integrating three new nesting areas established since 1985 brings the total number of Coastal Management Areas occupied by at least 1 nest site with 20 breeding pairs (in 2016) to 16 (adding Hayward Regional Shoreline, Napa Sonoma Marsh Wildlife Area, and Oceano Dunes). While currently secure, some of these sites are likely to be impacted by sea level rise in the future (see Factor A above and Appendices B and C); 4 of 40 sites evaluated at 1 foot SLR and 7 of 40 sites at 3 foot SLR are likely to be >50 percent inundated. Therefore, sea level rise remains a concern that will need to be closely monitored and evaluated. Information on which sites have predator management and site management (including vegetation management) is provided in Appendix A.

Table 3. Coastal Management Areas (13) and Nesting Areas (3) that supported a minimum of 20 nesting pairs in 2016.

| Coastal Mgmt. Area identified in 1985 Recovery Plan (Table 3) | Location |
|--|--|
| A | Alameda Point |
| | Hayward Regional Shoreline |
| | Napa Sonoma Marsh Wildlife Area |
| | Oceano Dunes SVRA |
| D | Vandenberg AFB |
| E | Santa Clara River / McGrath State Beach |
| F | NBVC Point Mugu |
| H | L.A. Harbor / Pier 400 / Terminal Island |
| J | Seal Beach NWR / NASA Island / Anaheim Bay |
| K | Bolsa Chica ER |
| L | Huntington State Beach |
| N | Marine Corps Base Camp Pendleton |
| Q | Batiquitos Lagoon |
| U | Mission Bay |
| V | San Diego Bay |
| W | Tijuana Estuary NERR |

Though we now have more than the required number of secure sites for downlisting, these 16 sites alone would not be sufficient to meet the downlisting criteria as originally stated. Objective 2 for downlisting also specifies that San Francisco Bay, Mission Bay, and San Diego Bay should have three, five, and four secure and viable nest sites, respectively. At San Francisco Bay, Alameda Point has been the primary secure nest site managed for California least terns and contained far greater than 20 nesting pairs in 2016 (Frost 2017, Table 1). Two additional nesting sites in San Francisco Bay (Hayward Regional Shoreline and Napa Sonoma Marsh Wildlife Area) were colonized in 2007 and 2008 and have each supported a minimum of 20 nesting pairs in recent years. At Mission Bay, two sites (FAA Island and Mariner's Point) had more than 20 nesting pairs in 2017 and 2016, but there was only one site with more than 20 nesting pairs in 2015 and 2014 (Mariner's Point). At San Diego Bay, there were six nesting sites occupied by more than 20 nesting pairs in 2016 that occur on public land and are managed for California least terns (Table 1). The sustainability of the new nest sites in San Francisco Bay and Mission Bay is untested because they have only been recently colonized.

As mentioned above, three of the secure nesting areas counting to the total of 16 have been colonized since the Recovery Plan was finalized. Oceano Dunes is currently a publicly owned California least tern nest site occupied by more than 20 breeding pairs and managed to conserve the species (Table 1). Based on geography, Oceano Dunes would be located within Coastal Management Area C. We also consider Terminal Island to be a secure nesting site. Although it does not occur on public land, we consider it secure because there is an irreversible written agreement to manage this nest site for the conservation of the California least tern (Table 1) (Fancher 2006, pers. obs., Table of California Least Tern Nest Site Parameters). Terminal Island is located in Coastal Management Area H.

For nest sites in Mexico, the information available to us indicates that nesting areas are generally not secure by the Recovery Plan's definition. Although some nesting areas in Mexico have more than 20 breeding pairs, the sites are not monitored regularly or intensively enough to determine whether they meet the definition of viable.

The distribution of the California least tern population is approaching the thresholds in Objective 2 for numbers of secure nesting areas. At least 16 Coastal Management Areas or new nesting areas established since 1985 contain a nest site with at least 20 breeding pairs, providing a good representation of nest sites throughout the U.S. breeding range of the California least tern. Further, new nest sites have been colonized in the greater San Francisco Bay Area (including such areas as Montezuma Wetlands and Pittsburg Power Plant), increasing redundancy of nesting locations for California least terns in these Coastal Management Areas. In Los Angeles County, a new nesting site at Malibu Lagoon was recently colonized with a minimum of 22 pairs in 2017.

Objective 2 was intended to address the availability of undisturbed suitable habitat for breeding, which was identified as a chief limiting factor influencing the number of least tern breeding pairs (USFWS 1985b, p. 26). Overall, the number of secure sites and the number of sites used by California least terns has increased since the recovery plan was developed, although Objective 2 for downlisting has not been met explicitly with the number of sites that must be secure and viable.

Objective 3: *A 3-year mean reproductive rate of at least 1.0 young/breeding pair is achieved.*

This objective does not identify explicitly specific threats to be alleviated, but is a proxy for whether threats to reproduction and fecundity are being reduced. In the 2006 5-year review, we concluded that based on the population data at that time, the species could likely be considered recovered without meeting this goal (USFWS 2006, p. 5), as the sharp growth in pairs had occurred while estimated fledgling rates were below 1.0 fledglings per pair. This definition of viability is the same for what is required for secure nesting sites in Objective 2, though it is unclear from the recovery criteria if this level of viability must be maintained for 3 or 5 years (USFWS 1985b, pp. 25–26).

The mean reproductive rate, as it was called in the Recovery Plan, is identical to the fledgling per pair ratio. It is calculated by dividing the estimated number of fledglings produced by the estimated number of adult breeding pairs. The minimum fledgling rate is calculated as the minimum number of fledglings divided by the maximum number of pairs, while the maximum fledgling count is calculated as the maximum number of fledglings divided by the minimum number of pairs. The fledgling per pair ratio for the California least tern population in the United States has only once reached the goal of 1.0 (Figure 7). From 1984 to 2000, the minimum reproductive rate was generally above 0.5, ranging from approximately 0.2 to 1.0 and averaging 0.7. The annual number of reported fledglings increased with the adult breeding population after listing, peaking in 2000 at 3,710 (Figure 5). Despite the annual reproductive rate not approaching that called for in the 1985 draft revised recovery plan, the adult population of breeding California least terns has increased seven-fold since listing (Figure 5), well exceeding the number of breeding pairs target. This suggests that, as we concluded in the 2006 5-year review, a reproductive rate of at least 1.0 young fledged per year per breeding pair is unrealistically high and unnecessary for an increasing or stable population.

However, over the last 15 years, the fledgling per pair ratio has been on a decreasing trend. Since 2001, the reproductive rate has been generally below 0.5, ranging from approximately 0.1 to 0.4 (Figure 7, Appendix A). Much of this low reproductive success is being driven by the poor productivity of southern California colonies where the majority of the population breeds. As discussed in the five-factor analysis, the population appears to be limited by availability of nest sites, level of predation at nest sites, and/or availability of food required for brood rearing. It is not known whether the recent estimated reproductive rate (0.17 fledglings per pair in 2011, 0.09 in 2012, 0.25 in 2013, 0.37 in 2014, 0.29 in 2015, 0.35 in 2016, and 0.2 in 2017; average of 0.25 fledglings per pair) will sustain the present size of the California least tern population. The recent, consistently low fledgling per pair ratio is cause for concern.

There has always been uncertainty regarding calculation of birds fledged each year. Terns often leave the nesting area shortly after fledging (Massey 1989, p. 3), so fledgling numbers may be underestimated. Additionally, fledgling count methods vary between sites (Marschalek 2012, p. 4). However, though the fledgling ratio may be underestimated, there is no doubt that fledgling counts have steeply declined over the past 15 years. Least terns are a long-lived species and therefore populations may show delayed responses to reproductive problems (Thompson *et al.* 1997, p. 18); however, their long life span may help buffer against variations in productivity.

Nest sites in Mexico likely contribute to the overall California least tern population, but we are not aware of any site that is monitored regularly or intensively enough to meet this objective's threshold.

No consensus currently exists on what reproductive rate would be needed for a stable population size. Determining a more appropriate rate is not straightforward. Fledgling rates may often be underestimated, given the early and rapid departure of newly fledged chicks from the breeding site (Akçakaya *et al.* 2003, p. 835). In the early 1990s, Fancher (1992, p. 6) noted that historical data showed a fledgling per pair ratio of 0.7 or above would result in a subsequent increase in the breeding population, and a ratio below 0.7 would result in a decline in the breeding population. Since then, the breeding population has continued to increase even as the fledgling per pair ratio has regularly fallen below 0.5 fledgling per pair. However, in 2016, the breeding population represented the lowest count since 2002 levels at 3,989 pairs (Figure 5). It is unclear if this is the beginning of a true population decline or a temporary fluctuation in numbers, or if the decline is due to an aging breeding population. Determining reliable, accurate measures of population growth and success is crucial to understanding the recovery of the California least tern.

Since the 2006 5-year review, estimates of population size and least tern productivity have continued to decline, raising concerns over the future viability of the least tern population. We are concerned about the consistent poor reproductive success, particularly over the 5 years when minimum fledglings per pair ratio averaged 0.29. At the current time, Objective 3 for downlisting (a mean reproductive rate of 1 fledgling per pair for 3 consecutive years) has not been met.

Recovery Criteria for Delisting

Currently, we are only considering this species for downlisting as most coastal management areas are not secure throughout the breeding range. In addition, poor productivity has been reported over the past 10 years, with decreasing trend in numbers and increasing age of some populations. Threats continue to be ongoing (e.g., predation, food availability) and are likely to impact the California least tern into the future. Therefore, we will not discuss delisting criteria here. Details on delisting criteria for the California least tern are available in the 1985 Recovery Plan.

Summary of the Recovery Criteria

A total of 4,095 breeding pairs were reported in 2017, supporting that the species has met and exceeded Objective 1 (requiring over 1,200 nesting pairs) in the United States. The California least tern partially meets Objective 2 for downlisting, with 13 Coastal Management Areas and an additional three nesting areas that support secure California least tern nesting areas (Table 3). However, there are still not enough secured and viable breeding sites at the San Francisco and Mission Bay coastal management areas to meet this criterion. Objective 3 has not been met as productivity remains significantly below that recommended (average of 1.0 fledgling per pair) and reported values have declined significantly since the last 5-year review. The sustained poor productivity over the last decade is of concern and warrants further attention.

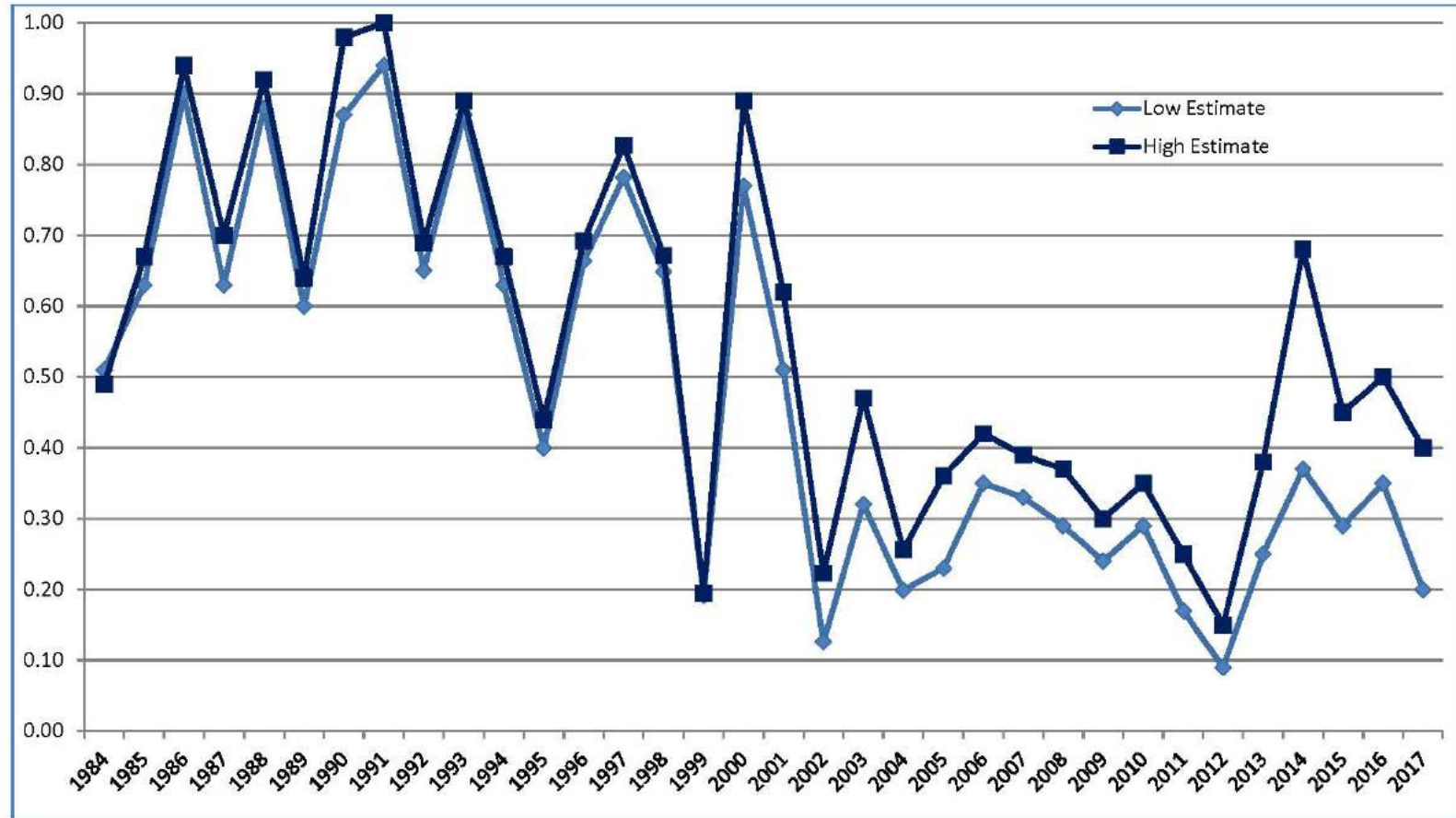


Figure 8. High and low estimates of California least tern fledglings produced per breeding pair in the United States. Only data from 1984 to 2017 are shown because fledgling data prior to 1984 is less reliable. Data are from CDFW annual reports (Collins 1987, Table 1; Massey 1988, Table 1; Massey 1989, Table 1; Johnston and Obst 1992, Table 1; Obst and Johnston 1992, Table 1; Caffrey 1993, Table 4; Caffrey 1994, Table 4; Caffrey 1995, Table 4; Caffrey 1997, p. 1; Caffrey 1998, Table 4; Keane 1998, Table 2a; Keane 2000, Table 2a; Keane 2001, Table 2a; Patton 2002, Table 1; Marschalek 2005, Table 2; Marschalek 2006, Table 2; Marschalek 2007, Table 2; Marschalek 2008, Table 2; Marschalek 2009, Table 2; Marschalek 2010, Table 2; Marschalek 2011, Table 1; Marschalek 2012, Table 1; Frost 2013, Table 1; Frost 2014, Table 1; Frost 2015, Table 1; Frost 2016, Table 1; Frost 2017, Table 1; Sin 2018, pers. comm.).

IV. SYNTHESIS

The California least tern was federally listed as endangered in 1969 (October 13, 1970; 35 FR 16047) and listed as endangered by the State of California in 1971 (CDFG 2008, p. 9) due to threats such as habitat destruction, human disturbance, and predation (Craig 1971, pp. 4–7; CDFG 1974, p. 23). The 2006 5-year review considered many of those threats to be reduced, but not eliminated (USFWS 2006, p. 22). Today, these threats are ongoing and continue to impact the continued survival and recovery of the California least tern, though many of these threats, including human disturbance, vegetation encroachment, and predation, are actively managed and reduced by volunteer, local, State and Federal agency implementation of management plans. In total, 86 percent of the current nesting areas are actively managed to ensure future nest site suitability.

We find that rising sea levels as a result of climate change (Factor A), may in the future pose a substantial threat to nesting habitat of the California least tern. We find that predation (Factor C), continues to threaten the California least tern. This threat is reduced, though not eliminated, by predator management conducted at the majority of active colonies. Predator management is confounded when the predator is a protected species. We also find that food availability (Factor E) poses a threat to California least terns, though its impact varies from year to year with an uncertain overall magnitude. Cumulative impacts of food availability, predation, and destruction of nesting habitat together pose a substantial threat to the persistence of the California least tern, although management at a majority of the U.S. nesting sites helps to reduce the impact of these combined threats. Though there are few data available on nesting areas in Mexico, lack of legal protection and conservation measures result in a higher degree of threats attributable for nesting California least terns than in the United States.

The U.S. population of California least tern has increased from an estimated 256 pairs at listing to an estimated 4,095 pairs in 2017. While the decreasing population trend of California least terns over the past 10 years and the low levels of productivity have been an ongoing cause for concern, the number of pairs remains significantly higher than called for in the Recovery Plan. Though intervals of low breeding success related to food resources are a natural aspect of seabird dynamics (Cury *et al.* 2011, p. 1704), the apparently increasing age of some California least tern populations and lack of juvenile recruitment provides evidence that this decline may be more than a periodic fluctuation and may be indicative of a range-wide decline in numbers. Based on our review of the Recovery Plan, the status of the species has improved since listing through recovery efforts that have successfully ameliorated Factor A threats. However, we are recommending no change in status at this time, because of the decreasing trend in numbers, increasing age of some populations, sustained poor productivity over the last 10 years, and ongoing threats (e.g., predation, food availability). We recommend that the status of this subspecies be reconsidered upon completion of the recommended actions identified below.

We are recommending the following actions prior to reconsidering the status of the subspecies:

1. Analyze existing California least tern data to develop a population model that estimates the population demographics necessary for population and breeding colony stability.
2. Continue to work with our partners regarding ongoing site management activities to minimize impacts of predation, encroaching vegetation, and human disturbance.

3. Investigate the impact of shifting food resources on survival, productivity, and colony dynamics of the California least tern, and explore potential for new nesting areas that address any anticipated changes in nesting distribution driven by shifting food resources.
4. Update the California least tern recovery plan and recovery criteria with current science, population data, and biology. Utilize threats-based criteria and analysis to develop updated recovery objectives supported by population modeling.
5. Analyze genetic samples to better understand the current distribution of California least terns and other subspecies in Mexico.

While the California least tern has met the population size recommended in the Recovery Plan for downlisting, the population has been recently declining, exhibited poor reproductive success, and, multiple ongoing threats continue to impact the species. Therefore, current information does not support reclassifying the California least tern at this time. Additional information on threats, management techniques, and current population models should be obtained before reassessing the taxon again in the future.

V. RESULTS

Recommended Listing Action:

Downlist to Threatened

Uplist to Endangered

Delist (indicate reason for delisting according to 50 CFR 424.11):

Extinction

Recovery

Original data for classification in error

No Change

New Recovery Priority Number and Brief Rationale: Change from 15C to 18C

The California least tern has a recovery priority number of 15C, which is defined as a subspecies that faces a low degree of threat and has a high recovery potential (USFWS 1983b, p. 51985). The taxon is distributed widely from San Francisco Bay to the North to the Tijuana River to the South. The U.S. population of California least tern has increased from an estimated 256 pairs at listing to an estimated 4,095 pairs in 2017, though impacts from current threats has resulted in a decreasing population trend of California least terns over the past 10 years. Successful reproduction at many nesting areas is dependent on ongoing management, particularly predator management. Therefore, due to the reliance on ongoing management, we are changing the recovery priority number from 15C to 18C.

VI. RECOMMENDATIONS FOR ACTIONS OVER THE NEXT 5 YEARS

The actions listed below are recommendations to be completed over the next 5 years. These will help guide continuing recovery of the California least tern by providing information to better manage nesting sites. Conservation of the California least tern is dependent on continued cooperation with our partners to minimize impacts from current threats and aid in future restoration.

1. Continue to coordinate with CDFW, San Diego State University, and other partners to conduct analysis of existing least tern data, to determine trends; create reliable, accurate population models that identify demographic requirements for a stable population; quantify long-term trends; and direct future management priorities to determine population and breeding colony stability.
2. Work with the DOD (the Navy, the Marine Corps, and Air Force), CDFW, California Department of Parks and Recreation, and other partners to continue current successful site management that minimizes impacts of encroaching vegetation, predation, and human disturbance. Investigate innovative techniques of site management and monitoring to reduce costs and better protect the species.

3. Continue food availability studies already started by monitors or initiate new studies on the impact that shifting food resources have on survival, productivity, and colony dynamics of the California least tern.
4. Partner with Mexican nongovernmental organizations, scientists, and Federal agencies on potential recovery and management actions at nesting sites in Mexico.
5. Update the California least tern recovery plan and recovery criteria with current science, population data, and biology. Utilize threats-based analysis to develop recovery goals.
6. Continue efforts to identify the wintering range of the California least tern and the threats that impact the species on its wintering grounds and migration route.
7. Develop banding protocol to create unified data collection rangewide. Continue banding and recapture studies to determine age structure, survival, and movement.
8. Develop standardized monitoring protocols and on-line data portal to facilitate synthesis, analysis, and sharing of data.
9. Enter into long-term agreements that will assure continued protection and management of California least tern nest sites.

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APPENDIX A

[California least tern occurrence table]

Table A1. Status of the California least tern (*Sternula antillarum browni*) at currently occupied nesting sites (2012–2017) in California. Site management includes at least two of the following: vegetation removal, fencing, chick shelters, or interpretive signs.

| Area | Nesting Area | Name | Ownership | Conservation Measures | Current Status | Minimum Number of Breeding Pairs (2012-2017) | Fledglings per pair ratio min-max (2012-2017) | Threats |
|------------------------|--------------|----------------------------|--|--------------------------------------|--------------------|--|--|--|
| Sacramento Area | 1 | Bufferlands | Sacramento Regional County Sanitation District | None | suitable, occupied | 2017: 1 2016: 1 2015: 1 2014: 0 2013: 0 2012: 1 | 2017: 0.00-0.00 2016: 2.00-2.00 2015: 1.00-1.00 2014: N/A 2013: N/A 2012: 0.00-0.00 | A: Development C: Predation E: Contaminants, Food availability |
| San Francisco Bay Area | 2 | Pittsburg Power Plant | Mirant Delta, LLC | Site management, predator management | suitable, occupied | 2017: unk 2016: 1 2015: 2 2014: 0 2013: 0 2012: 1 | 2017: 2016: 0.00-0.00 2015: 0.00-0.00 2014: N/A 2013: N/A 2012: 0.00-0.00 | A: Habitat modification, Sea level rise C: Predation; predation by special-status species E: Contaminants, Food availability |
| San Francisco Bay Area | 3 | Alameda Point | U.S. Navy | Site management, predator management | suitable, occupied | 2017: 382 2016: 358 2015: 321 2014: 281 2013: 281 2012: 306 | 2017: 0.47-0.65 2016: 1.54-1.78 2015: 0.99-1.67 2014: 1.22-1.39 2013: 1.07-1.08 2012: 0.50-0.50 | A: Habitat modification, development C: Predation E: Human disturbance, Food availability, Contaminants |
| San Francisco Bay Area | 4 | Hayward Regional Shoreline | County Parks | Site management, predator management | suitable, occupied | 2017: 66 2016: 83 2015: 67 2014: 77 2013: 80 2012: 143 | 2017: 1.04-1.17 2016: 1.80-1.89 2015: 1.29-1.58 2014: 1.42-1.66 2013: 1.46-1.53 2012: 0.58-1.14 | A: Habitat modification, Sea level rise C: Predation E: Contaminants, Food availability |

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| Area | Nesting Area | Name | Ownership | Conservation Measures | Current Status | Minimum Number of Breeding Pairs (2012-2017) | Fledglings per pair ratio min-max (2012-2017) | Threats |
|--|--------------|-----------------------------------|-------------------------|--------------------------------------|--------------------|--|--|---|
| San Francisco Bay Area | 5 | Montezuma Wetlands | Montezuma Wetlands, LLC | None | suitable, occupied | 2017: 7 2016: 4 2015: 12 2014: 15 2013: 25 2012: 18 | 2017: 0.63-0.71 2016: 0.17-0.25 2015: 0.00-0.00 2014: 0.06-0.07 2013: 0.12-0.16 2012: 0.83-1.00 | A: Habitat modification, Sea level rise C: Predation E: Contaminants, Food availability |
| San Francisco Bay Area | 6 | Eden's Landing Ecological Reserve | CDFW ¹ | None | suitable, occupied | 2017: 14 2012-2016: no nesting | 2017: 1.00-2.00 2012-2016: N/A | A: Sea level rise C: Predation E: Contaminants, Food availability |
| San Francisco Bay Area | 7 | Napa Sonoma Marsh Wildlife Area | CDFW | Site preparation | suitable, occupied | 2017: 65 2016: 60 2015: 63 2014: 38 2013: 61 2012: 16 | 2017: 1.23-1.23 2016: 0.07-0.10 2015: 0.34-0.38 2014: 1.36-1.84 2013: 0.14-0.33 2012: 0.14-1.88 | A: Habitat modification, Sea level rise C: Predation E: Contaminants, Food availability |
| San Luis Obispo/Santa Barbara Counties | 8 | Oceano Dunes SVRA | DPR ³ | Site management, predator management | suitable, occupied | 2017: 44 2016: 46 2015: 50 2014: 45 2013: 43 2012: 42 | 2017: 0.15-0.16 2016: 1.20-1.28 2015: 1.30-1.38 2014: 1.23-1.29 2013: 1.04-1.30 2012: 0.93-1.00 | A: Habitat modification C: Predation E: Human disturbance, Food availability |
| San Luis Obispo/Santa Barbara Counties | 9 | Vandenberg AFB (5 sites) | U.S. Air Force | Site management, predator management | suitable, occupied | 2017: 19 2016: 21 2015: 20 2014: 17 2013: 14 2012: 16 | 2017: 0.30-0.42 2016: 0.72-0.86 2015: 1.32-1.45 2014: 1.00-1.18 2013: 1.27-1.36 2012: 0.56-0.63 | C: Predation E: Food availability |

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| Area | Nesting Area | Name | Ownership | Conservation Measures | Current Status | Minimum Number of Breeding Pairs (2012-2017) | Fledglings per pair ratio min-max (2012-2017) | Threats |
|-----------------------------|--------------|---|--------------------------------|-----------------------|--------------------|--|--|---|
| Ventura County | 10 | Santa Clara River / McGrath State Beach | DPR | Site management | suitable, occupied | 2017: 7 2016: 40 2015: 45 2014: 4 2013: 37 2012: 38 | 2017: 0.00-0.00 2016: 0.19-0.28 2015: 0.39-0.60 2014: 0.50-0.50 2013: 0.00-0.00 2012: 0.21-0.21 | C: Predation E: Human disturbance, Food availability |
| Ventura County | 11 | Ormond Beach | Ventura County, City of Oxnard | Site management | suitable, occupied | 2017: 25 2016: 15 2015: 0 2014: 18 2013: 6 2012: 6 | 2017: 0.54-0.80 2016: 0.78-0.93 2015: N/A 2014: 0.50-0.50 2013: 0.00-0.00 2012: 0.00-0.00 | C: Predation E: Human disturbance, Food availability |
| Ventura County | 12 | Hollywood Beach | City of Oxnard | Site management | suitable, occupied | 2017: 0 2016: 0 2015: 15 2014: 77 2013: 117 2012: 0 | 2017: N/A 2016: N/A 2015: 0.00-0.00 2014: 0.26-0.38 2013: 0.15-0.26 2012: N/A | A: Rising sea levels, habitat modification C: Predation E: Human Disturbance, Dredging, Food availability |
| Ventura County | 13 | NBVC Point Mugu (4 sites) | U.S. Navy | Site management | suitable, occupied | 2017: 262 2016: 315 2015: 323 2014: 407 2013: 203 2012: 608 | 2017: 0.09-0.19 2016: 0.16-0.27 2015: 0.26-0.46 2014: 0.29-0.31 2013: 0.00-0.00 2012: 0.02-0.02 | A: Rising sea levels C: Predation E: Food availability |
| Los Angeles/Orange Counties | 14 | Malibu Lagoon | State Parks | UNK | suitable, occupied | 2017: 22 2012-2016: no nesting | 2017: 0.52-1.00 2016-2016: N/A | A: Rising sea levels C: Predation E: Human disturbance, Food availability |

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| Area | Nesting Area | Name | Ownership | Conservation Measures | Current Status | Minimum Number of Breeding Pairs (2012-2017) | Fledglings per pair ratio min-max (2012-2017) | Threats |
|-----------------------------|--------------|--------------------------------|---------------------|--------------------------------------|--------------------|--|--|--|
| Los Angeles/Orange Counties | 15 | Venice Beach | Los Angeles County | Site management | suitable, occupied | 2017: 0 2016: 2 2015: 8 2014: 47 2013: 12 2012: 0 | 2017: N/A 2016: 0.00-0.00 2015: 0.00-0.00 2014: 1.14-2.13 2013: 0.00-0.00 2012: 0.00-0.00 | A: Habitat modification C: Predation E: Food availability; Human disturbance |
| Los Angeles/Orange Counties | 16 | L.A. Harbor / Pier 400 | Port of Los Angeles | Site management, predator management | suitable, occupied | 2017: 0 2016: 109 2015: 103 2014: 110 2013: 237 2012: 144 | 2017: N/A 2016: 0.33-0.64 2015: 0.00-0.00 2014: 0.14-1.02 2013: 0.13-0.62 2012: 0.17-0.24 | C: Predation; predation by special-status species E: Food availability, Contaminants |
| Los Angeles/Orange Counties | 17 | Seal Beach NWR/ NASA Island | Service | Site management, predator management | suitable, occupied | 2017: 118 2016: 73 2015: 50 2014: 115 2013: 149 2012: 117 | 2017: 0.03-0.07 2016: 0.31-0.34 2015: 0.07-0.14 2014: 0.03-0.03 2013: 0.13-0.62 2012: 0.55-0.60 | A: Habitat modification C: Predation E: Contaminants, Food availability |
| Los Angeles/Orange Counties | 18 | Bolsa Chica Ecological Reserve | CDFW | Site management, predator management | suitable, occupied | 2017: 158 2016: 124 2015: 184 2014: 205 2013: 137 2012: 154 | 2017: 0.03-0.04 2016: 0.31-0.34 2015: 0.07-0.14 2014: 0.03-0.03 2013: 0.13-0.62 2012: 0.55-0.60 | A: Habitat modification, Sea level rise C: Predation; predation by special-status species E: Food availability |
| Los Angeles/Orange Counties | 19 | Huntington State Beach | DPR | Site management, predator management | suitable, occupied | 2017: 560 2016: 304 2015: 411 2014: 407 2013: 303 2012: 422 | 2017: 0.04-0.25 2016: 0.30-0.40 2015: 0.25-0.30 2014: 0.34-0.86 2013: 0.30-0.33 2012: 0.17-0.21 | A: Habitat modification C: Predation E: Human disturbance |

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| Area | Nesting Area | Name | Ownership | Conservation Measures | Current Status | Minimum Number of Breeding Pairs (2012-2017) | Fledglings per pair ratio min-max (2012-2017) | Threats |
|-----------------------------|--------------|--|------------------------------|--|--------------------|--|--|---|
| Los Angeles/Orange Counties | 20 | Burris Sand Pit | Orange County Water District | Site Management | suitable, occupied | 2017: 12 2016: 6 2015: 18 2014: 16 2013: 17 2012: 11 | 2017: 0.71-0.83 2016: 0.00-0.00 2015: 0.14-0.17 2014: 0.56-0.63 2013: 0.04-0.24 2012: 0.64-0.64 | A: Habitat modification C: Predation E: Contaminants, Food availability |
| Los Angeles/Orange Counties | 21 | Upper Newport Bay Ecological Reserve | CDFW | Site Management | suitable, occupied | 2017: 15 2016: 18 2015: 19 2014: 1 2013: 27 2012: 16 | 2017: 0.81-0.87 2016: 0.10-0.11 2015: 0.05-0.05 2014: 0.00-0.00 2013: 0.26-0.30 2012: 0.19-0.25 | A: Habitat modification, Sea level rise C: Predation E: Food availability |
| Los Angeles/Orange Counties | 22 | Anaheim Lake | | Unknown | suitable, occupied | 2017: 0 2016: 2 2012-2015: no nesting | 2017: N/A 2016: 0.00-0.00 2012-2015: N/A | C: Predation |
| San Diego County | 23 | MCB Camp Pendleton (7 sites) | U.S. Marine Corps | INRMP. Site management, predator management (no predator management in 2017) | suitable, occupied | 2017: 212 2016: 747 2015: 918 2014: 858 2013: 786 2012: 507 | 2017: 0.00-0.02 2016: 0.09-0.28 2015: 0.13-0.19 2014: 0.32-0.62 2013: 0.13-0.19 2012: 0.02-0.05 | A: Rising sea levels, habitat modification C: Predation; predation by special-status species, Disease E: Food availability, Contaminants, Human disturbance |
| San Diego County | 24 | Batiquitos Lagoon Ecological Reserve (5 sites) | CDFW | Site management, predator management (no predator management in 2011) | suitable, occupied | 2017: 658 2016: 414 2015: 296 2014: 311 2013: 443 2012: 550 | 2017: 0.26-0.34 2016: 0.39-0.48 2015: 0.22-0.48 2014: 0.49-0.86 2013: 0.21-0.37 2012: 0.06-0.07 | A: Habitat modification C: Predation; predation by special-status species E: Human disturbance; Food availability |

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| Area | Nesting Area | Name | Ownership | Conservation Measures | Current Status | Minimum Number of Breeding Pairs (2012-2017) | Fledglings per pair ratio min-max (2012-2017) | Threats |
|------------------|--------------|--|-----------------------------|---|--------------------|--|--|--|
| San Diego County | 25 | San Dieguito Lagoon (4 sites) | UNK | Site management, predator management | Suitable, occupied | 2017: 0 2016: 0 2015: 0 2014: 0 2013: 3 2012: 0 | 2017-2014: N/A 2013: 0.00-0.00 2012: N/A | A: Habitat modification C: Predation E: Food Availability |
| San Diego County | 26 | Mission Bay (5 sites) | City of San Diego | MBNRMP, SD MSCP, Site management, predator management | suitable, occupied | 2017: 181 2016: 114 2015: 199 2014: 106 2013: 148 2012: 36 | 2017: 0.36-0.49 2016: 0.25-0.37 2015: 0.27-0.42 2014: 0.48-0.79 2013: 0.03-0.04 2012: 0.00-0.01 | A: Habitat modification C: Predation; Predation by special-status species E: Contaminants, Food availability |
| San Diego County | 27 | San Diego Bay: Lindbergh Field | Airport Authority | Site management, predator management | suitable, occupied | 2017: 21 2016: 31 2015: 8 2014: 67 2013: 91 2012: 102 | 2017: 0.54-0.81 2016: 0.27-0.55 2015: 0.44-1.13 2014: 0.34-0.69 2013: 0.32-0.37 2012: 0.29-0.35 | A: Habitat modification C: Predation, Disease E: Contaminants, Food availability |
| San Diego County | | San Diego Bay: NBC Coronado (4 sites) | U.S. Navy | NBC INRMP, Site management, predator management | suitable, occupied | 2017: 804 2016: 748 2015: 707 2014: 556 2013: 714 2012: 803 | 2017: 0.32-0.59 2016: 0.12-0.26 2015: 0.21-0.33 2014: 0.21-0.35 2013: 0.17-0.22 2012: 0.01-0.02 | A: Rising sea levels, Habitat modification C: Predation; predation by special-status species E: Food availability, Contaminants, Human Disturbance |
| San Diego County | | San Diego Bay: Sweetwater Marsh Unit NWR | Service / Port of San Diego | SDNWR CCP, Site management, predator management | suitable, occupied | 2017: 33 2016: 106 2015: 105 2014: 100 2013: 113 2012: 102 | 2017: 0.20-0.24 2016: 0.19-0.21 2015: 0.18-0.24 2014: 0.12-0.34 2013: 0.18-0.28 2012: 0.08-0.24 | A: Rising sea levels, Habitat modification C: Predation; predation by special-status species E: Food availability, Contaminants, Human disturbance |

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| Area | Nesting Area | Name | Ownership | Conservation Measures | Current Status | Minimum Number of Breeding Pairs (2012-2017) | Fledglings per pair ratio min-max (2012-2017) | Threats |
|------------------|--------------|---|-------------------|---|--------------------|--|--|---|
| San Diego County | | San Diego Bay: South San Diego Bay Unit NWR | Service | Site management, predator management | suitable, occupied | 2017: 33 2016: 16 2015: 24 2014: 22 2013: 27 2012: 49 | 2017: 0.05-0.09 2016: 0.24-0.44 2015: 0.34-0.42 2014: 0.31-0.50 2013: 0.05-0.07 2012: 0.01-0.02 | A: Rising sea levels, Habitat modification C: Predation; predation by special-status species E: Contaminants, Food availability, Inter-specific disturbance |
| San Diego County | | San Diego Bay: Chula Vista Wildlife Reserve | Port of San Diego | San Diego Bay INRMP. Site management, predator management | suitable, occupied | 2017: 86 2016: 63 2015: 69 2014: 59 2013: 66 2012: 37 | 2017: 0.18-0.27 2016: 0.21-0.29 2015: 0.43-0.54 2014: 0.27-0.46 2013: 0.44-0.59 2012: 0.35-0.64 | A. Rising sea levels, Habitat modification C: Predation; predation by special-status species E: Contaminants |
| San Diego County | 28 | Tijuana Estuary NERR | DPR/Service | Site management, predator management | suitable, occupied | 2017: 197 2016: 144 2015: 144 2014: 229 2013: 206 2012: 109 | 2017: 0.35-0.42 2016: 0.19-0.28 2015: 0.15-0.22 2014: 0.14-0.17 2013: 0.23-0.32 2012: 0.00-0.00 | A: Rising sea levels, Habitat modification C: Predation; predation by special-status species E. Food availability, Human disturbance |
| Imperial County | 29 | Salton Sea | UNK | UNK | Suitable, occupied | 2017: 0 2016: 0 2015: 0 2014: 2 2013: 2 2012: 0 | 2017: N/A 2016: N/A 2015: 0.00-1.00 2014: 0.00-0.50 2013: 1.00-1.00 2012: N/A | C: Predation E: Contaminants |

1. CDFW: California Department of Fish and Wildlife
2. UNK: Unknown
3. DPR: California Department of Parks and Recreation

APPENDIX B**[Inundation probability with sea level rise]****Table B1. Inundation Probability at occupied (2013-2017) California Least Tern Nesting Sites in the U.S. based on NOAA Sea Level Rise Modeling.**

| Nesting Area | Sea Level Rise (ft) | High Confidence (80 percent) of No Inundation (ac) | Inundation Probability (percent) | Low Confidence (20 to <80) of Either Inundation or No Inundation (ac) | Inundation Probability (percent) | High Confidence (80 percent) of Inundation (ac) | Inundation Probability (percent) |
|---|---------------------|--|----------------------------------|--|----------------------------------|---|----------------------------------|
| Alameda NAS (9.63 ac) | 1 | 9.63 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 9.63 | 100 | 0 | 0 | 0 | 0 |
| | 3 | 9.39 | 97 | 0.24 | 3 | 0 | 0 |
| | 5 | 5.69 | 59 | 3.73 | 39 | 0.21 | 2 |
| Anaheim Lake (0.06 ac) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Batiquitos Lagoon Ecological Reserve (20.87 ac) | 1 | 20.82 | 100 | 0.03 | 0.1 | 0.03 | 0.1 |
| | 2 | 20.79 | 100 | 0.04 | 0.2 | 0.04 | 0.2 |
| | 3 | 20.75 | 99 | 0.07 | 0.3 | 0.05 | 0.3 |
| | 5 | 18.22 | 87 | 2.53 | 12 | 0.12 | 1 |
| Bolsa Chica Ecological Reserve (9.86 ac) | 1 | 7.81 | 79 | 0.44 | 4 | 1.61 | 16 |
| | 2 | 7.75 | 79 | 0.18 | 2 | 1.93 | 20 |
| | 3 | 7.59 | 77 | 0.22 | 2 | 2.05 | 21 |
| | 5 | 6.26 | 64 | 1.33 | 14 | 2.26 | 23 |
| Bufferlands (1.37 ac) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Burris Sand Pit/Burris Basin (0.72 ac) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Eden Landing (176.33 ac) | 1 | 1.35 | 1 | 9.96 | 6 | 165.02 | 94 |
| | 2 | 0.46 | 0 | 4.71 | 3 | 171.16 | 97 |
| | 3 | 0.09 | 0 | 1.53 | 1 | 174.71 | 99 |
| | 5 | 0 | 0 | 0.13 | 0 | 176.20 | 100 |
| Hayward Regional Shoreline (0.36 ac) | 1 | 0 | 0 | 0.32 | 91 | 0.03 | 9 |
| | 2 | 0 | 0 | 0.22 | 63 | 0.13 | 37 |
| | 3 | 0 | 0 | 0.01 | 4 | 0.34 | 96 |
| | 5 | 0 | 0 | 0 | 0 | 0.36 | 100 |

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| Nesting Area | Sea Level Rise (ft) | High Confidence (80 percent) of No Inundation (ac) | Inundation Probability (percent) | Low Confidence (20 to <80) of Either Inundation or No Inundation (ac) | Inundation Probability (percent) | High Confidence (80 percent) of Inundation (ac) | Inundation Probability (percent) |
|---|---------------------|--|----------------------------------|--|----------------------------------|---|----------------------------------|
| Hollywood Beach (30.88 ac) | 1 | 19.86 | 64 | 1.06 | 3 | 9.97 | 32 |
| | 2 | 18.34 | 59 | 2.11 | 7 | 10.43 | 34 |
| | 3 | 14.58 | 47 | 5.35 | 17 | 10.96 | 35 |
| | 5 | 9.25 | 30 | 5.74 | 19 | 15.90 | 51 |
| Huntington State Beach (10.96 ac) | 1 | 10.96 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 10.96 | 100 | 0 | 0 | 0 | 0 |
| | 3 | 10.95 | 100 | 0.01 | 0.05 | 0 | 0 |
| | 5 | 7.46 | 68 | 3.49 | 32 | 0 | 0 |
| L.A. Harbor (14.73 ac) | 1 | 14.73 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 14.730 | 100 | 0 | 0 | 0 | 0 |
| | 3 | 14.73 | 100 | 0 | 0 | 0 | 0 |
| | 5 | 14.73 | 100 | 0 | 0 | 0 | 0 |
| Malibu Lagoon (3.57 ac) | 1 | 1.01 | 28 | 0.81 | 23 | 1.75 | 49 |
| | 2 | 0.36 | 10 | 1.14 | 32 | 2.07 | 58 |
| | 3 | 0.02 | 0.5 | 1.07 | 30 | 2.49 | 70 |
| | 5 | 0 | 0 | 0.05 | 1 | 3.52 | 98 |
| MCB Camp Pendleton (259.03 ac) Blue Beach (88.64 ac) | 1 | 51.24 | 58 | 8.98 | 10 | 28.42 | 32 |
| | 2 | 42.08 | 47 | 13.90 | 16 | 32.66 | 37 |
| | 3 | 32.92 | 37 | 18.73 | 21 | 37.00 | 42 |
| | 5 | 11.76 | 13 | 21.56 | 24 | 55.33 | 62 |
| MCB Camp Pendleton (259.03 ac) Red Beach (7.54 ac) | 1 | 7.15 | 95 | 0.38 | 5 | 0 | 0 |
| | 2 | 7.00 | 93 | 0.35 | 5 | 0.18 | 2 |
| | 3 | 6.44 | 85 | 0.72 | 10 | 0.38 | 5 |
| | 5 | 5.09 | 67 | 1.38 | 18 | 1.07 | 14 |
| MCB Camp Pendleton (259.03 ac) Salt Flats (111.72) | 1 | 53.13 | 48 | 57.69 | 52 | 0.91 | 1 |
| | 2 | 24.39 | 22 | 78.02 | 70 | 9.31 | 8 |
| | 3 | 7.02 | 6 | 47.61 | 43 | 57.10 | 51 |
| | 5 | 0 | 0 | 7.61 | 7 | 104.11 | 93 |

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| Nesting Area | Sea Level Rise (ft) | High Confidence (80 percent) of No Inundation (ac) | Inundation Probability (percent) | Low Confidence (20 to <80) of Either Inundation or No Inundation (ac) | Inundation Probability (percent) | High Confidence (80 percent) of Inundation (ac) | Inundation Probability (percent) |
|--|---------------------|--|----------------------------------|--|----------------------------------|---|----------------------------------|
| MCB Camp Pendleton (259.03 ac) White Beach North/Central (17.41 ac) | 1 | 16.24 | 93 | 0.94 | 5 | 0.24 | 1 |
| | 2 | 15.51 | 89 | 1.19 | 7 | 0.71 | 4 |
| | 3 | 14.43 | 83 | 1.86 | 11 | 1.12 | 6 |
| | 5 | 8.41 | 48 | 6.09 | 35 | 2.91 | 17 |
| MCB Camp Pendleton (259.03 ac) White Beach South (33.72 ac) | 1 | 32.72 | 97 | 1.00 | 3 | 0 | 0 |
| | 2 | 31.20 | 93 | 2.46 | 7 | 0.06 | 0.2 |
| | 3 | 28.50 | 85 | 4.29 | 13 | 0.93 | 3 |
| | 5 | 6.43 | 19 | 22.20 | 66 | 5.08 | 15 |
| Mission Bay (23.94 ac) FAA Island (1.58 ac) | 1 | 1.57 | 99 | 0.01 | 1 | 0 | 0 |
| | 2 | 1.37 | 87 | 0.21 | 13 | 0 | 0 |
| | 3 | 0.51 | 33 | 1.05 | 67 | 0.01 | 1 |
| | 5 | 0 | 0 | 0.56 | 35 | 1.02 | 65 |
| Mission Bay (23.94 ac) Mariner's Point (2.19 ac) | 1 | 2.19 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 2.19 | 100 | 0 | 0 | 0 | 0 |
| | 3 | 2.19 | 100 | 0 | 0 | 0 | 0 |
| | 5 | 2.16 | 99 | 0.03 | 1 | 0 | 0 |
| Mission Bay (23.94 ac) North Fiesta Island (12.52 ac) | 1 | 12.52 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 12.52 | 100 | 0 | 0 | 0 | 0 |
| | 3 | 12.52 | 100 | 0 | 0 | 0 | 0 |
| | 5 | 12.52 | 100 | 0 | 0 | 0 | 0 |
| Mission Bay (23.94 ac) San Diego River Mouth (3.16 ac) | 1 | 2.03 | 64 | 1.13 | 36 | 0 | 0 |
| | 2 | 1.09 | 34 | 1.94 | 61 | 0.14 | 4 |
| | 3 | 0.26 | 8 | 1.80 | 57 | 1.09 | 35 |
| | 5 | 0 | 0 | 0.31 | 10 | 2.86 | 90 |
| Mission Bay (23.94 ac) Stony Point (4.49 ac) | 1 | 4.49 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 4.48 | 100 | 0.01 | 0.2 | 0 | 0 |
| | 3 | 4.40 | 98 | 0.09 | 2 | 0 | 0 |
| | 5 | 2.82 | 63 | 1.60 | 36 | 0.07 | 2 |

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| Nesting Area | Sea Level Rise (ft) | High Confidence (80 percent) of No Inundation (ac) | Inundation Probability (percent) | Low Confidence (20 to <80) of Either Inundation or No Inundation (ac) | Inundation Probability (percent) | High Confidence (80 percent) of Inundation (ac) | Inundation Probability (percent) |
|--|---------------------|--|----------------------------------|--|----------------------------------|---|----------------------------------|
| Montezuma Wetlands (0.29 ac) | 1 | 0 | 0 | 0 | 0 | 0.29 | 100 |
| | 2 | 0 | 0 | 0 | 0 | 0.29 | 100 |
| | 3 | 0 | 0 | 0 | 0 | 0.29 | 100 |
| | 5 | 0 | 0 | 0 | 0 | 0.29 | 100 |
| Napa Sonoma Marsh Wildlife Area (1.71 ac) | 1 | 0.04 | 2 | 0.46 | 27 | 1.21 | 71 |
| | 2 | 0 | 0 | 0.24 | 14 | 1.46 | 86 |
| | 3 | 0 | 0 | 0.06 | 4 | 1.65 | 96 |
| | 5 | 0 | 0 | 0 | 0 | 1.71 | 100 |
| Oceano Dunes SVRA (135.42 ac) | 1 | 135.42 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 135.31 | 100 | 0.11 | 0.1 | 0 | 0 |
| | 3 | 134.77 | 100 | 0.66 | 0.5 | 0 | 0 |
| | 5 | 131.60 | 97 | 3.24 | 2 | 0.59 | 0.4 |
| Ormond Beach (45.18 ac) | 1 | 40.54 | 90 | 0.23 | 1 | 4.41 | 10 |
| | 2 | 39.73 | 88 | 0.94 | 2 | 4.50 | 10 |
| | 3 | 37.13 | 82 | 3.42 | 8 | 4.63 | 10 |
| | 5 | 18.01 | 40 | 19.43 | 43 | 7.74 | 17 |
| Pittsburg Power Plant (0.59 ac) | 1 | 0.00 | 0 | 0.00 | 0 | 0.59 | 100 |
| | 2 | 0.00 | 0 | 0.00 | 0 | 0.59 | 100 |
| | 3 | 0.00 | 0 | 0.00 | 0 | 0.59 | 100 |
| | 5 | 0.00 | 0 | 0.00 | 0 | 0.59 | 100 |
| Pt Mugu (60.42 ac) | 1 | 55.21 | 91 | 1.17 | 2 | 4.04 | 7 |
| | 2 | 53.20 | 88 | 2.46 | 4 | 4.75 | 8 |
| | 3 | 48.34 | 80 | 6.92 | 11 | 5.16 | 9 |
| | 5 | 25.30 | 42 | 23.56 | 39 | 11.56 | 19 |
| Salton Sea (acres unknown) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| San Diego Bay (224.71 ac) Note: .25 ac outside modeled area | 1 | 4.48 | 90 | 0.20 | 4 | 0.31 | 6 |
| | 2 | 3.71 | 74 | 0.93 | 19 | 0.35 | 7 |
| Chula Vista Wildlife Reserve | 3 | 2.49 | 50 | 2.00 | 40 | 0.50 | 10 |
| (4.99 ac) | 5 | 1.17 | 24 | 1.42 | 28 | 2.40 | 48 |

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| Nesting Area | Sea Level Rise (ft) | High Confidence (80 percent) of No Inundation (ac) | Inundation Probability (percent) | Low Confidence (20 to <80) of Either Inundation or No Inundation (ac) | Inundation Probability (percent) | High Confidence (80 percent) of Inundation (ac) | Inundation Probability (percent) |
|--|---------------------|--|----------------------------------|--|----------------------------------|---|----------------------------------|
| San Diego Bay (224.71 ac) Note: .25 ac outside modeled area | 1 2 | 19.14 19.14 | 100 100 | 0 0 | 0 0 | 0 0 | 0 0 |
| NAS North Island, Coronado, MAT Site (19.14 ac) | 3 5 | 19.14 19.14 | 100 100 | 0 0 | 0 0 | 0 0 | 0 0 |
| San Diego Bay (224.71 ac) Note: .25 ac outside modeled area | 1 2 | 44.42 41.82 | 95 89 | 2.37 3.83 | 5 8 | 0.14 1.27 | 0.3 3 |
| NAB Coronado, Delta Beaches (46.92 ac) | 3 5 | 38.31 30.36 | 82 65 | 6.22 8.15 | 13 17 | 2.39 8.42 | 5 18 |
| San Diego Bay (224.71 ac) Note: .25 ac outside modeled area | 1 2 | 92.43 89.36 | 84 82 | 6.73 6.17 | 6 6 | 10.30 13.93 | 9 13 |
| NAB Coronado, Oceans (109.45 ac) | 3 5 | 85.64 73.85 | 78 67 | 6.92 12.04 | 6 11 | 16.89 23.57 | 15 22 |
| San Diego Bay (224.71 ac) Note: .25 ac outside modeled area | 1 2 | 12.55 12.55 | 100 100 | 0 0 | 0 0 | 0 0 | 0 0 |
| San Diego International Airport (12.55 ac) | 3 5 | 12.55 5.42 | 100 43 | 0 7.13 | 0 57 | 0 0 | 0 0 |
| San Diego Bay (224.71 ac) Note: .25 ac outside modeled area | 1 2 | 3.29 2.54 | 66 51 | 0.30 0.95 | 6 19 | 1.13 1.24 | 23 25 |
| Saltworks (4.98 ac) Note: 0.25 ac outside modeled area | 3 5 | 1.05 0.18 | 21 4 | 2.25 0.91 | 45 18 | 1.42 3.63 | 29 73 |
| San Diego Bay (224.71 ac) Note: .25 ac outside modeled area | 1 2 | 26.68 26.68 | 100 100 | 0 0 | 0 0 | 0 0 | 0 0 |
| D Street Fill (26.68 ac) | 3 5 | 25.83 21.21 | 97 80 | 0.84 4.66 | 3 17 | 0 0.81 | 0 3 |

2020 5-year Review for the California Least Tern

| Nesting Area | Sea Level Rise (ft) | High Confidence (80 percent) of No Inundation (ac) | Inundation Probability (percent) | Low Confidence (20 to <80) of Either Inundation or No Inundation (ac) | Inundation Probability (percent) | High Confidence (80 percent) of Inundation (ac) | Inundation Probability (percent) |
|--|---------------------|--|----------------------------------|--|----------------------------------|---|----------------------------------|
| San Dieguito Lagoon (14.68 ac) | 1 | 14.58 | 99 | 0.11 | 1 | 0.00 | 0 |
| | 2 | 14.38 | 98 | 0.30 | 2 | 0.01 | 0 |
| | 3 | 14.17 | 97 | 0.41 | 3 | 0.10 | 1 |
| | 5 | 13.46 | 92 | 0.74 | 5 | 0.48 | 3 |
| Santa Clara River Mouth/McGrath State Beach (55.49 ac) | 1 | 55.38 | 100 | 0.05 | 0.1 | 0.05 | 0.1 |
| | 2 | 55.21 | 100 | 0.21 | 0.4 | 0.07 | 0.1 |
| | 3 | 55.08 | 99 | 0.31 | 1 | 0.10 | 0.2 |
| | 5 | 54.28 | 98 | 0.81 | 1 | 0.39 | 1 |
| Seal Beach NWR - Anaheim Bay (2.45 ac) | 1 | 2.42 | 99 | 0.03 | 1 | 0 | 0 |
| | 2 | 2.09 | 86 | 0.35 | 14 | 0 | 0 |
| | 3 | 1.13 | 46 | 1.30 | 53 | 0.01 | 1 |
| | 5 | 0 | 0 | 1.22 | 50 | 1.23 | 50 |
| Tijuana Estuary NERR (22.7 ac) | 1 | 21.87 | 96 | 0.72 | 3 | 0.11 | 0.5 |
| | 2 | 20.13 | 89 | 2.40 | 11 | 0.17 | 1 |
| | 3 | 17.93 | 79 | 4.00 | 18 | 0.77 | 3 |
| | 5 | 13.57 | 60 | 4.46 | 20 | 4.68 | 21 |
| Upper Newport Bay Ecological Reserve (3.63 ac) | 1 | 2.06 | 57 | 0.56 | 15 | 1.02 | 28 |
| | 2 | 1.80 | 50 | 0.55 | 15 | 1.29 | 35 |
| | 3 | 1.47 | 41 | 0.60 | 17 | 1.56 | 43 |
| | 5 | 0 | 0 | 1.49 | 41 | 2.15 | 59 |
| Vandenberg AFB (66.86 ac) | 1 | 66.42 | 99 | 0.17 | 0.3 | 0.26 | 0.4 |
| | 2 | 66.30 | 99 | 0.16 | 0.2 | 0.39 | 1 |
| | 3 | 66.27 | 99 | 0.15 | 0.2 | 0.43 | 1 |
| | 5 | 66.18 | 99 | 0.10 | 0.1 | 0.58 | 1 |
| Venice Beach (7.3 ac) | 1 | 7.30 | 100 | 0 | 0 | 0 | 0 |
| | 2 | 7.30 | 100 | 0 | 0 | 0 | 0 |
| | 3 | 7.30 | 100 | 0 | 0 | 0 | 0 |
| | 5 | 7.30 | 100 | 0 | 0 | 0 | 0 |

* NA: These sites are inland and not subject to inundation.

APPENDIX C

[Probable inundation with 1 ft and 3 ft sea level rise]

Table C1. Probable Inundation of Individual California Least Tern Nesting Sites for the Likely Inundation Scenarios in 2050 and 2080 using only the High (80%) Confidence Model Results. Green Represents No Loss of Nesting Habitat (0%), Yellow Represents Minimal Loss (1-20%), Tan Represents Moderate Loss (21-50%), Orange Represents Significant Loss (51-99%), Red Represents Complete Loss (100%).

| Probable Inundation | 1 ft Sea Level Rise (2050) | Probable Inundation | 3 ft Sea Level Rise (2080) |
|---------------------------|--|---------------------------|--|
| None (<1%) (643.36 ac) | Alameda NAS (9.63 ac) | None (<1%) (417.60 ac) | Alameda NAS (9.63 ac) |
| None (<1%) (643.36 ac) | Anaheim Lake (0.06 ac) | None (<1%) (417.60 ac) | Anaheim Lake (0.06 ac) |
| None (<1%) (643.36 ac) | Batiquitos Lagoon Ecological Reserve (20.87 ac) | None (<1%) (417.60 ac) | Batiquitos Lagoon Ecological Reserve (20.87 ac) |
| None (<1%) (643.36 ac) | Huntington State Beach (10.96 ac) | None (<1%) (417.60 ac) | Huntington State Beach (10.96 ac) |
| None (<1%) (643.36 ac) | L.A. Harbor (14.73 ac) | None (<1%) (417.60 ac) | L.A. Harbor (14.73 ac) |
| None (<1%) (643.36 ac) | MCB Camp Pendleton, Red Beach (7.54 ac) | None (<1%) (417.60 ac) | Mission Bay, FAA Island (1.58 ac) |
| None (<1%) (643.36 ac) | MCB Camp Pendleton, Salt Flats (111.72 ac) | None (<1%) (417.60 ac) | Mission Bay, Mariner's Point (2.19 ac) |
| None (<1%) (643.36 ac) | MCB Camp Pendleton, White Beach South (33.72 ac) | None (<1%) (417.60 ac) | Mission Bay, North Fiesta Island (12.52 ac) |
| None (<1%) (643.36 ac) | Mission Bay, FAA Island (1.58 ac) | None (<1%) (417.60 ac) | Mission Bay, Stony Point (4.49 ac) |
| None (<1%) (643.36 ac) | Mission Bay, Mariner's Point (2.19 ac) | None (<1%) (417.60 ac) | Oceano Dunes SVRA (135.42 ac) |
| None (<1%) (643.36 ac) | Mission Bay, North Fiesta Island (12.52 ac) | None (<1%) (417.60 ac) | San Diego Bay, D Street Fill (26.68 ac) |
| None (<1%) (643.36 ac) | Mission Bay, San Diego River Mouth (3.16 ac) | None (<1%) (417.60 ac) | San Diego Bay, NAS North Island, Coronado, MAT Site (19.14 ac) |
| None (<1%) (643.36 ac) | Mission Bay, Stony Point (4.49 ac) | None (<1%) (417.60 ac) | San Diego Bay, San Diego International Airport (12.55 ac) |
| None (<1%) (643.36 ac) | Oceano Dunes SVRA (135.42 ac) | None (<1%) (417.60 ac) | San Dieguito Lagoon (14.68 ac) |

2020 5-year Review for the California Least Tern

| Probable Inundation | 1 ft Sea Level Rise (2050) | Probable Inundation | 3 ft Sea Level Rise (2080) |
|----------------------------------|--|----------------------------------|--|
| None (<1%) (643.36 ac) | San Diego Bay, D Street Fill (26.68 ac) | None (<1%) (417.60 ac) | Santa Clara River Mouth/McGrath State Beach (55.49 ac) |
| None (<1%) (643.36 ac) | San Diego Bay, NAB Coronado, Delta Beaches (46.92 ac) | None (<1%) (417.60 ac) | Seal Beach NWR - Anaheim Bay (2.45 ac) |
| None (<1%) (643.36 ac) | San Diego Bay, NAS North Island, Coronado, MAT Site (19.14 ac) | None (<1%) (417.60 ac) | Vandenberg AFB (66.86 ac) |
| None (<1%) (643.36 ac) | San Diego Bay, San Diego International Airport (12.55 ac) | None (<1%) (417.60 ac) | Venice Beach (7.3 ac) |
| None (<1%) (643.36 ac) | San Dieguito Lagoon (14.68 ac) | Minimal (1-20%) (358.19 ac) | Bolsa Chica Ecological Reserve (9.86 ac) |
| None (<1%) (643.36 ac) | Santa Clara River Mouth/McGrath State Beach (55.49 ac) | Minimal (1-20%) (358.19 ac) | MCB Camp Pendleton, Red Beach (7.54 ac) |
| None (<1%) (643.36 ac) | Seal Beach NWR - Anaheim Bay (2.45 ac) | Minimal (1-20%) (358.19 ac) | MCB Camp Pendleton, White Beach North/Central (17.41 ac) |
| None (<1%) (643.36 ac) | Tijuana Estuary NERR (22.7 ac) | Minimal (1-20%) (358.19 ac) | MCB Camp Pendleton, White Beach South (33.72 ac) |
| None (<1%) (643.36 ac) | Vandenberg AFB (66.86 ac) | Minimal (1-20%) (358.19 ac) | Ormond Beach (45.18 ac) |
| None (<1%) (643.36 ac) | Venice Beach (7.3 ac) | Minimal (1-20%) (358.19 ac) | Pt Mugu (60.42 ac) |
| Minimal (1-20%) (247.67 ac) | Bolsa Chica Ecological Reserve (9.86 ac) | Minimal (1-20%) (358.19 ac) | San Diego Bay, Chula Vista Wildlife Reserve (4.99 ac) |
| Minimal (1-20%) (247.67 ac) | Hayward Regional Shoreline (0.36 ac) | Minimal (1-20%) (358.19 ac) | San Diego Bay, NAB Coronado, Delta Beaches (46.92 ac) |
| Minimal (1-20%) (247.67 ac) | MCB Camp Pendleton, White Beach North/Central (17.41 ac) | Minimal (1-20%) (358.19 ac) | San Diego Bay, NAB Coronado, Oceans (109.45 ac) |
| Minimal (1-20%) (247.67 ac) | Ormond Beach (45.18 ac) | Minimal (1-20%) (358.19 ac) | Tijuana Estuary NERR (22.7 ac) |
| Minimal (1-20%) (247.67 ac) | Pt Mugu (60.42 ac) | Moderate (21-50%) (131.28 ac) | Hollywood Beach (30.88 ac) |
| Minimal (1-20%) (247.67 ac) | San Diego Bay, Chula Vista Wildlife Reserve (4.99 ac) | Moderate (21-50%) (131.28 ac) | MCB Camp Pendleton, Blue Beach (88.64 ac) |
| Minimal (1-20%) (247.67 ac) | San Diego Bay, NAB Coronado, Oceans (109.45 ac) | Moderate (21-50%) (131.28 ac) | Mission Bay, San Diego River Mouth (3.16 ac) |
| Moderate (21-50%) (131.70 ac) | Hollywood Beach (30.88 ac) | Moderate (21-50%) (131.28 ac) | San Diego Bay, Saltworks (4.98 ac) |
| Moderate (21-50%) (131.70 ac) | Malibu Lagoon (3.57 ac) | Moderate (21-50%) (131.28 ac) | Upper Newport Bay Ecological Reserve (3.63 ac) |

2020 5-year Review for the California Least Tern

| Probable Inundation | 1 ft Sea Level Rise (2050) | Probable Inundation | 3 ft Sea Level Rise (2080) |
|-------------------------------------|--|-------------------------------------|--|
| Moderate (21-50%) (131.70 ac) | MCB Camp Pendleton, Blue Beach (88.64 ac) | Significant (51-99%) (117.36 ac) | Hayward Regional Shoreline (0.36 ac) |
| Moderate (21-50%) (131.70 ac) | San Diego Bay, Saltworks (4.98 ac) | Significant (51-99%) (117.36 ac) | Malibu Lagoon (3.57 ac) |
| Moderate (21-50%) (131.70 ac) | Upper Newport Bay Ecological Reserve (3.63 ac) | Significant (51-99%) (117.36 ac) | MCB Camp Pendleton, Salt Flats (111.72 ac) |
| Significant (51-99%) (178.04 ac) | Eden Landing (176.33 ac) | Significant (51-99%) (117.36 ac) | Napa Sonoma Marsh Wildlife Area (1.71 ac) |
| Significant (51-99%) (178.04 ac) | Napa Sonoma Marsh Wildlife Area (1.71 ac) | Complete (100%) (177.21 ac) | Eden Landing (176.33 ac) |
| Complete (100%) (0.88 ac) | Montezuma Wetlands (0.29 ac) | Complete (100%) (177.21 ac) | Montezuma Wetlands (0.29 ac) |
| Complete (100%) (0.88 ac) | Pittsburg Power Plant (0.59 ac) | Complete (100%) (177.21 ac) | Pittsburg Power Plant (0.59 ac) |

APPENDIX D

[Probable inundation with 2 ft and 5 ft sea level rise]

Table D1. Probable Inundation of California Least Tern Nesting Sites for the 1-in-200 Inundation Levels at 2050 and 2080 using only the High (80%) Confidence Model Results. Green Represents No Loss of Nesting Habitat (<1%), Yellow Represents Minimal Loss (1-20%), Tan Represents Moderate Loss (21-50%), Orange Represents Significant Loss (51-99%), Red Represents Complete Loss (100%).

| Probable Inundation (Percent Loss of Habitat) Total Estimated Acreage | 2 ft Sea Level Rise (2050) | Probable Inundation (Percent Loss of Habitat) Estimated Acreage | 5 ft Sea Level Rise (2080) |
|---|--|---|--|
| None (<1%) (474.02 ac) | Alameda NAS (9.63 ac) | None (<1%) (358.09 ac) | Anaheim Lake (0.06 ac) |
| None (<1%) (474.02 ac) | Anaheim Lake (0.06 ac) | None (<1%) (358.09 ac) | Batiquitos Lagoon Ecological Reserve (20.87 ac) |
| None (<1%) (474.02 ac) | Batiquitos Lagoon Ecological Reserve (20.87 ac) | None (<1%) (358.09 ac) | Huntington State Beach (10.96 ac) |
| None (<1%) (474.02 ac) | Huntington State Beach (10.96 ac) | None (<1%) (358.09 ac) | L.A. Harbor (14.73 ac) |
| None (<1%) (474.02 ac) | L.A. Harbor (14.73 ac) | None (<1%) (358.09 ac) | Mission Bay, Mariner's Point (2.19 ac) |
| None (<1%) (474.02 ac) | MCB Camp Pendleton, White Beach South (33.72 ac) | None (<1%) (358.09 ac) | Mission Bay, North Fiesta Island (12.52 ac) |
| None (<1%) (474.02 ac) | Mission Bay, FAA Island (1.58 ac) | None (<1%) (358.09 ac) | Oceano Dunes SVRA (135.42 ac) |
| None (<1%) (474.02 ac) | Mission Bay, Mariner's Point (2.19 ac) | None (<1%) (358.09 ac) | San Diego Bay, NAS North Island, Coronado, MAT Site (19.14 ac) |
| None (<1%) (474.02 ac) | Mission Bay, North Fiesta Island (12.52 ac) | None (<1%) (358.09 ac) | San Diego Bay, San Diego International Airport (12.55 ac) |
| None (<1%) (474.02 ac) | Mission Bay, Stony Point (4.49 ac) | None (<1%) (358.09 ac) | Santa Clara River Mouth/McGrath State Beach (55.49 ac) |
| None (<1%) (474.02 ac) | Oceano Dunes SVRA (135.42 ac) | None (<1%) (358.09 ac) | Vandenberg AFB (66.86 ac) |
| None (<1%) (474.02 ac) | San Diego Bay, D Street Fill (26.68 ac) | None (<1%) (358.09 ac) | Venice Beach (7.3 ac) |

2020 5-year Review for the California Least Tern

| Probable Inundation (Percent Loss of Habitat) Total Estimated Acreage | 2 ft Sea Level Rise (2050) | Probable Inundation (Percent Loss of Habitat) Estimated Acreage | 5 ft Sea Level Rise (2080) |
|---|---|---|---|
| None (<1%) (474.02 ac) | San Diego Bay, NAS North Island, Coronado, MAT Site (19.14 ac) | Minimal (1-20%) (289.37 ac) | Alameda NAS (9.63 ac) |
| None (<1%) (474.02 ac) | San Diego Bay, San Diego International Airport (12.55 ac) | Minimal (1-20%) (289.37 ac) | MCB Camp Pendleton, Red Beach (7.54 ac) |
| None (<1%) (474.02 ac) | San Dieguito Lagoon (14.68 ac) | Minimal (1-20%) (289.37 ac) | MCB Camp Pendleton, White Beach North/Central (17.41 ac) |
| None (<1%) (474.02 ac) | Santa Clara River Mouth/McGrath State Beach (55.49 ac) | Minimal (1-20%) (289.37 ac) | MCB Camp Pendleton, White Beach South (33.72 ac) |
| None (<1%) (474.02 ac) | Seal Beach NWR - Anaheim Bay (2.45 ac) | Minimal (1-20%) (289.37 ac) | Mission Bay, Stony Point (4.49 ac) |
| None (<1%) (474.02 ac) | Tijuana Estuary NERR (22.7 ac) | Minimal (1-20%) (289.37 ac) | Ormond Beach (45.18 ac) |
| None (<1%) (474.02 ac) | Vandenberg AFB (66.86 ac) | Minimal (1-20%) (289.37 ac) | Pt Mugu (60.42 ac) |
| None (<1%) (474.02 ac) | Venice Beach (7.3 ac) | Minimal (1-20%) (289.37 ac) | San Diego Bay, D Street Fill (26.68 ac) |
| Minimal (1-20%) (289.37 ac) | Bolsa Chica Ecological Reserve (9.86 ac) | Minimal (1-20%) (289.37 ac) | San Diego Bay, NAB Coronado, Delta Beaches (46.92 ac) |
| Minimal (1-20%) (289.37 ac) | MCB Camp Pendleton, Red Beach (7.54 ac) | Minimal (1-20%) (289.37 ac) | San Dieguito Lagoon (14.68 ac) |
| Minimal (1-20%) (289.37 ac) | MCB Camp Pendleton, Salt Flats (111.72 ac) | Minimal (1-20%) (289.37 ac) | Tijuana Estuary NERR (22.7 ac) |
| Minimal (1-20%) (289.37 ac) | MCB Camp Pendleton, White Beach North/Central (17.41 ac) | Moderate (21-50%) (126.75 ac) | Bolsa Chica Ecological Reserve (9.86 ac) |
| Minimal (1-20%) (289.37 ac) | Mission Bay, San Diego River Mouth (3.16 ac) | Moderate (21-50%) (126.75 ac) | San Diego Bay, Chula Vista Wildlife Reserve (4.99 ac) |
| Minimal (1-20%) (289.37 ac) | Ormond Beach (45.18 ac) | Moderate (21-50%) (126.75 ac) | San Diego Bay, NAB Coronado, Oceans (109.45 ac) |
| Minimal (1-20%) (289.37 ac) | Pt Mugu (60.42 ac) | Moderate (21-50%) (126.75 ac) | Seal Beach NWR - Anaheim Bay (2.45 ac) |
| Minimal (1-20%) (289.37 ac) | San Diego Bay, Chula Vista Wildlife Reserve (4.99 ac) | Significant (51-99%) (248.16 ac) | Hollywood Beach (30.88 ac) |
| Minimal (1-20%) (289.37 ac) | San Diego Bay, NAB Coronado, Delta Beaches (46.92 ac) | Significant (51-99%) (248.16 ac) | Malibu Lagoon (3.57 ac) |

2020 5-year Review for the California Least Tern

| Probable Inundation (Percent Loss of Habitat) Total Estimated Acreage | 2 ft Sea Level Rise (2050) | Probable Inundation (Percent Loss of Habitat) Estimated Acreage | 5 ft Sea Level Rise (2080) |
|--|---|--|--|
| Minimal (1-20%) (289.37 ac) | San Diego Bay, NAB Coronado, Oceans (109.45 ac) | Significant (51-99%) (248.16 ac) | MCB Camp Pendleton, Blue Beach (88.64 ac) |
| Moderate (21-50%) (138.49 ac) | Hayward Regional Shoreline (0.36 ac) | Significant (51-99%) (248.16 ac) | MCB Camp Pendleton, Salt Flats (111.72 ac) |
| Moderate (21-50%) (138.49 ac) | Hollywood Beach (30.88 ac) | Significant (51-99%) (248.16 ac) | Mission Bay, FAA Island (1.58 ac) |
| Moderate (21-50%) (138.49 ac) | MCB Camp Pendleton, Blue Beach (88.64 ac) | Significant (51-99%) (248.16 ac) | Mission Bay, San Diego River Mouth (3.16 ac) |
| Moderate (21-50%) (138.49 ac) | San Diego Bay, Saltworks (4.98 ac) | Significant (51-99%) (248.16 ac) | San Diego Bay, Saltworks (4.98 ac) |
| Moderate (21-50%) (138.49 ac) | Upper Newport Bay Ecological Reserve (3.63 ac) | Significant (51-99%) (248.16 ac) | Upper Newport Bay Ecological Reserve (3.63 ac) |
| Significant (51-99%) (181.61 ac) | Eden Landing (176.33 ac) | Complete (100%) (179.28 ac) | Eden Landing (176.33 ac) |
| Significant (51-99%) (181.61 ac) | Malibu Lagoon (3.57 ac) | Complete (100%) (179.28 ac) | Hayward Regional Shoreline (0.36 ac) |
| Significant (51-99%) (181.61 ac) | Napa Sonoma Marsh Wildlife Area (1.71 ac) | Complete (100%) (179.28 ac) | Montezuma Wetlands (0.29 ac) |
| Complete (100%) (0.88 ac) | Montezuma Wetlands (0.29 ac) | Complete (100%) (179.28 ac) | Napa Sonoma Marsh Wildlife Area (1.71 ac) |
| Complete (100%) (0.88 ac) | Pittsburg Power Plant (0.59 ac) | Complete (100%) (179.28 ac) | Pittsburg Power Plant (0.59 ac) |

2020 5-year Review for the California Least Tern

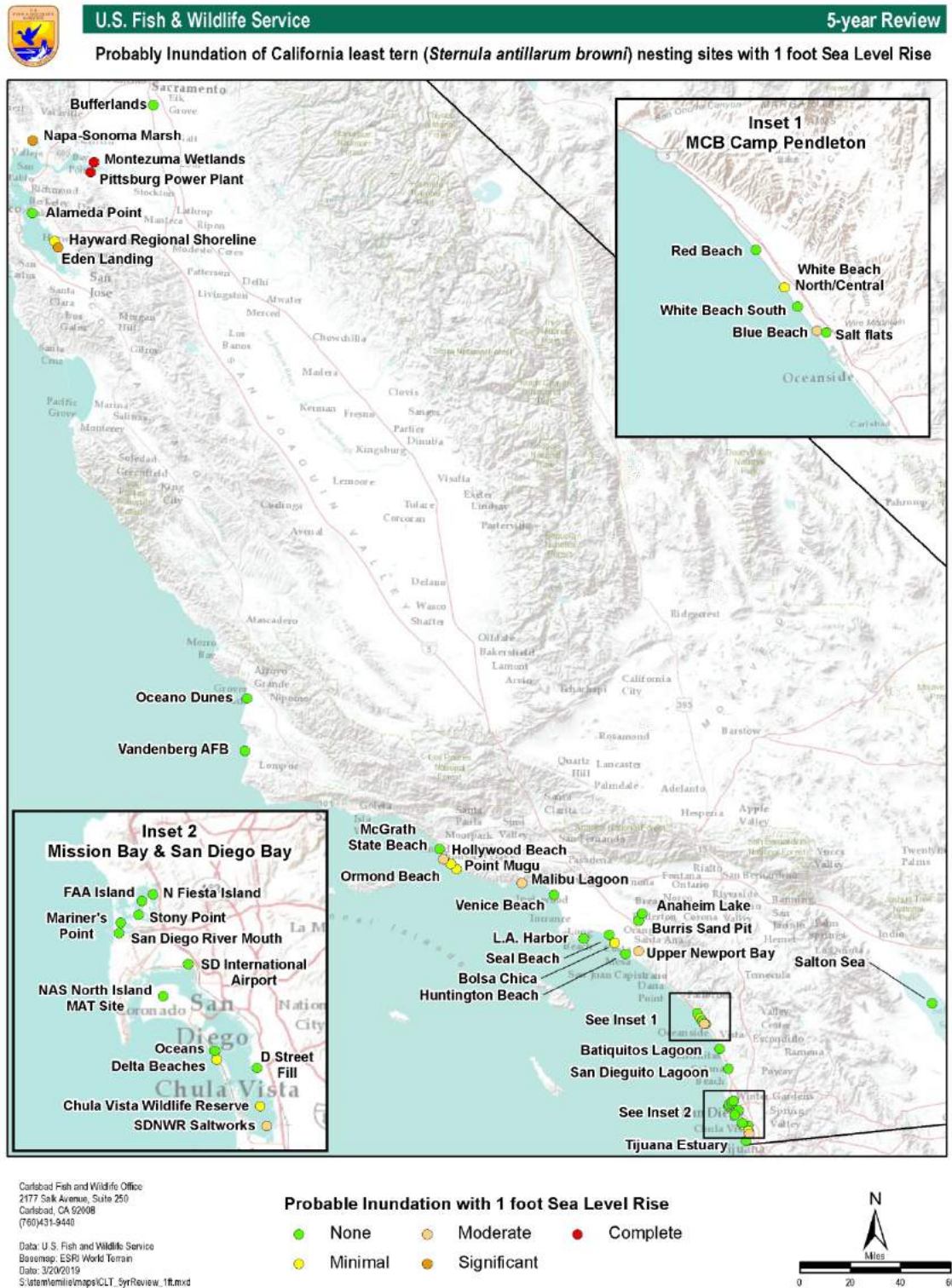


Figure D1. Probable inundation of California least tern sites with 1-foot sea level rise.

2020 5-year Review for the California Least Tern

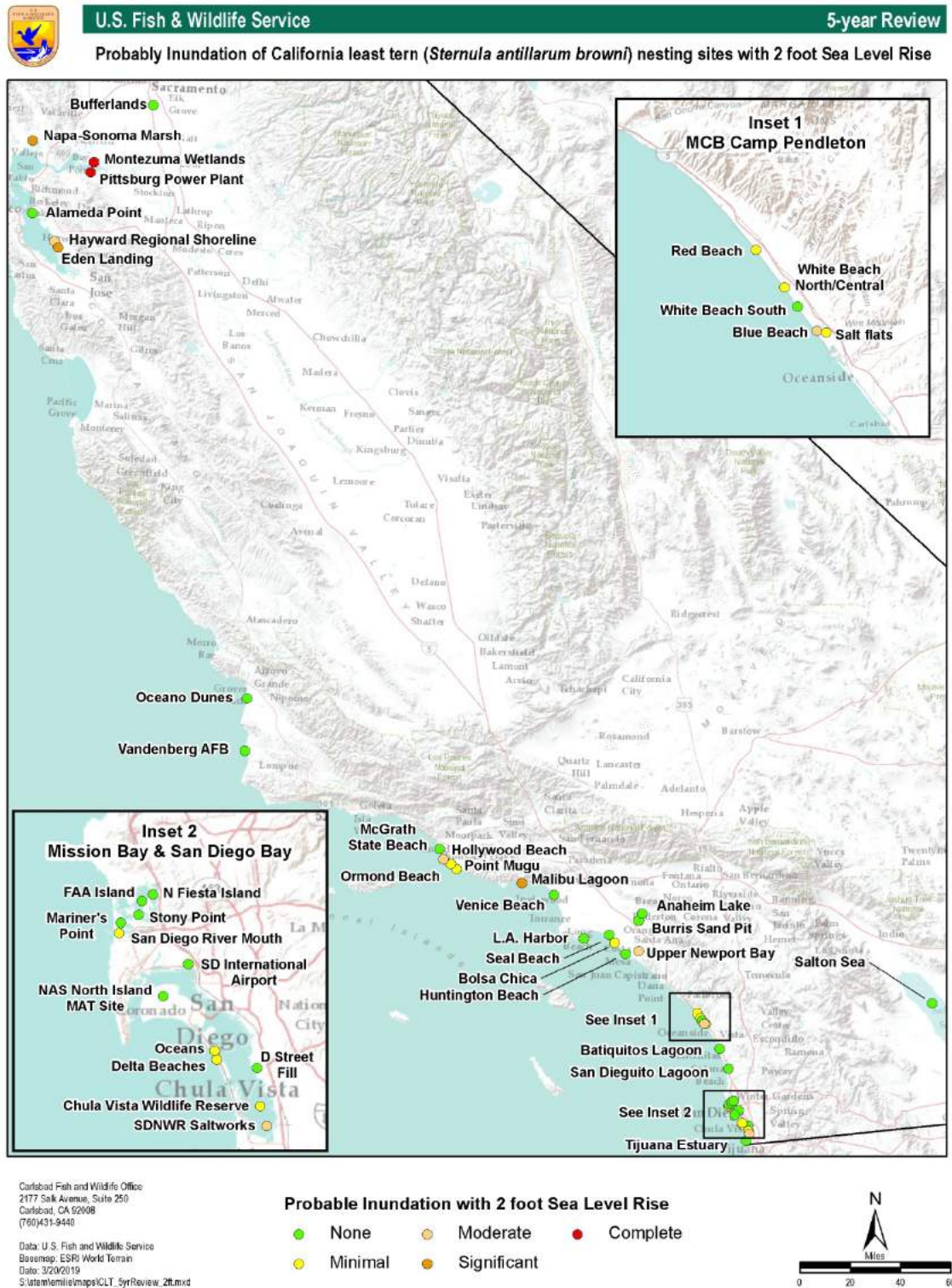


Figure D2. Probable inundation of California least tern sites with 2-foot sea level rise.

2020 5-year Review for the California Least Tern

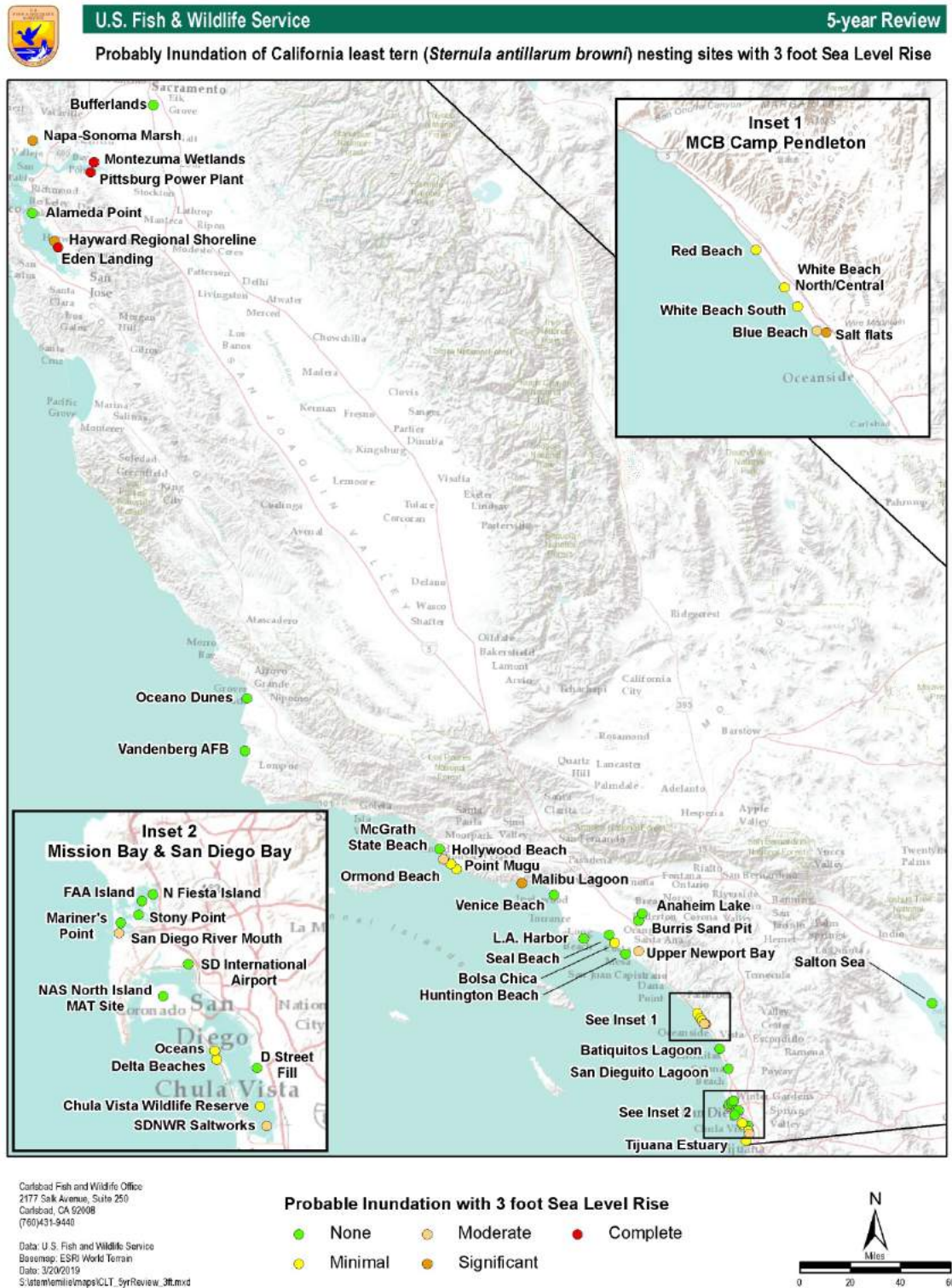


Figure D3. Probable inundation of California least tern sites with 3-foot sea level rise.

2020 5-year Review for the California Least Tern

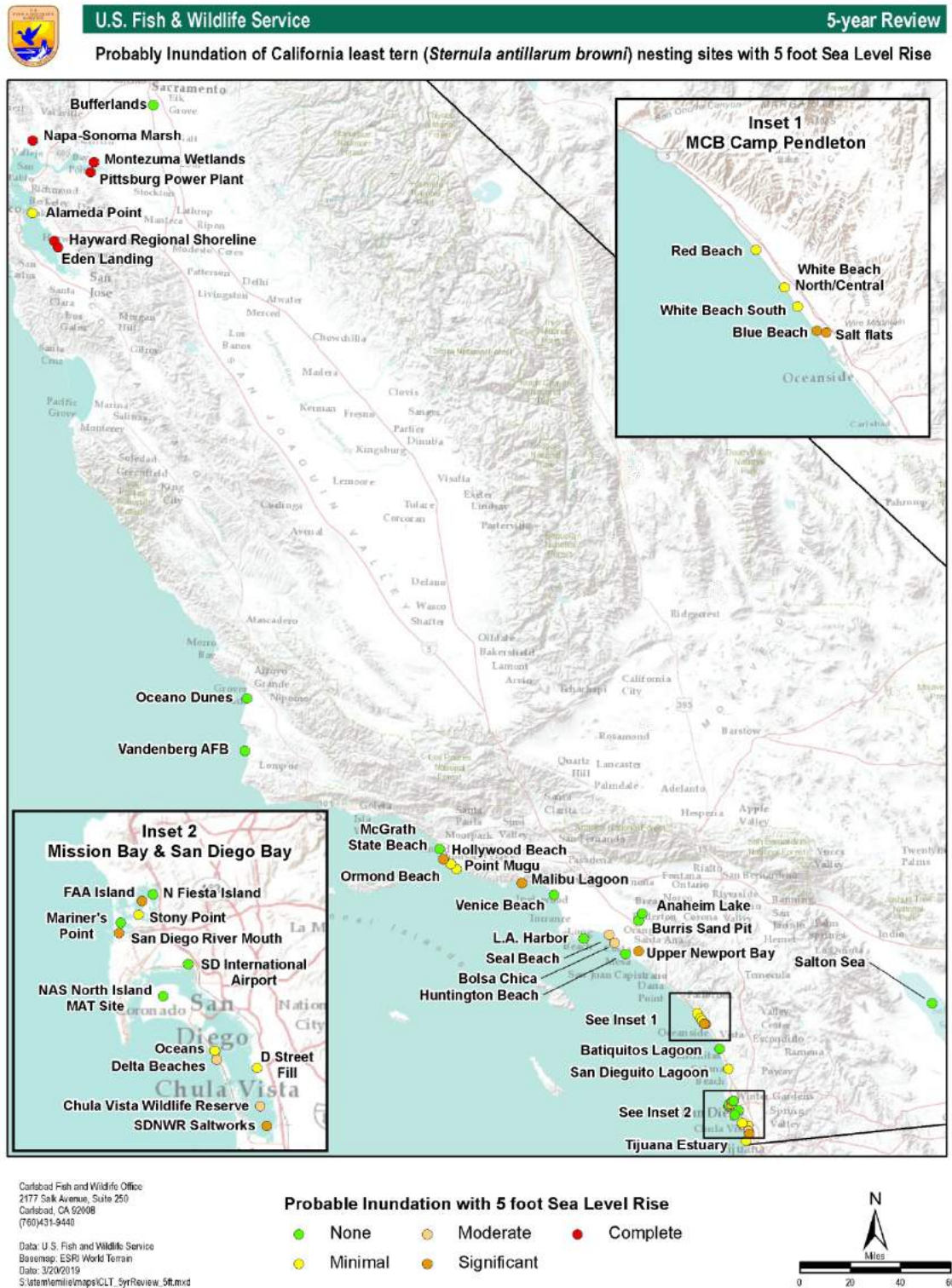


Figure D4. Probable inundation of California least tern sites with 5-foot sea level rise.

U.S. FISH AND WILDLIFE SERVICE

5-YEAR REVIEW

California Least Tern **(*Sternula antillarum browni*)**

Current Classification: Endangered

Recommendation Resulting from the 5-year Review:

Downlist to Threatened

Uplist to Endangered

Delist

No change needed

Review Conducted By: Carlsbad Fish and Wildlife Office

New Recovery Priority Number and Brief Rationale: Change from 15C to 18C

The California least tern has a recovery priority number of 15C, which is defined as a subspecies that faces a low degree of threat and has a high recovery potential (USFWS 1983b, p. 51985). The taxon is distributed widely from San Francisco Bay to the North to the Tijuana River to the South. The U.S. population of California least tern has increased from an estimated 256 pairs at listing to an estimated 4,095 pairs in 2017, though impacts from current threats has resulted in a decreasing population trend of California least terns over the past 10 years. Successful reproduction at many nesting areas is dependent on ongoing management, particularly predator management. Therefore, due to the reliance on ongoing management, we are changing the recovery priority number from 15C to 18C.

Lead Field Supervisor, Fish and Wildlife Service

Approve

Scott A. Sobiech
Field Supervisor

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(62) 590-5071

Filed: 4/16/2001
49th Day: 6/4/2001
180th Day: 10/13/2001
Staff: CP-LB
Staff Report: 5/24/2001
Hearing Date: June 14, 2001
Commission Action:

**Item Th20b****RECORD PACKET COPY****STAFF REPORT: PERMIT AMENDMENT****APPLICATION NUMBER:** 5-92-377-A1**APPLICANT:** City of Los Angeles Department of Public Works**AGENT:** James E. Doty, Environmental Supervisor**PROJECT LOCATION:** Public rights-of-way of Linnie, Howland, Sherman, Eastern, Grand (north of Washington Blvd.), and Carroll Canals, Venice, City of Los Angeles.**DESCRIPTION OF PROJECT ORIGINALLY APPROVED ON OCTOBER 14, 1993:**

The Venice Canals boat dock plan, which establishes dock design parameters and allows one residential boat dock per residence with a maximum of 175 docks allowed in seven years (1994-2000) on a first-come, first-served basis.

DESCRIPTION OF AMENDMENT REQUEST:

Amend Special Condition Six of Coastal Development Permit 5-92-377 in order to extend the time period during which private residential boat docks are permitted to be constructed in the Venice Canals.

SUMMARY OF STAFF RECOMMENDATION

Between 1993 and December 31, 2000, Commission staff signed-off plans for the construction of nineteen docks following the process established by Special Condition Three of the underlying permit (See Page Three). A recent survey counted 75 non-permitted docks in the Venice Canals. Approval of this amendment request will provide the City with the opportunity to properly permit, or remove, all docks in the canals.

Staff recommends that the Commission approve the amendment with a revised set of special conditions. As conditioned, the amendment would authorize the permitting and construction of small boat docks (up to a total of 175) in the Venice Canals during a term to commence upon the City's submittal of an operating plan for the Grand Canal public boat launch. Special Condition Six, as revised, would allow docks to be permitted and constructed under the terms of the amended permit until December 31, 2002. Prior to applying for a subsequent term, the City shall submit a monitoring plan to the Commission which documents the results of the City's continuing efforts to eliminate and prevent the construction of non-permitted docks.

The City agrees with the staff recommendation. **See page two for motion** to carry out the staff recommendation.

SUBSTANTIVE FILE DOCUMENTS:

1. City of Los Angeles Land Use Plan for Venice.
2. Coastal Development Permit 5-92-377/A5-VEN-92-377 (Venice Boat Docks).
3. Coastal Development Permit 5-91-585 & amendments (Venice Canals Rehabilitation).

PROCEDURAL NOTE: The Commission's regulations provide for referral of permit amendment requests to the Commission if:

1. The Executive Director determines that the proposed amendment is a material change,
2. Objection is made to the Executive Director's determination of immateriality, or
3. The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.

In this case, the Executive Director has determined that the proposed amendment affects a condition of Coastal Development Permit 5-92-377/A5-VEN-92-377 that was required for the purpose of protecting a coastal resource and coastal access. If the applicant or objector so requests, the Commission shall make an independent determination as to whether the proposed amendment is material. [14 California Code of Regulations 13166].

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution to **APPROVE** the permit amendment request with special conditions:

MOTION: *"I move that the Commission approve the proposed amendment to Coastal Development Permit 5-92-377 pursuant to the staff recommendation."*

Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

I. Resolution to Approve a Permit Amendment

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act, is located between the sea and the first public road nearest the shoreline and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse effects on the environment within the meaning of. Approval of the permit amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or

alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

II. Special Conditions

[Note: The following special conditions are the original conditions of Coastal Development Permit 5-92-377/A5-VEN-92-377, as revised by this amendment. The revisions are identified by cross-outs for deleted language (~~deleted~~) and underlining for new language. Only Special Conditions Four and Six are revised by this amendment. All six special conditions, as revised by this amendment, still apply to the approved development.]

1. Maintenance of Wetland Vegetation

The City shall be responsible for maintaining the integrity of the rehabilitated Venice Canals, including the maintenance of the wetland vegetation on the canal banks.

2. Flushing

Prior to issuance of the coastal development permit, the City shall agree in writing to submit a flushing plan for the Venice Canals, subject to the review and approval of the Executive Director, within nine months of Commission action. The flushing plan shall be developed in consultation with the Department of Fish and Game and in cooperation with Los Angeles County and the private owners of Lot R in Ballona Lagoon, and shall maximize fresh seawater circulation throughout the Venice Canals/Ballona Lagoon system. The plan shall include details regarding the operation of the tidal gates located at Washington Boulevard and Via Marina, and shall include a schedule for the opening of the gates and how long they shall remain open.

3. Authorization to Construct Docks

The approval of Coastal Permit A5-92-377 authorizes only the City of Los Angeles, as applicants, to construct docks consistent with the Venice Canals boat dock plan approved by the Coastal Commission. Venice Canal residents may request Coastal Commission authorization to construct a dock in front of their residence by submitting the following to the Coastal Commission:

- a. The City's request to assign the rights to undertake the development as it pertains to lands seaward of the assignee's property;
- b. An application for the assignment of Coastal Permit A5-92-377 (consistent with Section 13170 of the California Code of Regulations), as it pertains to lands seaward of the assignee's property, from the City of Los Angeles to an individual resident (or pair of residents) for the construction of a private residential boat dock;

- c. An affidavit executed by each assignee attesting to the assignee's agreement and legal ability to comply with the terms and conditions of Coastal Permit A5-92-377 for the Venice Canals boat dock plan as approved by the Coastal Commission; and,
- d. City approved plans for the construction of a dock consistent with the Venice Canals boat dock plan as approved by the Coastal Commission. The City approved plans shall show the location of the proposed dock.

4. Public Boat Launch

No private residential docks shall be permitted or constructed in the Venice Canals until the public boat launching ramp and parking lot at the northern end of the Grand Canal is under construction. Signs, subject to the approval of the Executive Director, shall be posted which state that the boat launch facility is available to public.

Prior to issuance of the permit amendment, and within sixty days of Commission action on the amendment, the City shall submit, for the review and approval of the Executive Director, a City plan for the operation of the public boat launching ramp and parking lot located at the northern end of the Grand Canal. The plan shall include signage and the specific terms for public access and use of the facility. At a minimum, the facility shall be open for public boating and vehicular access (for transportation of boats to and from launch ramp) between the hours of 8 a.m. and sunset on all days. The City shall implement the plan as approved by the Executive Director.

5. Public Walkways

There shall be no obstruction of the public walkways along the Venice Canals. The storage of boats or other items within the public walkways is prohibited. All conditions relating to continued public use of Dell Avenue, the canal walkways, and alleys applied to this permit and previous permits shall still apply.

6. Permit Term

~~Coastal Permit A5-92-377 shall expire on December 31, 2000. Any application for an amendment or a new Coastal Permit shall be analyzed for cumulative impacts associated with boat docks and recreational use of the canals.~~

The time period during which private residential boat docks may be permitted to be constructed in the Venice Canals pursuant to Coastal Development Permit A5-92-377 and Amendment 5-92-377-A1 shall expire on December 31, 2002. Prior to December 31, 2002, the City shall submit a monitoring report to the Executive Director which documents the location and number of permitted and unpermitted dock structures in the Venice Canals. The monitoring report shall include an analysis of the City's current and past efforts to eliminate and prevent unpermitted dock structures in the canals. Upon submittal of the monitoring report to the Executive Director, the City may apply to the Commission for a permit amendment in order to extend the time period during which private residential boat docks may be permitted to be constructed in the Venice Canals.

III. Findings and Declarations

The Commission hereby finds and declares:

A. Amendment Description and Background

On October 14, 1993, the Commission approved Coastal Development Permit 5-92-377/A5-VEN-92-377 (City of Los Angeles) for the implementation of a boat dock plan for the Venice Canals (See Exhibits). The approved permit established dock design parameters and allowed one residential boat dock per residence (with a maximum of 175 docks) to be permitted during a seven year term which ended on December 31, 2000. The permit term was established by Special Condition Six of Coastal Development Permit 5-92-377/A5-VEN-92-377.

The City is now requesting to amend Special Condition Six of Coastal Development Permit 5-92-377/A5-VEN-92-377 in order to extend the time period during which private residential boat docks are permitted to be constructed in the Venice Canals. The City proposes a new term that would expire on December 31, 2007.

The previously approved boat dock plan was developed to establish a procedure for the permitting of a limited number of private residential boat docks in the Venice Canals (Exhibit #3, p.1). The adoption of a single master boat dock plan for all docks in the canals was intended to minimize the cumulative impacts on canal resources that could have resulted from the construction of individual docks under several individual permits. The approved dock plan established specific design parameters for docks and a maximum limit of 175 docks in order to allow and encourage recreational boating uses while protecting marine resources and the wetland vegetation that has been established on the canal banks.

The specific dock location standards, dock design parameters and size standards for boats were established in the approved boat dock plan. The plan allows one boat dock to be constructed anywhere within the segment of canal which corresponds to a property owner's lot lines. However, if any dock is proposed within six feet of an adjacent lot's frontage, the dock builder must receive written consent from the adjacent property owner. Two adjacent property owners may build a shared dock, but in order to do so, they must forego their privilege to build individual docks. The following are the Commission-approved design parameters for docks in the Venice Canals located north of Washington Boulevard:

- Overall dock width: 5'0" maximum
- Overall dock length: 5'8" maximum (measured from top of slope)
- Foundation of reinforced concrete
- Foundation footprint no larger than standardized plan specifications
- No fixed roofs or canopies
- Required safety barrier on all four sides
- Required self-latching gate:
 - Minimum height: 2.5 feet
 - Maximum height: 3.5 feet
 - Maximum width: 5.0 feet

The City currently proposes to authorize the use of three similar types of dock designs that comply with the above-stated design parameters (Exhibit #2). The small size of each dock (5'x 5'8" maximum) provides enough area for a person to access a boat from the banks of a canal, but also limits the amount of area in the canals that is occupied by docks. Each dock is supported by the canal bank (Loffelstein blocks) and two six-inch diameter piles placed on the gravel toe of the canal bank (Exhibit #2). At low tide, the entire dock structure (including the support piles) is above the water line, thus limiting the dock's impacts on marine resources and maintaining a wide channel for recreational boating.¹

The approved dock plan has a limit of one dock per canal fronting lot. The specific dock locations are not identified in the dock plan because the plan includes a limit of 175 docks for the 383 canal fronting lots. Because the 175 proposed docks would be permitted by the City on a first-come, first-served basis to the residents who apply for City permits, the specific locations of the proposed docks are not yet known.

The plan also requires utilization of specified construction methods which are designed to minimize the potential for adverse environmental impacts associated with the construction of the boat docks in the canals. Construction must occur during low tide and fast drying concrete must be used for the pile supports. No construction debris of any kind can be left in a canal. Additionally, the City requires each resident who constructs a dock to maintain a one million-dollar liability insurance policy for the dock.

The City prohibits the use of motorized boats in the Venice Canals, and also limits the size of non-motorized boats. The approved plan includes the following size standards for non-motorized boats in the Venice Canals:

| | |
|----------------------------|---------------------------|
| Maximum boat length: | 18.0 feet |
| Maximum boat width: | 6.0 feet |
| Maximum length plus width: | 21.0 feet |
| Maximum draft: | 2.0 feet |
| Maximum height: | 3.5 feet above water line |
| Maximum draft plus height: | 4.0 feet above water line |

During the first term of the Commission approved project (1993 until December 31, 2000), Commission staff signed-off plans for the construction of nineteen docks following the process established by Special Condition Three of Coastal Development Permit 5-92-377/A5-VEN-92-377 (See Page Three). The City surveyed the canals in 2001 and found a total of eighty docks in the Venice Canals: five permitted docks and 75 non-permitted docks (Exhibit #3, p.8). A non-permitted dock is one that is not authorized pursuant to the process described in Special Condition Three of Coastal Development Permit 5-92-377/A5-VEN-92-377 (Exhibit #3, p.1).

¹ The Venice Canals Association has inquired about a potential alternative to the construction of private boat docks involving only private access gates and boat tie-ups on the canal bank in lieu of building a private dock (Exhibit #7, p.3). The City has not, however, included this alternative in the current permit amendment request.

Commission records show that eleven of the eighty existing docks are authorized pursuant to Coastal Development Permit 5-92-377/A5-VEN-92-377. Commission staff has confirmed that the vast majority of the existing docks in the canals, including the non-permitted ones, are equal or smaller in size than the maximum dock size (5'x 5'8") dock permitted by Coastal Development Permit 5-92-377/A5-VEN-92-377. Several of the non-permitted docks have been removed from the canals since the City's survey.

B. Description of Project Area

The Venice Canals neighborhood is a predominantly residential community consisting of single family homes located along the open waterways. The neighborhood is located about four blocks from Venice Beach, one of the most popular visitor destinations in Los Angeles (Exhibit #1). The canals, which are public rights-of-way owned by the City of Los Angeles, are a popular Southern California visitor destination. The canals, which were created as part of the "Venice of America" subdivision in 1905, provide a sense of character and history for the Venice community. They also provide public access, recreation opportunities, and wildlife habitat. Recreational boating has historically been part of the Venice Canals culture.

The Venice Canals, along with adjacent Ballona Lagoon, support some of the last remaining pockets of coastal wetland habitat in Los Angeles County. The Venice Canals are part of the Ballona Lagoon sea water system and are connected with Ballona Lagoon via Grand Canal. Water enters the canals system from the Pacific Ocean through two sets of tidal gates at Ballona Lagoon and Grand Canal.

The canals system fell into disrepair in the 1920's, and many of the original canals were filled by the City in 1927. Since the 1960's, residents in the Venice area had been attempting to restore the remaining canals. On November 14, 1991, the Commission approved Coastal Permit 5-91-584 (City of Los Angeles) for the rehabilitation of the Venice Canals. The rehabilitation project, completed in 1993, involved dredging of the canal channels and construction of new canal banks and new public walkways along the canal banks. A public boat launch ramp and parking area was also approved and constructed at the northern end of Grand Canal between North and South Venice Boulevards (Exhibit #1).

C. Public Access

One of the basic goals of the Coastal Act is to maximize public access to and along the coast. The Coastal Act has several policies which address the issue of public access to the coast.

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Coastal Act states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30213 of the Coastal Act states:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred...

The approved boat dock plan allows the construction of private residential boat docks in the public rights-of-way of the Venice Canals. The plan allows any resident, or pair of residents, with canal fronting property to construct a private dock in front of their homes if they follow the process described in Special Condition Three of Coastal Development Permit 5-92-377/A5-VEN-92-377 (Exhibit #3, p.1). Public access to recreational boating activities in the Venice Canals is provided by the Grand Canal public boat launch and parking lot located at the northern end of the Grand Canal (Exhibit #1).

Private residential docks constructed under the previously approved permit are similar to private boat slips in a marina in that they are located in publicly owned areas, but are reserved for private use. The use of the residents' private docks is restricted to the permittees (residents) and co-permittees who apply for the required City permits and pay for the construction and maintenance of the docks in front of their homes. The permittees are required by the City to place safety barriers and a gate on each permitted dock.

There are several reasons why canal residents prohibit the general public from using the private boat docks. One reason is liability. The residents who decide to build private docks are required by the City to secure property damage and liability insurance with a minimum coverage of one million dollars (per dock). Annual submission of proof of insurance is required to prevent revocation of the City's encroachment permit for a dock. The City and the residents limit the risk of injury and liability by restricting the public from using the docks.

Another reason for restricting the public from using the proposed private docks is that the residents are incurring the costs of permitting, constructing, maintaining, and insuring the docks (Exhibit #3, ps.1-2). No public funds will be used for the construction or maintenance of the private docks. The residents' privacy is a third reason for restricting the use of the docks. Although the docks are situated entirely on City property, the docks are also located near the front yards of people's homes.

Section 30210 of the Coastal Act states that maximum access and recreational opportunities shall be provided for all the people. Therefore, approval of the amendment request shall ensure that public access to the Venice Canals is adequately protected. In order to ensure that the public is not excluded from boating in the Venice Canals, and that the public is given

an equal opportunity to access the Venice Canals for recreational boating, the approval of the amendment request is conditioned so that no private residential boat docks can be permitted or built until the City ensures that public access is being provided to the public boat launching ramp and parking lot at the northern end of Grand Canal.

Special Condition Four of the underlying permit, originally approved by the Commission in 1993, required the City to commence construction of the public boat launch prior to the construction of any private residential boat docks. The public boat launch was constructed and opened in 1994. A few years later, the public boat launch was closed. Commission staff has not been able to confirm when the City began locking the gates to the public boat launch, but the gates have been locked during recent visits by staff.

In order to ensure that the public has equal access to recreational boating in the Venice Canals, revised Special Condition Four states:

Prior to issuance of the permit amendment, and within sixty days of Commission action on the amendment, the City shall submit, for the review and approval of the Executive Director, a City plan for the operation of the public boat launching ramp and parking lot located at the northern end of the Grand Canal. The plan shall include signage and the specific terms for public access and use of the facility. At a minimum, the facility shall be open for public boating and vehicular access (for transportation of boats to and from launch ramp) between the hours of 8 a.m. and sunset on all days. The City shall implement the plan as approved by the Executive Director.

As conditioned, the dock plan will not restrict the public from using the Venice Canals for recreational boating and public boating access in the Venice Canals will be protected as required by the Coastal Act. The public will continue to be able to access the canals with non-motorized boats at the public boat launching ramp approved under Coastal Development Permit 5-91-584 (City of Los Angeles). The public boat launching ramp is located on the northern end of the Grand Canal (Exhibit #1). A seven-space parking area at the public boat ramp provides parking for people using boats while visiting the Venice Canals.

Public access along the public walkways adjacent to the Venice Canals must also be protected. In order to ensure that construction and use of the proposed docks does not inhibit the use of the public walkways, Special Condition Five of the permit prohibits the storage of boats or other items within the public walkways.

As conditioned, the dock plan and the permit amendment will not reduce public access to, along, or through the Venice Canals, and the public will have an equal opportunity to access the canals for recreational boating at the public boat launching ramp. Therefore, the Commission finds that the amendment, as conditioned, is consistent with the public access policies of the Coastal Act.

D. Recreation

Another of the Coastal Act's goals is to maximize public recreational opportunities in the coastal zone. Recreational boating, bird watching, and walking are the primary recreation opportunities in the Venice Canals area. The Coastal Act has several policies which address the issue of recreation on and near the coast.

Section 30220 of the Coastal Act states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221 of the Coastal Act states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30224 of the Coastal Act states:

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

The dock plan and amendment, as conditioned, is consistent with Sections 30220 and 30221 of the Coastal Act because it provides for water-oriented recreational uses consistent with the Coastal Act. The dock plan and amendment is also consistent with Section 30224 of the Coastal Act because it increases the opportunities for recreational boating in the Venice Canals. Boating use is encouraged by the dock plan and amendment by permitting up to 175 boat docks where there are currently none. The public boat launch also provides for public recreational boating opportunities. Therefore, the dock plan and amendment provide the opportunity for all people to enjoy recreational boating in the Venice Canals.

E. Marine Resources

The Coastal Act contains many policies which serve to protect marine resources and marine habitats. The following Coastal Act policies apply to the proposed project because of its potential impacts to the wetlands and marine environments found in the water and along the banks of the Venice Canals.

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233(a) of the Coastal Act limits the fillings of coastal waters. It states, in part:

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
 - (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
 - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
 - (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the

placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

- (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- (7) Restoration purposes.
- (8) Nature study, aquaculture, or similar resource dependent activities.

In addition, Section 30233(c) states, in part:

- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.....

Section 30240 of the Coastal Act states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

The Venice Canals are part of the larger Venice Canals/Ballona Lagoon wetlands system. Seawater enters the wetlands system through tidal gates which the County controls to allow water to flow to and from the Marina del Rey entrance channel and Ballona Lagoon. Seawater flows through Ballona Lagoon to another set of tidal gates located in Grand Canal at Washington Boulevard. The City operates the Grand Canal tidal gates which separate Ballona Lagoon from the Venice Canals located north of Washington Boulevard (Exhibit #1).

The Venice Canals are protected under the Coastal Act policies stated above. The entire canals system is an Environmentally Sensitive Habitat Area (ESHA) as defined in the Coastal Act. In addition to being important wetlands, the canals system is a critical habitat area for the endangered California least tern, Sterna antillarum browni, and many other marine species.

Section 30233 of the Coastal Act limits the types of development allowed in wetlands. The construction of boat docks involves filling of wetlands in the form of pilings. Each boat dock is supported by two 6-inch diameter piles (Exhibit #2). Each dock pile is supported by a small

concrete footing placed in the gravel toe of the canal bank. There will be no filling in addition to the piles and footings, which are placed above the low water line.

Section 30233(a)(2) of the Coastal Act allows for the maintenance of existing boating facilities in existing channels. Historically, recreational boating has been a popular recreational activity and boat docks have existed in the Venice Canals since the early 1900's. The previously existing boat docks were removed in 1992 when the City dredged the canals as part of the Venice Canals rehabilitation project [Coastal Development Permit 5-91-584 (City of Los Angeles)]. In 1993, the Commission's approval of Coastal Development Permit 5-92-377/A5-VEN-92-377 (City of Los Angeles) for the Venice Canals boat dock plan allowed residents to construct new docks under the process described in Special Condition Three of the coastal development permit (Exhibit #3, p.1). Therefore, boat docks in the Venice Canals are an allowable type of development in coastal waters pursuant to Section 30233(a)(2) of the Coastal Act.

Section 30233(a) of the Coastal Act allows boat docks and other development in coastal waters only if there is no feasible less environmentally damaging alternative and where feasible mitigation measures have been provided to minimize adverse environmental effects. Section 30240 of the Coastal Act requires that development in environmentally sensitive habitat areas, like the Venice Canals, be compatible with the continuance of such habitat areas and be designed to prevent impacts which would significantly degrade such areas.

The design and location parameters approved as part of the Venice Canals boat dock plan were specifically designed by the City and approved by the Commission to limit the impacts of recreational boating in the Venice Canals. First, the plan allows for the construction of small docks on the banks of the canals in order to reduce the trampling of the banks and wetland vegetation. As part of the Venice Canals rehabilitation project, the City has planted and is maintaining approximately one acre of native wetland vegetation along the reconstructed banks of the canals. The approved docks allow people to access boats in the water at the docks, thereby reducing damage to the banks and wetland vegetation by providing distinct access points which eliminate the need to walk through and trample the wetland vegetation.

Secondly, the dock plan reduces impacts to the wetland habitat by limiting the maximum number of potential docks to 175. Other alternatives that were considered would allow no boat docks or would not limit the number of docks. Every alternative, even the no project alternative, would result in some impacts to the canal habitat caused by recreational boating activities. The construction of all 175 approved docks would directly impact 0.18 acres of the wetland vegetation planted along the banks of the canals. The impact to wetland vegetation occurs when a dock shades a canal bank area five feet wide and approximately three feet long from the edge of the public walkway to the gravel toe of the bank. This impact is mitigated, however, by each dock's limited size and the dock's placement the canal bank. The canal banks, which are constructed with cement Loffelstein blocks and gravel, are not entirely composed of wetland vegetation (Exhibit #2). Additionally, the canal banks and all permitted docks in their entirety are located above the low water line so that no subtidal habitat is displaced.

Finally, the small size of the permitted docks further reduces the adverse environmental effects of the docks. The small size of each dock (5'x 5'8" maximum) provides enough area for a person to access a boat from the banks of a canal, but also limits the amount of area in the canals that is occupied by docks. Each dock is supported by the canal bank (Loffelstein blocks) and two six-inch diameter piles placed on the gravel toe of the canal bank (Exhibit #2). At low tide, the entire dock structure (including the support piles) is above the water line, thus limiting the dock's impacts on marine resources and maintaining a wide channel for recreational boating.

Therefore, the Commission finds that the dock plan and the amendment, as conditioned, prevent impacts and minimize adverse environmental effects which would significantly degrade the environmentally sensitive habitat area, and there is no feasible less environmentally damaging alternative. Furthermore, recreational boating and boat docks in the Venice Canals are compatible with the continuance of the environmentally sensitive habitat area. The dock plan and the amendment are consistent with the Marine Resource policies of the Coastal Act.

F. Local Coastal Program

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal development permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act:

- (a) Prior to certification of the Local Coastal Program, a Coastal Development Permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200). A denial of a Coastal Development Permit on grounds it would prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200) shall be accompanied by a specific finding which sets forth the basis for such conclusion.

The City of Los Angeles does not have a certified Local Coastal Program for the Venice area. The Los Angeles City Council adopted a proposed Land Use Plan (LUP) for Venice on October 29, 1999. On November 29, 1999, the City submitted the draft Venice LUP for Commission certification. On November 14, 2000, the Commission approved the City of Los Angeles Land Use Plan (LUP) for Venice with suggested modifications. On March 28, 2001, the Los Angeles City Council accepted the Commission's suggested modifications and adopted the Venice LUP as it was approved by the Commission on November 14, 2000.

In regards to recreational boating and docks in the Venice Canals, the LUP for Venice contains the following relevant policies:

Policy III. D. 2. Boating Use of Canals and Lagoon. *Recreational boating use of the Venice Canals shall be limited to non-commercial shallow-bottom, non-motorized boats such as canoes and rafts, in order to permit recreation while protecting the environmentally sensitive habitat area and maintain a quiet ambience within the neighborhoods of the plan area. No boating shall be permitted in Ballona Lagoon and the portion of Grand Canal south of Washington Boulevard.*

A public boat launch facility was built as part of the Venice Canals Rehabilitation Project at the Grand Canal and North Venice Boulevard. The City shall protect the public's ability to access the canals by boat by maintaining public access to the Grand Canal public boat launch. The facility shall provide adequate on-site public parking consistent with the sizes and types of boats to be launched and frequency of launching pursuant to the County Department of Small Craft Harbors standards.

Policy III. D. 3. Venice Canals Boat Docks. *Construction of small non-commercial private boat docks along the restored canal banks may be permitted, subject to the approval of the Department of Public Works and a coastal development permit, to provide boating access while protecting habitat along the banks.*

The dock plan and amendment, as conditioned, conform to the Venice LUP policies regarding the Venice Canals. The LUP states that private boat docks are allowed, subject to approval. The LUP also contains a policy to restore and preserve the historic integrity of the Venice Canals. The proposed project is consistent with the preservation and the historic nature of the area. The amendment also conforms to the recreational policies of the LUP which state that non-motorized boats shall be permitted in the Venice Canals, but prohibited in Ballona Lagoon and Grand Canal south of Washington Boulevard. The public boat launch ramp in Grand Canal is also recognized by the LUP.

Therefore, the dock plan and amendment, as conditioned, conforms with the Commission-approved Venice LUP. The dock plan and amendment, as conditioned, is also consistent with the Chapter 3 policies of the Coastal Act. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the City's ability to prepare a Local Coastal Program consistent with the policies of Chapter 3 of the Coastal Act, as required by Section 30604(a).

G. California Environmental Quality Act (CEQA)

Section 13096 Title 14 of the California Code of Regulations requires Commission approval of a coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of

CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The dock plan and amendment, as conditioned, has been found consistent with the Chapter 3 policies of the Coastal Act. All adverse impacts have been minimized by the recommended conditions of approval and there are no feasible alternatives or additional feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.

H. Enforcement

Some of the docks that have been built recently in the City rights-of-way of Linnie, Howland, Sherman, Eastern, Grand (north of Washington Blvd.), and Carroll Canals have not complied with the dock approval process described in Special Condition Three of Coastal Development Permit 5-92-377/A5-VEN-92-377 (Exhibit #3, p.1). During the first term of the Commission approved project (1993 until December 31, 2000), Commission records indicate that nineteen docks were authorized pursuant to the terms of Coastal Development Permit 5-92-377/A5-VEN-92-377 (City of Los Angeles). The City surveyed the canals in 2001 and found a total of eighty docks in the Venice Canals. That means that at least 61 of the eighty existing docks are non-permitted docks (Exhibit #3, p.8). A non-permitted dock is one that is not authorized pursuant to the process described in Special Condition Three of Coastal Development Permit 5-92-377/A5-VEN-92-377 (Exhibit #3, p.1).

The City proposes to eliminate the non-permitted docks by processing after-the-fact approvals for the development. Another option is for the City to remove the non-permitted docks from the City right-of-way. In order to process after-the-fact approvals for the non-permitted docks, and to allow construction of new docks, the City has requested this amendment to amend Special Condition Six of Coastal Development Permit 5-92-377 in order to extend the time period during which private residential boat docks can be permitted in the Venice Canals. The former time period established by Special Condition Six of Coastal Development Permit 5-92-377 expired on December 31, 2000. Currently, no authorization for existing or proposed docks can be granted under the terms of Coastal Development Permit 5-92-377 until Special Condition Six is amended.

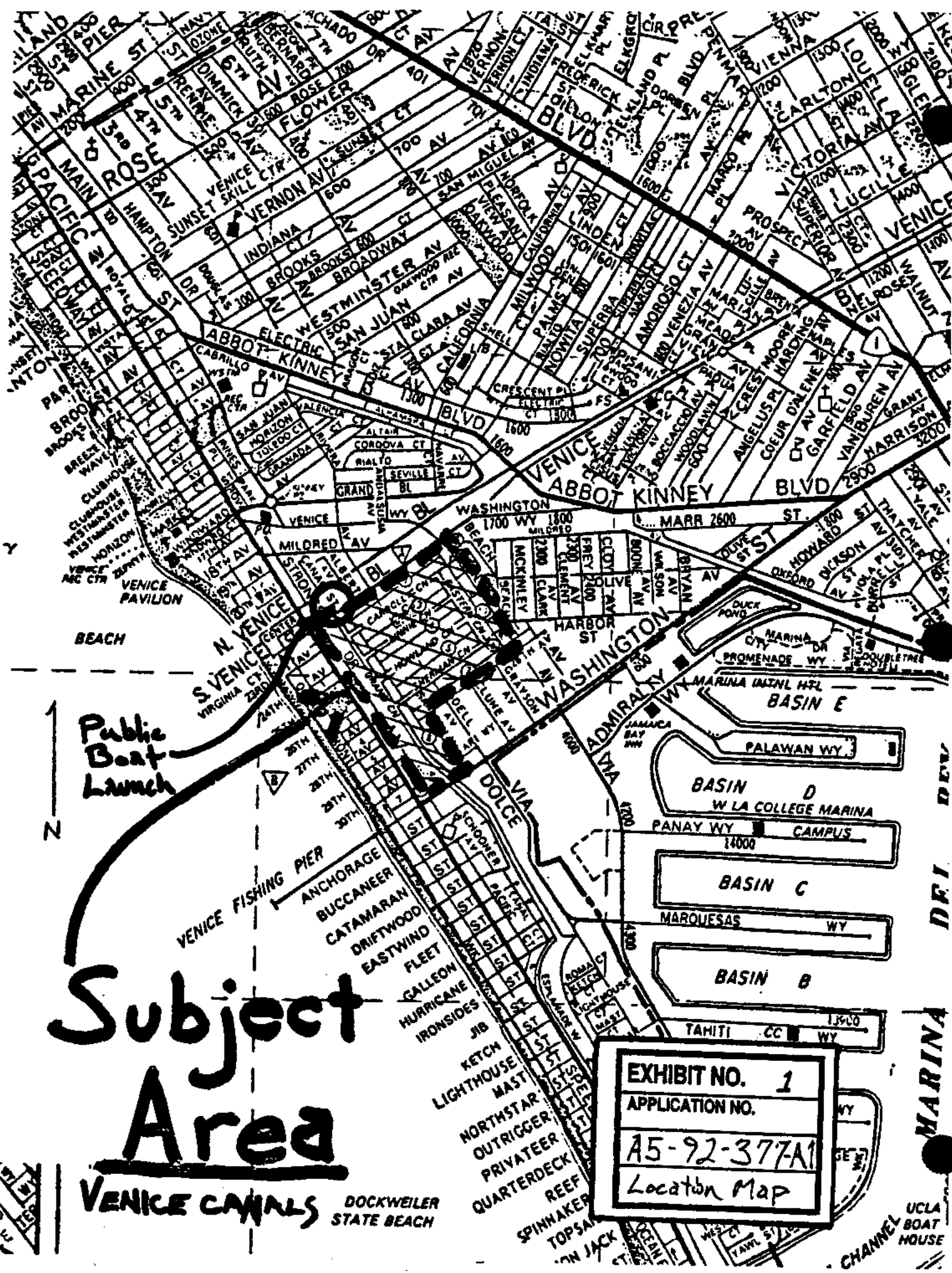
In order to grant the City the opportunity to correct the situation with non-permitted docks in the Venice Canals, Special Condition Six of Coastal Development Permit 5-92-377 is amended in order to establish a time period during which existing and proposed docks can be authorized under the process described in Special Condition Three of Coastal Development Permit 5-92-377/A5-VEN-92-377 (Exhibit #3, p.1). The new term would commence upon the City's submittal of an operating plan for the Grand Canal public boat launch required by revised Special Condition Four, and would end on December 31, 2002. Prior to applying for a subsequent term, the City is required to submit a monitoring plan to the Commission which documents the results of the City's efforts to eliminate and prevent the construction of non-permitted docks.

Revised Special Condition Six states:

The time period during which private residential boat docks may be permitted to be constructed in the Venice Canals pursuant to Coastal Development Permit A5-92-377 and Amendment 5-92-377-A1 shall expire on December 31, 2002. Prior to December 31, 2002, the City shall submit a monitoring report to the Executive Director which documents the location and number of permitted and unpermitted dock structures in the Venice Canals. The monitoring report shall include an analysis of the City's current and past efforts to eliminate and prevent unpermitted dock structures in the canals. Upon submittal of the monitoring report to the Executive Director, the City may apply to the Commission for a permit amendment in order to extend the time period during which private residential boat docks may be permitted to be constructed in the Venice Canals.

Although development has taken place prior to submission of this permit amendment, consideration of this application has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of this permit amendment does not constitute a waiver of any legal action with regard to any alleged violation of the Coastal Act, nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit.

End/cp



Public Boat Launch

Subject Area

VENICE CANALS DOCKWEILER STATE BEACH

| | |
|-----------------|-------------|
| EXHIBIT NO. | 1 |
| APPLICATION NO. | A5-92-377A1 |
| Location Map | |

MARINA
UCLA BOAT HOUSE
CHANNEL

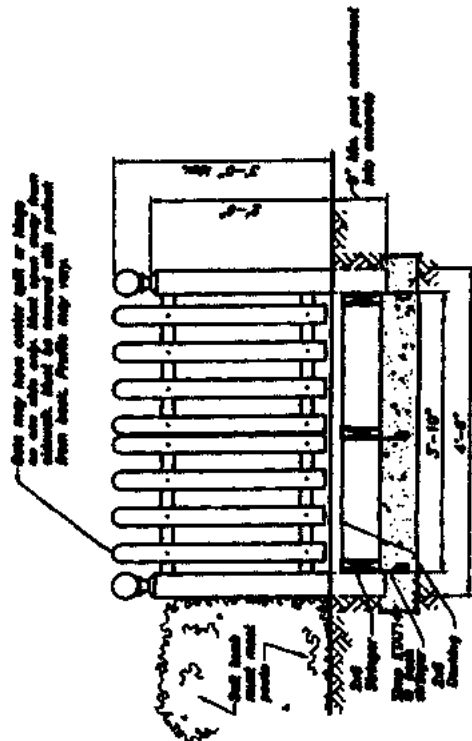
PRELIMINARY PLAN FOR DESIGN STUDY

APR 26 1999

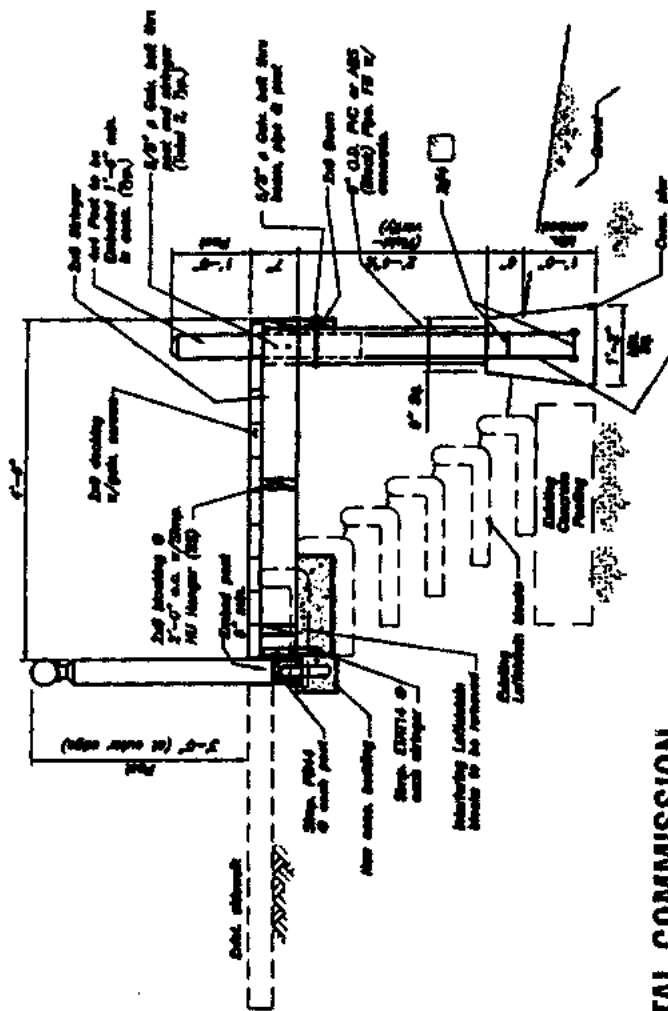
STRUCTURAL
ENGINEERING DIVISION

1. The Contractor shall verify all dimensions in the field before installing or fabricating materials.
2. All existing piling that need to be removed shall be replaced in adjacent locations or as directed by the City Engineer.
3. Concrete shall be Class 800-C-12500, 4" minimum slump.
4. All bar reinforcement shall conform to the requirements of ASTM Specification A618 Grade 60.
5. Bar spacings are similar to existing. Bar cover is from edge of bar to face of concrete.
6. All metal hardware and fasteners shall be hot dipped galvanized whenever stainless steel is not called for in the plans.
7. Stainless steel bolts, nuts and washers shall conform to ASTM F433-86, Type 316L.
8. Stainless steel plates shall conform to ASTM A409-84, Type 316L.
9. Grind all sharp edges smooth.
10. Finish shall be Order of contact Reduced No. 1 or better. Finish must be smooth and uniform.

General Notes



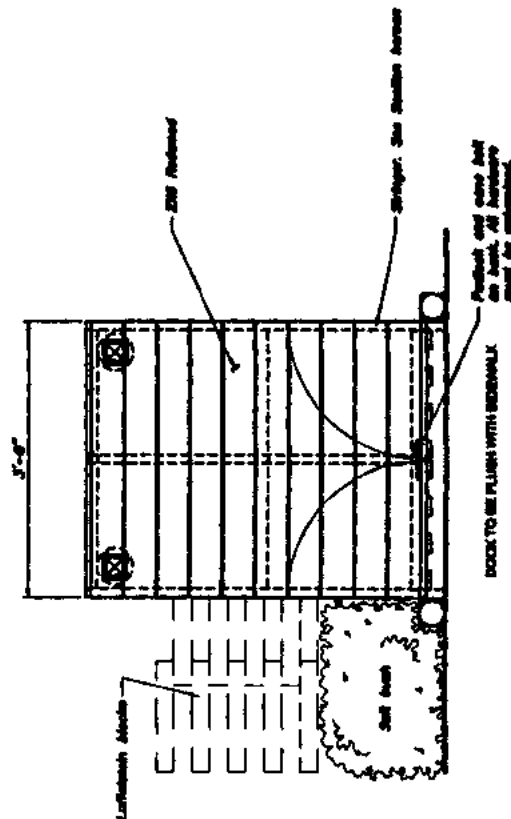
VIEW FROM SIDEWALK
ELEVATION
SCALE 1"=1'-0"



SECTION
SCALE 1"=1'-0"

COASTAL COMMISSION

PLAN
SCALE 1"=1'-0"



PLAN
SCALE 1"=1'-0"

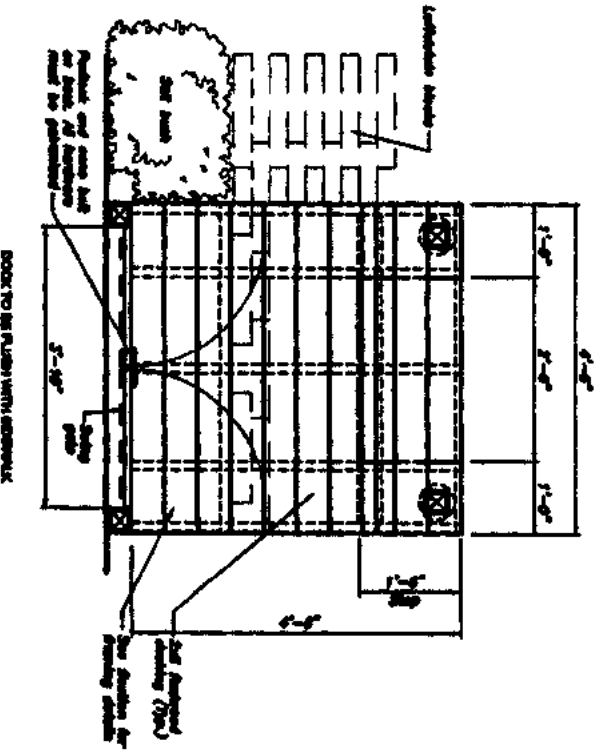
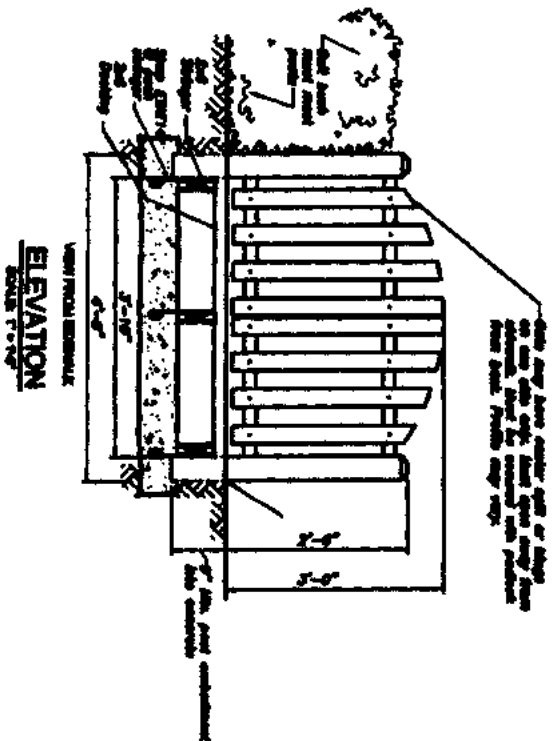
EXHIBIT #

PAGE 1 OF 3

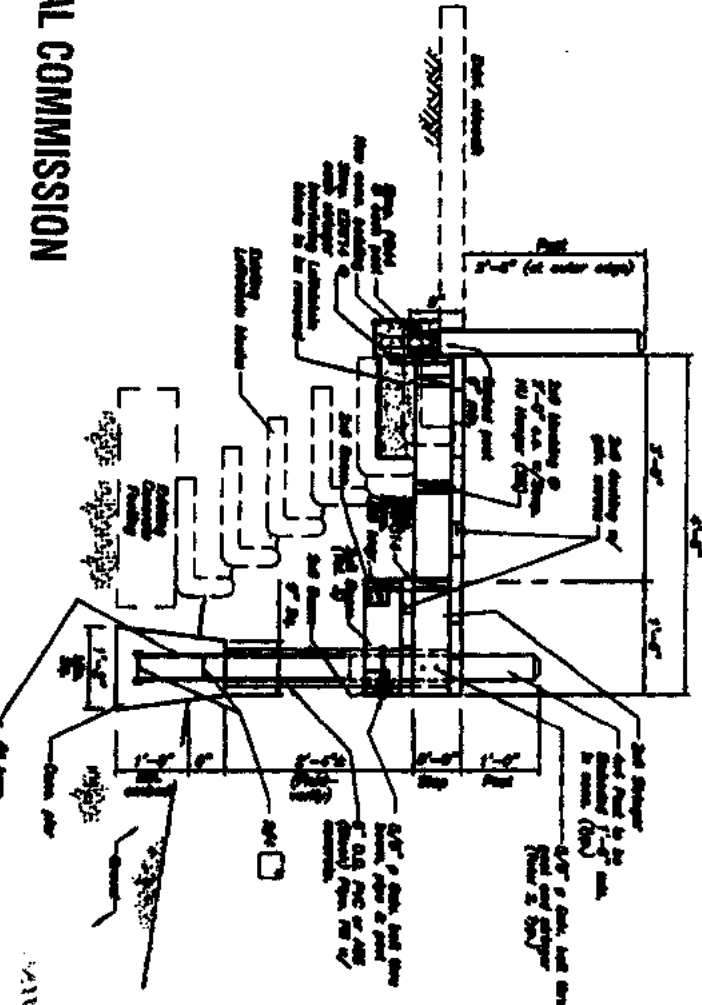
General Notes

1. The Contractor shall verify all dimensions in the field before starting or installing materials.
2. All existing structures that need to be removed shall be removed to original foundation or as directed by the City Engineer.
3. Concrete shall be Class 4000-psi, 4" minimum slump.
4. All for reinforcement shall conform to the requirements of ASTM Specification A615 Grade 60.
5. All spacing, one center to center, for steel in floor slabs or wall to base of column.
6. All steel hardware and fasteners shall be hot dipped galvanized to meet the requirements of the City Engineer.
7. Reinforcement shall be installed in the field.
8. Reinforcement shall be installed in the field.
9. Over all slabs shall comply.
10. The Contractor shall be the Owner of any and all materials, labor, and equipment used in the construction of the project.

PRELIMINARY PLAN
FOR DESIGN STUDY
APR 26 1999
STRUCTURAL
ENGINEERING DIVISION
3



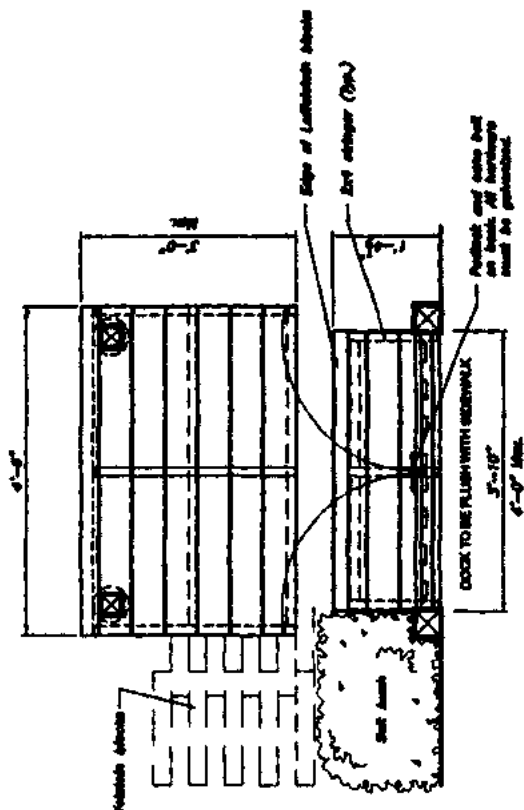
COASTAL COMMISSION



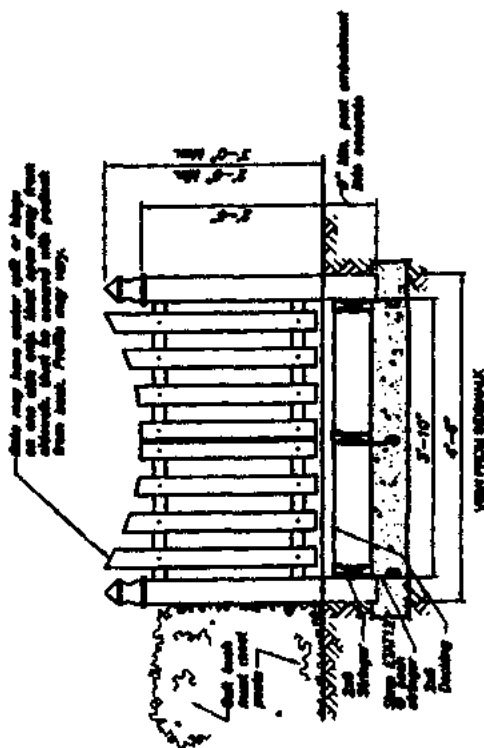
**STRUCTURAL
ENGINEERING DIVISION**

Commercial Abstracts

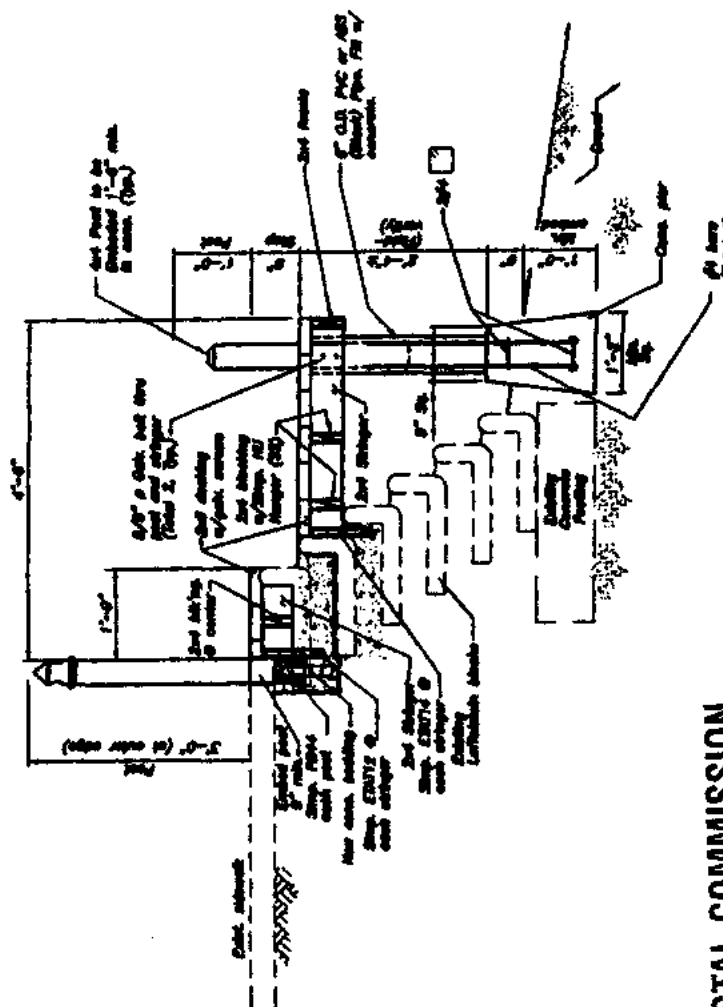
1. The Contractor shall verify all dimensions in the field before starting or fabricating materials.
2. All existing piling shall need to be removed and be replaced in equivalent locations or as directed by the City Engineer.
3. Concrete shall be Class 600-C-3500, 4" minimum slump.
4. All bar reinforcement shall conform to the requirements of ASTM Compression A615 Grade 40.
5. Bar spacings are center to center. Bar cover is from edge of bar to face of concrete.
6. All steel hardware and fasteners shall be hot dipped galvanized minimum thickness shall be not smaller than the plate.
7. Stainless steel bolts, nuts and washers shall conform to ASTM F593-82, Type 316L.
8. Stainless steel plates and washers to ASTM A490-84, Type 316L.
9. Chief of all other edges immediately.
10. There shall be Center of cast-in-place Reinforced No. 1 or better. There shall be drilled and drilled.



PLAN
SCALE 1" = 10'



ELEVATION



SECTION
SCHE 1-1

COASTAL COMMISSION

EXHIBIT 1181HX3

PAGE 3 OF 3

City of Los Angeles

ADDITIONAL INFORMATION AND/OR MATERIALS NECESSARY TO COMPLETE COASTAL DEVELOPMENT PERMIT AMENDMENT APPLICATION 5-92-377-A1 (VENICE CANALS DOCKS)

1. Please describe all terms and conditions that the City will require individual dock builders to meet prior to obtaining City permission to construct docks in the Venice Canals. Include amount and type of required insurance, fees, plans, residency requirements, etc.

The applicant submits the following to the West Los Angeles District Office of the Bureau of Engineering (WLA), located at 1828 Sawtelle Boulevard:

1. Identification to verify that the applicant is the owner of the abutting property (or provide a notarized letter from the property owner authorizing the applicant as agent for the owner)
2. Evidence of Legal Interest in Property (i.e. a title report or tax bill)
3. A sketch showing the proposed location of the dock with dimensions from the lot lines
4. A check for \$502.90 (Tier 1 Revocable Permit Fee) made out to "City of Los Angeles"

WLA will give the Applicant:

1. A receipt for paying \$502.90
2. Dock reference number
3. Permit Package (see Exhibit 1).

The Permit Package contains 9 items:

1. Instruction to Applicants
2. City request letter for Assignment of Coastal Permit
3. Coastal Commission application and Affidavit for Assignment of Coastal Permit
4. Coastal Commission Notice of Intent to issue permit
5. Standard Plan for dock
6. Key Map
7. Waiver of Damages forms and instructions
8. Liability Insurance Package
9. List of Revocable Permit Conditions for boat docks

Evidence of Legal interest in Property and Items 2-6 must be hand carried or mailed

~~with a check for \$200.00~~ to the Coastal Commission Office located at ~~245 West~~

~~Broadway, Suite 200, P.O. Box 1450, Long Beach, CA 90802-4416. No Fee.~~

~~200 Ocean Gate #1000~~

Applicant records the Waiver of Damages at the County Recorder's Office.

The applicant or contractor returns to WLA with:

1. Coastal Commission approval

COASTAL COMMISSION
5-92-377-A1

EXHIBIT # 3

PAGE 1 OF 10

2. Recorded Waiver of Damages
3. Liability insurance slip from the Board of Public Works office with City Attorney's approval number
4. A check for \$1,031.00 (\$31 for the E-permit and \$1,000 for the Work Order deposit)
5. Contractors name and license number

WLA will give the Applicant or Contractor:

1. E-Permit for construction
2. Instructions and requirements for construction inspection

Licensed Contractor constructs dock and follows the inspection instructions

After the final inspection and closing of the W.O. (which includes settlement of any deficit or refund), WLA will issue and mail the Revocable Permit to the applicant

2. **Please submit results of local public hearing(s) regarding the proposed extension of coastal development permit term for the City of Los Angeles Venice Canals Boat Dock Plan, including copies of written public comments received and minutes of December 14, 2000 public hearing.**

A copy of the Hearing Attendees sign-in sheet is attached as ~~Exhibit 2.~~
Written comments attached as ~~Exhibits 3 through 8.~~

The public had the following project concerns:

- a.) Sharing of boat docks by adjacent neighbors
- b.) Existence of Public Boat Launch
- c.) Dissatisfaction with the original dock design due to size and cost of permits and construction.

The Venice Canals Association "endorses and supports" the City of Los Angeles' request for a 2-year extension of the Local Coastal Development Permit (~~see Exhibit 3).~~

3. **Please submit an analysis of the cumulative impacts associated with the construction of boat docks in the Venice Canals and the use of the canals for public recreational boating activities. Include an inventory of all permitted and unpermitted dock structures that currently exist in the Venice Canals.**

Operation and Maintenance

The Venice Canals Maintenance Program (W.O. E6000440) maintains the Venice Canals, the Grand Canals and the Ballona Lagoon. The purpose of the Venice Canals maintenance work is to keep the rehabilitated canals clean, control algae growth, maintain the landscaping and operate the tidegates.

COASTAL COMMISSION

The Venice Canals (Sherman, Howland, Linnie, Carroll, Grand (from Washington Street to North Venice Boulevard) and Eastern Canals) were originally constructed in 1905 and were designated as public right-of-ways owned by the City of Los Angeles, open to the public for use of small, non-powered boats for recreation and intra-canal travel. The canal right-of-ways were withdrawn from public use in 1942 due to the severely deteriorated condition of the canal embankments and adjacent sidewalks. The canals were rehabilitated in 1992 and 1993.

The canals, approximately 1.5 miles long, were embanked with special blocks called Loffelstein. New sidewalks were also constructed in addition to a brand new 1.5-foot wide landscaping strip with native material and plants approved by the California Coastal Commission.

The water in the canals comes from the ocean (through a gate at Via Marina, controlled by the Los Angeles County's Department of Beaches and Harbors) via the Ballona Lagoon through five tidegates located at Washington Street and the Grand Canal. The control box adjacent to the tidegates contains the electrical switches used to open and close the tidegates. Flushing (emptying at low tides and re-filling at high tides) depends on the tide level. The canals must be kept full of water (whenever the tides permit) on weekends, holidays and at the City's request for special events.

The City of Los Angeles has been granted an easement for the flow of water from Ballona Lagoon to the canals. Ballona Lagoon and Grand Canal are used to store floodwaters during major winter storms, and the operation of the gates is designed to prevent flooding to low-lying structures in this area.

The maintenance program contributes to improved water quality, however, the canal waters are subject to pollutant inputs via urban runoff and nuisance runoff from adjacent properties.

The current boat dock plan allows one boat dock to be constructed anywhere within the segment of canal which corresponds to a property owner's lot lines. However, if any dock is proposed within six feet of an adjacent lot's frontage, the dock builder must receive written consent from the adjacent property owner. Two adjacent property owners may build a shared dock, but in order to do so, they must forego their privilege to build individual docks.

The City's proposed plan also established size standards for non-motorized boats in the Venice Canals. Motorized boats are prohibited. The proposed size standards are identical to those first proposed in the master plan. The following are the City's proposed size standards for boats:

| | |
|----------------------------|-----------|
| Maximum length: | 18.0 feet |
| Maximum width: | 6.0 feet |
| Maximum length plus width: | 21.0 feet |
| Maximum draft: | 2.0 feet |

COASTAL COMMISSION

Maximum height: 3.5 feet above water line
Maximum draft plus height: 4.0 feet above water line

The City's plan also has the following design parameters for boat docks:

Overall dock width: 5'0"
Overall dock length: 5'8"
Foundation of reinforced concrete
Foundation footprint no larger than standardized plan specifications
No fixed roofs or canopies
Required safety barrier on all four sides
Required self-latching gate:
Minimum height: 2.5 feet
Maximum height: 3.5 feet
Maximum width: 5.0 feet

This plan requires utilization of specified construction methods which are designed to minimize the potential for adverse environmental impacts associated with the construction of the boat docks in the canals.

Coastal Act

The project is located in the Venice Canals which are in part submerged lands subject to tidal action. Therefore, the proposed project is also located between the sea and the first public road paralleling the sea and within three hundred feet of the mean high tide line. Consequently, the Venice Canals are located in the dual permit jurisdiction area as defined in Section 30601 of the Coastal Act.

Under Section 30600(b) of the Coastal Act, a Coastal Development Permit for the portion of the project that involves construction in the water of the Venice Canals must be approved by the Coastal Commission rather than the City. However, the City of Los Angeles does have the authority, as the local government and landowner of the Venice Canals, to approve the project and revocable permit applications regardless of Coastal Act requirements.

Public Access

Public access to and through the Venice Canals has not been impacted by the project. The plan has not restricted the public from using the Venice Canals for recreational boating. The public can access the canals with non-motorized boats at the public boat launching ramp approved under Coastal Permit 5-91-584 (City of Los Angeles). The public boat-launching ramp is located on the northern end of the Grand Canal.

Section 30210 of the Coastal Act states that maximum access and recreational opportunities shall be provided for all the people. In order to ensure that the public would not be excluded from boating in the Venice Canals, and that the public was

given an equal opportunity to access the Venice Canals for recreational boating, the approval of the plan was conditioned so that no private residential boat docks were permitted or built until the public boat launching ramp and parking lot at the northern end of Grand Canal was open and available for use by the general public.

Public access along the public walkways adjacent to the Venice Canals must also be protected. The construction of the private residential boat docks does not affect the use of the public walkways along the sides of the Venice Canals. In order to ensure that the future construction and use of the docks does not inhibit the use of the public walkways, the plan is conditioned to prohibit the storage of boats or other items within the public walkways.

Because the plan will not reduce public access to, along, or through Venice Canals, and the public has an equal opportunity to access the canals for recreational boating at the public boat launching ramp, the plan is consistent with the public access policies of the Coastal Act.

Recreation

The plan is consistent with Section 30224 of the Coastal Act because it increases the opportunities for recreational boating in the Venice Canals. Boating use is encouraged through the City's plan by providing up to 175 boat docks. The plan, along with the public boat launching ramp, provides all people with an opportunity to enjoy recreational boating in the Venice Canals.

The storage of boats had been a concern of some Venice Canal residents. They are concerned that stored boats will block the canals or public walkways. Under the City's plan, boat storage will not inhibit recreational boating in the canals. There is ample room to tie two boats to each dock without obstructing the canal. Boats may also be stored in the boat-owners' front yards. No boats or equipment may be stored on the public walkways along the canals.

Marine Resources

The Coastal Act contains many policies which serve to protect marine resources and marine habitats. The following Coastal Act policies apply to the project because of its potential impacts on the wetlands and marine environments found in the Venice Canals and their banks.

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will

COASTAL COMMISSION

maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233 of the Coastal Act states, in part:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(3) In wetland areas, only entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.

Section 30240 of the Coastal Act states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

The Venice Canals are part of the larger Venice Canals/Ballona Lagoon wetlands system. Sea water enters the wetlands system through tidal gates which control the flow from the Marina del Rey entrance channel into Ballona Lagoon. The sea

water then flows through Ballona Lagoon to another set of tidal gates located at Washington Boulevard, which separate Ballona Lagoon from Grand Canal and the rest of the Venice Canals.

The Venice Canals are wetlands and are protected under Coastal Act policies. The entire canal system is an Environmentally Sensitive Habitat Area (ESHA) as defined in the Coastal Act. In addition to being important wetlands, the canal system is used by the endangered California least tern, Sterna antillarum browni.

Section 30233 of the Coastal Act limits the types of development allowed in wetlands. Under Section 30233(a)(3) of the Coastal Act, boating facilities are an allowable use in the canals. Recreational boating has historically occurred in the Venice Canals.

Implementation of the plan results in some wetland habitat loss on the banks of the canals where the 175 docks are proposed. In addition, the shade created by the proposed docks will impact habitat value. However, some impacts associated with the construction of docks may be beneficial to the environment. The pier pilings and shade will promote the development of a more diverse type of habitat recognized as a valuable aquatic environment. The docks will protect the canal habitat by directing human access away from the vegetated banks of the canals by providing alternative access to the water through the docks.

Local Coastal Program

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act:

- (a) Prior to certification of the Local Coastal Program, a Coastal Development Permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200). A denial of a Coastal Development Permit on grounds it would prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200) shall be accompanied by a specific finding which sets forth the basis for such conclusion.

On November 14, 2000, the Coastal Commission approved the Venice Coastal Land Use Plan (LUP), with modifications. These modifications must be made by

ON

May 14, 2001, in order for the Coastal Commission to certify the LUP. The project conforms to the Venice LUP policies regarding the Venice Canals.

CEQA

Section 13096(a) of the Commission's administrative regulations requires Commission approval of Coastal Development Permit application to be supported by a finding showing the application, as conditioned by conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) of CEQA prohibits a proposed development from being approved if there are feasible alternative or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment.

The City analyzed several alternatives and determined that the current plan is the least environmentally damaging because it reduces the number of docks in the canals, and thus the impacts of the docks on the canal habitat. In addition, an EIR with addendum and supplements was prepared by the City for the Venice Canals rehabilitation project. The EIR documents discuss the affects of both non-motorized and motorized boats in the canals. The EIR documents conclude that the use of non-motorized boats in the canals would not cause any major impacts.

STATUS OF PERMIT APPLICATIONS

As of February 12, 2001, there are 75 Non-permitted boat docks and 5 permitted boat docks in the Venice Canals (see below):

Non-permitted Boat Docks

301 Washington on Grand Canal
2210 Grand Canal
2212 Grand Canal
2219 Grand Canal
2310 Grand Canal
2320 Grand Canal
2333 Grand Canal
2405 Grand Canal
2408 Grand Canal
2508 Grand Canal
2604 Grand Canal
2605 Grand Canal
2610 Grand Canal
2614 Grand Canal
2620 Grand Canal
2904 Grand Canal
2910 Grand Canal

Permitted Boat Docks

450 Carroll Canal SA4
457 Linnie Canal SA2-3
2427 Eastern Canal SA16
446 Carroll Canal SA15
458 Carroll Canal SA17

COASTAL COMMISSION

EXHIBIT # 3
PAGE 8 OF 10

3001 Strongs Drive
 2302 Strongs Drive
 2316 Strongs Drive
 2318 Strongs Drive
 2500 Strongs Drive
 2700 Strongs Drive
 2820 Strongs Drive
 213 Linnie Canal
 230 Linnie Canal
 232 Linnie Canal
 236 Linnie Canal
 415 Linnie Canal
 428 Linnie Canal
 437 Linnie Canal
 453 Linnie Canal SAL
 499 Linnie Canal
 230 Carroll Canal SAL
 236 Carroll Canal
 240 Carroll Canal
 241 Carroll Canal
 401 Carroll Canal
 405 Carroll Canal
 416 Carroll Canal
 425 Carroll Canal
 433 Carroll Canal
 447 Carroll Canal
 451 Carroll Canal
 453 Carroll Canal
 457 Carroll Canal
 2302 Dell on Carroll Canal
 211 Sherman Canal
 213 Sherman Canal
 217 Sherman Canal
 218 Sherman Canal
 220 Sherman Canal
 229 Sherman Canal
 408 Sherman Canal
 452 Sherman Canal SAL
 217 Howland Canal
 223 Howland Canal
 413 Howland Canal SAL
 415 Howland Canal
 420 Howland Canal SAL
 424 Howland Canal
 428 Howland Canal
 431 Howland Canal SAL

COASTAL COMMISSION

EXHIBIT # 3
 PAGE 2 OF 10

437 Howland Canal
452 Howland Canal
445 Howland Canal
453 Howland Canal
456 Howland Canal
460 Howland Canal
2335 Eastern Canal
2337 Eastern Canal
2401 Eastern Canal
2427 Eastern Canal SA 16
2429 Eastern Canal

3. Please submit the City's plan to eliminate all non-permitted docks and other structures from the Venice Canals. Include in the plan a City enforcement plan to prevent additional non-permitted development in the Venice Canals.

The non-permitted boat docks are cited (~~see Exhibit 9~~). Owners must apply for a Revocable Permit to keep a boat dock on private property. An administrative hearing is scheduled at the WLA Office if the owner does not opt to pursue a boat dock permit. If the case is not resolved at the administrative hearing, the owner can appeal and have the case transferred to the City Attorney's Office.

4. Please submit the City's management plan for the Grand Canal public boat launch including: a) the terms for public use and access to the boat launch, b) its past and current level of use, and c) the hours and days of operation of the facility. Include any current or proposed use fees or admission fees.

The Venice Canals Maintenance Program (W.O. E6000440) maintains the Venice Canals, the Grand Canals and the Ballona Lagoon. A contractor, Mariposa Horticultural Enterprises, has been awarded this work. The program comprises algae cleanup, trimming of shrubs and miscellaneous landscaping work, filling up and flushing of canals by means of a mechanical sluice gates gallery (~~see Exhibit 10~~).

The public boat launch is primarily used by the maintenance crews. No formal operation plan is in effect at this time.

COASTAL COMMISSION

EXHIBIT # 3
PAGE 10 OF 10

Jerome P. Helman, M.D.
452 Sherman Canal
Venice, CA 90291

December 5, 2000

City of Los Angeles, Bureau of Engineering
Environmental Group
650 South Spring Street
Los Angeles, California 90014

RE: Venice Canal Boat Docks

Dear Ms. Irene Paul,

While I cannot attend the meeting on December 14, 2000, there are several points I wish to comment on. First, the letter from the city seemed to indicate that neighbors adjacent to boat docks have the right to use the docks whether they participated in their construction or not. This needs to be clarified. It seems to say that if one neighbor has a dock and another wants to use it, the second neighbor has that right. It is as if my neighbor has something in his yard and I want to use it, so I have the right to enter his yard and use it. This appears to be highly inappropriate.

Next, the yearly inspections. Houses and other buildings are not inspected yearly after their initial inspection or remodeling. Why will docks be inspected yearly? This appears to be a "make work" project. These are small docks for small boats. The docks are to be gated and locked, so pedestrians are not in danger. Why should homeowners pay for a yearly inspection? If inspections are needed, the inspector should be paid by the city, the inspectors' employer.

A "public boat launch" is mentioned in the letter. I have lived on the canals a little less than two years and have not seen a public boat launch. Is this being planned in the future? Is it a concept left from the past? Please clarify this point.

To summarize my concerns. I am opposed to mandatory shared rights for boat docks on the canal, if that is the proposal. I am also opposed to yearly inspections of the docks as it serves no public purpose.

Yours,


Jerome P. Helman, M.D.

COASTAL COMMISSION

5-92-377-A1

EXHIBIT # 4

PAGE 1 OF 1

Public Hearing
Venice-Abbott Kinney Memorial Library
Thursday, December 14, 2000

Conducted by:
City of Los Angeles
Bureau of Engineering
Structural Engineering Group

Project Title: Venice Canals Rehabilitation (W.O. EXX51316)
Venice Canals Boat Dock Plan

Good afternoon. My name is Darryl DuFay. I am a member of the Venice Canals Association's Board of Directors. Our Association has served the Canals for over twenty five years and presently represents seventy percent of the property owners. In addition, we offer participation to non property owners through our "Friends of the Canals" subscription.

The Venice Canals Association endorses and supports the City of Los Angeles' request for a 2-year extension of the Local Coastal Development Permit issued by the California Coastal Commission on Thursday, October 14, 1993 (A5-92-377). The original permit was issued for seven years and expires on December 31, 2000.

The permit "...allows for canal residents to construct their own dock in front of each of their respective lots. The specific locations are not identified. A total of 175 docks would be permitted by the City on a first-come, first-serve basis to the residents who apply for City permits."

However, there has been continual dissatisfaction with the original dock design of the City of Los Angeles. Since the permit was issued in 1993, approximately eighteen individuals sought permits to build docks. However, in that time only five docks were built using the City's dock design. The major objections raised by the property owners were the negative environmental impact of the original design due to its inappropriate size and the high cost of permits and construction. In addition, there has been confusion over liability issues related to building a dock.

In 1998, members of the community undertook to address the concerns about the original dock design. Working with the Bureau of Engineering over the past two years, three new docks designs were developed and approved. I have attached a copy of those designs.

The new dock designs are superior to the original design. They are significantly more environmentally sensitive to the wetlands status of the Canals due to their smaller and less intrusive size. In addition, they are visually less obtrusive. They offer different design choices and can be built at a cost that is less than one third of the original dock design.

We request that the new dock designs be the standard for all new docks constructed in the Venice Canals. We also request that any areas of confusion over the dock applicants' responsibilities and liabilities be clarified immediately.

Thank you for this opportunity to speak today. We look forward to the approval of the City of Los Angeles request to extend the Local Coastal Permit for the Venice Canals Boat Docks.

Darryl DuFay, Member, Board of Directors,
Venice Canals Association
2602 Grand Canal
Venice, CA 90291-4549
(310) 822-9194

Attachment



COASTAL COMMISSION
5-92-377-A1
EXHIBIT # 5
PAGE 1 OF 1

California Coastal Commission
200 Ocean Gate 10th floor
Long Beach
California

RECEIVED
South Coast Region

MAR 12 2001

Maryjane
PO Box 5844
Santa Monica
Calif. 90405

1st March 2001

CALIFORNIA
COASTAL COMMISSION

Dear Chuck Posner, Pam Emerson, and Commissioners:

This letter is in regards to the sotermed Venice Canals Boat Dock Master Plan and Revocable Permit, and issues concerning such. Please note copies attached, on this issue. Copies of such weere submitted to Jim Doty, who held a small meeting at our Venice Library, 14 Dec. 2000. The "posted notices" on this issue, put up late on 21 Nov. told to contact you...no mention of the City of LA. Doty audio taped the meeting: you may wish to listen to those tapes.

Reminders... The Venice Canals, north and south of Washington Street, are of the PUBLIC WETLANDS WATERWAYS. They are supposed to be protected under such environs. But you have allowed full MOTORS used daily, since the "restoration" of the northern canals by 1995: the motor boat and chain saws and other such are polluting daily, destroying environs/habitats. AND...there can be NO PRIVATE DOCKS in the Canals/Wetlands/Waterways. It is a PUBLIC system/environs. You have HUGE PERMANENT structures in the canals now. They need to be removed. (Of course you have allowed the FORTRESSES all about, and even the "TRADE OFF" of PUBLIC LANDS here, to private profiteers, too.)

It seems FINE that people do as done from @ 1905-1996, here. Only simple, environs biodegradable, small step docks and really mostly just simple "tie ups" for the NON-MOTOR water craft were used (some still remain). Materials were of simple wood, small post, stick, a stone, a piece of plant. PLEASE have this be the way to continue, both north and south of Washington Street!!!

Yes, you do need to reset the wetlands plants of the embankments of the low canal wetlands. The huge BLUFF plants you have all about the northern canals (and even near Washington Street, now) are wrong: non-native, non-indigenous, invasive, and intently forced to oust all other/proper vegetations, chain saw massacres go on daily for such: horrid and destructive on all levels and aspects. Varities of other plants might be used.

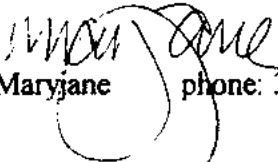
The issues of the issue need to be addressed and lived with as a "whole," not piecemeal polluting profiteering. These aspects matter whether I am dead or alive. I own nothing. I have no "conflict with interest." My letters to gov. bodies go to trash...as such to you in 1997 and 1998. This one is sent again, in hopes of bettering all about as we all go along. "Issues" include the ones noted on the attached "comment" copies. It is now known that boat/watercraft "must" be "registered, or so the powers that be wish. NOT necessary!!! Soon we will all wear badges...privatize the public wetlands...you know the way.

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5-92-377-A

EXHIBIT # 6
PAGE 1 OF 3

Though I deal with many realities, and constant life-death issues of beloveds, so that my schedules are often packed, and I am called out of town...if you WOULD LIKE A TOUR of the issues, in brief, I would be glad to arrange such. I raised my children here, doing constant community and cultural works. I co-did the efforts, also, of getting the Venice Canals declared Cultural and Historical Monument Status (not that the status has been really protected or enforced), in my @ 35 years, here

Sincerely,


Maryjane phone: 310-306-9536...please leave best times & ph# to return any calls.

PS. It is known that there is NO CLARITY as to who is responsible for any one falling in the canals. Long stretches still remain of no barrier/bluff plants...people rarely ever fell in the canals...do you have reports of such from your 1972 inception? Can it be that no one else is responsible other than the faller inner? Of course there is such an army of dogowners/dogs not controlled, most not leashed, owners with café and cell phones that cause day and night trials...perhaps THAT needs to be addressed. As it is of recent, dogowners/dogs have all rights at any speed any where in Venice , and all about the canals and beaches.

COASTAL COMMISSION

EXHIBIT # 6
PAGE 2 OF 3

PRIVATIZATION by the PROFITEERS
Is the high crime rate of officialdoms.

The public territories are public.
Virtues seem beneficial.
Neither Master nor Slave
Seems the best "Plan."

See reminders/comments below, as done for
A half century, here. You have a chance to
Fulfill your responsibilities, to resolve
Many past harms here, and answer
For your actions within the human realm.

As The CANALS FLOW
There are three major tides:
Environmental, Cultural, and Historical.
We do not favor any of the recent past assessments and harms done, nor such for any
Los Angeles "Master Plan" for Venice, its Captive Daughter since October 1925. We
do not favor the "Venice Canals Boat Docks Master Plan and Revocable Permit," nor
the "Parker-vous French Drain" assessment/demands. The 1911 assessment law
is of Los Angeles, not Venice.

These motor uses... to stop. These fortress "docks"... to not be.
The privatization vegetation/fences of fortress forces to be
The bridges might get to be public.
Off all public areas
The personal designer lifestyle colours of the officialdoms
The plants, of canal embankments: the few salt grasses, the few pickle weeds,
The occasional sea lavender, beach lupine, beach evening primrose, poppy, plus a few
others. No fenced or gated canals systems are needed, your BLUFF PLANTS were never
Here till late 1995-early 1996. 1905 to 1996 all was fine with no fences, gates, hedges.

"Freedom is a matter of choice."

2 or 3 pages of enclosures may be attached with this reply...

LOCAL COASTAL DEVELOPMENT PERMIT PUBLIC HEARING

FOR

VENICE CANALS BOAT DOCK MASTER PLAN AND REVOCABLE PERMIT

Thursday, December 14, 2000
1:00 - 4:00 p.m.

If you plan to speak this afternoon or would like to make a written comment, please fill
out the following and hand it to any staff member.

Name: _____

OCCUPANT / CURRENT RESIDENT

Address: _____

Zip Code: _____

90291

Are you representing an organization? _____

Group Name: _____

☐ I WOULD LIKE TO SPEAK

☒ I HAVE THE FOLLOWING COMMENT:

Venice used to have 16 to 18 miles of canals, now it has @ under 4 miles of canals; they
are supposed to be public in full, they are supposed to be "protected wetlands waterways"
They were declared as Cultural and Historical Monuments; nationally and statewide in
1982, then by the City of LA, 15 July 1983. Some constant issues are with them; without
them, there is no "Venice" really.

No motors are allowed to be used in the canals/ embankments/walkways/walk bridges...
Since the illegal ways the northern canals were redone 1992-1995; motors are used daily
in all such areas. Note that canal maintenance never used any such... till the "redone"
powers that be seem to insist that these huge motors pollute and deter all wetlands
wildlife balances; most agree that less than 4% of our original wetlands remain, now.

The city/powers that be have forced embankment plants, that they also tend with high
powered motor tools, along the canals; these are non-native, non-indigenous, and
invasive, and deter the wildlife balance of the remaining wetlands. The plants are seen in
nature, here and there in the bluffs areas, but not below that habitat.

As wetlands waterways... no permanent nor private structure/s nor blocking of walkways,
embankments, or waters, etc., may be made. We now have, since '96, mostly, huge
structures of such things... large & small, cemented, posted, gated, marked off "docks"
and "seats" and blockades. They are illegal on all aspects. People can have some simple
wooden post or boat tiemp, small dock, of no permanent mode; none of it is private; the
wetlands are public, and one can use a hand/body/paddle/oar/sail SMALL watercraft and
tie it up appropriately between uses.

All the Dell Ave. side strips by the residences and by the city lots and by the Linnie
Canal Park are public road way... the road was two way traffic till recent powers that be
made it one way... the city pillars by the park; the various lot owners adjacent to such,
and the remaining city lots' encroachment/landscapings/"no parking" signs/ the police
and parking depts of the city giving tickets for parking in such areas: all are not of the
public ways; it is public Dell Ave. roadway. The privatization of such, as of docks, gates,
fences, blockades (inclusive of yard vegetations)... is what it is of powers that be.

The South Grand Canal has @ 8 residences... all with complete privatization and
blockade of any walkpath/sidewalk (across from Driftwood to Galleon) this has been an
issue for @ 33 years... from the powers that be. That embankment has many other issues
up to Washington St., also. The Grand Canal/aka Ballona Lagoon has many other issues,
including the entire western embankments and who owns what with what zoning by
powers that be... as so the issues of the Ocean Front Walk not restored on our peninsula
and the issue of the bike path never allowed there, by the powers that be.

12343

Looking forward to discussing
a canal access gate
with you.

MOVING IN THE RIGHT DIRECTION

AN UPDATE ON BOAT DOCKS AND BOAT STORAGE IN THE CANALS

FYI

Distributed to
the Community



The Venice Canals Association has been involved in addressing the concerns of residents regarding the Street Use Inspection Division "Notices" issue for Non-Permitted docks (1-29-01) and boats stored in the canals (4/30 - 5/4).

BOAT DOCK BACKGROUND

In 1993, the CA Coastal Commission approved a Local Coastal Development Permit to build up to 175 docks in the Venice Canals. This permit was required because the Canals are a joint jurisdictional area with the City of Los Angeles. The permit expired on December 31, 2000.

Only five permitted docks were built in seven years. Most people felt that the original dock plan was far too large and costly, and out of scale for our Canals. A dock was reported to cost about seven thousand dollars. For the past three and a half years the Association and community members worked with the City on a dock plan that was smaller and far less expensive. That dock plan was approved by the City.

"NOTICE" FOR NON-PERMITTED DOCKS - 1/29/01

In December, 2000, the City applied to the CA Coastal Commission for a two year extension of the expiring dock permit. The City felt confident that they would have the permit in February.

Based upon the expectation of having a permit and the safety concern for the docks that had no gate or barricade, "Notices to Abate Nuisance or Correct Violation" were issued in late January to the property owners of the seventy four docks that had been built without a permit. The owners of these non-permitted docks were notified to apply "...for a Revocable Permit to keep a Boat Dock on Public Property." The notice also instructed the dock owner to "Barricade boat dock entrance immediately so that it will restrict small children and pets from entering the dock area."

A "Revocable Permit" is necessary to build a dock because the canals are a public right of way. Unfortunately, the City did not get the permit authority by February. The Association requested that no further action be taken on the "Notices" under the City's permitting authority was resolved.

STATUS OF DOCK "NOTICE"

At the present time the City CANNOT issue a permit for a dock. The dock "Notices" are temporarily on hold until the City receives permitting authority. The CA Coastal Commission has scheduled a June meeting (tentatively) to vote on the City's application to issue dock permits.

COASTAL COMMISSION
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EXHIBIT # 7
PAGE 1 OF 3

REMINDER: The "Notice" created a "paper trail" for owners of docks who have NOT yet barricaded their dock entrance. You are strongly encouraged to immediately build a barricade or remove your dock to avoid any possible legal consequences that may result from an accident.

"NOTICE" FOR BOATS (4/30-5/4)

In late April and early May, the Street Use Inspection Division, in their effort to address abandoned boats, placed "72" hour removal notices on ninety six boats in the Canals which were tied to bridges, railings, the Saltbush barrier along the canals, and brick anchors in the canals. Boats attached to permitted or non-permitted docks were not issued a "Notice."

Because the original dock issue had not been resolved, some residents were concerned that they were in a "Catch 22." They wanted a dock but couldn't build one and yet still received a notice. The Association and other residents brought their concerns to the Council office. They requested prompt action to address the boat "Notices."

On Friday, May 11th, a meeting was held at the Westside Field office of Council President Ruth Galanter. The meeting was arranged and chaired by Peter Brown, Field Deputy. Attending the meeting were representatives from the Bureau of Street Services, Street Use Inspection Division, WLA Bureau of Engineering, and the Venice Canals Association.

The following issues were discussed and decisions made at the meeting:

1. There is a temporary "MORATORIUM" on the "72 hour" boat notice while the "boat docking" issues are resolved.

a. During this temporary "moratorium" a BOAT CAN BE TIED to a:

- STAKE IN THE DIRT along the canal bank. Be sure to place the stake away from the roots of the Saltbush, OR
- Consider removing the boat from the water at this time.

b. A BOAT may NOT be TIED to a:

- BRIDGE
- RAILING along the canals
- BRICK/CONCRETE BLOCK in the canal used as an anchor, or
- SALTBUSH BARRIER PLANT along the canals.

The Venice Canals are a designated wetlands. The Saltbush is a wetlands restoration plant. Boats tied to the Saltbush will be moved to the storage area on Grand Canal between North and South Venice Blvd for 30 days before removal from the canals.

2. The Council Office will appoint an advisory committee on boat issues.

3. Free floating boats, whose owners cannot be identified, and abandoned boats will continue to be moved to the storage area and kept there for 30 days before removal from the canals.

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EXHIBIT # 7
PAGE 2 OF 3

4. Develop a safe and legal alternative to building a dock:

The Association is actively working on the following proposal. We have received a favorable first impression from the City. The proposal will be presented to the CA Coastal Commission.

This dock alternative would allow a canal property owner to construct a gate next to the sidewalk as an access to the canals. This would provide a legal "docking" site without building a dock. The gate, as currently designed, is 25 1/2 inches in width and 30 inches in height (the height of the Saltbush plants) and fits into the spaces between the Loffelblock retaining wall. It would be unobtrusive, almost invisible. A permit would be required since the gate would be located in a public right of way.

5. Other areas of discussion at the meeting included :

- a. Need to post existing rules related to boats.
- b. Need a means to identify abandoned boats.

A STRONG REMINDER: DO NOT BUILD A BOAT DOCK.
THEY ARE ILLEGAL. THERE ARE NO PERMITS AT THIS TIME.

We know that the notices by the Street Use Inspection Division have caused frustration and anger. However, your concerns have been passed on to the Council Office and we're encouraged that those concerns are being addressed in ways that will bring more satisfying alternatives. Thank you for your continued input. We will keep you informed.



Venice Canals Association
Post Office Box 893
Venice, CA 90294

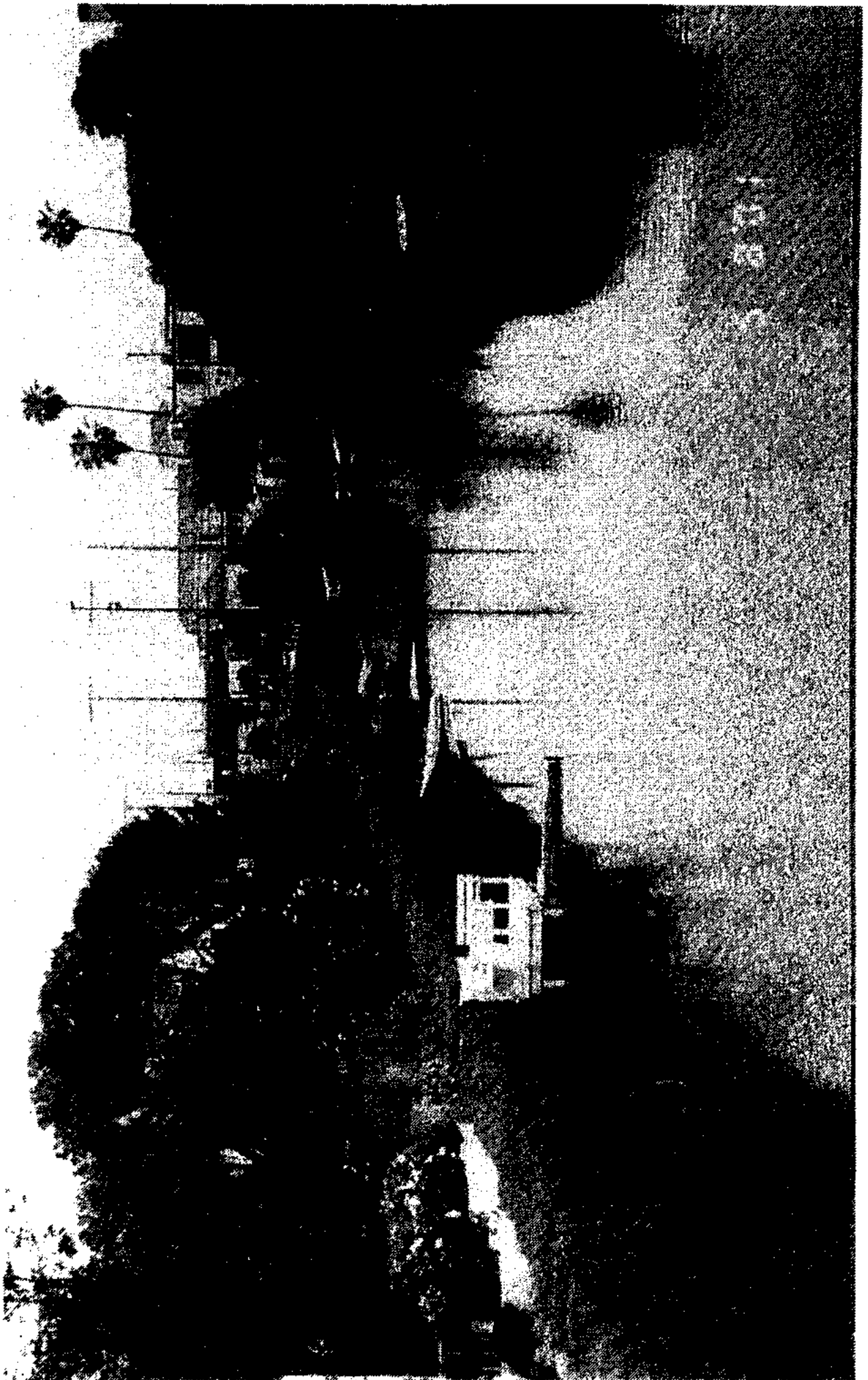
E-MAIL: venicecanalsassoc@excite.com

COASTAL COMMISSION

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EXHIBIT # 7

PAGE 3 OF 3





California Department of Fish and Wildlife and California Attorney General Xavier Becerra Advisory

Affirming California's Protections for Migratory Birds

November 29, 2018

The California Department of Fish and Wildlife (CDFW) and California Attorney General Xavier Becerra jointly provide this advisory to affirm that California law continues to provide robust protections for birds, including a prohibition on incidental take of migratory birds, notwithstanding the recent reinterpretation of the Migratory Bird Treaty Act (MBTA) by the U.S. Department of the Interior (DOI).

The Federal Government's Reinterpretation of MBTA

Section 2 of the MBTA makes it "*unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, [or] kill ...*" a wide variety of migratory birds, except as permitted by regulations. (16 U.S.C. § 703, emphasis added.) A bipartisan coalition of seventeen former leaders of DOI and the U.S. Fish and Wildlife Service recently confirmed that, since at least the 1970s, both agencies have consistently interpreted Section 2 of the MBTA to prohibit incidental

take of migratory birds.¹ “Incidental take” is take that is incidental to but not the intended purpose of an otherwise lawful activity. (See 16 U.S.C. § 1539(a)(1)(B).) In January 2017, the DOI issued a memorandum affirming this longstanding interpretation.

In December 2017, the acting Solicitor of the DOI issued a new memorandum now disclaiming the DOI’s longstanding interpretation of the MBTA as prohibiting incidental take of migratory birds. While three separate lawsuits, including one joined by the Attorney General, challenge the legality of the new memorandum and its consistency with the requirements of the MBTA, California’s protections for migratory birds, including a prohibition against incidental take, remain clear and unchanged.

California Law’s Protection for Birds

The protection of birds is of critical importance to both CDFW, which holds fish and wildlife resources in California in trust for the people of the State and has jurisdiction over the conservation, protection, and management of those resources (Fish and Game Code §§ 711.7(a) and 1802), and to the Attorney General, who enforces state law, including statutes protecting birds. (Cal. Gov. Code §§ 12607 and 12511.) California courts have affirmed the “legitimate and, indeed, vital nature of a state’s interest in protecting its natural resources, including wildlife within the State,” stressing the State’s “obligation and duty to exercise supervision over such resources for the benefit of the public generally.” (*People v. Maikhio*, 51 Cal.4th 1074, 1093-95 (2011).)

As identified below, California law contains a number of provisions prohibiting “take” of migratory birds. The California Fish and Game Code defines “take” for purposes of all of these statutes as “to hunt, pursue, catch, capture, kill, or attempt to hunt, pursue, catch, capture, or kill.” (Fish and Game Code § 86.) California courts have held that take includes incidental take and is not limited to hunting and fishing and other activities that are specifically intended to kill protected fish and wildlife. (See *Dept. of Fish and Game v. Anderson Cottonwood Irrigation Dist.*, 8 Cal.App.4th 1554, 1563-64 (1992) (“take” includes the killing of endangered species in the course of lawful activity; in that case, via unscreened diversions of water), citing *Churchill v. Parnell*, 170 Cal.App.3d 1094, 1098 (1985) (“take” includes the application of pesticides in water that kills fish).) More recently, in *Center for Biological Diversity v. Department of Fish and Wildlife*, 62 Cal.4th 204, 235-36 (2015), the California Supreme Court specifically stated that:

The broad definition of “take” in Fish and Game Code section 86 ensures that DFW can maintain legal control over actions interfering with threatened, endangered and fully protected animals even where those actions may not have been intended to kill or hurt the animal.

¹ See: <https://apps.washingtonpost.com/g/documents/national/letter-from-17-former-interior-officials-to-secretary-ryan-zinke-on-new-migratory-bird-treaty-act-policy/2708/>.

Unless the Fish and Game Code or its implementing regulations provide otherwise, under California law it is unlawful to:

- Take a bird, mammal, fish, reptile, or amphibian (Fish and Game Code § 2000);
- Take, possess, or needlessly destroy the nest or eggs of any bird (Fish and Game Code § 3503);
- Take, possess, or destroy any bird of prey in the orders *Strigiformes* (owls) and *Falconiformes* (such as falcons, hawks and eagles) or the nests or eggs of such bird (Fish and Game Code § 3503.5);
- Take or possess any of the thirteen fully protected bird species listed in Fish and Game Code section 3511;
- Take any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird) (Fish and Game Code § 3800);
- Take or possess any migratory non-game bird as designated in the MBTA² or any part of such bird, except as provided by rules or regulations adopted by the Secretary of the Interior under the MBTA (Fish and Game Code § 3513);
- Take, import, export, possess, purchase, or sell any bird (or products of a bird), listed as an endangered or threatened species under the California Endangered Species Act unless the person or entity possesses an Incidental Take Permit or equivalent authorization from CDFW (Fish and Game Code § 2050 et seq.).

California hosts an incredible diversity of bird species, and over 600 species of migratory birds live in or migrate through California. CDFW and the Attorney General will continue to implement and enforce California law to protect these birds.

For more information regarding permit requirements for activities that may affect bird species, please visit <https://www.wildlife.ca.gov/Conservation/Environmental-Review> or contact CDFW staff for your region. To report the illegal take of birds and other wildlife, please call the CalTIP hotline at 1-888-334-2258 or visit <https://www.wildlife.ca.gov/enforcement/caltip>.

² “Migratory bird” is defined in federal regulations implementing the MBTA at 50 C.F.R. § 10.12. The list of species protected under the MBTA is set forth at 50 C.F.R. § 10.13.

Fauna By-catch in Pipeline Trenches: Conservation, Animal Ethics, and Current Practices in Australia

J. Sean Doody^{1,2}, Peter West¹, Jessica Stapley¹, Michael Welsh¹, Anton Tucker^{1,2}, Enzo Guarino^{1,2}, Matthew Pauza¹, Nina Bishop¹, Megan Head¹, Stuart Dennis¹, Geoff West¹, Ashe Pepper¹, and Amanda Jones¹

¹Ecos Consulting (Aust) Pty Ltd, Suite 4, Level 1, 443 Little Collins Street, Melbourne, VIC 3000

²Present address: Applied Ecology Research Group, University of Canberra, ACT 2601,
email: doody@aerg.canberra.edu.au

ABSTRACT

We use the Eastern Gas Pipeline (EGP) in southeastern Australia as a case study to examine the value of documenting and retrieving entrapped fauna from open pipeline trenches. Daily inspection of nearly 800 km of open pipeline trenches during construction of the EGP (1999-2000) resulted in the identification of 103 vertebrate species (45 reptiles, 24 mammals, 19 frogs, 14 birds, 1 fish). Of 7438 individuals found in the open trenches, 7125 (97%) were found alive and released. Of the 224 dead animals, 29 (13 %) were of two threatened mammal species, most of which drowned in low flooded sections of trenches following rainfall. Nine threatened species were found in trenches, and an additional 5 threatened species were found along the pipeline route. Importantly, most threatened species were found outside of protected areas. Our findings indicate that wildlife conservation should play an important role in pipeline construction, but more emphasis should also be placed within the broader arena of animal ethics, or the retrieval and release of unlisted species. Despite preventative measures taken to minimise mortality in trenches (e.g., ramped earth known as 'trench plugs' positioned every 500 m to allow entrapped animals to escape), smaller (< 75 g), less-mobile animals were unlikely to survive, unless retrieved. There is no current legislation governing the rescue of fauna from trenches during pipeline construction, despite the current increase in pipelines in Australia, although the measure is included as a recommendation in the Australian Pipeline Environmental Code of Practice. Our data indicate that retrieving trench fauna solely within protected areas or sensitive areas (e.g., national parks, nature reserves, selected areas of native vegetation or wetlands), as is sometimes currently practised, will not protect all, or even most, threatened species. Retrieving fauna from the entire trench as standard practice during pipeline construction would be beneficial to native fauna, and therefore to conservation bodies, industry, and the general community.

Key words: fauna, surveys, pipeline construction, threatened species, animal ethics

Introduction

Clearing of vegetation is generally detrimental to the diversity of native fauna (Dobson *et al.* 1997). Yet, as the human population expands so does the pressure for clearing or altering landscapes. A major problem in balancing the needs of human expansion and environmental integrity is an inadequate knowledge of fauna distributions at scales appropriate for predicting impacts of development on conservation of species, communities, and ecosystems. One solution to reduce this deficiency is to survey for fauna prior to or during development. Such information provides baseline inventories that are essential for understanding species assemblages at a range of spatial scales. However, the enormous costs associated with field surveys are obstacles to collecting data on fauna distributions and abundance (Burbidge 1991).

A unique opportunity exists to build such fauna inventories by sampling open trenches for fauna during pipeline construction (Ayers and Wallace 1997; Woinarski *et al.* 2000). Pipeline trenches are excavated by specialised machinery and remain open for days to weeks until pipes are welded and lowered into the trench and covered with soil. Open trenches serve as an extensive pitfall trap (Ayers and Wallace 1997); fauna from surrounding habitats

inadvertently fall into the trench and are often unable to escape. Pipeline trenches offer a unique survey method – providing fine-scale sampling over a great distance. Conventional pitfall sampling at the large scale typical of a pipeline trench (e.g., hundreds of kilometers) would incur prohibitively high costs, and would bias captures with respect to animal taxa (Woinarski *et al.* 2000). In contrast, the retrieval of fauna from already excavated pipeline trenches requires comparatively little additional expenditure (labour costs associated with walking along the trenches searching for trapped fauna), and pipeline trenches are less biased (Woinarski *et al.* 2000).

Herein we use the Eastern Gas Pipeline (EGP) in southeastern Australia as a case study to examine the value of documenting and retrieving entrapped fauna from open pipeline trenches. We surveyed nearly 800 km of open trenches daily throughout construction, identifying, rehabilitating, and releasing captured vertebrates. We compare our findings to those of other pipeline fauna surveys, and discuss implications for conservation and animal ethics. We also examine current practices of fauna retrieval in Australia.

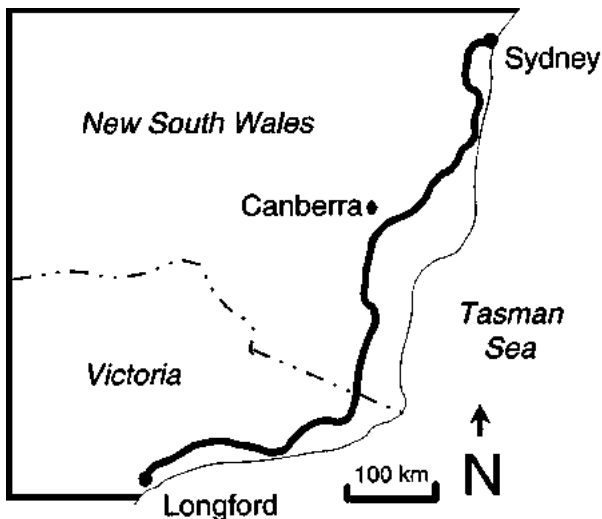


Figure 1. Route of the Eastern Gas Pipeline.

Materials and methods

The Eastern Gas Pipeline (EGP) was constructed in 1999-2000 to transport natural gas from Longford, Victoria to Horsely Park west of Sydney, New South Wales (Fig. 1). The pipeline is 792 km in length, and a 20 m wide easement was cleared to facilitate installation, except in highly-sensitive areas, where the easement was reduced (Duke Eastern Gas Pipeline 1999). The pipeline route crossed a wide variety of habitats, including wet sclerophyll forests and heathlands, dry woodland, native grasslands, and improved pastures.

The pipeline was constructed by four widely-spaced crews (construction spreads) working simultaneously. The trenches were excavated using wheel ditchers and excavators, and pipes were welded and lowered into open trenches, which were then back-filled with soil. Sections of trench remained open for days to weeks depending on a variety of factors (e.g., weather), and were generally restricted to 15 km in length. Trenches were sheer-walled, 90 cm wide and 1-3 m deep (averaging 1.5 m).

Originally, fauna retrieval was to occur only in 'fauna management' areas, or 'sensitive areas' (e.g., Morton National Park) identified by New South Wales National Parks and Wildlife Service (NSWNPWS) and Department of Natural Resources and Environment Victoria (DNRE), prior to construction. However, the finding of large numbers of fauna in open trenches early in the construction phase prompted an expansion of fauna retrieval to all open trenches. This practice was volunteered by the proponent (initially West Coast Energy/BHP but sold to Duke Energy International), rather than imposed.

A team of 2-4 persons surveyed open trenches daily on each construction spread, with each person covering ca. 3-8 km per day. Most surveys began in late morning and ended by 1600-1700 hrs. This schedule was chosen to maximise overlap between surveys and activity of ectothermic animals, which often go undetected under soil lumps and rocks while inactive (pers. obs.). Surveys involved walking alongside the open trench searching for animals, and retrieving them with a long-handled dipnet (modified from a pool net). Due to the risk of

trench collapse while working in a confined space, project safety requirements prohibited entry into the trench for all personnel. However, we were permitted to enter the trench briefly (and under supervision) to retrieve animals that could not be removed with dipnets. Some venomous snakes were retrieved with specialised tongs (Fig. 2).

Identification of animals to species was facilitated by appropriate texts (Strahan 1998; Simpson and Day 1999; Cogger 2000). Retrieved animals were usually released immediately upon identification in habitat adjacent to the easement near where they were found. Occasionally animals were taken out of the field for rehabilitation (i.e., wet, hypothermic mammals) or when in need of further inspection for identification. A few mammals were taken to state wildlife rescue and rehabilitation units (e.g. WIRES) for rehabilitation. Dead specimens of species of interest were preserved and deposited into museum collections.

After discovering that many frogs and possibly other small animals were hiding under soil and debris in the trench, and thus going undetected, we employed funnel traps opportunistically into the trench in East Gippsland. Funnel traps were constructed of hardware wire (0.5 cm mesh) and were ca. 1 m long, consisting of a 30 cm diameter cylinder and wire funnels on each end (see Heyer *et al.* 1994). Funnels were made to span the entire trench width such that animals that were small enough to fit into the funnels (ca. 7 cm diam.) were trapped as they moved along the trench bottom. A string tied to traps allowed them to be checked without personnel entering the trench. Traps were checked in the morning to prevent desiccation and over-exposure.



Figure 2. A lace monitor *Varanus varius* captured in the open trench in East Gippsland, Vic. by S. Doody. Photograph by N. Bishop.

Table 1. Vertebrates retrieved from open trenches during construction of the EGP in 1999-2000. Members of two species groups of frogs (*Litoria ewingii/verreauxii*; *Pseudophryne bibroni/dendyi*) were not identified to species.

| Group and scientific name | Common name | Abundance |
|----------------------------------|------------------------------|-----------|
| Reptiles | | |
| Lizards | | |
| Agamidae | | |
| <i>Amphibolurus muricatus</i> | Jacky Lizard | 135 |
| <i>Pogona barbata</i> | Eastern Bearded Dragon | 1 |
| <i>Tympanocryptis diemensis</i> | Mountain Dragon | 151 |
| Gekkonidae | | |
| <i>Oedura leseuerii</i> | Lesueur's Velvet Gecko | 2 |
| <i>Phyllurus platurus</i> | Broadtail Gecko | 2 |
| Pygopodidae | | |
| <i>Pygopus lepidopodus</i> | Common Scalyfoot | 4 |
| Scincidae | | |
| <i>Bassiana duperreyi</i> | Three-lined Skink | 10 |
| <i>Bassiana platynota</i> | Red-throated Skink | 11 |
| <i>Cryptoblepharus virgatus</i> | Wall Lizard | 2 |
| <i>Ctenotus taeniolatus</i> | Copper-tailed Skink | 29 |
| <i>Ctenotus uber</i> | Spotted-back Skink | 2 |
| <i>Cyclodomorphus michaeli</i> | She-oak Skink | 9 |
| <i>Egernia cunninghami</i> | Cunningham's Skink | 4 |
| <i>Egernia saxatilis</i> | Black Rock Skink | 17 |
| <i>Egernia whitii</i> | White's Skink | 4 |
| <i>Eulamprus heatwolei</i> | Heatwole's Water Skink | 31 |
| <i>Eulamprus quoyii</i> | Eastern Water Skink | 13 |
| <i>Eulamprus tenuis</i> | Barred-sided Skink | 2 |
| <i>Eulamprus tympanum</i> | Southern Water Skink | 160 |
| <i>Hemiergis decresiensis</i> | Three-toed Skink | 13 |
| <i>Lampropholis delicata</i> | Grass Skink | 363 |
| <i>Lampropholis guichenoti</i> | Garden Skink | 699 |
| <i>Nannoscincus maccoyi</i> | Maccoys's Skink | 334 |
| <i>Niveoscincus conventryi</i> | Litter Skink | 418 |
| <i>Pseudemoia entrecasteauxi</i> | Mountain Log Skink | 142 |
| <i>Pseudemoia pagenstechneri</i> | Tussock Skink | 17 |
| <i>Pseudemoia rawlinsoni</i> | Bog Skink | 3 |
| <i>Pseudemoia spenceri</i> | Spencer's Skink | 15 |
| <i>Saproscincus mustelinus</i> | Weasel Skink | 56 |
| <i>Tiliqua nigrolutea</i> | Blotched Blue-tongued Lizard | 42 |
| <i>Tiliqua scincoides</i> | Common Blue-tongued Lizard | 10 |
| Varanidae | | |
| <i>Varanus rosenbergi</i> | Rosenberg's Monitor | 2 |
| <i>Varanus varius</i> | Lace Monitor | 7 |
| Snakes | | |
| Elapidae | | |

| Group and scientific name | Common name | Abundance |
|------------------------------------|--------------------------------|-----------|
| <i>Austrelaps ramsayi</i> | Highland Copperhead | 35 |
| <i>Cacophis squamulosus</i> | Golden Crowned Snake | 2 |
| <i>Demansia psammnophis</i> | Yellow-faced Whipsnake | 1 |
| <i>Drysdalia coronoides</i> | White-lipped Snake | 38 |
| <i>Drysdalia rhodogaster</i> | Blue Mountains Crowned Snake | 3 |
| <i>Hoplocephalus bungaroides</i> | Broad-headed Snake | 1 |
| <i>Notechis scutatus</i> | Tiger Snake | 9 |
| <i>Pseudechis porphyriacus</i> | Red-bellied Blacksnake | 27 |
| <i>Pseudonaja textilis</i> | Eastern Brown Snake | 7 |
| <i>Rhinoplocephalus nigrescens</i> | Eastern Small-eyed Snake | 6 |
| <i>Suta flagellum</i> | Little Whip Snake | 1 |
| Turtles | | |
| Chelidae | | |
| <i>Chelodina longicollis</i> | Long-necked turtle | 20 |
| Frogs | | |
| Hylidae | | |
| <i>Litoria aurea</i> | Green and Golden Bell Frog | 19 |
| <i>Litoria citropa</i> | Blue Mountains Tree Frog | 436 |
| <i>Litoria dentata</i> | Bleating tree frog | 129 |
| <i>Litoria ewingii/verreauxii</i> | Brown/Whistling Tree Frog | 44 |
| <i>Litoria lesueurii</i> | Lesueur's Frog | 699 |
| <i>Litoria littlejohni</i> | Heath frog | 3 |
| <i>Litoria peronii</i> | Peron's Tree Frog | 30 |
| <i>Litoria nudidigitis</i> | Southern Leaf Green Tree Frog | 18 |
| <i>Litoria tyleri</i> | Tyler's Tree Frog | 2 |
| Myobatrachidae | | |
| <i>Crinia parainsignifera</i> | Eastern Sign-bearing Froglet | 9 |
| <i>Crinia signifera</i> | Common Eastern Froglet | 1161 |
| <i>Geocrinia victoriana</i> | Eastern Smooth Frog | 20 |
| <i>Limnodynastes dumerelli</i> | Eastern Banjo Frog | 110 |
| <i>Limnodynastes peronii</i> | Brown-striped Frog | 278 |
| <i>Limnodynastes tasmaniensis</i> | Spotted Grass Frog | 988 |
| <i>Neobatrachus sudelli</i> | Sudell's Frog | 3 |
| <i>Paracrinia haswelli</i> | Haswell's Frog | 17 |
| <i>Pseudophryne bibroni/dendyi</i> | Brown Toadlet/Southern Toadlet | 135 |
| <i>Uperolia laevigata</i> | Smooth Toadlet | 2 |
| Mammals | | |
| Acrobatidae | | |
| <i>Acrobates pygmaeus</i> | Feathertail Glider | 12 |
| Bovidae | | |
| <i>Bos taurus</i> | Cattle | 7 |
| <i>Ovis aries</i> | Sheep | 1 |
| Burramyidae | | |
| <i>Cercartetus nanus</i> | Eastern Pygmy Possum | 64 |

Fauna by-catch in pipeline trenches

| | | |
|---------------------------------|------------------------------|----|
| Canidae | | |
| <i>Canis lupus</i> | Dog/Dingo | 1 |
| Dasyuridae | | |
| <i>Antechinus agilis</i> | Agile Antechinus | 15 |
| <i>Antechinus stuarti</i> | Brown Antechinus | 31 |
| <i>Antechinus swainsonii</i> | Dusky Antechinus | 30 |
| <i>Sminthopsis murina</i> | Common Dunnart | 2 |
| Felidae | | |
| <i>Felis catus</i> | Feral Cat | 3 |
| Leporidae | | |
| <i>Oryctolagus cuniculus</i> | European Rabbit | 8 |
| Macropodidae | | |
| <i>Macropus giganteus</i> | Eastern Grey Kangaroo | 11 |
| <i>Wallabia bicolor</i> | Black Wallaby | 2 |
| Muridae | | |
| <i>Mus musculus</i> | House Mouse | 24 |
| <i>Rattus fuscipes</i> | Bush Rat | 5 |
| <i>Rattus lutreolus</i> | Swamp Rat | 2 |
| <i>Rattus rattus</i> | Black Rat | 3 |
| Peramelidae | | |
| <i>Perameles nasuta</i> | Long-nosed Bandicoot | 9 |
| Petauridae | | |
| <i>Petaurus breviceps</i> | Sugar Glider | 1 |
| Potoroidae | | |
| <i>Potorous longipes</i> | Long-footed Potoroo | 1 |
| Pseudocheiridae | | |
| <i>Pseudocheirus peregrinus</i> | Common Ringtail Possum | 4 |
| Tachyglossidae | | |
| <i>Tachyglossus aculeatus</i> | Echidna | 9 |
| Vombatidae | | |
| <i>Vombatus ursinus</i> | Common Wombat | 1 |
| Microchiroptera spp. | unidentified bat spp. | 2 |
| Birds | | |
| Anatidae | | |
| <i>Anas platyrhynchos</i> | Mallard | 1 |
| <i>Anas superciliosa</i> | Pacific Black Duck | 1 |
| <i>Chenonetta jubata</i> | Wood Duck | 1 |
| Alaudidae | | |
| <i>Mirafrja javanica</i> | Singing Bushlark | 2 |
| Artamidae | | |
| <i>Strepera graculina</i> | Pied Currawong | 1 |
| Cacatuidae | | |
| <i>Calyptorhynchus funereus</i> | Yellow-tailed Black Cockatoo | 6 |
| Dicruridae | | |
| <i>Rhipidura leucophrys</i> | Willie Wagtail | 2 |

| Group and scientific name | Common name | Abundance |
|-------------------------------|-------------------|-----------|
| Hirundinidae | | |
| <i>Hirundo neoxena</i> | Welcome Swallow | 1 |
| Maluridae | | |
| <i>Malurus cyaneus</i> | Superb Fairy Wren | 2 |
| Menuridae | | |
| <i>Menura novaehollandiae</i> | Superb Lyrebird | 2 |
| Motacillidae | | |
| <i>Anthus novaeseelandiae</i> | Richard's Pipit | 9 |
| Phasianidae | | |
| <i>Coturnix chinensis</i> | King Quail | 1 |
| <i>Coturnix ypsilophora</i> | Brown Quail | 1 |
| Strigidae | | |
| <i>Ninox novaeseelandiae</i> | Southern Boobook | 1 |
| Fish | | |
| Anguillidae | | |
| <i>Anguilla australis</i> | Short-finned Eel | 1 |

Results

Diversity of trench captures

We retrieved 103 vertebrate species from open trenches during construction of the EGP (Table 1). Most entrapped species were reptiles (45 species = 44 %), followed by mammals (24 = 23 %), frogs (19 = 18 %), birds (14 = 14 %), and fish (1 = 1 %). Most species retrieved from the trench were natives, and most were small in body size (< 75 g). Most large animals temporarily trapped in the trench escaped via ramped earth positioned every 500 m, as evidenced by footprints at these locations (pers. obs.). Exceptions were a few large animals that became stuck in the mud in the trench bottom (e.g., wombats, wallabies, cattle).

A total of 7438 individual animals were retrieved from open trenches (Table 1). Frogs were the most abundant (4103 = 55 %), followed by reptiles (2960 = 40 %), mammals (254 = 3.5 %), birds (31 = 0.5 %), and fish (1 = < 0.1 %). Locality data for all captures, and for several thousand additional incidental records during pipeline construction, have been lodged with the state Atlas Databases of New South Wales (National Parks and Wildlife Service) and Victoria (Department of Natural Resources and Environment). Of the trench captures, 549 individuals were caught in funnel traps. Most of these were frogs (N = 541), but a few snakes (N = 5) and small mammals (N = 3) were captured.

Mortality

Of the total animals retrieved from the open trenches, 7125 (96 %) were found alive and 224 (4 %) dead. Of the dead animals found in the open trench, 112 (50 %) drowned. Most drowned animals were small mammals (N = 106; 95 %).

Threatened species

Fourteen state- and/or federally-listed species were found during fauna inspection of the EGP in both New South Wales and Victoria (Table 2). Nine of these species were found in open trenches, and most were reptiles (Table 2; Fig. 3). Of the 14 listed species, 12 were found in unprotected areas, while three were found within Morton National Park (although technically the pipeline easement followed the road alignment) and three were found in Kuma Nature Reserve (Table 2). The most commonly entrapped threatened species was the eastern pygmy possum, *Cercartetus nanus* (N = 60 in NSW). One specimen of a federally-threatened species, the long-footed potoroo (*Potorous longipes*), was found in East Gippsland near Bellbird Creek. This species had not been recorded south of the Princes Highway in over 10 years (S. Henry, Department of Natural Resources and Environment, pers. comm.). Another noteworthy find was a specimen of the threatened little whipsnake (*Suta flagellum*) from near Bredbo, NSW. This specimen filled a hiatus between previous known populations north of Canberra and Cooma (W. Smith, NSWNPWS, pers. comm.).

Reptiles

Most reptiles entrapped in the trench were lizards (5 families, 20 genera, 33 species), and the majority of these were small skinks (Scincidae, 25 species) (Table 1). High skink species richness was found in East Gippsland (Vic), south of Nowra (NSW), and northwest of Wollongong (NSW). Each of these areas produced > 10 species of skinks. The greatest density of skinks was found in forested areas of East Gippsland, where we removed > 300 skinks in a single day in < 5 km of trench. Other lizards caught in the trench were three species of dragons (Agamidae), and two species each of goannas (Varanidae; Fig. 2), geckos (Geckonidae), and a legless lizard (Pygopodidae).



Figure 3. An eastern brown snake *Pseudonaja textilis* captured in the open trench near Captains Flat, NSW by E. Guarino. Photograph by S. Doody.



Figure 4. A common dunnart *Sminthopsis murinus*, captured in the open trench near Nowra, NSW by N. Bishop. Photograph by S. Doody.

Table 2. Listed fauna species found during construction of the EGP in 1999-2000. For listings, AUS = Environment Protection and Biodiversity Conservation Act (1999), NSW = NSW Threatened Species Conservation Act (1995), Vic = Flora and Fauna Guarantee Act (1988). For location, T = trench, R = pipeline route prior to construction, A = adjacent habitat. For designation, P = national park, R = nature reserve, U = unprotected area. Abundance data reflect only captures within the listed state (see listing column).

| Species | listing | abundance | location | designation |
|----------------------------------|---------------------------------------|-----------|----------|-------------|
| Mammals | | | | |
| <i>Potorous longipes</i> | Endangered (AUS), Endangered (NSW) | 1 | T | U |
| <i>Cercartetus nanus</i> | Vulnerable (NSW) | 60 | T | U, P |
| Reptiles | | | | |
| <i>Hoplocephalus bungaroides</i> | Endangered (NSW) | 1 | T | U |
| <i>Suta flagellum</i> | Vulnerable (NSW) | 4 | T, R | U, R |
| <i>Tympanocryptis lineata</i> | | | | |
| <i>Pinguicolla check</i> | Endangered (NSW) | 9 | R, A | R |
| <i>Delma impar</i> | Vulnerable (NSW) | 28 | R, A | U, R |
| <i>Varanus rosenbergi</i> | Vulnerable (NSW) | 6 | T, R, A | U, P |
| <i>Cyclodomorphus michaeli</i> | Near threatened (Vic) | 1 | T | U |
| <i>Pseudemoia rawlinsoni</i> | Near threatened (Vic) | 3 | T | U |
| <i>Varanus varius</i> | Data deficient (Vic) | 3 | A | U |
| Frogs | | | | |
| <i>Litoria aurea</i> | Near Threatened (Vic) | 19 | T | U |
| <i>Litoria littlejohni</i> | Vulnerable (NSW) | 3 | T | P |
| Birds | | | | |
| <i>Ninox strenua</i> | Endangered (Vic), Vulnerable (NSW) | 1 | A | U |
| <i>Calyptorhynchus lathamii</i> | Vulnerable (NSW) | 3 | A | U |

Snakes were the second most speciose reptile group found (1 family = Elapidae, 10 genera, 11 species; Fig. 3), followed by turtles (1 species, Chelidae). The most commonly entrapped reptile was the skink *Lampropholis guichenoti* (N = 699).

Mammals

Mammals were the second most speciose group recorded in the trenches (16 families, 20 genera, 24 species). Several exotic (cat, fox, rabbit, house mouse, black rat) and domesticated species (cattle, sheep) were seen in, or retrieved from, the trench (Table 1). Most entrapped native mammals were small (Dasyuridae = 4 species; Muridae = 4 species, Burramyidae, Petauridae, Acrobatidae = 1 species each) or medium-sized (Paramelidae, Pseudocheiridae, Potoroidae, Tachyglossidae, = 1 species each; Fig. 4). Large mammals (Macropodidae = 2 species; Vombatidae = 1 species) were uncommon, and were generally injured or stuck in mud. The most commonly entrapped native mammal was the eastern pygmy possum, *Cercartetus nanus* (N = 64). Most *C. nanus* were entrapped in and near Morton National Park, between the Endrick River and Nowra, NSW.

Frogs

Frogs entrapped in the trenches included 10 species of southern frogs (Myobatrachidae) and nine species of tree frogs (Hylidae). Hylid frogs were represented by several ecological groups including arboreal, terrestrial, and fossorial species, and included riverine and non-riverine species (Table 1). Particularly high abundances of frogs were found south of Nowra, NSW and in East Gippsland, Victoria. The most commonly entrapped frog was *Crinia signifera* (1161 individuals). Sections of trench that held water continuously for several days attracted amplexing (mating) frogs, and eggs and tadpoles of three species were found in the trench bottom (*Crinia signifera*, *C. parainsignifera*, *Limnodynastes tasmaniensis*).

Birds and fish

Trapped birds were relatively uncommon in the trenches (11 families, 12 genera, 14 species). Several of these animals were fledglings that could not yet fly. One predatory species, the southern boobook owl *Ninox novaeseelandiae* may have utilised the trench to find prey. Only one individual of one fish species, the short-finned eel *Anguilla australis*, was found in the trenches.

Other entrapment mitigation strategies

In some areas, trenches held water for extensive periods of time (i.e., days to 2 weeks), especially if wet conditions prevented continued construction. After finding drowned animals in these sections, a few other measures were taken in an attempt to reduce mortality rates. These included (1) pumping out water (carried out by construction personnel), (2) constructing drift (silt) fences along the top of trenches near flooded sections of trench, (3) employing funnel traps in the trench bottom at the water's edge, (4) positioning branches and other objects to serve as ladders from the pooled water to the top of trenches, (5) placing floating objects in the flooded sections, and (6)

using makeshift 'bridges' across the trenches. Drift fences were placed between habitats and the trench to prevent animals from falling into flooded sections of the trench. Funnel traps (See Heyer *et al.* 1994) were employed to capture frogs, snakes, and small mammals on the trench bottom at the water's edge. Although our study was not designed to test the usefulness of these procedures, there was evidence that some of them were at least partly successful. For example, we placed dirt on makeshift bridges, on which we subsequently found animal tracks (wombat, bandicoot), and funnel traps were effective in capturing large numbers of frogs.

Discussion

Our study reinforces the value of retrieving trapped fauna from pipeline trenches (Ayers and Wallace 1997; Woinarski *et al.* 2000). First, we rescued several thousand vertebrate animals including several threatened species. In particular, we retrieved numerous small animals (frogs, lizards, small snakes, and small mammals) that were unable to escape due to their low mobility relative to the distance between trench plugs (ramped soil every 500 m). Second, a faunal inventory built during construction of the EGP provided valuable scientific data on the distribution and abundance of many species. The inventory, in amalgamation with other distributional data in state atlases, increases our understanding of spatial patterns of Australian vertebrate assemblages. For example, the finding of a specimen of the threatened little whipsnake *Suta flagellum* filled a hiatus in its known distribution, and two specimens of Tyler's tree frog *Litoria tyleri*, whose distribution is not well-known, were also found. Third, our data provide a further impetus to ensure that fauna retrieval during construction becomes standard practice in future pipelines. Lastly, the project developed methods novel to pipeline surveys that could be implemented in fauna monitoring on future pipelines.

Comparisons with other pipeline trench fauna surveys

Reptiles were the most speciose group in the EGP trench inventory, followed by mammals, frogs, birds, and fish. This pattern mirrors trench fauna captures recorded in three other Australian pipeline studies (Ayers and Wallace 1997; Faulkner, 1999; Woinarski *et al.* 2000). In terms of abundance, frogs dominated the EGP trench captures (followed by reptiles, mammals, birds, and fish), similar to the Marsden-Dubbo pipeline captures (Faulkner 1999). In the other two pipeline studies reptiles were the most abundant (followed by mammals, frogs, and birds). The higher abundance of frogs during the EGP likely reflects the pipeline's route through wetter habitats compared to the Moomba-Sydney and Daly Waters pipelines, but may also be related to differences in the amount of rainfall during their construction. The most abundant reptiles differed among pipeline studies, and were also likely related to site-specific differences in habitat and climate. Small skinks dominated the EGP inventory, the larger shingleback skink *Trachydosaurus rugosus* was most abundant in the Moomba-Sydney

Pipeline (Ayers and Wallace 1997), and legless lizards (Pygopodidae) dominated in the Daly Waters-McArthur Pipeline (Woinarski *et al.* 2000).

Mortality of entrapped fauna was low (3 %), particularly compared to studies quantifying mortality in pipelines without formalised fauna retrieval (41.8 %, Ayers and Wallace 1997; 52.5 %, Faulkner, 1999; 25 % in 1994 survey, 11 % in 1999 survey, Woinarski *et al.* 2000). The chief cause of mortality during the present study was drowning, usually when the trench crossed saturated depressions in forested areas. The most significant losses were the drownings of 28 entrapped eastern pygmy possums (*C. nanus*). These animals drowned in low, flooded sections of the trench after rainfall, despite our efforts to provide floats and 'ladders' in flooded areas. Some efforts were also made by construction crews to drain these sections of trench with pumps. A single specimen of the federally-threatened long-footed potoroo (*P. longipes*) was found dead of unknown causes (although a post-mortem revealed crush injuries around the chest, inconsistent with death due to falling in trench, S. Henry, DNRE, pers. comm.). Dehydration was a major cause of mortality (especially among frogs) in the Moomba-Sydney Pipeline study (Ayers and Wallace 1997). The lack of dehydration and desiccation in our study is probably due to our daily fauna retrieval and the relatively wetter, more humid, and cooler conditions along the EGP route compared to that of the Moomba-Sydney Pipeline.

Our extensive work on the EGP provides a useful comparison of fauna retrieval practices to those of previous studies. Previous studies have suggested that trench surveys should be conducted in early morning to reduce mortality (Ayers and Wallace 1997; Woinarski *et al.* 2000). We feel this is an oversimplification: although early morning checks will reduce the amount of time animals spend in the trenches, such procedures would increase the probability of overlooking small ectothermic animals. We found that in months with cool mornings, small ectotherms (mainly lizards and snakes) did not become active until mid- to late morning, when sunlight reached the trench bottom. Surveys initiated too early would not detect these animals, which hide under soil while inactive. Search method is also important, however. We were not allowed to walk in the trench due to workplace safety constraints, hindering efforts to locate small animals hiding under loose soil. Surveys associated with construction of some other pipelines have involved walking within the trenches (Ayers and Wallace 1997). It is worth noting that our estimate of entrapped animals (and thus, mortality rate) is likely to be conservative, given that some small animals hiding in trench spoil would have been overlooked. Finally, in contrast to the present study, fauna retrieval later in the morning at the Daly Waters pipeline would likely have resulted in higher mortality of entrapped mammals (J. Woinarski, pers. comm.), indicating that animal type should be considered in choosing an optimal time to retrieve fauna. In summary, our results and those of others demonstrate that the diel timing of trench surveys should consider daily temperature and irradiation (influenced by time of year), survey method, and the type of entrapped animals.

Implications for conservation, animal ethics, and future practices of fauna retrieval

Several threatened species were found in the trenches and along the pipeline route during construction of the EGP (Table 2). This list, which is dominated by small reptiles, highlights the need for continued consideration of threatened species conservation during pipeline construction (Ayers and Wallace 1997). With two notable exceptions, threatened species were found alive and were released, minimising the impact of construction activities on threatened species.

The majority of entrapped threatened species were in unprotected areas. This was likely a consequence of the high proportion of trench transecting those areas (i.e., < 5 % of the pipeline traversed protected lands such as national parks or nature reserves). Regardless of the reason, this finding has implications for future fauna retrieval practices: removing fauna only from 'sensitive areas' during pipeline construction will not necessarily protect all, or even most, threatened species. The current code of practice of the Australian Pipeline Industry Association (APIA) includes fauna removal only in 'sensitive areas' (i.e., national parks and nature reserves, or selected areas of native vegetation or wetlands). Such areas are typically identified by natural resource agencies and the proponents during the assessment phase prior to construction.

But what of the other 7353 individual animals, representing common or non-threatened species? Most of these animals were small (frogs, lizards, small snakes, and small mammals), weighing < 75 g body mass. Because small animals occupy small home ranges (Mace *et al.* 1983), many would have been unable to escape via the ramped trench plugs, which were usually positioned 500 m apart. Thus, we hypothesize that the majority of these small animals would not have survived without retrieval, due to their low mobility relative to the distance between trench plugs. Larger snakes and lizards, turtles, and larger mammals were less commonly trapped in the trenches. Although we would predict lower relative abundance of animals with larger body size (Blackburn and Gaston 1997), low captures of larger animals in the present study presumably also reflected frequent escape via the trench plugs, and numerous footprints in the plugs supported this.

Other pipelines have also incorporated an inter-plug distance of 500 m (A. Chapman, pers. comm., in Ayers and Wallace 1997), whereas earlier pipeline construction did not incorporate trench plugs (Moomba-Sydney trench, D. Ayers, pers. comm.). Woinarski *et al.* (2000) suggested that trench plugs be positioned at intervals of 200-500 m. However, it is likely that even trench plugs every 200 m would present small skinks with too great a distance to cover, given their low relative mobility. We foresee two options: position trench plugs every 50-100 m, or retrieve fauna on a daily basis. The former option is likely impractical and costly. The latter option, in combination with trench plugs every 400-500 m, would allow large animals to escape and entrapped smaller animals to be retrieved. It is worth noting that the consideration of whether to retrieve thousands of animals of non-threatened status from trenches in future pipelines is one of animal ethics or welfare, rather than one of only

conservation concern. However, these unlisted species are protected wildlife, and it is generally illegal to directly harm or kill them knowingly or deliberately.

The effectiveness of opportunistic funnel trapping within the trench, particularly for frogs, indicates that this method is a worthwhile practice that augments fauna retrieval. The conventional use of these funnel traps is along drift fences with pitfall traps (Heyer *et al.* 1994), their main purpose being to capture animals too large or too agile to remain in pitfall traps. However, the pipeline trench provides an excellent opportunity to employ funnel traps: the trench, analogous to a fence, funnels animals into the traps. Advantages of funnel trapping are that large numbers of frogs or other animals can be captured overnight, and traps are relatively inexpensive to construct. Trapping, however, is labour-intensive (traps must be checked early in the morning to prevent desiccation and exposure), and we recommend opportunistic trapping when logistically feasible and within budget constraints.

We surveyed all open trenches every day during construction. Accordingly, observed mortality during pipeline construction was only 4 %. Fauna retrieval was explicitly incorporated into the Environmental Management Plan for the EGP (Duke Eastern Gas Pipeline 1999), and was originally to occur only in 'fauna

management' areas, or 'sensitive areas' (e.g., Morton National Park) identified by NSWNPWS, DNRE, and the environmental consulting team prior to construction. However, the finding of significant numbers of fauna in open trenches early in the construction phase prompted an expansion of fauna retrieval to all open trenches, as volunteered by the proponent.

Despite the apparent success of our efforts, such measures are not currently federally mandated in Australia, despite an increase in pipeline construction in Australia (Woinarski *et al.* 2000). However, the APIA Code of Environmental Practice does recommend the management measures of fauna entrapment prevention, surveillance, and retrieval (pp. 4.1-14, APIA 1998), and these procedures have improved over the last decade. Thus, the pipeline industry in Australia has made considerable progress towards fauna protection during construction. It is suggested that the policies aimed at ameliorating the impacts of pipeline construction on fauna be reviewed, especially considering the low mortality and high number of rescues documented in this study as a result of fauna retrieval from the open trenches. Based on our findings, retrieving fauna from the entire trench would be the most desirable outcome for animal conservation and ethics, and thus, the pipeline industry and the general community.

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EFFECTS OF ARTIFICIAL NIGHT LIGHTING ON AMPHIBIANS AND REPTILES IN URBAN ENVIRONMENTS

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Abstract — Amphibians and reptiles have evolved with natural lighting cycles. Consequently, alteration of natural variation in diurnal and nocturnal light intensities and spectral properties has the potential to disrupt their physiology, behavior, and ecology. We review the possible effects of night lighting on many species of amphibians and reptiles, noting that few studies of the consequences of artificial lights to amphibians and reptiles have been conducted to date. The one exception is the information available on the negative impacts of artificial lights on hatchling sea turtles, which has received considerable coverage in both scientific and popular media. In many studies that might be relevant, researchers have not recorded the illumination or irradiance at which experiments were conducted. We identify light pollution as a serious threat that should be considered as part of planning and management decisions in the maintenance or conservation of urban areas containing amphibians and reptiles. However, we consider it too early to precisely gauge the effects of artificial night lighting on other taxa found in light-polluted environments or provide specific management recommendations, beyond pointing out the urgent need for more information.

Key words — Activity Pattern, Amphibians, Behavior, Conservation, Ecology, Invasive Species, Light Pollution, Night Lighting, Photopollution, Physiology, Reptiles, Suburban, Urban

Conservation biologists have long been concerned about anthropogenic effects on species and environments. There is good reason for herpetologists to share this concern: both amphibians and reptiles are declining worldwide (e.g., Alford and Richards 1999; Gibbons et al. 2000). Much work has focused on habitat loss and the consequences of water and air pollution, particularly on amphibians. Other anthropogenic impacts, such as light pollution, remain poorly studied and are of concern for urban herpetofauna (defined here as those species that are present within or adjacent to urbanized areas). Light pollution is a by-product of anthropogenic outdoor illumination from sources such as street lighting, sports arenas, and porch lights (e.g., Dawson 1984). When discussed in the context of adverse effects on wildlife, light pollution is

also known as photopollution (Verheijen 1985). Its effects on herpetofauna are the focus of this chapter.

Five decades ago, Verheijen (1958) documented illumination patterns produced by lighting devices in urban habitats. The abnormal lighting patterns from these artificial sources resulted in locally elevated contrast in brightness between lighted and background areas which attracted invertebrates, a phenomenon known as “light trapping” (Robinson and Robinson 1950). Artificial lighting has become much more pervasive since 1958, affecting most of the world’s urban areas and adjacent habitats (Cinzano et al. 2001; Longcore and Rich 2004). Street and security lights can be more than one million times brighter than natural ambient illumination (S. Wise and B. Buchanan unpubl. data). Additionally, skyglow, caused by

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reflection of artificial night lights from clouds, may increase nocturnal ambient illumination indirectly in less urban areas near cities (Cinzano et al. 2001). Sources of light pollution are often referred to as “night lighting,” and the relatively new habitat created by the presence of artificial lights has sometimes been termed the “night-light niche” (Garber 1978).

With the exception of negative consequences for sea turtles, data on the effects of night lighting on amphibians and reptiles are uncommon. A recent book (Rich and Longcore 2006) focuses on many ecological aspects of light pollution. To avoid duplication, this review provides an updated synthesis of information we presented separately there (Buchanan 2006; Perry and Fisher 2006; Salmon 2006; Wise and Buchanan 2006). We focus on what little is known about the relationship between artificial lighting and urban herpetofauna and suggest areas that require further work. Special attention is paid to taxa that appear to be at greatest risk of being effected: species that are edificant, feed at lights (or are simply positively phototactic), inhabit permanent and ephemeral ponds (parks, ditches), or are found in greenbelts or habitat reserves in or near city limits that are affected by skyglow or glare. Roads that connect urban areas, many of them illuminated by fixed lights in addition to vehicle headlights, may also have effects on species occurring nearby (Outen 2002; Spellerberg 2002), although few papers address this problem (e.g., Baker 1990; Mazerolle et al. 2005). In this chapter, we document the apparently positive (i.e., population-increasing) consequences of night lighting on some species and discuss effects that are clearly or possibly negative for others.

TAXONOMIC PREFACE

Information presented in the body of this chapter is arranged by habitat. However, some taxon-specific information pertains across habitats and is presented here. We use standard English names for large, well-recognized clades, but prefer scientific names when discussing specific species.

Salamanders — Salamanders are often nocturnal or crepuscular, with activity patterns regulated by photoperiod (reviewed in Wise and Buchanan 2006). Many species that have been studied are negatively phototropic or phototactic, although some species may show ontogenetic shifts in behavior, exhibiting positive phototaxis as larvae and negative phototaxis as adults (reviewed in Wise and Buchanan 2006). Artificial night lighting may affect physiology and behavior by (1) increasing ambient illumination, (2) lengthening photoperiod, and (3) varying the spectral properties of ambient light. Most studies of the effect of artificial light on salamanders have been conducted in the laboratory and focus on hormone levels or thermoregulation. These laboratory results, the basis for much of the information below, are important for generating field-testable hypotheses that may explain how artificial night lighting affects salamander populations in natural habitats.

Frogs — Frogs may be exposed to extreme changes in natural lighting patterns in urban environments. Few data exist that demonstrate direct effects of lighting on frogs, but many indirect effects are likely (Buchanan 2006). Adults of most taxa conduct the majority of their foraging and reproductive activities under twilight or nocturnal conditions. Eggs and larvae typically develop in aquatic environments, where they may be exposed to artificial illumination. Unfortunately, very few experimental data exist on the effects of artificial illumination on frogs in natural environments. Consequently, most of the data presented in this chapter have been extracted from papers dealing with the general effects of light on the physiology or behavior of frogs.

Caecilians — As with most subterranean taxa, relatively little is known about the biology of caecilians (Gower and Wilkinson 2005). Although many caecilians are of conservation concern, night lighting seems unlikely to be a significant cause of population decline, because these animals spend so little time above-ground and possess such poor eyesight. We have found no information to suggest otherwise and therefore do not discuss caecilians in the sections that follow.

*Tuatara*s — The remaining range of this taxon is limited, and does not overlap major population centers. Thus, night lighting is an unlikely to affect populations. The current recovery plan (Gaze 2001) does not refer to lights as a source of concern, and as we have found no information to suggest otherwise, do not discuss tuataras in the sections that follow.

Crocodylians — Relatively few crocodylians occur in abundance in urban areas. When they do, as in parts of Florida, USA, and Darwin, Australia (Nichols and Lentic 2008), they are often considered a source of concern in terms of human safety, rather than a target for conservation efforts. Perhaps because of this bias, we have been unable to locate evidence of possible effects of night lighting on these organisms. Thus, no information on crocodylians is presented in this chapter. Given that most crocodylian species are under some degree of threat and that urban sprawl is likely to bring more of them into contact with humans and night lighting, we feel that studies to explore these effects are urgently needed.

Turtles — Marine turtles are diving specialists (Lutcavage and Lutz 1999) whose vision is adapted to finding food, locating mates, and avoiding predators underwater. Seawater differentially absorbs both the shorter (UV, violet) and longer (yellow to red) light wavelengths, while best transmitting wavelengths between 450–500 nm (blue-green to green). Some turtles have spectral sensitivities that are “tuned” (most sensitive) to the latter; sensitivity declines rapidly as wavelength increases (Witherington 1992a; Lohmann et al. 1997; J. Gocke, M. Salmon, and K. Horch unpubl. data). Negative influences of light pollution on sea turtles, especially those of artificial lights near beaches on the seaward locomotion of hatchlings,

have been well-studied (reviewed in Witherington and Martin 1996), and have led to the only attempts we are aware of to reduce such negative influences. However, the attention given to sea turtles has not resulted in investigations of other turtles. We suggest that field research on non-marine turtles is another area that needs to be addressed.

Lizards — Lizards are often terrestrial and can be either diurnal or nocturnal. More anecdotal information about the effects of night lighting on lizards is available than for any other group (Perry and Fisher 2006). Although this effort has identified some intriguing preliminary patterns (e.g., positive effects for invading species, discussed below), the lack of experimental or systematic observational data is a source of concern.

Snakes — Snakes can be either diurnal or nocturnal, and some species show an ontogenetic switch (Clarke et al. 1996). No studies directly link artificial light to positive or negative effects on snake populations. However, declines have been noted in snake populations in many populated regions, making such work very timely. Perry and Fisher (2006) discussed possible positive predator-prey interactions between snakes and their prey, such as geckos, that are attracted to artificial lights. They also reviewed the probable negative predator-prey interactions associated with prey, such as the apparent decline of heteromimid rodents due to artificial lights, and increased exposure to snake predators. Snakes generally elicit a negative response in the general public, placing them at a special disadvantage in urban areas.

EFFECTS OF LIGHT IN URBAN HABITATS

Although irradiance (defined as the density of radiant flux on a surface and typically measured over 180 degrees in units of W/cm^2) is the more appropriate measure of light intensity to use when describing light levels, we often refer to illumination (lux, $lumen/m^2$), because it is more commonly reported in the literature, making for easier comparisons.

Urban Cores — In this section, we focus on species found within or near human dwellings (i.e., edficarian species). Taxa common in urban cores are often familiar to many; some of them have had a long history of co-residence with humans.

Although the number of species capable of surviving close to humans is low, edficarian species can reach high densities in their adopted habitat. Responses of edficarian amphibians and reptiles to artificial lights are well documented (Tables 1, 2), but ecological consequences remain much less obvious.

Salamanders — Few salamanders are found in urban cores. However, Garden Slender Salamanders (*Batrachoseps major*), California Slender Salamanders (*B. attenuatus*), and Arboreal Salamanders (*Aneides lugubris*) often occur around houses or along rock walls in California, USA (Cunningham 1960; Petranks 1998). We have not been able to find any information on effects that night lighting might have on such species.

Frogs — Some species of frogs commonly associate with edficarian habitats, including several species that feed on insects at lights (Table 2). Such species are typically only active at night, normally foraging under low ambient illumination (Woolbright 1985; Buchanan 1992). Some nocturnal frogs, such as the widely introduced Cane Toads (*Bufo marinus*), regularly forage under enhanced illumination near buildings (Table 2). Many nocturnal frogs show positive phototaxis (Jaeger and Hailman 1973), and laboratory studies have demonstrated that enhanced lighting can facilitate foraging in edficarian species (Larsen and Pedersen 1982; Buchanan 1998). However, it is unclear whether frogs are attracted to the increased abundance of insects available at lights, the light itself, or a combination of the two. How much light or what illumination differential is necessary to elicit this effect also remains unknown.

Although additional foraging opportunities can be beneficial, frogs aggregating at lights may also experience increased mortality. For example, Baker (1990) suggested that frogs feeding under streetlights are particularly susceptible to being killed by automobiles. In addition, radical and rapid changes in illumination can reduce visual sensitivity and require hours for complete light adaptation (Cornell and Hailman 1984). The frog eye tends to adapt to the brightest available source of light (Fain et al. 2001). Once they are light-adapted, frogs moving through areas with different ambient illuminations may suffer reduced visual capabilities, particularly when moving into shadows cast by artificial lights (Cornell and Hailman 1984; Buchanan 1993; Fain et al. 2001).

Table 1. Non-nocturnal amphibians and reptiles reported to use the night-light niche.

| Species | Location | Source |
|----------------------------------|--------------|------------------------|
| Lizards | | |
| Geckos (Gekkonidae) | | |
| <i>Gonatodes humeralis</i> | Peru | Dixon and Soini 1975 |
| <i>Gonatodes vittatus</i> | Trinidad | Quesnel et al. 2002 |
| <i>Lygodactylus capensis</i> | South Africa | V. Egan unpublished |
| <i>Phelsuma laticauda</i> | Hawaii | Perry and Fisher 2006 |
| <i>Phelsuma madagascariensis</i> | Madagascar | García and Vences 2002 |

Table 1. Continued

| Species | Location | Source |
|---|-----------------------|-----------------------------|
| <i>Sphaerodactylus cinereus</i> | Florida, USA | J. Lazell unpublished |
| | Haiti | J. Lazell unpublished |
| <i>Sphaerodactylus elegans</i> | Florida, USA | Meshaka et al. 2004 |
| <i>Sphaerodactylus difficilis</i> | Hispaniola | R. Powell unpublished |
| <i>Sphaerodactylus macrolepis</i> | Guana Island, BVI | Perry and Lazell 2000 |
| <i>Sphaerodactylus sputator</i> | Anguilla | Howard et al. 2001 |
| Anoles (Iguanidae) | | |
| <i>Anolis aeneus</i> | Grenada | R. Powell unpublished |
| <i>Anolis bimaculatus</i> | St. Eustatius | R. Powell unpublished |
| <i>Anolis brevirostris</i> | Hispaniola | Bowersox et al. 1994 |
| <i>Anolis carolinensis</i> | Hawaii | Perry and Fisher 2006 |
| | Mississippi, USA | J. Lazell unpublished |
| | Texas, USA | McCoid and Hensley 1993 |
| <i>Anolis cristatellus</i> | Dominican Republic | Schwartz and Henderson 1991 |
| | Guana Island, BVI | Perry and Lazell 2000 |
| | Puerto Rico | Garber 1978 |
| <i>Anolis cybotes</i> | Hispaniola | Henderson and Powell 2001 |
| <i>Anolis distichus</i> | Hispaniola | R. Powell unpublished |
| <i>Anolis gingivinus</i> | St. Maarten | Powell and Henderson 1992 |
| | Anguilla | Hodge et al. 2003 |
| <i>Anolis leachii</i> | Antigua | Schwartz and Henderson 1991 |
| <i>Anolis lineatopus</i> | Jamaica | Rand, 1967 |
| <i>Anolis luteocularis</i> | Cuba | J. Losos, unpublished |
| <i>Anolis marmoratus</i> | Guadeloupe | Powell and Henderson 1992 |
| <i>Anolis richardii</i> | St. George's, Grenada | Perry and Fisher 2006 |
| <i>Anolis sabanus</i> | Saba | Powell and Henderson 1992 |
| <i>Anolis sagrei</i> | Bahamas | Schwartz and Henderson 1991 |
| | Florida, USA | Meshaka et al. 2004 |
| <i>Anolis schwartzi</i> | St. Eustatius | Powell et al. 2005 |
| <i>Anolis trinitatus</i> | St. Vincent | R. Powell unpublished |
| | Young Island | R. Powell unpublished |
| Other iguanids (Iguanidae) | | |
| <i>Agama agama</i> | Cameroon | Böhme 2005 |
| | Gabon | Pauwels et al. 2004 |
| <i>Basiliscus basiliscus</i> | Costa Rica | A. Vega unpublished |
| <i>Leiocpehalus carinatus</i> | Florida, USA | Meshaka, in preparation |
| <i>Tropidurus plica</i> (= <i>Plica plica</i>) | Trinidad | Werner and Werner 2001 |
| Skinks (Scincidae) | | |
| <i>Cryptoblepharus poecilopleurus</i> | Cocos Island, Guam | McCoid and Hensley 1993 |
| <i>Lamprolepis smaragdina</i> | Pohnpei | Perry and Buden 1999 |
| Snakes | | |
| Racers (Colubridae) | | |
| <i>Alsophis portoricensis</i> | Guana Island, BVI | Perry and Lazell 2000 |

Table 2. Nocturnal amphibians and reptiles reported to use the night-light niche.

| Species | Location | Source |
|--|--------------------------------|---------------------------|
| Frogs | | |
| Toads (Bufonidae) | | |
| <i>Bufo americanus</i> | Oklahoma, USA | J. Lazell unpublished |
| <i>Bufo bufo</i> | England | Baker 1990 |
| <i>Bufo cognanus</i> | Texas, USA | S. Rideout unpublished |
| <i>Bufo gutturalis</i> | South Africa | V. Egan unpublished |
| <i>Bufo maculatus</i> | Cameroon | Böhme 2005 |
| <i>Bufo marinus</i> | Costa Rica | A. Vega unpublished |
| | Florida, USA | Meshaka et al. 2004 |
| | Guadeloupe | Henderson and Powell 2001 |
| | Hawaii, Fiji, American Samoa | R. Fisher unpublished |
| <i>Bufo melanostictus</i> | China | Lazell 2002 |
| <i>Bufo terrestris</i> | Florida, USA | W. Meshaka unpublished |
| <i>Bufo woodhousii</i> | Oklahoma, USA | J. Lazell unpublished |
| <i>Bufo viridis</i> | Europe | Balassina 1984 |
| <i>Schismaderma carens</i> | Tanzania | V. Egan unpublished |
| Rain frogs (Leptodactylidae) | | |
| <i>Eleutherodactylus coqui</i> | Puerto Rico | Henderson and Powell 2001 |
| <i>Eleutherodactylus johnstonei</i> | Saba, Netherlands Antilles | Perry 2006 |
| Treefrogs (Hylidae) | | |
| <i>Hyla cinerea</i> | Florida, USA | Goin 1958 |
| | Mississippi and Louisiana, USA | B. Buchanan unpublished |
| <i>Hyla femoralis</i> | Florida, USA | W. Meshaka unpublished |
| <i>Hyla gratiosa</i> | Florida, USA | W. Meshaka unpublished |
| <i>Hyla squirella</i> | Florida, USA | Goin and Goin 1957 |
| | Mississippi and Louisiana, USA | B. Buchanan unpublished |
| <i>Osteopilus septentrionalis</i> | Anguilla | Henderson and Powell 2001 |
| | Guana, British Virgin Islands | G. Perry, in MS |
| | Florida, USA | Carr 1940 |
| <i>Scinax eleochoa</i> | Costa Rica | A. Vega unpublished |
| Old World treefrogs (Rhacophoridae) | | |
| <i>Chiromantis xerampelina</i> | South Africa | V. Egan unpublished |
| Lizards | | |
| Geckos (Gekkonidae) | | |
| <i>Afrogecko porphyreus</i> | South Africa | E. Baard unpublished |
| <i>Bunopus tuberculatus</i> | United Arab Emirates | Perry and Fisher 2006 |
| <i>Cosymbotus platyurus</i> | Southeast Asia | Case et al. 1994 |
| <i>Cyrtopodion scabrum</i> | Jordan | Disi et al. 2001 |
| <i>Gekko chinensis</i> | China | J. Lazell unpublished |
| <i>Gekko gecko</i> | China | J. Lazell unpublished |
| | Florida, USA | W. Meshaka unpublished |
| | Thailand | R. Fisher unpublished |

Table 2. Continued

| Species | Location | Source |
|--|--|---------------------------|
| <i>Gekko subpalmatus</i> | China | J. Lazell unpublished |
| | Philippines | J. Lazell unpublished |
| | Indonesia | J. Lazell unpublished |
| <i>Gehyra mutilata</i> | China | J. Lazell unpublished |
| | Hawaii | J. Lazell unpublished |
| | Sapwuahfik Atoll | Buden 2000 |
| <i>Gehyra oceanica</i> | Sapwuahfik Atoll | Buden 2000 |
| | Pacific Region | R. Fisher unpublished |
| <i>Hemidactylus brookii</i> | China | J. Lazell unpublished |
| <i>Hemidactylus bowringi</i> | China | J. Lazell unpublished |
| <i>Hemidactylus flaviviridis</i> | Egypt | Ibrahim and Ghobashy 2004 |
| | United Arab Emirates | Perry and Fisher 2006 |
| <i>Hemidactylus frenatus</i> | Australia | Cogger 1979:179 |
| | Costa Rica | Savage 2002:484-485 |
| | Florida, USA | W. Meshaka unpublished |
| | Guam | G. Perry unpublished |
| | Hawaii | Case et al. 1994 |
| <i>Hemidactylus garnotii</i> | Costa Rica | Savage 2002:484-485 |
| | China | J. Lazell unpublished |
| | Pacific Region | R. Fisher unpublished |
| | Florida, USA | Meshaka 2000 |
| <i>Hemidactylus haitianus</i> (recently renamed <i>H. angulatus</i>) | Dominican Republic | Bowersox et al. 1994 |
| <i>Hemidactylus mabouia</i> | Anguilla | Howard et al. 2001 |
| | Brazil | Perry and Fisher 2006 |
| | Cameroon | Böhme 2005 |
| | Gabon | Pauwels et al. 2004 |
| | Dutch Antilles | Powell and Henderson 1992 |
| | Florida, USA | Meshaka 2000 |
| | Guana Island, BVI | G. Perry unpublished |
| | Puerto Rico | R. Powell unpublished |
| | South Africa | V. Egan unpublished |
| | Venezuela | Fuenmayor et al. 2005 |
| <i>Hemidactylus persicus</i> | United Arab Emirates | Perry and Fisher 2006 |
| <i>Hemidactylus turcicus</i> | Israel | Werner 1966 |
| | Egypt | A. Ibrahim unpublished |
| | Jordan | Disi et al. 2001 |
| | United Arab Emirates | Perry and Fisher 2006 |
| | USA: Alabama, Florida, and Mississippi | Nelson and Carey 1993 |
| | Texas, USA | G. Perry unpublished |
| <i>Hemiphyllodactylus typus</i> | Pacific Region | R. Fisher unpublished |
| <i>Homopholis wahlbergi</i> | South Africa | V. Egan unpublished |

Table 2. Continued

| Species | Location | Source |
|-----------------------------------|----------------------|-------------------------|
| <i>Lepidodactylus lugubris</i> | Costa Rica | Savage 2002:486 |
| | Guam | G. Perry unpublished |
| | Hawaii | Case et al. 1994 |
| | Sapwuahfik Atoll | Buden 2000 |
| <i>Nactus pelagicus</i> | South Pacific | Perry and Fisher 2006 |
| <i>Pachydactylus bibronii</i> | Namibia | Perry and Fisher 2006 |
| | South Africa | E. Baard unpublished |
| <i>Pachydactylus turneri</i> | Namibia | Perry and Fisher 2006 |
| | South Africa | V. Egan unpublished |
| <i>Ptyodactylus guttatus</i> | Israel | Werner 1965 |
| <i>Ptyodactylus hasselquistii</i> | Israel | Y.L. Werner unpublished |
| | United Arab Emirates | Perry and Fisher 2006 |
| <i>Ptyodactylus puiseuxi</i> | Israel | Y.L. Werner unpublished |
| <i>Tarentola annularis</i> | Egypt | Ibrahim 2004 |
| <i>Tarentola mauritanica</i> | Egypt | A. Ibrahim unpublished |
| | Libya | Ibrahim and Ineich 2005 |
| <i>Thecadactylus rapicauda</i> | Anguilla | R. Powell unpublished |
| | Dominica | J. Lazell unpublished |
| | Necker, BVI | J. Lazell unpublished |
| | Trinidad | Kaiser and Diaz 2001 |
| Snakes | | |
| Racers (Colubridae) | | |
| <i>Lamprophis fuliginosus</i> | Namibia | Cunningham 2002 |
| <i>Boiga irregularis</i> | Guam | Perry and Fisher 2006 |
| | Papua New Guinea | Perry and Fisher 2006 |
| | Solomon Islands | Perry and Fisher 2006 |

Turtles — Some terrestrial turtles, such as Box Turtles (genus *Terrapene*) are known to inhabit urban cores (Dodd 2001). Most of these species are diurnal and could conceivably be affected if night lighting extends their activity period or disturbs their nocturnal rest. Whether such an effect actually occurs remains unknown.

Lizards — Night lighting can benefit some urban lizards. Species that are not normally active after dark, especially anolis lizards members of the genus *Anolis*, have been observed foraging or being active near artificial lighting at night (Table 1), taking advantage of the “night-light niche” (Garber 1978). Normally nocturnal species, especially members of the family Gekkonidae, have also been documented around night lights (Table 2). At least some of these taxa are also known to occasionally be active during the day (McCoid and Hensley 1993; Teynié et al. 2004). Presumably, the attraction of invertebrates to artificial lights attracts lizards because of the greater quantity of food and the increased predictability of finding prey. Intriguingly, the work of Werner (1990) suggests that artificial

lights can also provide basking sites, and thus a second important resource, for lizards (and possibly other amphibians and reptiles). Observations from Egypt (Ibrahim 2004; Ibrahim and Ghobashy 2004) suggest this may be a broad pattern, especially in winter, but additional studies are desirable.

Negative effects of lights on non-introduced urban lizards have not been documented, but some species are more likely to take advantage of the presence of lights, and asymmetric competition can cause locally negative effects for other taxa. The best-documented example is the interaction between two introduced geckos, the Common House Gecko *Hemidactylus frenatus* and the Mourning Gecko *Lepidodactylus lugubris*, in the Pacific. Although *H. frenatus* has negatively affected populations of *L. lugubris* and the Oceanic Gecko *Gehyra oceanica* in some lighted locations (Case et al. 1994), the two species appear to coexist in native and less-disturbed habitats (Case et al. 1994) and on other lighted structures (Perry and Fisher 2006).

Taxa that would not normally interact might nonetheless meet where artificial lights are available. Perry and Fisher (2006) reported a more extreme example from Hawaii.

Hemidactylus frenatus (nocturnal), the Gold Dust Day Gecko *Phelsuma laticauda* (a diurnal gecko), and the green anole *A. carolinensis* (also diurnal) sometimes forage together at the same light source, and may compete for food resources. Ironically, all three are not native to Hawaii, and their ranges do not naturally overlap anywhere. Observations conducted in 2007 indicate that *P. laticauda* was successful in competing for these habitats, at least in the area around Kona, Hawai'i, where it now dominates both the diurnal and nocturnal lizard communities (R. Fisher, unpub.). In a different example, Perry and Lazell (2000) reported that *Anolis cristatellus* forages at artificial lights in the British Virgin Islands. Its predator, the snake *Alsophis portoricensis* (Puerto-Rican Racer), was also observed at the same lights. These species would normally interact during the day, but such additional interactions are of interest for two reasons. First, if common enough, added interactions can exacerbate normal predation effects. Second, and more importantly, this example shows that night lighting can affect more than a single species at a time, perhaps allowing species to interact that would otherwise not do so and possibly creating novel food webs. More severe or pervasive consequences might occur when night lighting exposes native species to competition with or predation by native or introduced species with which they would not normally interact.

Snakes — The effects of night lighting are difficult to separate from other problems that snakes face in urban environments, such as persecution. Only two published reports have been found of nocturnal snakes foraging under lights (Table 2). Other nocturnal species, such as the Brahminy Blind Snake *Ramphotyphlops braminus*, are found near houses in tropical areas and in cities where they have become established, but what effect lights have on their populations is not known.

URBAN WATER BODIES AND GREENBELTS

Many cities and towns have areas of natural or semi-natural aquatic or terrestrial habitats, such as city parks and water runoff storage areas, within or just outside their limits. These are typically managed for aesthetics, recreation, and/or flood control. They may be connected to each other by corridors or isolated, and the intensity of management can range from heavy (e.g., channeled streams) to very low. In these areas, skyglow may chronically increase ambient illuminations to levels substantially greater than normal nocturnal light levels (Buchanan 2006; Cinzano et al. 2001). As a result, artificial illumination around urban ponds can be brighter than even the brightest natural nocturnal light levels. For example, nocturnal light intensity around Utica Marsh in Utica, New York was measured at 0.1–1 lux (S. Wise and B. Buchanan unpubl. data), equivalent to illuminations at dawn or dusk. High-density urban cores are typically surrounded by less developed areas (e.g., agriculture, waterways, and greenbelts). In such areas, human density gradually decreases with distance from the core and species absent from the city core are often pres-

ent here. Despite greater diversity, however, these areas remain influenced by the urban matrix in which they are embedded and the resulting light pollution.

Salamanders — Salamanders, such those of the genera *Ambystoma* (Mole Salamanders) and *Notophthalmus* (Eastern Newts), are commonly found in ponds and surrounding terrestrial habitats within or near urban areas. Completely terrestrial taxa, such as those of the genus *Plethodon* (Woodland Salamanders), may be found in large wooded city parks and greenbelts. Where ponds are located near roadways, salamanders can be subject to very high probabilities of automobile impacts when crossing roads during nocturnal activity (Fahrig et al., 1995; Hels and Buchwald 2001; Mazerolle 2004). Most spotted salamanders (*Ambystoma maculatum*) and blue-spotted salamanders (*Ambystoma laterale*) respond to disturbance and lights from approaching automobiles by halting their movements, perhaps further increasing the probability of automobile-induced mortality by increasing the time that salamanders spend on the roadway (Mazerolle et al. 2005).

The physiology and behavior of salamanders are influenced by a variety of biotic and abiotic factors, including ambient light. Introduction of artificial light during normally dark periods can disrupt the production of melatonin, a hormone responsible for many aspects of photoperiodic behavior and physiology (Vanecsek 1998). Common Mudpuppy (*Necturus maculosus*) aquatic adults kept on a 12L:12D photoperiod exhibited higher plasma melatonin levels during the dark phase than during the light phase (Rawding and Hutchison 1992). When the photoperiod was reversed, melatonin production was also reversed. Aquatic adults of the Eastern Tiger Salamander *Ambystoma tigrinum* also had significantly higher plasma levels of melatonin during scotophase (the dark period of a day-night cycle) than during photophase (the light period of a day-night cycle) (Gern and Norris 1979). Gern et al. (1983) found that *A. tigrinum* kept under constant light (a condition that can occur under bright point sources of artificial night lighting) did not show significant differences in plasma levels of melatonin during photophase and scotophase as they would under natural lighting conditions. Although not tested statistically, levels of melatonin during scotophase were similar to levels during photophase for salamanders kept on a regular 12L:12D photoperiod.

Melatonin has multiple effects in amphibians, including reducing tolerance to high temperatures and lowering body temperature (Erskine and Hutchison 1982; Hutchison et al. 1979). One prediction, therefore, is that decreased nocturnal plasma melatonin levels will cause higher metabolic rates. Whitford and Hutchison (1965) compared physiological functions of terrestrial adults of Spotted Salamander (*A. maculatum*) kept on a 16L:8D photoperiod to those kept on an 8L:16D photoperiod. As predicted, animals kept on a 16L:8D photoperiod had significantly higher pulmonary, cutaneous, and total rates of O₂ consumption and higher cutaneous and total rates of CO₂ production (Whitford and Hutchison

1965). Wise and Buchanan (2006) therefore hypothesized that artificially increasing the length of photophase through night lighting may disrupt normal cyclical changes in metabolic rates, changing the energy demands of salamanders. This effect could become problematic during periods of low food availability or when energetic demands are especially high, such as during egg production or periods of drought.

The diel pattern of vertical migration exhibited by larval salamanders (genus *Ambystoma*: *A. jeffersonianum* (Jefferson Salamander), *A. opacum*, *A. talpoideum* (Mole Salamander), and *A. tigrinum*) is influenced by ambient light, temperature, competition, and predation risk (Anderson and Graham 1967; Stangel and Semlitsch 1987). Anderson and Graham (1967) observed that *A. opacum* exhibited more activity on overcast days and less vertical migration on bright nights. Interruption of vertical migration may reduce size at metamorphosis or survival (Semlitsch 1987).

Changes in light intensity during scotophase as a result of artificial night lighting can also affect other behaviors, such as foraging. Buchanan (unpubl. data) tested adult Red-backed Salamanders (*Plethodon cinereus*) in the laboratory, in the absence of olfactory cues but under a range of illuminations (complete darkness, 10^{-5} , 10^{-4} , or 10^{-3} lux). Salamanders oriented toward prey sooner at higher ambient illuminations, indicating improved visually-based foraging ability with higher light levels. Although increased ambient light may allow salamanders to see prey better, it can also delay the nocturnal foraging activity of *P. cinereus*, which typically emerge from the leaf litter approximately 1–2 h after dark (B. Buchanan and S. Wise unpubl. data; Fig. 1). We conducted forest censuses 1–2 h after sunset in six dark (no artificial illumination; 10^{-4} lux) and six lighted (with white holiday lights; 10^{-2} lux, equivalent to bright moonlight) transects. Fewer salamanders were active in the lighted transects than in the unlighted transects during the census. B. Buchanan and S. Wise (unpubl. data) hypothesized that delayed emergence may reduce the length of time salamanders are able to forage, especially on dry nights, when reduced humidity decreases the amount of time spent foraging (Keen 1984).

Agonistic behavior is also affected by nocturnal ambient illumination. Adults of *P. cinereus* are territorial, guarding cover objects that provide access to food, moisture, and potentially mates (Mathis et al. 1995). In the laboratory, B. Buchanan (unpubl. data) examined the threat displays exhibited by territorial residents towards intruding salamanders under different levels of illumination (complete darkness, 10^{-4} , or 10^{-2} lux). Residents used more visual displays as light intensities increased. Presumably, visual threat displays are energetically costly to produce (Wise and Jaeger 1998); thus, increased use of visual displays with increased ambient illumination may negatively affect energy budgets. On the other hand, increased visibility may also allow individuals to assess better the outcome of agonistic interactions, thereby reducing the probability of contests escalating to overt aggression and injury (Jaeger 1981).

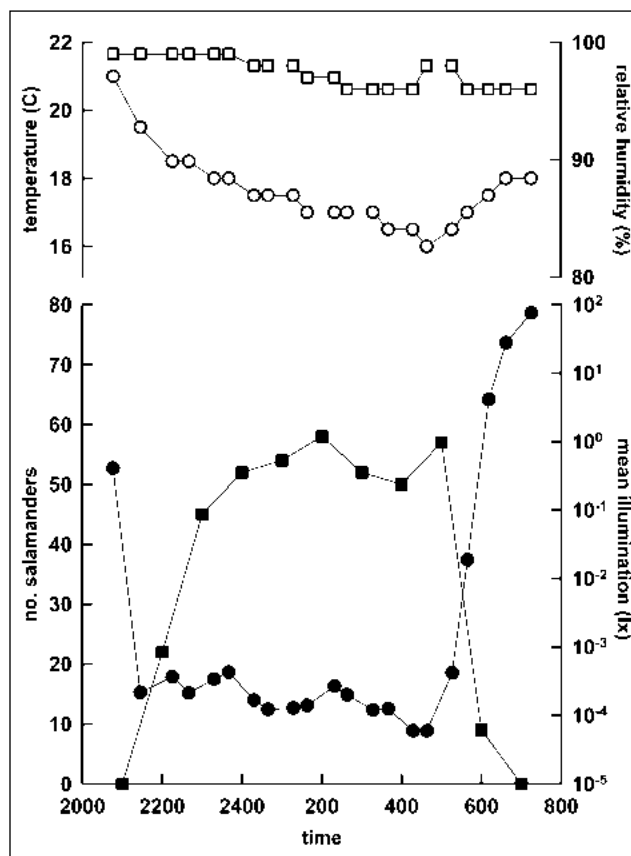


Fig. 1. Activity of *Plethodon cinereus* (Red-backed Salamander) during a representative night census (from dusk until dawn, 2100–0700 h, 1–2 July 2003) of two 50 x 1 m transects (Buchanan and Wise, unpubl. data). The study was conducted at Mountain Lake Biological Station, University of Virginia, Giles County, VA. Plotted are the numbers of salamanders detected on the leaf litter or vegetation (■), the mean illumination from the 4 cardinal directions (●), temperature (○), and percent relative humidity (○) for each sampling period.

Spectral properties of light may affect migration to and from ponds. Metamorphosed juvenile Red-spotted Newts (*Notophthalmus viridescens*) migrate from their natal ponds to nearby forests a few months after hatching and return to their natal ponds as adults. Adults also leave the ponds during periods of drought or when ponds freeze (Petranka 1998). These salamanders use a light-dependent magnetic compass (Phillips et al. 1995) involving extraocular photoreceptors (Adler 1970; Deutschlander et al. 1999) for navigation. Phillips and Borland (1992a,b,c, 1994) demonstrated experimentally that orientation and homing behavior were disrupted by monochromatic, long-wavelength light (yellow spectrum, especially 550–600 nm). Common outdoor lights emit light at 540–630 nm (Massey et al. 1990). Their use, therefore, could negatively affect the ability of *N. viridescens*, and perhaps other species of salamanders that use a similar light-dependent magnetic compass, to navigate to home ponds for breeding. Thus, spectral properties of artificial night lighting should be considered as

part of conservation or management efforts in urbanized habitats containing semi-aquatic salamanders.

Frogs — Frogs are typically aquatic breeders, and in urban settings they are likely to use both ephemeral breeding sites (e.g., ditches) and permanent sites (e.g., ponds or streams). Such sites are frequently exposed to increased light levels due to roadway lighting and skyglow (Buchanan 2006). Effects of altered lighting may be seen as early as during embryonic growth and larval development. Decreasing the duration of scotophase slowed growth in larval Painted Frogs *Discoglossus pictus* (Gutierrez et al. 1984) and African Clawed Frogs *Xenopus laevis*, causing the latter to metamorphose at a smaller size (Delgado et al. 1987; Edwards and Pivorun 1991). Conversely, constant lighting accelerated larval development in Northern Leopard Frogs, *Rana pipiens* (Eichler and Gray 1976). Thus, artificial night lighting has the potential to affect time to metamorphosis or size at metamorphosis.

The behavior and physiology of tadpoles may also be affected by night lighting. For example, larval American Toads (*Bufo americanus*) use photoperiodic cues to thermoregulate behaviorally (Beiswenger 1977) and vertical migration in *Xenopus laevis* larvae is dependent upon changes in illumination (Jamieson and Roberts 2000). Exposure at night to artificial light for as little as 1 min can disrupt production of precursors required for larval melatonin production (Lee et al. 1997), which may in turn have important effects on physiological performance (Vanecek 1998). For example, *X. laevis* larvae exposed to constant lighting did not experience normal diel patterns of color change (Binkley et al. 1988).

Adult frogs living in greenbelt or park areas, like those of many species, would traditionally be active at very low environmental illuminations (reviewed in Buchanan 2006), and may thus be affected by artificial night lighting. Species such as the Western Tailed Frog *Ascaphus truei*, normally active only at the darkest natural nocturnal illuminations (Hailman 1982), are likely to be influenced when environmental illuminations increase to levels at which the frogs typically seek refugia. Artificial night lighting can disrupt foraging, fat storage, and growth in adult frogs (e.g., in Fowler's Toad *B. fowleri*, Bush 1963). Reproductive behavior is also sensitive to changes in illumination. For example, calling males of Panamanian Cross-banded Treefrogs *Smilisca sila* exhibit illumination-dependent changes in anti-predator behavior under natural conditions (da Silva Nunes 1988). In another example, females of the Tungara Frog (*Physalaemus pustulosus*) become less likely to exhibit mate choice at higher ambient illuminations (Rand et al. 1997), and vary their oviposition behavior in response to changes in illumination (Tárrano 1998). Other nocturnally breeding species, such as the Squirrel Treefrog *Hyla squirella* (Taylor et al. 2007) and the Sarayacu Treefrog *H. parviceps* (Amézquita and Hödl 2004), use visual cues in mate choice and male-male competition. Artificial lighting may allow these and other visually-based behaviors to occur at uncharacteristic times or intensities (Buchanan 2006).

Frogs moving across roadways while foraging or breeding have a high probability of being killed by automobiles (Fahrig et al., 1995; Hels and Buchwald 2001; Mazerolle 2004). Many frogs are primarily active at night, and the moving lights of oncoming cars create cycles of increasing and decreasing illumination that may make dark adaptation difficult. Buchanan (1993) found that rapid increases in illumination similar to that produced by oncoming traffic slow visual foraging in the Gray Treefrog (*H. chrysoscelis*). Mazerolle et al. (2005) similarly found that nocturnally active American toads (*B. americanus*), spring peepers (*P. crucifer*), green frogs (*R. clamitans*), and wood frogs (*R. sylvatica*) are more likely to become immobile on the road when approached by automobile-related stimuli than when left undisturbed. Although their experiment did not completely control for disturbance, making it impossible to separate out the effects of light and disturbance, their results are consistent with the idea that rapid shifts in illumination can alter the behavior of frogs at night.

Physiological consequences are also possible. For example, Leopard Frogs, *Rana pipiens* kept under constant lighting suffered from retinal irregularities (Bassinger and Matthes 1980) and Common Asian Toads *B. melanostictus* show reduced sperm production when maintained in constant light (Biswas et al. 1978). The expression of genes that, in turn, regulate other physiological processes can also be altered by constant illumination (Baggs and Green 2003; Green and Besharse 1996; Steenhard and Besharse 2000). The number of species that may be susceptible to these various effects and the magnitude of change in illumination intensity or duration that is necessary to elicit such responses remain unknown.

Turtles — A number of freshwater turtles survive within urban matrices, perhaps because of their unusual resistance to various pollutants (Gasith and Sidis 1984). Increasingly, species common in the pet trade, such as the Red-Eared Slider *Trachemys scripta elegans*, are also becoming widely established in urban settings (e.g., Lever 2003; Perry et al. 2007), presumably following their release or escape. Information about the ecology of such species in urban and near-urban environments, and on the influence of lights upon them, is lacking. The single exception involves a laboratory study in which Chinese Soft-Shelled Turtles (*Trionyx sinensis*) were shown to have lower food uptakes and growth rates at higher light intensities (Zhou et al. 1998). It is quite possible that species such as softshell turtles (Trionychidae) that sleep on shore at night would also be more exposed to predation due to increased visibility to predators in lighted landscapes.

Lizards — Many lizard species exist in urban peripheries. Nonetheless, we have not been able to find any studies showing effects of lights on these reptiles. Further study on the impacts of night lighting in these habitats is needed.

Snakes — Some aquatic snakes track the lunar cycle in their activity and foraging patterns (Andreadis 1997; Houston

and Shine 1994; Madsen and Osterkamp 1982). The issue of artificial lights disrupting the lunar cycle in natural areas (i.e. biodiversity reserves) adjacent to urban areas is of concern, but studies exploring this potential problem are absent. Increased lighting may affect snake foraging success. Predation success rates for some species that prey on snakes increase with increased illumination (Bouskila 1995), and some snake prey reduce their foraging activity in response to increased illumination (e.g., Bouskila 1995; Bowers 1988=).

URBAN BEACHES AND ESTUARIES

Many of the world's largest cities originated as port towns. Other urban centers have more recently emerged around tourist destinations, and often feature heavily-developed beaches. In many cases, the same sandy beaches treasured by vacationers are also the traditional sites for sea turtle nesting. Sea turtles at such locations probably offer the best case studies of the effects of artificial lighting on any taxonomic group (e.g., Witherington 1992b). Other species, such as the diurnal Fringe-Toed Lizard (*Acanthodactylus scutellatus*) and the nocturnal Leaf-Nosed Snake (*Lytorhynchus diadema*) also inhabit those same dunes (e.g., Perry and Dmi'el 1995) and may be exposed to ambient light from nearby cities.

Frogs — Although no species of frog tolerates the high salinity associated with marine beaches per se, some (e.g., Marine Toads *Bufo marinus*, Crab-Eating Frogs *Rana cancrivora*) are known to breed in brackish water. One of them, *B. marinus*, has been widely introduced around the world (Lever 2003) and is commonly found near urban centers. In Hawaii, Guam, and elsewhere, large numbers will forage under lights, clearly taking advantage of the increased prey abundance (J. Lazell pers. comm.; G. Perry unpubl. data). However, the consequences of lights for amphibian populations inhabiting beaches and estuaries remain unstudied.

Turtles — McFarlane (1963) described how hatchling turtles in Florida, after emerging from their nests, were attracted to street lighting visible at the beach. Many crawled inland, crossed a coastal roadway *en route* to the lights, and were crushed on the road by passing cars. We now know that hatchlings worldwide are commonly attracted to light fixtures (Philibosian 1976; Peters and Verhoeven 1994), and that most turtles attracted to lights die from exhaustion, dehydration, and predation. Other sources of illumination (such as abandoned campfires on land) can also be deadly (Mortimer 1979). Artificial lighting also affects adult turtles by degrading the quality of their rookery sites. Nesting attempts (crawls of gravid females up the beach to nest) each night by Green Sea-Turtles (*Chelonia mydas*) and Loggerheads (*Caretta caretta*) were reduced to almost zero at historically important sites (Melbourne Beach, Florida; Tortuguero, Costa Rica) when these locations were experimentally exposed to lighting (Witherington 1992b). When the lights

were turned off, nesting attempts each evening immediately increased. In Florida, the spatial pattern of artificial lighting probably accounts for the present distribution of the “preferred” rookery sites along the East Coast (approximately 75,000 loggerhead nests annually). About 90% of all nests are deposited at five beach sites characterized primarily by their lower exposure to artificial lighting (Salmon 2003). The same sites are also preferentially used by Leatherbacks (*Dermochelys coriacea*), *C. mydas*, and *C. caretta*, which elsewhere tend to nest at different locations. This suggests that the negative effects of coastal development and its associated lighting, rather than features that have traditionally promoted female reproductive success and hatchling survival, currently determine where marine turtles nest.

Lizards — Some species of lizards inhabit beaches, and a few, such as Black Iguanas (*Ctenosaura similes*), may occasionally be seen near human habitation. Slightly further from the beach proper, species such as the Fringe-Toed Lizards *Acanthodactylus scutellatus* and *A. schreiberi* inhabit dune formations nestled within seaside urban communities (Perry and Dmi'el 1995). However, such cases are uncommon, and we are unaware of any studies examining the influence of lights on such species.

Snakes — A number of snake species in the family Elapidae (some authors place them in the families Hydrophiidae and Laticaudidae) spend their lives in the sea and most can at times be found near land, if only briefly. Some of these (e.g. *Laticauda* species) can be quite common along beach-retaining walls in urban south-Pacific cities that are exposed to lights. Another group of snakes, the Homolopsines, primarily occur in mudflats and forage at night. Finally, terrestrial species such as the Sand Snake (*Psammodphis schokari*) and *Lytorhynchus diadema* inhabit dune formations nestled within sea-side urban communities in Israel (Perry and Dmi'el 1995). However, we are unaware of studies examining the effects of lights on such species.

REMEDIATION

All of the work conducted to date on light pollution remediation for herpetofauna involves sea turtles. Recent tests on hatchling orientation, conducted in an arena setting, indicated that natural cues and artificial lights “compete.” This work offers hope of identifying a technological fix because it shows that a reduction in the perceived “attractiveness” of artificial lighting makes it more likely that hatchling orientation will be based upon natural cues (Tuxbury and Salmon 2005).

A number of studies have examined the feasibility of using alternative lighting methods that would reduce or eliminate the negative influence on sea turtles but that would also be acceptable to humans. Turtle-friendly lights generally emit wavelengths between 540 and 700 nm (amber to red) and can be produced either by designing lights that emit only the longer wavelengths (Fig. 2) or by using filters that exclude the

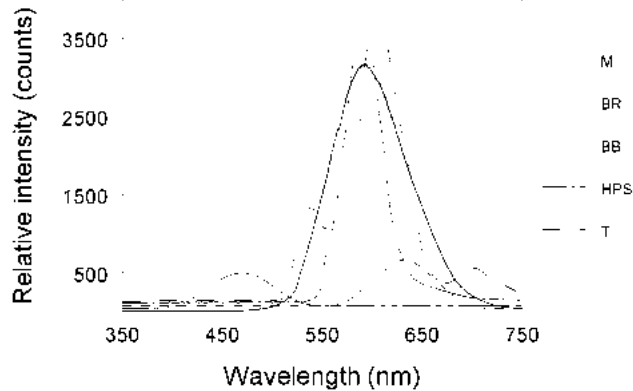


Fig. 2. Spectral energy distributions for four “turtle-friendly” lights (Magnaray, M; filtered High Pressure Sodium vapor, HPS; Twistee, T; and Beeman Red, BR). One short-wavelength light (Beeman Blue, BB) was used as a control. Filtered HPS lights are used on coastal roadway poled streetlights in Florida; the Twistee and Beeman red are lights designed for buildings (residential or commercial) that are visible at marine turtle nesting beaches.

shorter wavelengths of “broad-spectrum” lights. Salmon and his colleagues (Halager et al. in press) developed a bioassay that can be used to evaluate the efficacy of “turtle-friendly” lights by giving hatchlings choices between darkness and a light (single light experiments), or pairs of different lights. Using this bioassay, Halager et al. (in press) found that some lights are more attractive to turtles than others and that the strength of attraction declines as spectral energies become more concentrated in, and shifted toward, the longer wavelengths (Figs. 3, 4). Field experiments demonstrate that high-pressure sodium vapor lamps affect marine turtles, but passing such illumination through a filter that excludes wavelengths below 530 nm makes these lights far less attractive to hatchlings (Sella et al. 2006). In fact, when this filtered lighting is visible at nesting beaches, it no longer reduced nesting by adults (Pennell 2000).

The use of spectrally-modified outside lighting should increase the number of hatchlings that successfully locate the ocean, even at urban nesting beaches. Recently, lighting along a coastal roadway in the city of Boca Raton, Florida, was extensively modified. Streetlights placed on posts were turned off during sea turtle nesting season and replaced with light-emitting diodes installed in the pavement. These provided sufficient illumination for traffic safety, but none of the lighting was visible at the nesting beach. Behavioral tests at the beach demonstrated that the seaward orientation of hatchling Loggerheads was normal when the embedded lights were on, but disrupted when the elevated streetlights were on (Bertolotti and Salmon 2005). It remains to be seen to what extent use of similar technologies could help other taxonomic groups.

DISCUSSION

Artificial light, long considered a problem for astronomers but of little concern to biologists, is increasingly viewed as a

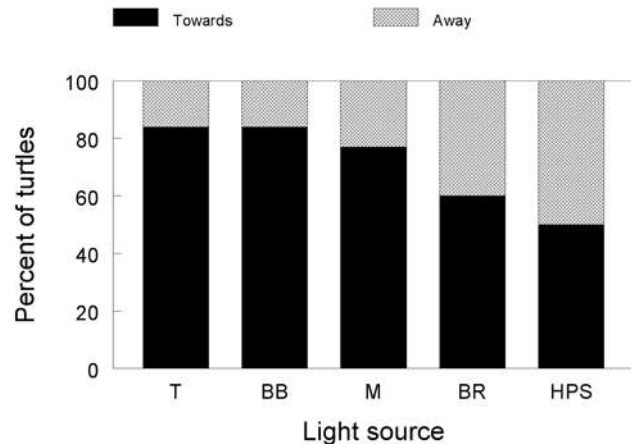


Fig. 3. Choices of hatchling sea turtles (Loggerheads, *Caretta caretta*) presented with various lights. A no-light control was used in each case. Differences among light sources in relative intensities were eliminated through the use of neutral density filters, so that responses shown by the turtles were based upon spectral differences alone. Results show that the turtles are statistically significantly attracted to the Twistee (T, $n = 25$ turtles), Beeman Blue (BB, $n = 25$), and Magnaray (M, $n = 35$) lights, but not to the Beeman Red (BR, $n = 45$) or Filtered HPS (HPS, $N = 46$).

threat by conservation biologists. A recent volume (Rich and Longcore 2006) illustrated the pervasiveness of the problem of artificial lights, which affect a broad range of taxa. In this chapter, we focused on updating and summarizing the information for amphibians and reptiles, but emphasize that the problems associated with artificial night lighting likely do not stop with a particular group of organisms. It may impact entire communities, and we find it encouraging that solutions to this problem may also simultaneously benefit a broad range of taxa.

There are doubtlessly additional species and populations which use artificial lights and are not listed in Tables 1 and 2. For example, Outen (2002), Spellerberg (2002), identified lights associated with roads as a potential source of concern, but could find few studies directly evaluating this potentially widespread risk (but see Mazerolle 2004; Mazerolle et al. 2005). The reports collected by Rich and Longcore (2006) also stress the magnitude of the lack of information on effects of artificial night lighting for many taxonomic groups, including amphibians and reptiles (Buchanan 2006; Perry and Fisher 2006; Salmon 2006; Wise and Buchanan 2006). However, there is reason to be concerned about the effects of artificial light on amphibians and reptiles in general: many species are nocturnal and many populations are in serious decline (e.g., Alford and Richards 1999; Gibbons et al. 2000). Unfortunately, the literature demonstrates a lack of information for caecilians, tuataras, and crocodilians, which are primarily nocturnal and could therefore be at risk from changes in light levels.

Urban ecology is a rapidly growing discipline, but herpetological research in urban environments remains notably underrepresented. Studies typically focus on relatively undisturbed habitats, and even herpetofaunal surveys rarely

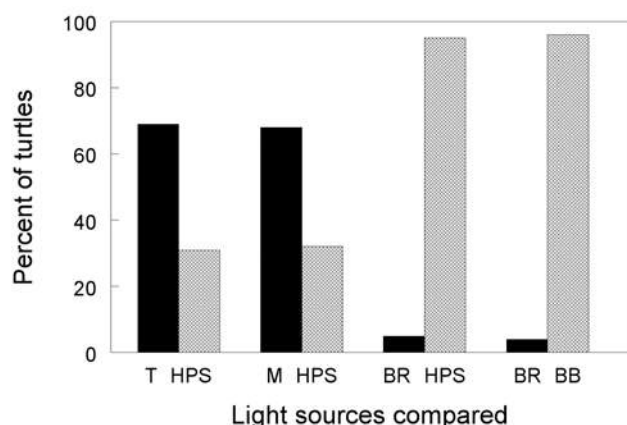


Fig. 4. Choices of hatchling sea turtles (Loggerheads, *Caretta caretta*) in tests in which paired light presentations were made. Turtles are significantly attracted to the Twistee (T) and Magnaray (M) lights when each is matched with a filtered HPS light ($n = 29$ and 60 , respectively, for each test). However, turtles are significantly attracted to the filtered HPS light when it is paired with a Beeman Red light (BR, $n = 40$), which is also less attractive to the turtles than the Beeman Blue light (BB, $n = 25$).

explicitly address taxa found in or near human habitation. The biology of edificarian taxa is even more rarely reported (but see Powell and Henderson 2008). We hope that the increased interest in urban ecology will lead to more studies addressing light pollution and their effects on amphibians and reptiles. Although these influences are only beginning to be studied, a few general patterns appear to be emerging:

- 1) Species vary in their sensitivity to light pollution, which may have no effect, benefit, or negatively affect a particular taxon. Thus, it is important to consider the photobiology of all taxa found in a particular habitat. For example, sea turtle nesting problems may be reduced by shifting the spectra of lights to longer wavelengths. Shifting spectra to longer wavelengths can, however, disrupt migration in newts (which do not, fortunately, share the same habitat). Thus, there may not always be simple solutions to lighting problems other than the removal, reduction of use, or shielding of artificial night lighting.
- 2) Different aspects of a given species' biology can be affected differently by different lighting conditions at different life history stages.
- 3) There is a paucity of research available on the negative effects of lighting on herpetofauna. Negative effects of light pollution, such as the disruption of orientation in hatchling sea turtles (e.g., Witherington and Martin 1996) are well documented, but detailed studies for other taxa are not yet available.
- 4) There is a dearth of studies of the positive effects of lighting on herpetofauna. Positive influences, such as increased prey availability and thermoregulatory opportunities around artificial night lighting are better documented, if only anecdotally, in lizards (Tables 1, 2). We are not

aware of studies that have elucidated population-level consequences are, what mechanisms are involved, and which species are most likely to be affected.

- 5) Indirect effects are likely to be common. Benefits to one species may negatively influence another, as demonstrated by Case et al. (1994). However, studies of this phenomenon that do not involve invasive species are only now starting to reach the literature (Rich and Longcore 2006).
- 6) The ability of artificial light to enhance the invasive potential of some species should be a source of broad concern. Some of the species listed in Table 1 and many of those in Table 2 were observed in areas outside their native range. The ability to use human habitats, which are often characterized by having additional lighting during the night, can be beneficial to invasive species, many of which first colonize urbanized areas. For species that are not only tolerant of such conditions but can also take advantage of the night-light niche, establishment of viable populations may be easier. Almost no information is available on the impacts of invaders such as geckos, which are generally perceived as innocuous, yet it seems likely that at least some native species (particularly invertebrate prey) must be negatively affected. Light-aided invasive species may also spread disease and exotic parasites to native species.

Is it possible to resolve such conflicts of interest between urban residents and urban amphibians and reptiles? New technology, briefly reviewed above, offers some promising options for providing illumination that satisfies human requirements while minimizing effects on other species. However, solving the light pollution problem necessitates light management, including protocols that eliminate the influence of artificial lighting on wildlife by, for example, turning off unnecessary lights, reducing wattage, shielding and lowering luminaires, or creating natural light barriers, such as dune or wooded areas, between light sources and wildlife habitats (Witherington and Martin 1996). However, humans often perceive lighted environments as more pleasing or safe. For example, lighting along roadways and in city parks is often considered necessary for pedestrian and vehicular safety. Thus, there may be resistance to reducing the amount of lighting at urban sites. There is much room for research on the human dimensions of the problem and such work can hopefully help identify technological solutions that benefit wildlife and are broadly acceptable to the public. We hope that such solutions can be incorporated rapidly not just where a particular species of sea turtle or gecko is found, but on a global scale commensurate with the scope of the artificial light problem.

MANAGEMENT RECOMMENDATIONS

The information presented in this chapter clearly indicates the potential for multiple types of effects on amphibians and reptiles resulting from artificial night lighting. Although

the most extensive work has been carried out on sea turtles at urban beaches, preliminary evidence indicates that many species are likely at risk. Although it is clear that much more research is needed in this area before firm conclusions can be drawn, work reviewed above has begun identifying potential problems and solutions to these problems, which we are hopeful can effectively be incorporated into standard practices. We recommend that managers adopt a precautionary approach and attempt to minimize consequences without waiting for researchers to confirm the impacts on a particular species or habitat. It is clear that the best approach for the conservation of native taxa involved is returning habitats as closely as possible to their natural lighting conditions, primarily through the removal of unnecessary lighting and shielding of necessary lighting. It is worth noting that several entities that have experimented with reducing lighting have also recouped their investment in reduced power costs (e.g., International Dark Sky Association: <http://www.darksky.org/infoshts/pdf/is191.pdf>; accessed May 2006).

SUMMARY

Amphibians and reptiles have not evolved with artificial lighting at night. Thus, alteration of the natural variation in diurnal and nocturnal light intensities and spectral properties of lights has the potential to disrupt their physiology, behavior, and ecology. Our review documents identified possible effects of night lighting on many species of amphibians and reptiles. However, they also reveal that conclusive data are often lacking. Few studies on the consequences of artificial lights for amphibians and reptiles have been conducted to date, and in many that might be relevant, researchers have not recorded the illumination or irradiance at which experiments are conducted. Thus, it is currently impossible to precisely gauge the effects of artificial night lighting on taxa found in urban, light-polluted environments. The one exception is the information available on the negative impacts of artificial lights on hatchling sea turtles, which has received considerable coverage in both scientific and popular media. With that exception, we believe it is too early to draw sweeping conclusions and to provide broad management recommendations, beyond pointing out the urgent need for more information. However, we identify light pollution as a serious threat that should be considered as part of planning and management decisions in the maintenance or conservation of urban areas containing amphibians and reptiles.

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WILDLIFE MORTALITIES IN OPEN-TOPPED PIPES IN CENTRAL CALIFORNIA

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Abstract.—Nearly 20 billion birds are killed in the United States each year by a number of anthropogenic causes, but a lesser known threat is open-topped pipes. Open-topped pipes are prevalent across the landscape, as they are used for a multitude of purposes including agriculture, mining, and infrastructure. Birds, herptiles, and small mammals can be attracted to the pipes as sites for nesting or shelter but they soon can become trapped by the smooth interior and small diameter. Cavity-nesting birds are the most likely animals to enter these pipes, potentially due to competition over a decreasing number of tree cavities in their natural habitat. We inspected pipes in several areas in central California including the South Fork Kern River Valley, Ridgecrest, and Fresno. The main goal of this study was to document the prevalence and predominant taxa comprising the wildlife mortalities in pipes, while also examining the influence of pipe dimensions and adjacent landscape types. We found 13.3% of pipes studied caused mortality: the majority of those mortalities were birds and significantly more deaths were in desert landscapes. The results of this study reveal the need for future research and pipe alteration projects to prevent further mortalities, especially in high priority desert shrubland areas.

Key Words.—birds; cavity-nesting; mortality; desert shrubland; herptiles; mining claim posts; mammals; PVC pipes.

INTRODUCTION

It is estimated that up to 20 billion birds are killed in the United States each year due to direct anthropogenic causes, including collisions with vehicles and various manmade structures, poisoning by oil spills and other contaminants, and predation by domestic cats (Loss et al. 2012, 2015). A lesser-known threat to birds are hollow metal or PVC (polyvinyl chloride) pipes or posts, which have the potential to kill a large number of birds annually (Ogden 2013; American Bird Conservancy 2016; Malo et al. 2016). Open-topped pipes, found on farms, ranches, oil production facilities, construction sites, residential areas, and rooftops, serve a variety of purposes including fencing, irrigation, plumbing, ventilation, and mining claim markers. Birds, small mammals, and reptiles enter the pipes to nest or find shelter, but the smooth interior and tight confines of the pipes prevent individuals from escaping, leading to a slow death by stress, dehydration, or starvation (Brattstrom 1995; Hathcock et al. 2014; Malo et al. 2016; Peter Bradley and Jason Williams, unpubl. report). In 2017, the Bureau of Land Management (BLM) estimated that there were 3.6 million mining claims (each with four or more markers) in the western United States, with Nevada having about a third of the claims (1.1 million; Bureau of Land Management [BLM]. 2018. Public Land Statistics 2017. Available from <https://www.blm.gov/about/data/public-land-statistics>. [Accessed 22 March 2019]). Previously these markers were often made of wood, but in the 1970s they started being replaced by PVC pipes, which were typically hollow and open-topped with about a 10-cm diameter opening (Wilshire et al. 2008). These mining claim markers and other open-topped pipes present a potentially large scale and wide ranging threat to birds in the western United States.

The Nevada Department of Wildlife (NDOW) conducted one of the first studies on bird mortalities in open-topped mining claim markers (Peter Bradley and Jason Williams, unpubl. report). The study began in 1986 after a local chapter of the Sierra Club reported that Mountain Bluebirds (*Sialia currucoides*) were found trapped in mining claim markers. NDOW biologists found 914 dead birds representing 33 species in 7,058 posts in northeast Nevada and estimated that there were 13 dead birds per 100 posts (Peter Bradley and Jason Williams, unpubl. report).

California had an estimated 320,617 mining claims (BLM, *op. cited*) in 2017, which could total to an estimated 1.2 million potential open-topped markers. The issue was first addressed in California in 1990 by LaPre (1990), who reported that 262 dead birds and lizards were found in 820 mining claim posts in the Eastern Mojave National Scenic Area. This study prompted the BLM in California to conduct their own survey of 750 mining claim markers and they found 25% had dead birds and lizards (unpubl. report). Subsequently, California passed legislation that required using solid metal or wooden posts or mounds of stone when marking mines (State of California 1991; Baicich 2012); however, open-topped pipes can still be found in California (e.g., mining claims placed prior to 1991) or pipes that are used for other purposes (irrigation vent pipes, fence posts, rooftop vent pipes).

Across news articles and Audubon newsletters, the prevalence of bird mortalities in open-topped pipes were reported as being quite substantial, although variable. Compared to the news media and gray literature, peer-reviewed scientific research documenting wildlife mortality in open-topped pipes in North America is limited. One of the few studies published was conducted in the mountains of eastern San Bernardino County in California (Brattstrom 1995). In this study,

140 PVC mining claim posts were searched and found to contain the carcasses of birds (19%), lizards (28%), and mammals (4%). Another study, in north central New Mexico on the Los Alamos National Laboratory property, searched open bollard pipes and open pipes on gates and found 19.6% of the 188 pipes had dead birds (Hathcock and Fair 2014). Similar to the study conducted by the NDOW (Peter Bradley and Jason Williams, unpubl. report), both Brattstrom (1995) and Hathcock and Fair (2014) found that a large majority of the dead birds identified in pipes were native cavity-nesting songbirds: Mountain Bluebirds in Nevada, Ash-throated Flycatchers (*Myiarchus cinerascens*) and Cactus Wrens (*Campylorhynchus brunneicapillus*) in California, and Western Bluebirds (*Sialia mexicana*) in New Mexico.

The habitat surrounding open-topped pipes are likely to influence the diversity and abundance of species that are attracted and trapped. Tree cavity shortages limit the numbers of hole-nesting birds an area can support, as several species can compete to use the same sites (Newton 1994). Lower habitat quality and increased competition can drive cavity-nesting birds to occupy manmade holes. In the case of nest boxes, Mänd et al. (2005) found a greater occupancy of nest boxes placed near deciduous habitat where a higher number of cavity-nesting species existed, compared to nest boxes placed near less diverse coniferous habitat. In some cavity nesting species such as bluebirds (*Sialia* spp.), use of artificial cavities is most frequent in areas with perches, wooded pastures, high grass and shrub availability, and sparse ground cover (Munro and Rounds 1985; Hsu and Humpert 1988).

We documented wildlife mortalities in various types of open-topped pipes in several areas in central California: the Kern River Valley, Ridgecrest, and Fresno and King counties. The objective of this study was to quantify the prevalence of wildlife mortalities in open-topped pipes in central California to add to the more extensive work done in Nevada. We examined how several factors may have influenced the prevalence of mortalities in pipes including: (1) taxonomic group (birds, herptiles and mammals); (2) pipe dimensions (height and diameter); and (3) surrounding habitat type (orchard, agriculture, riparian or desert). The results of this study will add to the understanding of the potential threat that open-topped pipes pose to wildlife.

METHODS

Study site. —We conducted this study in four areas in central California (Fig. 1). The first area was in the South Fork Kern River Valley on the lands adjacent to Audubon's Kern River Preserve (35.6690N, 118.3050W), California Department of Fish and Wildlife Canebreak Ecological Reserve, and the South Fork Wildlife Area of the U.S. Forest Service. This area encompasses approximately 20 km of contiguous riparian forest (Fig. 1). Kern River Preserve employees have covered most

of the open-topped pipes on the preserve itself (unpubl. report), but the surrounding grazing pasture upstream of the Kern River Preserve, and the adjoining South Fork Wildlife Area remained undocumented. The South Fork Kern River Valley is 16 km long and 800 m in elevation and is located at the southern end of the Sierra Nevada, and has been designated as an important area for birds (National Audubon Society [NAS]. 2017. Important bird areas: South Fork Kern River Valley. NAS. Available from <https://www.audubon.org/important-bird-areas/south-fork-kern-river-valley>. [Accessed 26 November 2017]). The riparian habitat in the SFWA is composed of Fremont Cottonwoods (*Populus fremontii*), Red Willows (*Salix laevigata*), and Goodding's Black Willow (*Salix gooddingii*) as the canopy, and Coyote Willow (*Salix exigua*), Mule Fat (*Baccharis salicifolia*), Stinging Nettle (*Urtica dioica holosericea*), Mugwort (*Artemisia douglasiana*), and a variety of grasses and forbs as the understory (Whitfield et al. 1999). The forest is intermixed with freshwater marshes characterized by cattails (*Typha* spp.) and tules (*Scirpus* spp.; Whitfield et al. 1999). The area supports a diverse range of wildlife species that are potentially at risk of entrapment in pipes, including several small rodents (e.g., *Peromyscus* sp.), fence lizards (*Sceloporus* sp.), and over 339 birds (Hewett 1984). A number of cavity-nesting birds exist in the area, such as flycatchers, bluebirds, woodpeckers, swallows, chickadees, wrens, kestrels, and owls.

In addition to the South Fork Kern River Valley, we inspected pipes in nearby areas with similar landscapes and characteristics, including near Ridgecrest (35.9749N, 117.3540W) within Kern County and Sanger (36.7080N, 119.5560W) within Fresno County, and near Riverdale (36.3008N, 119.7829W) within Kings County (Fig. 1). We examined mining claim markers on BLM land north of Ridgecrest and west of the China Lake Naval Air Weapons Station. The area is situated at the edge of the Mojave Desert and the foothills of the Sierra Nevada and is characterized as high desert shrubland with rocky hills. We found pipes near Riverdale that were situated in agricultural fields and in small, neighborhood orchards and vineyards in Sanger. These two cities lie within the San Joaquin Valley and have relatively flat landscapes. Their semi-arid climates include hot, dry summers and mild, rainy winters (Tucker 2013). A number of cavity nesting birds, as well as small mammals, reptiles, and amphibians inhabit these areas.

Data collection. —We collected data from the middle of May through August 2017. We conducted weekly roadside surveys in search of pipes. We planned the general survey locations in advance to contact any known landowners for permission to access their properties. When a pipe was spotted, we pulled over and initially documented what the pipe was being used for, assigned it a number, and used a GPS unit (Garmin GPSMAP 76CSx, Garmin Ltd., Olathe, Kansas) to mark location

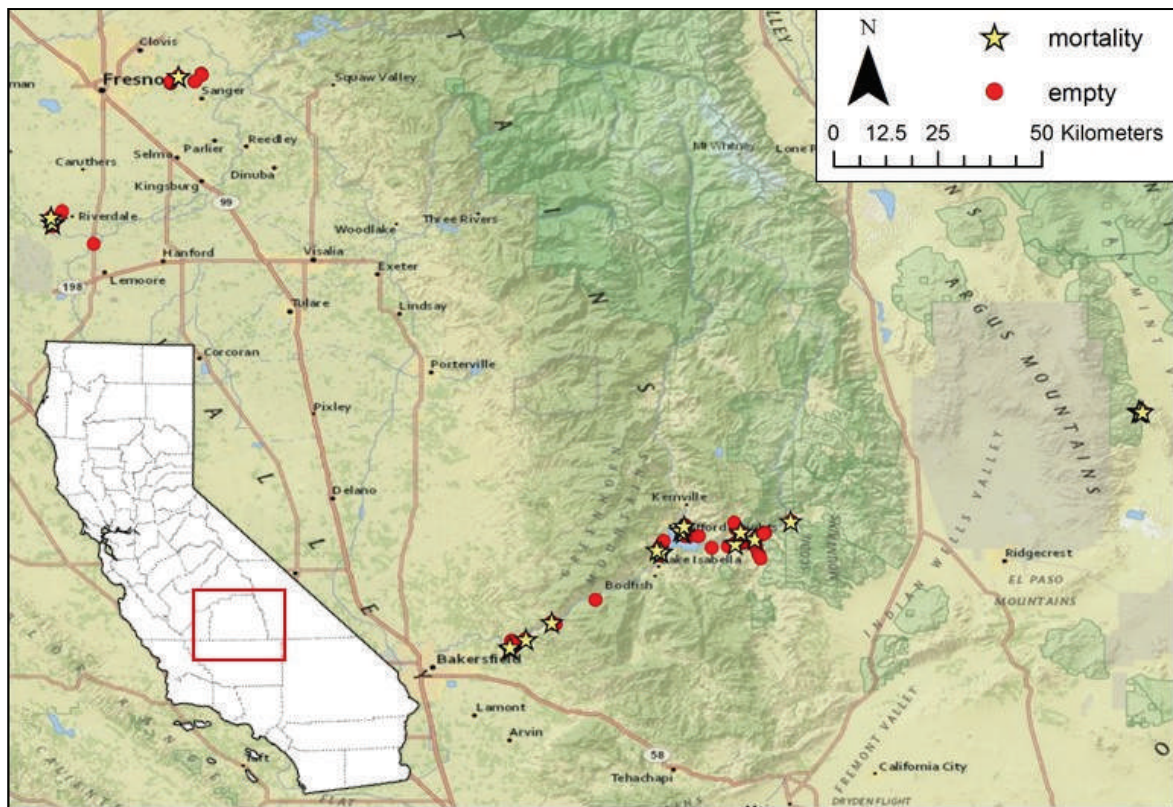


FIGURE 1. The locations of the pipes checked May–August 2017 in the Kern River Valley and Ridgecrest in Kern County, Sanger in Fresno County, and near Riverdale in Kings County, California, representing those empty and those with wildlife mortalities.

coordinates. We checked an average of 41 pipes during a full day of search effort. Most pipes were gate markers or fence posts, but we also surveyed irrigation pipes, livestock corrals, signposts, BLM mining claim markers, and lone pipes that appeared to serve no function. Of the 295 pipes inspected, 256 (87%) pipes were made of metal and only 39 (13%) were of plastic material.

We documented several factors about each pipe and its location in order to assess how they might affect wildlife mortalities. The diameter and length of each pipe were measured with a measuring tape (length was taken from the ground to the top of the pipe that was above ground and thus did not include the portion below ground) and classified position as upright, horizontal, or leaning. The majority of the pipes were positioned upright (277) with only 12 leaning and six horizontal; therefore, we did not include this characteristic in our analyses. We also described the habitat and vegetation components surrounding each pipe based on general visual observations, noting whether the pipe was near roads, buildings, cow pastures, forests, or orchards and then used this information to categorize each pipe into a habitat type category.

The contents of each pipe were searched for any signs of wildlife, dead or alive, using a 700+ lumen flashlight. The flashlight allowed us to identify the presence or absence of an animal, as well as categorize what taxa it belonged to and the number of individuals inside of a single pipe. The presence of trash and debris was also noted, as this could potentially affect our ability to

accurately estimate taxa or number of individuals.

Data analysis.—Because we did not necessarily predict a linear relationship of pipe diameter and height with wildlife mortality, we grouped the data by pipe diameter and height into interval categories depending on the range of values obtained. We expected that the pipe frequencies would not be equal across categories, but we tried to make it so that each category contained an adequate number of pipes so a pattern of wildlife mortality could be detected during analyses. We ended up using three diameter intervals of 2.5–8.33 cm (small), 8.34–14.16 cm (intermediate), and ≥ 14.17 cm (large), and the numbers of pipes that fell within each category were fairly equal (Table 1). The height variable, however, was more uniform (most pipes were 120–160 cm tall), therefore we only split height into two categories, 12.7–120.9 cm (short) and 121.0 cm and taller (tall); and there were far fewer pipes in the short height category than the tall category (Table 2).

In addition, we grouped the habitat descriptions into landcover categories using available types within the study areas. These categories included: urban, agriculture, orchard, riparian/temperate forest, and desert shrubland; however, only two pipes could be classified as urban, so that category was removed from the analysis. We defined agriculture as a crop field, cow pasture, or otherwise open, grassy area. An orchard contained uniform rows of trees or vineyards. We defined riparian/temperate forest by groupings of trees > 5 m tall, an understory of shrubs or saplings, and possible water bodies. Desert shrubland

TABLE 1. The number of pipes in each diameter category (cm) comparing those empty and those with wildlife mortalities measured May–August 2017 in the Kern River Valley and Ridgecrest in Kern County, Sanger in Fresno County, and near Riverdale in Kings County, California.

| Diameter (cm) | Mortality | | % Yes | Total |
|---------------------------|-----------|-----|-------|-------|
| | No | Yes | | |
| Small (2.50–8.33) | 75 | 5 | 6.67 | 80 |
| Intermediate (8.34–14.16) | 97 | 22 | 22.60 | 119 |
| Large (≥ 14.17) | 84 | 12 | 14.20 | 96 |
| Total | 256 | 39 | 13.22 | 295 |

was an open, rocky area with sparse vegetation in the form of short shrubs. These habitat types followed a gradient of human disturbance, with agriculture and orchard sites considered highly impacted by humans, while forest and desert sites were considered to have less human influence. We placed pipes located in areas with characteristics that fell into multiple categories in the habitat type that was most dominant and influential. For example, we classified a roadside pipe near both a pasture and a riparian forest in the riparian/temperate forest category, as the presence of trees was deemed more influential on the types of species that might use the area (e.g., cavity nesting bird species). The numbers of pipes inspected in each habitat category were fairly evenly distributed with 76 pipes in orchards, 73 in agriculture, 59 in riparian/forests, and 87 in desert areas.

We used a series of Chi-square tests to compare the frequency of the response variable wildlife mortality in a pipe (yes or no) across our three categorical independent variables including pipe diameter, pipe height, and habitat type. We also calculated the effect sizes using Cramer's *V* for each analysis which allowed us to determine the strength of association of any significant results (Cohen 1988). We used SPSS (IBM Corporation) for all statistical analyses with $\alpha = 0.05$.

RESULTS

We inspected 339 pipes, 295 of which we were able to determine if there were wildlife mortalities. We excluded the additional 44 pipes from the analysis because it could not be determined with confidence whether the pipes contained wildlife. This was due to trash and/or debris obstructing the view inside the pipes.

Of the 295 pipes we inspected, 39 (13.3%) contained dead wildlife. Twenty-one pipes (7.1%) contained signs of birds, specifically passerines, including full carcasses, feathers, and a nest with a cracked egg (Appendix Fig. 1). Although most birds could not be identified to species,

two feathers were confirmed as belonging to a Western Bluebird and a Western Meadowlark (*Sturnella neglecta*). We detected herptiles in five pipes (1.7%), including five Western Fence Lizards (*Sceloporus occidentalis*), a Western Toad (*Anaxyrus boreas*), and a Great Basin Gopher Snake (*Pituophis catenifer deserticola*; Appendix Fig. 2). We found mammals in nine pipes (3.1%), all of which were mice (*Peromyscus* spp.; Appendix Fig. 3). Four pipes (1.4%) held unknown carcasses that we could not identify beyond vertebrate status, including a spine, skulls, and other assorted bones.

Pipe diameter category significantly influenced the frequency of wildlife mortality in pipes ($\chi^2 = 6.309$, $df = 2$, $P = 0.043$) but the strength of this association was weak (Cramer's *V* = 0.146; Cohen 1988). There were more deaths in pipes with an intermediate-sized diameter (8.34–14.16 cm) than the small or large pipes (Table 1). There was no significant difference in the number of pipes with wildlife mortality of differing heights ($\chi^2 = 1.338$, $df = 1$, $P = 0.223$; Table 2). Habitat type had a significant influence on the number of pipes with wildlife mortality ($\chi^2 = 10.598$, $df = 3$, $P = 0.014$) and the effect was moderate (Cramer's *V* = 0.190; Cohen 1988). Specifically, pipes in desert landscapes had more wildlife deaths than those in orchard, agricultural, or forested areas (Fig. 2).

DISCUSSION

We found that just over a tenth of pipes inspected in our central California study area had wildlife mortalities, with birds being the greatest represented taxonomic group (7.1%), followed by mammals (3.1%) and herptiles (1.7%). These results are lower than previous studies conducted in California in San Bernardino County (LaPre 1990; Brattstrom 1995), in particular the number of pipes with herptiles (e.g., Brattstrom 1995 found 28% of pipes inspected had

TABLE 2. The number of pipes in each height category (cm) comparing those empty and those with wildlife mortalities measured May–August 2017 in the Kern River Valley and Ridgecrest in Kern County, Sanger in Fresno County, and near Riverdale in Kings County, California.

| Height (cm) | Mortality | | % Yes | Total |
|-----------------------|-----------|-----|-------|-------|
| | No | Yes | | |
| Short (12.70–120.9) | 82 | 9 | 9.89 | 91 |
| Tall (≥ 121.0) | 174 | 30 | 14.70 | 204 |
| Total | 256 | 39 | 13.22 | 295 |

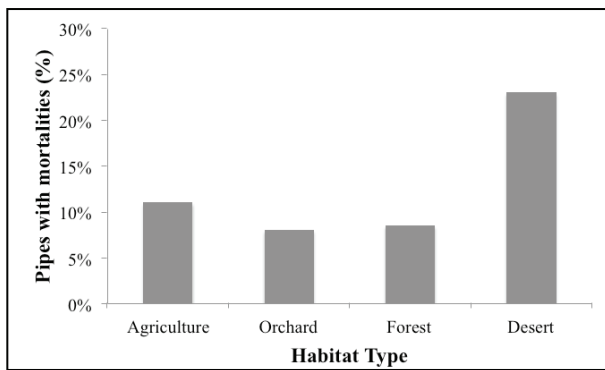


FIGURE 2. The percentage of pipes with wildlife mortalities in four habitat types observed May–August 2017 in the Kern River Valley and Ridgecrest in Kern County, Sanger in Fresno County, and near Riverdale in Kings County, California. The total number of pipes inspected in each habitat were 73 in agriculture, 76 in orchard, 59 in forest/riparian, and 87 in desert.

lizards). This difference may be due to differences in habitat types as well as distribution and abundance of species in Kern, Kings, and Fresno counties compared to San Bernardino.

We found differences in habitat types in our study with the largest proportion of wildlife deaths in the pipes found in the desert shrubland landscape type, which may in part be explained by the observed scarce vegetation and therefore potential lack of natural cavities in those areas. Orchards and riparian/temperate forests provide trees for nesting and roosting that may be preferred over man-made holes. Agricultural areas are similarly open landscapes with a lack of trees and natural cavities or shelter, but desert shrubland represents a more natural habitat type and may have more native species. In contrast, the Nevada Department of Wildlife found a positive relationship between the distances to Pinon-Juniper Woodlands with bird mortality in open-topped pipes; however, mortalities were also found in Sagebrush Steppe and Salt Desert Shrub landcover (Peter Bradley and Jason Williams, unpubl. report). It is likely that across species these relationships will vary as some species will prefer to use natural areas, whereas others may also use disturbed areas and perhaps even expand into disturbed areas because of human structures (e.g., Dunning and Bowers 1990) and in some cases can benefit from new nesting structures (Morelli et al. 2014). We did not systematically survey the presence of natural cavities across our sites in this study, and thus cannot quantify what options were available for cavity nesting birds; however, future studies should consider this variable to test if entrapment in pipes is greater in areas with fewer natural cavities.

The structure, dimensions, and type of some pipes may be more hazardous for certain wildlife species than others. Overall, we found that intermediate-sized diameter (8.34–14.16 cm) pipes were more likely to have wildlife mortalities. This may simply be due to easier access; however, it was more difficult to clearly see to the bottom of pipes with smaller diameters so this may have

also played a role in this relationship. For mammals, we found that four of the nine pipes we inspected that caused mice mortalities were irrigation pipes dispersed throughout a Sequoia National Forest campsite. We found the remains of several mice in each individual pipe, along with a western toad and a bird. We did not find a distinct pattern for herptiles, but Brattstrom (1995) found all pipes with lizards were perforated posts. Although we only examined very few horizontal pipes, one could predict that wildlife may have an easier time escaping compared to vertical pipes. Nevertheless, Brattstrom (1995) discovered a dead Desert Cottontail (*Sylvilagus audubonii*) in a post laying on the ground, and an Audubon employee found over 200 birds in a fallen irrigation standpipe on the Kern River Preserve (Audubon, unpubl. report), but in the latter case the pipe was previously upright.

The areas with the most mortalities for wildlife in our study was located on BLM land near Ridgecrest, where six out of 11 pipes (54.5%) contained at least one bird. These pipes were previously used as mining claim markers and were dispersed along the crest of a rocky hill far from any urban structures. A BLM employee estimated that at least half of the several dozen mining claim markers he had capped in the surrounding area contained dead birds (Robert Enriquez, pers. comm.). Nationwide, BLM registered 3.6 million mining claims in 2017 (BLM 2018, *op. cited*), which could represent millions of death traps for wildlife. Moreover, mining claim markers are only a small subset of the open-topped pipes used for a variety of other purposes. Comparing the extent of mortality across pipes of different uses and structures, such as mining claim markers, gate markers, vent pipes on buildings and irrigation pipes, would be interesting for a future study.

This study was limited to presence or absence of wildlife mortalities in pipes because pipes were inspected with a flashlight and contents were not removed. We were only able to count the actual number of individuals within a few pipes, so it is unknown if pipes contained one or more individuals. The data likely underestimate the number of pipes with wildlife mortalities, as well. Even though pipes obscured by trash and debris were removed from the analysis, we could have easily overlooked carcasses in seemingly empty pipes. Hathcock and Fair (2014) also used a flashlight to inspect bollards and gate markers except for the few that were removable. Their findings were fairly similar, with positive detections in 11% of gate markers and 27% of bollards. Malo et al. (2016) were much more thorough when investigating uncapped tubular poles along the Madrid-Levante high-speed railway line in central Spain. They examined poles using flashlights and a borescope and extracted carcasses with wire hooks that were later identified. Their findings were significantly higher, with one or more bird remains found in 70 out of 96 poles (72.9%) for a total of 162 carcasses.

Solutions for decreasing open-topped pipe mortalities include filling, crimping, capping, or removing unused pipes, which for mining claim markers in California and Nevada is now required by law (State of California 1991; State of Nevada 2009). In the case of PVC pipes used for mining claims, capping pipes with plastic caps has been shown to not be effective as they are often not monitored once installed and often fall off due to desert weather wear (Peter Bradley and Jason Williams, unpubl. report). Removal of unused pipes or replacing them with other mine markers (wooden posts or rock piles) is obviously the most effective permanent solution. Taking into account labor and material costs, capping existing poles in the field is much more costly than sealing them in the factory in the first place (Malo et al. 2016) or using alternatives that are not open-topped. Solutions for other types of open-topped pipes vary and include securing metal caps for chain link fence posts, filling pipes that cannot be removed with sand or concrete, and covering rooftop and heating vents with galvanized hardware cloth held in place by stainless steel pipe clamps or gutter guard leaf filters (Southern Sierra Research Station. Avian Mortality Epidemic - Death Pipes. Available from <http://www.southernsierraresearch.org/Information/DeathPipes/> [Accessed 26 November 2017]). Nevertheless, pipes may still need to be monitored, as installments such as hardware cloth can fall off. One specialized solution that appears very effective has been developed to reduce the entrapment of raptor and other bird species in vault toilets (e.g., pit toilets; Teton Raptor Center. Poo-poo Project. <https://tetonraptorcenter.org/our-work/poo-poo-project/> [Accessed 13 December 2017]). Raptors enter the vault toilets through ventilation pipes and the Teton Raptor Center created a stainless-steel screen that secures to the top of the pipe, preventing entry by birds while allowing for ventilation. With the increasing awareness of the issue and solutions being implemented, future research will be able to test the long-term effectiveness of these variety of solutions.

Our study provides insight into the severity of bird and wildlife mortality caused by open-topped pipes in central California. The extent to which these pipes are having a population level effect is unknown (Loss et al. 2015), but the presence of open-topped pipes in areas where threatened or endangered wildlife exists could be of conservation concern. This issue can be invisible to the general public, as wildlife trapped in pipes die completely unnoticed in these hidden locations compared to birds colliding with windows or dead animals brought home by cats. Raising awareness is vital, and a larger dataset of mortalities could attract funding for projects to remove unused pipes and securely close off others. Quantifying the number of potentially threatening pipes that exist would also shed light on the scope of this issue and garner support. Furthermore, open-topped pipes are not the only source of entrapment, as several other human-made structures endanger wildlife such as

uncovered trenches dug into the ground (Germano et al. 1993, Germano 1995, Simpson et al. 2011) and oil pits (U.S. Fish and Wildlife Service 2013). Collaboration across federal, state and local natural resource agencies, agricultural workers, landowners, and the public is necessary for successful solutions and preventative measures to be implemented to lessen the impacts of wildlife entrapment and mortality.

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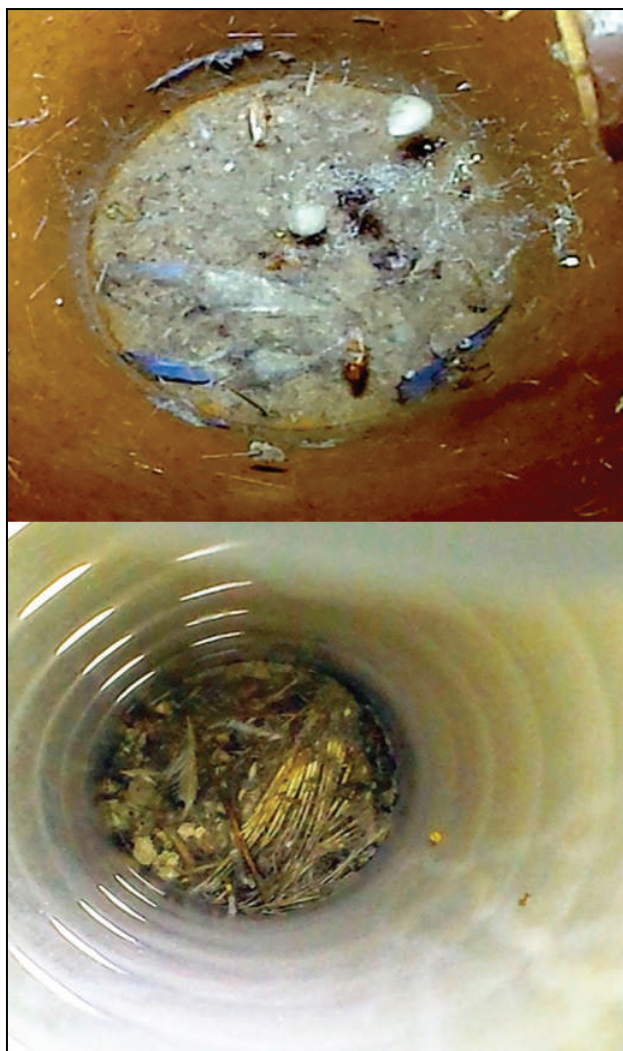
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APPENDIX FIGURE 1. The contents of a gate marker with (Top) a Western Bluebird (*Sialia mexicana*) and (Bottom) a mining claim marker with an unidentified bird. (Photographed by Michelle Harris).



APPENDIX FIGURE 2. The contents of three metal livestock corral pipes revealing (Top and Bottom Left) two living Western Fence Lizards (*Sceleporus occidentalis*) and (Bottom Right) a Great Basin Gopher Snake (*Pituophis catenifer deserticola*). (Photographed by Michelle Harris).



APPENDIX FIGURE 3. The contents of an irrigation pipe revealing several deer mice (*Peromyscus* sp.). (Photographed by Michelle Harris).

Ecological light pollution

Travis Longcore and Catherine Rich

Ecologists have long studied the critical role of natural light in regulating species interactions, but, with limited exceptions, have not investigated the consequences of artificial night lighting. In the past century, the extent and intensity of artificial night lighting has increased such that it has substantial effects on the biology and ecology of species in the wild. We distinguish “astronomical light pollution”, which obscures the view of the night sky, from “ecological light pollution”, which alters natural light regimes in terrestrial and aquatic ecosystems. Some of the catastrophic consequences of light for certain taxonomic groups are well known, such as the deaths of migratory birds around tall lighted structures, and those of hatchling sea turtles disoriented by lights on their natal beaches. The more subtle influences of artificial night lighting on the behavior and community ecology of species are less well recognized, and constitute a new focus for research in ecology and a pressing conservation challenge.

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As diurnal creatures, humans have long sought methods to illuminate the night. In pre-industrial times, artificial light was generated by burning various materials, including wood, oil, and even dried fish. While these methods of lighting certainly influenced animal behavior and ecology locally, such effects were limited. The relatively recent invention and rapid proliferation of electric lights, however, have transformed the nighttime environment over substantial portions of the Earth's surface.

Ecologists have not entirely ignored the potential disruption of ecological systems by artificial night lighting. Several authors have written reviews of the potential effects on ecosystems or taxonomic groups, published in the “gray” literature (Health Council of the Netherlands 2000; Hill 1990), conference proceedings (Outen 2002; Schmiedel 2001), and journal articles (Frank 1988; Verheijen 1985; Salmon 2003). This review attempts to integrate the literature on the topic, and draws on a conference organized by the authors in 2002 titled *Ecological Consequences of Artificial Night Lighting*. We identify the roles that artificial night lighting plays in changing eco-

logical interactions across taxa, as opposed to reviewing these effects by taxonomic group. We first discuss the scale and extent of ecological light pollution and its relationship to astronomical light pollution, as well as the measurement of light for ecological research. We then address the recorded and potential influences of artificial night lighting within the nested hierarchy of behavioral and population ecology, community ecology, and ecosystem ecology. While this hierarchy is somewhat artificial and certainly mutable, it illustrates the breadth of potential consequences of ecological light pollution. The important effects of light on the physiology of organisms (see Health Council of the Netherlands 2000) are not discussed here.

■ Astronomical and ecological light pollution: scale and extent

The term “light pollution” has been in use for a number of years, but in most circumstances refers to the degradation of human views of the night sky. We want to clarify that this is “astronomical light pollution”, where stars and other celestial bodies are washed out by light that is either directed or reflected upward. This is a broad-scale phenomenon, with hundreds of thousands of light sources cumulatively contributing to increased nighttime illumination of the sky; the light reflected back from the sky is called “sky glow” (Figure 1). We describe artificial light that alters the natural patterns of light and dark in ecosystems as “ecological light pollution”. Verheijen (1985) proposed the term “photopollution” to mean “artificial light having adverse effects on wildlife”. Because photopollution literally means “light pollution” and because light pollution is so widely understood today to describe the degradation of the view of the night sky and the human experience of the night, we believe that a more descriptive term is now necessary. Ecological light pollution includes direct glare, chronically increased illumina-

In a nutshell:

- Ecological light pollution includes chronic or periodically increased illumination, unexpected changes in illumination, and direct glare
- Animals can experience increased orientation or disorientation from additional illumination and are attracted to or repulsed by glare, which affects foraging, reproduction, communication, and other critical behaviors
- Artificial light disrupts interspecific interactions evolved in natural patterns of light and dark, with serious implications for community ecology

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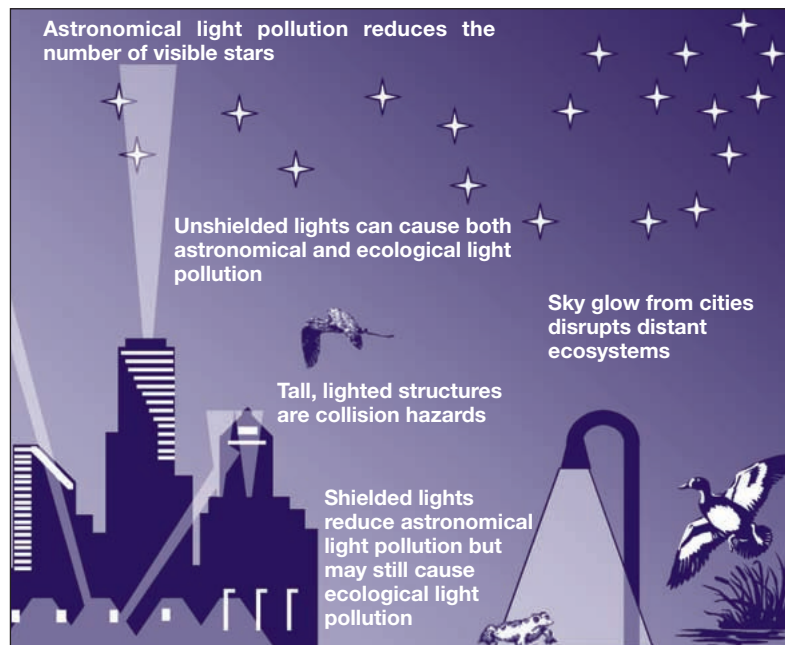


Figure 1. Diagram of ecological and astronomical light pollution.

tion, and temporary, unexpected fluctuations in lighting. Sources of ecological light pollution include sky glow, lighted buildings and towers, streetlights, fishing boats, security lights, lights on vehicles, flares on offshore oil platforms, and even lights on undersea research vessels, all of which can disrupt ecosystems to varying degrees. The phenomenon therefore involves potential effects across a range of spatial and temporal scales.

The extent of ecological light pollution is global (Elvidge *et al.* 1997; Figure 2). The first atlas of artificial night sky brightness illustrates that astronomical light pollution extends to every inhabited continent (Cinzano *et al.* 2001). Cinzano *et al.* (2001) calculate that only 40% of Americans live where it becomes sufficiently dark at night for the human eye to make a complete transition from cone to rod vision and that 18.7% of the terrestrial surface of the Earth is exposed to night sky brightness that is polluted by astronomical standards. Ecosystems may be affected by these levels of illumination and lights that do not contribute to sky glow may still have ecological consequences, ensuring that ecological light pollution afflicts an even greater proportion of the Earth. Lighted fishing fleets, offshore oil platforms, and cruise ships bring the disruption of artificial night lighting to the world's oceans.

The tropics may be especially sensitive to alterations in natural diel (ie over a 24-hour period) patterns of light and dark because of the year-round constancy of daily cycles (Gliwicz 1999). A shortened or brighter night is more likely to affect tropical species adapted to diel patterns with minimal seasonal variation than extratropical species adapted to substantial seasonal variation. Of course, temperate and polar zone species active only during a portion of the year would be excluded from this gen-

eralization. Species in temperate zones will also be susceptible to disruptions if they depend on seasonal day length cues to trigger critical behaviors.

■ Measurements and units

Measurement of ecological light pollution often involves determination of illumination at a given place. Illumination is the amount of light incident per unit area – not the only measurement relevant to ecological light pollution, but the most common. Light varies in intensity (the number of photons per unit area) and spectral content (expressed by wavelength). Ideally, ecologists should measure illumination in photons per square meter per second with associated measurements of the wavelengths of light present. More often, illumination is measured in lux (or footcandles, the non-SI unit), which expresses the brightness of light as perceived by the human

eye. The lux measurement places more emphasis on wavelengths of light that the human eye detects best and less on those that humans perceive poorly. Because other organisms perceive light differently – including wavelengths not visible to humans – future research on ecological light pollution should identify these responses and measure light accordingly. For example, Gal *et al.* (1999) calculated the response curve of mysid shrimp to light and reported illumination in lux adjusted for the spectral sensitivity of the species.

Ecologists are faced with a practical difficulty when communicating information about light conditions. Lux is the standard used by nearly all lighting designers, lighting engineers, and environmental regulators; communication with them requires reporting in this unit. Yet the use of lux ignores biologically relevant information. High-pressure sodium lights, for instance, will attract moths because of the presence of ultraviolet wavelengths, while low-pressure sodium lights of the same intensity, but not producing ultraviolet light, will not (Rydell 1992). Nevertheless, we use lux here, both because of the need to communicate with applied professionals, and because of its current and past widespread usage. As this research field develops, however, measurements of radiation and spectrum relevant to the organisms in question should be used, even though lux will probably continue to be the preferred unit for communication with professionals in other disciplines.

Ecologists also measure aspects of the light environment other than absolute illumination levels. A sudden change in illumination is disruptive for some species (Buchanan 1993), so percent change in illumination, rate, or similar measures may be relevant. Ecologists may also measure luminance (ie brightness) of light sources that are visible to organisms.

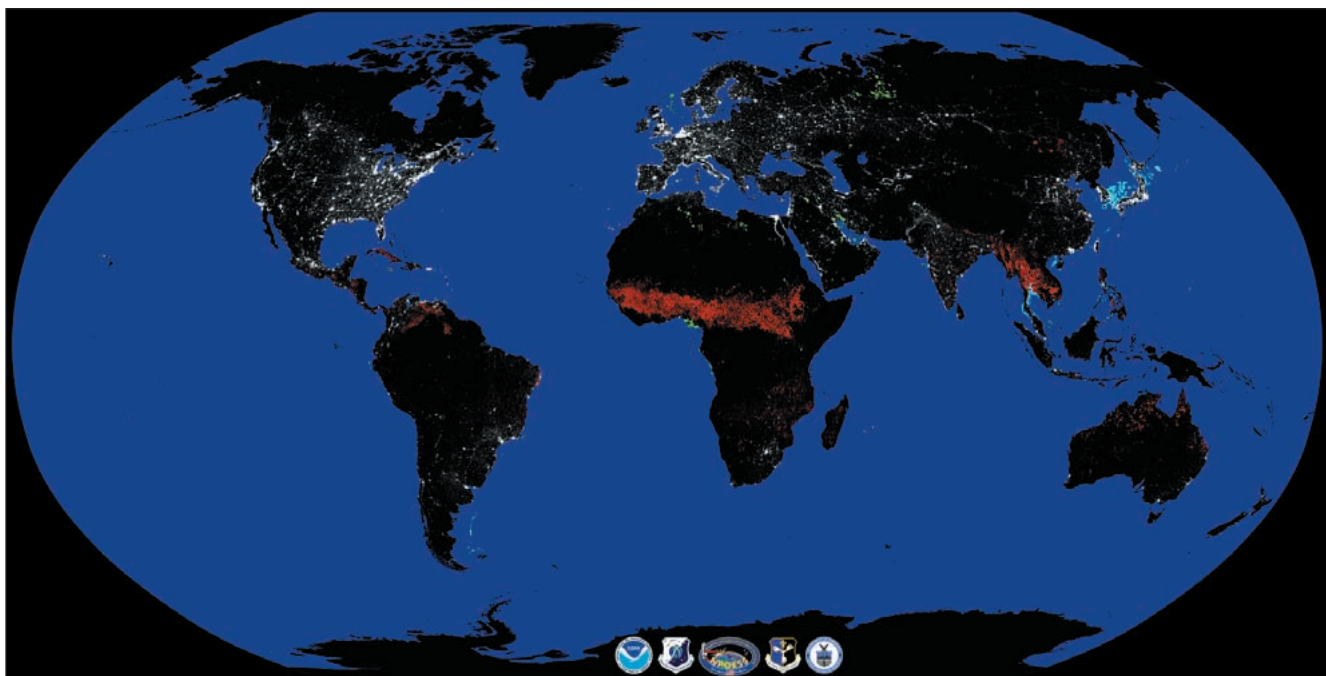


Figure 2. Distribution of artificial lights visible from space. Produced using cloud-free portions of low-light imaging data acquired by the US Air Force Defense Meteorological Satellite Program Operational Linescan System. Four types of lights are identified: (1) human settlements – cities, towns, and villages (white), (2) fires – defined as ephemeral lights on land (red), (3) gas flares (green), and (4) heavily lit fishing boats (blue). See Elvidge et al. (2001) for details. Image, data processing, and descriptive text by the National Oceanic and Atmospheric Administration's National Geophysical Data Center.

■ Behavioral and population ecology

Ecological light pollution has demonstrable effects on the behavioral and population ecology of organisms in natural settings. As a whole, these effects derive from changes in orientation, disorientation, or misorientation, and attraction or repulsion from the altered light environment, which in turn may affect foraging, reproduction, migration, and communication.

Orientation/disorientation and attraction/repulsion

Orientation and disorientation are responses to ambient illumination (ie the amount of light incident on objects in an environment). In contrast, attraction and repulsion occur in response to the light sources themselves and are therefore responses to luminance or the brightness of the source of light (Health Council of the Netherlands 2000).

Increased illumination may extend diurnal or crepuscular behaviors into the nighttime environment by improving an animal's ability to orient itself. Many usually diurnal birds (Hill 1990) and reptiles (Schwartz and Henderson 1991), for example, forage under artificial lights. This has been termed the "night light niche" for reptiles and seems beneficial for those species that can exploit it, but not for their prey (Schwartz and Henderson 1991).

In addition to foraging, orientation under artificial illumination may induce other behaviors, such as territorial singing in birds (Bergen and Abs 1997). For the northern mockingbird (*Mimus polyglottos*), males sing at night before mating, but once mated only sing at night in artificially

lighted areas (Derrickson 1988) or during the full moon. The effect of these light-induced behaviors on fitness is unknown.

Constant artificial night lighting may also disorient organisms accustomed to navigating in a dark environment. The best-known example of this is the disorientation of hatchling sea turtles emerging from nests on sandy beaches. Under normal circumstances, hatchlings move away from low, dark silhouettes (historically, those of dune vegetation), allowing them to crawl quickly to the ocean. With beachfront lighting, the silhouettes that would have cued movement are no longer perceived, resulting in disorientation (Salmon *et al.* 1995). Lighting also affects the egg-laying behavior of female sea turtles. (For reviews of effects on sea turtles, see Salmon 2003 and Witherington 1997).

Changes in light level may disrupt orientation in nocturnal animals. The range of anatomical adaptations to allow night vision is broad (Park 1940), and rapid increases in light can blind animals. For frogs, a quick increase in illumination causes a reduction in visual capability from which the recovery time may be minutes to hours (Buchanan 1993). After becoming adjusted to a light, frogs may be attracted to it as well (Jaeger and Hailman 1973; Figure 3).

Birds can be disoriented and entrapped by lights at night (Ogden 1996). Once a bird is within a lighted zone at night, it may become "trapped" and will not leave the lighted area. Large numbers of nocturnally migrating birds are therefore affected when meteorological conditions bring them close to lights, for instance, during inclement weather or late at night when they tend to fly lower.



Figure 3. Attraction of frogs to a candle set out on a small raft. Illustration by Charles Copeland of an experiment in northern Maine or Canada described by William J Long (1901). Twelve or fifteen bullfrogs (*Rana catesbeiana*) climbed on to the small raft before it flipped over.

Within the sphere of lights, birds may collide with each other or a structure, become exhausted, or be taken by predators. Birds that are waylaid by buildings in urban areas at night often die in collisions with windows as they try to escape during the day. Artificial lighting has attracted birds to smokestacks, lighthouses (Squires and Hanson 1918), broadcast towers (Ogden 1996), boats (Dick and Donaldson 1978), greenhouses, oil platforms (Wiese *et al.* 2001), and other structures at night, resulting in direct mortality, and thus interfering with migration routes.

Many groups of insects, of which moths are one well-known example (Frank 1988), are attracted to lights. Other taxa showing the same attraction include lacewings, beetles, bugs, caddisflies, crane flies, midges, hoverflies, wasps, and bush crickets (Eisenbeis and Hassel 2000; Kolligs 2000; Figure 4). Attraction depends on the spectrum of light – insect collectors use ultraviolet light because of its attractive qualities – and the characteristics of other lights in the vicinity.

Nonflying arthropods vary in their reaction to lights. Some nocturnal spiders are negatively phototactic (ie repelled by light), whereas others will exploit light if available (Nakamura and Yamashita 1997). Some insects are always positively phototactic as an adaptive behavior and others always photonegative (Summers 1997). In arthropods, these responses may also be influenced by the frequent correlations between light, humidity, and temperature.

Natural resource managers can exploit the responses of animals to lights. Lights are sometimes used to attract fish to ladders, allowing them to bypass dams and power plants (Haymes *et al.* 1984). Similarly, lights can attract larval fish to coral reefs (Munday *et al.* 1998). In the terrestrial realm, dispersing mountain lions avoid lighted areas to such a degree that Beier (1995) suggests installing lights to deter them from entering habitats dead-ending in areas where humans live.

Reproduction

Reproductive behaviors may be altered by artificial night lighting. Female *Physalaemus pustulosus* frogs, for example, are less selective about mate choice when light levels are increased, presumably preferring to mate quickly and avoid the increased predation risk of mating activity (Rand *et al.* 1997). Night lighting may also inhibit amphibian movement to and from breeding areas by stimulating phototactic behavior. Bryant Buchanan (pers comm) reports that frogs in an experimental enclosure stopped mating activity during night football games, when lights from a nearby stadium increased sky glow. Mating choruses resumed only when the enclosure was covered to shield the frogs from the light.

In birds, some evidence suggests that artificial night lighting affects the choice of nest site. De Molenaar *et al.*



Figure 4. Thousands of mayflies carpet the ground around a security light at Millecoquins Point in Naubinway on the Upper Peninsula of Michigan.

(2000) investigated the effects of roadway lighting on black-tailed godwits (*Limosa l. limosa*) in wet grassland habitats. Breeding densities of godwits were recorded over 2 years, comparing lighted and unlighted conditions near a roadway and near light poles installed in a wet grassland away from the road influence. When all other habitat factors were taken into account, the density of nests was slightly but statistically lower up to 300 m away from the lighting at roadway and control sites. The researchers also noted that birds nesting earlier in the year chose sites farther away from the lighting, while those nesting later filled in sites closer to the lights.

Communication

Visual communication within and between species may be influenced by artificial night lighting. Some species use light to communicate, and are therefore especially susceptible to disruption. Female glow-worms attract males up to 45 m away with bioluminescent flashes; the presence of artificial lighting reduces the visibility of these communications. Similarly, the complex visual communication system of fireflies could be impaired by stray light (Lloyd 1994).

Artificial night lighting could also alter communication patterns as a secondary effect. Coyotes (*Canis latrans*) group howl and group yip-howl more during the new moon, when it is darkest. Communication is necessary either to reduce trespassing from other packs, or to assemble packs to hunt larger prey during dark conditions (Bender *et al.* 1996). Sky glow could increase ambient illumination to eliminate this pattern in affected areas.

Because of the central role of vision in orientation and behavior of most animals, it is not surprising that artificial lighting alters behavior. This causes an immediate conservation concern for some species, while for other species the influence may seem to be positive. Such “positive” effects, however, may have negative consequences within the context of community ecology.

Community ecology

The behaviors exhibited by individual animals in response to ambient illumination (orientation, disorientation) and to luminance (attraction, repulsion) influence community interactions, of which competition and predation are examples.

Competition

Artificial night lighting could disrupt the interactions of groups of species that show resource partitioning across illumination gradients. For example, in natural commu-



Figure 5. Crowned hornbill (*Tockus albaterminatus*) hawking insects at a light at the Kibale Forest National Park, Uganda.

nities, some foraging times are partitioned among species that prefer different levels of lighting. The squirrel treefrog (*Hyla squarrela*) is able to orient and forage at lighting levels as low as 10^{-5} lux and under natural conditions typically will stop foraging at illuminations above 10^{-3} lux (Buchanan 1998). The western toad (*Bufo boreas*) forages only at illuminations between 10^{-1} and 10^{-5} lux, while the tailed frog (*Ascaphus truei*) forages only during the darkest part of the night at below 10^{-5} lux (Hailman 1984). While these three species are not necessarily sympatric (ie inhabiting the same area), and differ in other niche dimensions, they illustrate the division of the light gradient by foragers.

Many bat species are attracted to insects that congregate around light sources (Frank 1988). Although it may seem that this is a positive effect, the increased food concentration benefits only those species that exploit light sources and could therefore result in altered community structure. Faster-flying species of bats congregate around lights to feed on insects, but other, slower-flying species avoid lights (Blake *et al.* 1994; Rydell and Baagøe 1996).

Changes in competitive communities occur as diurnal species move into the “night light niche” (Schwartz and Henderson 1991). This concept, as originally described, applies to reptiles, but easily extends to other taxa, such as spiders (Frank pers comm) and birds (Hill 1990; Figure 5).

Predation

Although it may seem beneficial for diurnal species to be able to forage longer under artificial lights, any gains from increased activity time can be offset by increased predation risk (Gothard 2000). The balance between gains from extended foraging time and risk of increased preda-

tion is a central topic for research on small mammals, reptiles, and birds (Kotler 1984; Lima 1998). Small rodents forage less at high illumination levels (Lima 1998), a tendency also exhibited by some lagomorphs (Gilbert and Boutin 1991), marsupials (Laferrier 1997), snakes (Klauber 1939), bats (Rydell 1992), fish (Gibson 1978), aquatic invertebrates (Moore *et al.* 2000), and other taxa.

Unexpected changes in light conditions may disrupt predator–prey relationships. Gliwicz (1986, 1999) describes high predation by fish on zooplankton during nights when the full moon rose hours after sunset. Zooplankton had migrated to the surface to forage under cover of darkness, only to be illuminated by the rising moon and subjected to intense predation. This “lunar light trap” (Gliwicz 1986) illustrates a natural occurrence, but unexpected illumination from human sources could disrupt predator–prey interactions in a similar manner, often to the benefit of the predator.

Available research shows that artificial night lighting disrupts predator–prey relationships, which is consistent with the documented importance of natural light regimes in mediating such interactions. In one example, harbor seals (*Phoca vitulina*) congregated under artificial lights to eat juvenile salmonids as they migrated downstream; turning the lights off reduced predation levels (Yurk and Trites 2000). Nighttime illumination at urban crow roosts was higher than at control sites, presumably because this helps the crows avoid predation from owls (Gorenzel and Salmon 1995). Desert rodents reduced foraging activity when exposed to the light of a single camp lantern (Kotler 1984). Frank (1988) reviews predation by bats, birds, skunks, toads, and spiders on moths attracted to artificial lights. Mercury vapor lights, in particular, disrupt the interaction between bats and tympanate moths by interfering with moth detection of ultrasonic chirps used by bats in echolocation, leaving moths unable to take their normal evasive action (Svensson and Rydell 1998).

From these examples, it follows that community structure will be altered where light affects interspecific interactions. A “perpetual full moon” from artificial lights will favor light-tolerant species and exclude others. If the darkest natural conditions never occur, those species that maximize foraging during the new moon could eventually be compromised, at risk of failing to meet monthly energy budgets. The resulting community structure would be simplified, and these changes could in turn affect ecosystem characteristics.

■ Ecosystem effects

The cumulative effects of behavioral changes induced by artificial night lighting on competition and predation have the potential to disrupt key ecosystem functions. The spillover effects from ecological light pollution on aquatic invertebrates illustrates this point. Many aquatic invertebrates, such as zooplankton, move up and down within the water column during a 24-hour period, in a

behavior known as “diel vertical migration”. Diel vertical migration presumably results from a need to avoid predation during lighted conditions, so many zooplankton forage near water surfaces only during dark conditions (Gliwicz 1986). Light dimmer than that of a half moon ($<10^{-1}$ lux) is sufficient to influence the vertical distribution of some aquatic invertebrates, and indeed patterns of diel vertical migration change with the lunar cycle (Dodson 1990).

Moore *et al.* (2000) documented the effect of artificial light on the diel migration of the zooplankton *Daphnia* in the wild. Artificial illumination decreased the magnitude of diel migrations, both in the range of vertical movement and the number of individuals migrating. The researchers hypothesize that this disruption of diel vertical migration may have substantial detrimental effects on ecosystem health. With fewer zooplankton migrating to the surface to graze, algae populations may increase. Such algal blooms would then have a series of adverse effects on water quality (Moore *et al.* 2000).

The reverberating effects of community changes caused by artificial night lighting could influence other ecosystem functions. Although the outcomes are not yet predictable, and redundancy will buffer changes, indications are that light-influenced ecosystems will suffer from important changes attributable to artificial light alone and in combination with other disturbances. Even remote areas may be exposed to increased illumination from sky glow, but the most noticeable effects will occur in those areas where lights are close to natural habitats. This may be in wilderness where summer getaways are built, along the expanding front of suburbanization, near the wetlands and estuaries that are often the last open spaces in cities, or on the open ocean, where cruise ships, squid boats, and oil derricks light the night.

■ Conclusions

Our understanding of the full range of ecological consequences of artificial night lighting is still limited, and the field holds many opportunities for basic and applied research. Studies of natural populations are necessary to investigate hypotheses generated in the laboratory, evidence of lunar cycles in wild populations, and natural history observations. If current trends continue, the influence of stray light on ecosystems will expand in geographic scope and intensity. Today, 20% of the area of the coterminous US lies within 125 m of a road (Riitters and Wickham 2003). Lights follow roads, and the proportion of ecosystems uninfluenced by altered light regimes is decreasing. We believe that many ecologists have neglected to consider artificial night lighting as a relevant environmental factor, while conservationists have certainly neglected to include the nighttime environment in reserve and corridor design.

Successful investigation of ecological light pollution will require collaboration with physical scientists and

engineers to improve equipment to measure light characteristics at ecologically relevant levels under diverse field conditions. Researchers should give special consideration to the tropics, where the constancy of day–night lighting patterns has probably resulted in narrow niche breadths relative to illumination. Aquatic ecosystems deserve increased attention as well, because despite the central importance of light to freshwater and marine ecology, consideration of artificial lighting has so far been limited. Research on the effects of artificial night lighting will enhance understanding of urban ecosystems – the two National Science Foundation (NSF) urban Long Term Ecological Research sites are ideal locations for such efforts.

Careful research focusing on artificial night lighting will probably reveal it to be a powerful force structuring local communities by disrupting competition and predator–prey interactions. Researchers will face the challenge of disentangling the confounding and cumulative effects of other facets of human disturbance with which artificial night lighting will often be correlated, such as roads, urban development, noise, exotic species, animal harvest, and resource extraction. To do so, measurements of light disturbance should be included routinely as part of environmental monitoring protocols, such as the NSF's National Ecological Observatory Network (NEON). Future research is likely to reveal artificial night lighting to be an important, independent, and cumulative factor in the disruption of natural ecosystems, and a major challenge for their preservation.

Ecologists have studied diel and lunar patterns in the behavior of organisms for the greater part of a century (see Park 1940 and references therein), and the deaths of birds from lights for nearly as long (Squires and Hanson 1918). Humans have now so altered the natural patterns of light and dark that these new conditions must be afforded a more central role in research on species and ecosystems beyond the instances that leave carcasses on the ground.

■ Acknowledgements

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Attachment C

Table 4-2. Summary of Relevant State and Local Agencies, Programs and Regulations

| Agency, Program or Regulation | Plan Area Affected | Relevance |
|--|--------------------------------|--|
| AB 162: Flood Planning (Chapter 369, Statutes of 2007) | Flood Hazard | Cities and counties must address flood-related matters in the land use, conservation, and safety and housing elements of their general plans. |
| AB 2800: Climate Change—Infrastructure Planning | Action Plan Development | This act requires state agencies to take into account the impacts of climate change when developing state infrastructure. |
| AB 32: The California Global Warming Solutions Act of 2006 | Action Plan Development | This act establishes a state goal of reducing greenhouse gas emissions to 1990 levels by 2020 |
| AB 70: Flood Liability | Flood Hazard | A city or county may be required to partially compensate for property damage caused by a flood if it unreasonably approves new development in areas protected by a state flood control project |
| California Coastal Management Program | Flood and Tsunami | This program requires coastal communities to prepare coastal plans and requires that new development minimize risks to life and property in areas of high geologic, flood, and fire hazard. |
| California Department of Water Resources | Flood Hazard | This state department is the state coordinating agency for floodplain management. |
| California Division of Safety of Dams | Dam Failure Hazard | This division monitors the dam safety program at the state level and maintains a working list of dams in the state. |
| California Environmental Quality Act | Action Plan Implementation | This act establishes a protocol of analysis and public disclosure of the potential environmental impacts of development projects. Any project action identified in this plan will seek full California Environmental Quality Act compliance upon implementation. |
| California General Planning Law | Floodplain Management Planning | This law requires every county and city to adopt a comprehensive long-range plan for community development, and related laws call for integration of floodplain management plans with general plans. |
| California State Building Code | Action Plan Implementation | Local communities must adopt and enforce building codes, which include measures to improve buildings' ability to withstand hazard events. |
| City of Los Angeles Coastal Transportation Corridor Specific Plan | Action Plan Implementation | This City ordinance establishes a Specific Plan for the Coastal Transportation Corridor and identifies a set of comprehensive transportation improvements funded by usage fee revenue. |
| City of Los Angeles Ordinance Number 183144: Los Angeles River Improvement Overlay District | Action Plan Implementation | This City ordinance establishes the Los Angeles River Improvement Overlay District and amends the zoning map accordingly. |
| City of Los Angeles Ordinance Number 183145: River Improvement Overlay District | Action Plan Implementation | This City ordinance authorizes the establishment of River Improvement Overlay Districts and River Design Guidelines for designated areas adjacent to the City's waterways. |
| City of Los Angeles Ordinance Number 183954: Elysian Valley Q Condition Ordinance | Action Plan Implementation | This City Ordinance changes the zone and height district and amends the Los Angeles Municipal Code for certain parcels adjacent to the Los Angeles River. |
| Disadvantaged and Low-Income Communities Investments | Action Plan Funding | This is a potential source of funding for actions located in disadvantaged or low-income communities. |
| First Validating Act of 2019 | Action Plan Implementation | This act requires cities and counties to include climate adaptation and resiliency strategies in the safety element of their general plans. |
| Governor's Executive Order S-13-08 (Climate Impacts) | Action Plan Implementation | This order includes guidance on planning for sea level rise in designated coastal and floodplain areas for new projects. |
| Los Angeles Regional Water Quality Control Board | Action Plan Implementation | The Los Angeles Regional Water Quality Control Board protects ground and surface water quality in the Los Angeles region. |

- Pacific Coastal Highway
- Ronald Reagan Freeway
- San Diego Freeway
- Topanga Canyon Blvd
- W Pomona Freeway
- Pasadena Freeway
- S Santa Ana Freeway
- Santa Monica Freeway
- Ventura Freeway

Some of these roads are built above the flood level, and others function as levees to prevent flooding. Still, in severe flood events these roads can be blocked or damaged, preventing access to some areas.

Bridges

Bridges washed out or blocked by floods or debris can cause isolation. There are dozens of bridges that are in or cross over the 100-year floodplain in the City of Los Angeles.

Water and Sewer Infrastructure

Water distribution and sewer systems can be affected by flooding. Floodwaters can back up drainage systems, causing localized flooding. Culverts can be blocked by debris from flood events, also causing localized urban flooding. Floodwaters can get into drinking water supplies, causing contamination. Sewer systems can be backed up, causing wastewater to spill into homes, neighborhoods, rivers and streams.

7.5.4 Environment

Flooding can impact the environment in negative ways. Pollution from roads, such as oil, and hazardous materials can wash into rivers and streams. During floods, these can settle onto normally dry soils, polluting them for agricultural uses. Human development within flow channels can increase stream bank erosion if not carefully designed and mitigated, causing rivers and streams to migrate into non-natural courses.

7.6 VULNERABILITY

This section assesses flood vulnerability (likely damage) for the 10-, 50-, 100- and 500-year flood events, based on flood depth projections from the current effective FEMA FIRMs for the City of Los Angeles. The flood depths used for the 100-year and 500-year events are shown in Figure 7-11 through Figure 7-24.

7.6.1 Population

Vulnerable Populations

A geographic analysis of demographics using the Hazus model identified populations vulnerable to the flood hazard as follows:

- **Economically Disadvantaged Populations**—It is estimated that 58 percent of the households within the 100-year floodplain are economically disadvantaged, defined as having household incomes of \$50,000 or less.
- **Population over 65 Years Old**—It is estimated that 10 percent of the population in the census blocks that intersect the 100-year floodplain are over 65 years old.
- **Population under 16 Years Old**—It is estimated that 26 percent of the population within census blocks located in or near the 100-year floodplain are under 16 years of age.

Impacts on Persons and Households

Impacts on persons and households in the planning area were estimated through the Level 2 Hazus analysis. The

- The capability for flood threat recognition and warning needs to be enhanced.
- Flood warning capability should be tied to flood phases.
- There needs to be enhanced modeling to better understand the true flood risk.
- Floodplain restoration/reconnection opportunities should be identified as a means to reduce flood risk.
- Post-flood disaster response and recovery actions need to be solidified.
- Staff capacity is required to maintain the City's existing level of floodplain management.
- Floodplain management actions require interagency coordination.
- With the large percentage of pre-FIRM flood insurance policies in force, the City can expect to see significant increases in the costs of flood insurance within the City. This will create challenges in the promotion of flood insurance.
- Open spaces (infiltration) have decreased substantially, with no plans to reverse this trend. More impervious surface leads to more runoff.
- Demographic studies to better understand social equity impacts from flooding are needed.
- Hazard disclosure laws are not being consistently applied within the city as it pertains to flood hazards.

provisions of AB 102. The General Plan, the FMP2020, and this RLAA are considered to be linked as the General Plan represents the City's adopted policies and the FMP2020 and RLAA are part of the implementation programs established to carry out policies.

Comprehensive Zoning Plan

The Zoning Code regulates all land, building, structures, and uses within the City of Los Angeles. Since 2013, the City has been in the process of creating a new zoning code for the 21st century. The original zoning regulations were developed in 1946 and had not been revised comprehensively since then. An ongoing initiative called, "Plan re:code LA" is the City's latest effort to update the zoning code with an engaged community vision, policies and implementation strategies, alignment with various adopted plans, land use and zoning maps, and address the issues of unique neighborhoods with needs that differ by neighborhood. The code update team released a draft of an ordinance September 2017, held five public hearings and a dozen stakeholder group meetings. A City Planning Commission meeting was held October 2018 and is currently making its way through the legislative process.

Los Angeles Municipal Code Chapter 1, Article 2, also known as the Comprehensive Zoning Plan of the City of Los Angeles, coordinates all City zoning regulations and provisions in order to regulate the location and use of

buildings, structures and land. The goals of the Comprehensive Zoning Plan are to encourage the most appropriate use of land; to stabilize the value of property; to provide adequate open spaces; to prevent and fight fires; to prevent undue concentration of population; to lessen street congestion; to facilitate adequate provisions for transportation, water, sewerage, schools, parks and other public requirements; and to promote health, safety and the general welfare in accordance with the General Plan. It includes designation of zones that allow for floodplains and flood control facilities and presents design standards including those that deal with flood prevention and control.

Los Angeles River Revitalization Master Plan

The Los Angeles River has a long history of modifications that were made to control flooding as the City of Los Angeles grew. More recently, community leaders, elected officials, concerned citizens, environmental groups and recreational groups began to look for ways to return the natural benefits of the river to the people of Los Angeles while maintaining flood protection and safety. In 2007, the City adopted the Los Angeles River Revitalization Master Plan, establishing a blueprint for future revitalization of the Los Angeles River.

The master plan's long-term vision is to restore a continuous, functioning ecosystem along the river corridor. This would involve restoring vegetation and developing fish passages, fish ladders, and riffle pools. It also would involve expanding channel capacity and reducing flow velocity through a combination of flood storage outside the channel, underground flow diversions, and land acquisition to allow for channel widening. In the short-term, channel walls can be modified to provide landscaped terraces for wildlife habitat, water quality treatment, and increased public enjoyment. Pathways and overlooks can provide safe public access (City of Los Angeles, 2007).

Programs to Preserve or Enhance Natural Beneficial Functions

The City of Los Angeles has implemented numerous programs to preserve or enhance the natural beneficial functions that floodplains provide. This includes projects to improve local water quality, as well as development review requirements for mapped significant ecological areas. These programs are described in detail in the natural beneficial functions plan that is presented in Chapter 12 of the FMP2020.

Attachment D



CITY OF LOS ANGELES
NATIONAL FLOOD INSURANCE PROGRAM
Annual Newsletter
2020-2021

Dear Resident:

As a public outreach effort you are receiving this letter because your property is in or near a special flood hazard area (SFHA).

2020 Floodplain Management Plan (FMP)

The City of Los Angeles joined the National Flood Insurance Program (NFIP) in 1980, which made federally-backed flood insurance available to all City residents. The NFIP/Community Rating System (CRS) was implemented by the Federal Emergency Management Agency (FEMA) in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP requirements. Flood insurance premium rates are adjusted to reflect the reduced flood risk.

Since October 2005, the City has received a class 7 rating under CRS, which means the residents within FEMA-designated Special Flood Hazard Area(s) (SFHA) receive a 15% flood insurance premium discount and others in the City outside the SFHA receive a 5% discount.

On October 2020, the Los Angeles City Council adopted a Comprehensive Floodplain Management Plan pursuant to the CRS activity 510 planning requirements that is the cornerstone for guiding the City's floodplain management programs. To maintain compliance with CRS activity 510 program requirements, the plan undergoes an update to assure that it has the vision necessary to direct the City's floodplain management program for the next 5-years. This plan update has been an iterative process conducted with full citizen and stakeholder involvement. The 2020 update has been completed, approved and is now available for viewing at: <https://eng.lacity.org/fmp-updates>

Average Yearly Rainfall

According to the latest statistics from National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center, precipitation averaged across the Continental United States in 2019 was 34.82 inches, 4.88 inches above the 20th century average. This made 2019 the 2nd wettest year on record for the nation. Since 1985, precipitation across the Continental United States has increased at an average rate of 1.81 inch per century.

Per County of Los Angeles precipitation records for the 2019-20 water year (from October 1, 2019 to September 30, 2020), the Downtown Los Angeles (USC) gauge ended the water year with 13.01 inches of rain. (This is about 8.83% below the average rainfall of 14.27 inches.)

Recent Activities

Annual NFIP Newsletters for FY20-21

With October 1st marking the beginning of rainy season, Bureau of Engineering (BOE) staff are working on preparing the annual mailers to be sent out to the LA residents informing them about the latest and greatest of the NFIP and how to get prepared for the upcoming rain storms especially for those who live in the flood-prone area of LA. Prior to mid-December, the Bureau of Engineering mailed out three (3) different mailers including NFIP postcard, Repetitive Loss Property (RLP) Newsletter, and Annual NFIP Newsletter in preparation for the upcoming winter storms. Please keep a look out for these mail items in your mail box.

NFIP Reinsurance Program for 2020

FEMA will be procuring reinsurance for the NFIP to be effective on or about January 1, 2021. To participate in the reinsurance procurement, vendors must submit a request to participate by November 24, 2020 (the date on or about FEMA anticipates Firm Order Terms will be issued), and final tenders by December 4, 2020 (the date on or about FEMA anticipates final authorizations will be due from the reinsurance markets). For further information contact: fema-nfip-reinsurance@fema.dhs.gov.

Development Within Floodway

Per the City Ordinance No.172081, in floodways, it is the policy of the City: 1. That drainage channels adequate to discharge the flood waters or runoff of a base flood be preserved from encroachment in areas which are still substantially undeveloped. 2. That no new development be allowed in floodways. 3. That where existing development now occupies floodways measures be taken to either: (a) Provide flood works sufficient to discharge a base flood or (b) Encourage relocation of such development outside of areas which must be preserved as floodways as required for the overall safety, health and well-being of the community. 4. That floodways be maintained in good repair and free of debris by the agency or organization (public or private) responsible for such activity. For more information please contact at eng.nfip@lacity.org or call 213-485-4820.

Final Determination On Open Pacific Coast Study

On October 21, 2020, the City of Los Angeles was notified by FEMA regarding the Summary of Map Actions for the Open Pacific Coast Study. The revised flood zones along the ocean becomes effective for flood insurance purposes on April 21, 2021. Notification letter will be sent out to negatively impacted residents soon. Residents are highly encouraged to obtain flood insurance prior to the effective date.

If you have a hazard mapping concern or any question about the continuing progress of the FEMA flood studies please let us know at eng.nfip@lacity.org or call 213-485-4820.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

The NFIP is a federal program enabling property owners in participating communities to purchase protection against property losses due to flooding. This insurance is designed to provide an alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents.

Flood insurance covers direct losses caused by surface flooding, including a river flowing over its banks, a lake or ocean storm (including tsunami and seiches), and local flooding.

There is a 30 day waiting period before the policy becomes effective.

There are two types of coverage: Structural and Contents. Structural coverage is for the walls, floors, insulation, furnace and other items permanently attached to the structure. Contents coverage, purchased separately, requires the contents to be in an insurable structure.

Insurance Premium Discount

Due to the City of Los Angeles' active participation in the NFIP and CRS, new and renewed flood insurance policies in SFHA continue to receive a 15% premium discount. Through the NFIP, flood insurance is available to all City residents who wish to purchase flood insurance regardless of their flood risk or flood history. Properties located outside the SFHA receive a 5% premium discount.

Insurance agents should use the latest Flood Insurance Manual in order to apply the discount automatically. This manual is available on the Web at:

<https://www.fema.gov/flood-insurance/work-with-nfip/manuals#flood-insurance>

When disaster strikes, every minute counts

Every September, FEMA promotes the National Preparedness Month. FEMA believes that preparation saves lives and prevents loss. Taking the time to prepare yourself can make a life changing difference. What do you need? Put together an emergency kit with life essentials such as water, food, and medication for at least three days. Don't forget your pet's needs and any important documents you may need in the event of a disaster. Where are you going? Designate multiple emergency meet-up destinations for you and your family in the wake of a disaster. Can we talk? Phone service may be unavailable during a disaster. Create a family emergency communication plan using this link: <https://go.usa.gov/xPcCF>. Who do you know? It is good to get to know your neighbors so you can help one another during a disaster. Keep in mind that the elderly and disabled in your neighborhood may need assistance during evacuation. For more information on how to be prepared during a disaster event, please go to: <https://www.fema.gov/news-release/20200220/when-disaster-strikes-every-minute-counts>

NFIP FEMA Phone Number

General Information.....(800) 427-4661
Need a Flood Insurance Agent?.....(800) 720-1093

Why Flood Insurance is better than Disaster Assistance?

Flood Insurance

- You are in control. Flood insurance claims are paid even if a disaster is not declared by the President.
- More than 25 percent of all claims paid by the NFIP are outside of an SFHA.
- There is no payback requirement.
- Flood insurance policies are continuous, and are not non-renewed or cancelled for repeat losses.
- Flood insurance reimburses you for all covered losses up to \$250,000 for homeowners and \$500,000 for businesses.
- The average flood insurance policy costs about \$650 per year.
- For a \$100,000 flood insurance coverage, your premium payment is about \$400 a year (\$33 a month).

Disaster Assistance

- Most forms of federal disaster assistance require a presidential declaration.
- Federal disaster assistance declarations are awarded in less than 50% of flooding incidents.
- The most typical form of disaster assistance is a loan that must be repaid with interest.
- The duration of a Small Business Administration (SBA) disaster home loan is approximately 30 years.
- The average Individuals and Households Program award related to flooding was less than \$4,000.
- Repayment on a \$50,000 SBA disaster home loan is \$240 a month or \$2,880 annually at 4% interest. This comes out to more than \$8 dollars per day.

Over 5.1 million people currently hold flood insurance policies in more than 22,100 communities across the U.S. providing \$1.25 trillion of content and building coverage. From 1978, the NFIP has paid over \$52.5 billion for flood insurance claims and related costs. Since the City of Los Angeles participates in the CRS, you can qualify for an insurance premium discount of up to 15%. For more policy and claim statistics, visit the National Flood Insurance Program at:

<https://www.fema.gov/media-library/assets/documents/106144>

Continue on page 3

Mandatory Purchase Requirement

The mandatory flood insurance purchase requirement applies to all forms of federal or federally related financial assistance for buildings located in a SFHA. A home located within a SFHA has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage.

This requirement affects loans and grants for the purchase, construction, repair, or improvement of any publicly or privately owned building in the SFHA, including machinery, equipment, fixtures, and furnishings contained in such buildings.

The requirement also applies to secured mortgage loans from financial institutions, such as commercial lenders, savings and loan associations, saving banks, and credit unions that are regulated, supervised or insured by Federal agencies such as the Federal Deposit Insurance Corporation and the Office of Thrift Supervision. It also applies to all mortgage loans purchased by Fannie Mae or Freddie Mac in the secondary mortgage market.

How It Works

Before a person can receive a loan or other financial assistance from one of the affected agencies or lenders, the property needs to be verified to see if it is in a SFHA. SFHAs are land areas that are at high risk for flooding. These areas are indicated on the Digital Flood Insurance Rate Map (DFIRM). It is shown as one or more zones that begin with the letter "A" or "V".

Many lenders and insurance agents also have copies of the DFIRM for the City of Los Angeles. It is the lender's responsibility to check the DFIRM to determine if the building is in an SFHA. If the building is in a SFHA, your lender is required by law to require you to purchase a flood insurance policy on the building. Federal regulations require purchase of structural insurance coverage equal to the amount of the loan or the maximum amount available from the NFIP, whichever is less. The maximum amount available for a single-family house is \$250,000 for structures and \$100,000 for its contents.

The mandatory purchase requirement does not affect loans or financial assistance for items that are not covered by a flood insurance policy, such as vehicles, business expenses, landscaping, and vacant lots. It does not affect loans for buildings that are not in the SFHA, even though a portion of the lot may be flood prone. **While not mandated by law, a lender may require a flood insurance policy as a condition of a loan for a property in any zone on a DFIRM.**

The most important thing you can do to protect yourself from financial loss is to have flood insurance. Floods can also pose life-threatening risks to you and your family, so be smart. Be prepared for anything nature sends your way.

Federal disaster assistance is usually a loan that must be paid back with interest.

As of 2020, there are \$1.3 trillion insurance dollars in force with over \$40 billion in estimated maximum annual loss. There are 22,483 participating communities with an average \$728 in annual premiums. For the Preferred Risk Policy, which provides affordable flood insurance protection, premium can start as low as \$137 a year.

You are eligible to purchase flood insurance because the City of Los Angeles participates in the NFIP. It takes 30 days after purchase for a policy to take effect, so it's important to buy insurance before floodwaters start to rise. All claims and expenses of the NFIP program are funded by insurance premiums, not tax dollars.

Financial Assistance

Financial assistance includes loans and grants from agencies such as the Department of Veterans Affairs, Farmers Home Administration, Federal Housing Administration, Small Business Administration, and FEMA.

FEMA Grant Assistance

Grant assistance is provided to those who have suffered damage and loss from disasters occurring in that state. When there is a presidential declaration, FEMA begins accepting assistance applications for a period of time that varies depending on the scope and magnitude of the disaster, as well as affected areas and amendments to the governor's declaration request. Those applicants may be eligible for FEMA grant money. This disaster assistance does not have to be repaid and is to be used for vital expenses that cannot be managed via other means.

Increased Cost of Compliance (ICC) Coverage

If your property is damaged by flood, you may be required by law to bring your home up to community and/or state floodplain management standards. If you have NFIP insurance, and your home has been declared substantially damaged by your community, ICC coverage will provide coverage up to \$30,000 of the cost to elevate, floodproof, demolish, or relocate your property. ICC coverage is in addition to the coverage you receive to repair flood damage; however, the total payout on a policy may not exceed \$250,000 for residential buildings and \$500,000 for non-residential buildings.

ICC coverage does not apply to substantial improvements unless a structure is substantially damaged due to flooding. More information on ICC and flood insurance can be found at following websites:

<https://www.fema.gov/increased-cost-compliance-coverage>

<https://www.fema.gov/media-library/assets/documents/1130>

https://www.fema.gov/sites/default/files/2020-09/fema_watermark_report_06-2020.pdf

FLOOD ZONE

Flood Zone Map

The flood zone map of the City of Los Angeles is included as an insert of this newsletter (see page 6). If you want to verify whether or not your property is located within a flood zone, you can visit NavigateLA at: <https://navigate.lacity.org> or email us at Eng.nfip@lacity.org or call (213) 485-4820.

The Bureau of Engineering keeps records of the DFIRM for the City of Los Angeles. If you have recently purchased or refinanced your home, your lender may require you to obtain a flood insurance policy. Whether you own or rent the property you live in, you need to know the flood risks associated with the flood designation in order to take precautions that protect your interests. The City of Los Angeles prepares annual mailing to provide you with information that may help you understand and reduce the flood risk surrounding your home. If you have questions regarding this publication, you can email the City of Los Angeles at Eng.nfip@lacity.org or call (213) 485-4820.

What Can Homeowners Do if They Believe Their Homes are Erroneously Included in the Flood Zone?

If a homeowner can show that the home is located above the Base Flood Elevation (BFE) he/she can apply for a map amendment by completing an application for a Letter of Map Amendment (LOMA) and submitting this request to FEMA. A LOMA application (known as MT-EZ) can be obtained online at: <https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms/mt-ez>

FEMA's review is free to individual property owners who apply for single lot LOMA review. However, a Registered Professional Engineer or Licensed Land Surveyor will need to be hired by the homeowner to certify the elevation information in the application. More information is available by accessing FEMA's web site at: <https://www.fema.gov/letter-map-amendment-letter-map-revision-based-fill-process>

If you would like assistance in completing a LOMA application from a Map Specialist, you may call the FEMA Map Service Center toll-free at (877)-FEMA-MAP or (877)-336-2627. Please note that the City does not approve or deny any map amendment requests since the FIRMs are published by a federal agency.

Building or Remodeling in the Flood Zone

All developments in the floodplain, not just construction of buildings, need local permits.

The minimum Lowest Finished Floor Elevation (LFFE) of all new buildings and existing building undergoing substantial improvement (including remodeling) located in SFHA must be one foot higher than the expected Base Flood Elevation (BFE) per City Ordinance No. 172081.

Certain flood hazard areas are considered floodways or passages to the 100-year flood, therefore, no new development will be allowed. Other areas that experience high velocity flow and heavy debris loads may require special design considerations.

No basements are allowed for newly constructed or substantially improved residential structures located in Special Flood Hazard Areas.

Mandeville Canyon is considered a Flood Risk Area and developers are likely to be required to obtain a watercourse permit per Special Order SO003-1005. A copy of the Special Order can be obtained by emailing a request to Eng.nfip@lacity.org.

If your property is in the flood zone, please contact the City's NFIP information line at (213) 485-4820 or email us at Eng.nfip@lacity.org before designing your project.

What are Substantial Improvements?

Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the depreciated market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

- Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or
- Any alterations of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Floodplain management requirements apply to new construction and substantial improvements.

What is a Floodplain and Special Flood Hazard Areas (SFHA)?

Floodplain is defined as any land area susceptible to being inundated by flood waters from any source.

SFHAs are areas subject to inundation by a 100-year flood, a flood that has a 1-percent or greater chance of being equaled or exceeded during any given year. They are shown on the DFIRM as zones labeled with the letters A, AO, AH, A1-A30, AE, A99, AR, AR/AE, AR/AO, AR/A1-A30, AR/A, V, VE, and V1-V30. In an SFHA, there is at least a 1 in 4 chance of flooding during a 30-year mortgage. All home and business owners in these areas with mortgages from Federally-regulated or insured lenders are required to buy flood insurance.

For a more thorough explanation of a Floodplain and SFHA please check out:

<https://www.fema.gov/flood-zones>

PERSONAL SAFETY DURING A FLOOD

The most visible features of the City of Los Angeles are the 270 miles of open flood control channels, which include the Los Angeles River, Dominguez Channel, and Ballona Creek. They serve to collect rainwater from most of the City's storm drains and smaller open channels, and move the water out to either the Santa Monica Bay or the San Pedro Bay. When it rains, the open channels fill up with fast flowing water that can kill anyone who gets caught up or swept away in it. It is illegal to enter the flood control channels at anytime.

What if I see someone fall into the channel?

Immediately call 911. Do not go into the channel to try to save them. Don't try to save them using a rope as the force of the water will pull you in. Find some sort of flotation device, styrofoam ice chests, foam cushions, any unattached object they can use to hang on to.

What if I fall in?

Remain calm, float on your back with your head up from the water. Use your feet and legs to steer yourself clear of obstructions. If a large obstacle is blocking the channel, try to flip over your stomach and approach the object head on, and crawl over the top of it. People die in swift water when they get pinned or trapped against debris. Never finding yourself in this situation is the best way of surviving swift waters.

- Do not walk through flowing water.
- Do not drive through a flooded area.
- Stay away from power lines and electrical wires.
- If your property is flooded, have your electricity turned off by the Department of Water and Power.
- Look out for animals, especially snakes.

Emergency Alert System

On January 7, 2010, Los Angeles County officials launched an Emergency Alert System, similar to reverse 911, that will notify residents and businesses by phone, text or e-mail about dangerous conditions in their area. Residents and businesses will be contacted if there are emergencies like wildfires or floods near their home or offices, and tell them whether evacuation is necessary.

The Sheriff Department's Emergency Communications Center will be responsible for sending out the alerts. Members of the public who would rather receive the emergency notification via their cell phone or e-mail account will have to register that information through the <https://www.lacounty.gov/emergency/alert-la/> website.

You will also have the option of registering your fax numbers and voice-over Internet Protocol (IP) lines. But only one phone number or e-mail address may be entered per street address. If the number is busy or does not answer, the system will be re-dialed twice. If it reaches an answering machine, the system leaves a message. The system will also have the ability to detect and communicate with telecommunication devices for the deaf.

Tsunami - What to Do

Tsunamis (pronounced soo-ná-mees), also known as seismic sea waves (mistakenly called "tidal waves"), are a series of enormous waves created by an underwater disturbance such as an earthquake, landslide, volcanic eruption, or meteorite. A tsunami can move hundreds of miles per hour in the open ocean and smash into land with waves as high as 100 feet or more. From the area where the tsunami originates, waves travel outward in all directions. Once the wave approaches the shore, it builds in height. The topography of the coastline and the ocean floor will influence the size of the wave. There may be more than one wave and the succeeding one may be larger than the one before. That is why a small tsunami at one beach can be a giant wave a few miles away. All tsunamis are potentially dangerous, even though they may not damage every coastline they strike. A tsunami can strike anywhere along most of the U.S. coastline. The most destructive tsunamis have occurred along the coasts of California, Oregon, Washington, Alaska, and Hawaii. Earthquake-induced movement of the ocean floor most often generates tsunamis. If a major earthquake or landslide occurs close to shore, the first wave in a series could reach the beach in a few minutes, even before a warning is issued. Areas are at greater risk if they are less than 25 feet above sea level and within a mile of the shoreline. Drowning is the most common cause of death associated with a tsunami. Tsunami waves and the receding water are very destructive to structures in the run-up zone. Other hazards include flooding, contamination of drinking water, and fires from gas lines or ruptured tanks.

What to Do Before and During a Tsunami

The following are guidelines for what you should do if a tsunami is likely in your area:

1. Turn on your radio to learn if there is a tsunami warning.
2. If an earthquake occurs and you are in a coastal area move inland to higher ground immediately and stay there.
3. Stay away from the beach. Never go down to the beach to watch a tsunami come in. If you can see the wave you are too close to escape it.

CAUTION - If there is noticeable recession in water away from the shoreline this is nature's tsunami warning and it should be heeded. You should move away immediately.

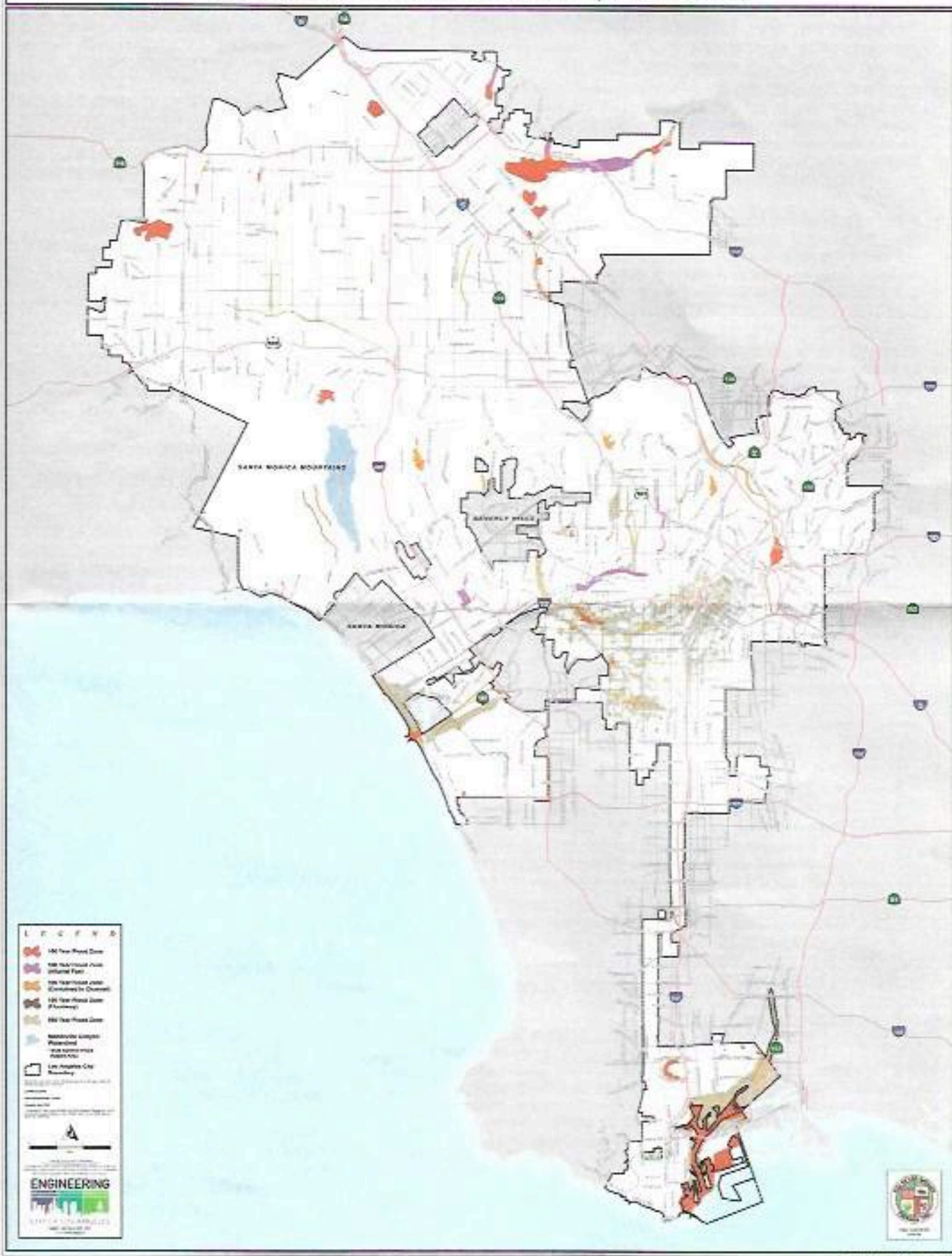
What to Do After a Tsunami

The following are guidelines for the period following a tsunami:

1. Stay away from flooded and damaged areas until officials say it is safe to return.
2. Stay away from debris in the water; it may pose a safety hazard to boats and people. Save yourself - not your possessions

See <https://www.ready.gov/tsunamis> for more information.

Los Angeles Flood Hazard Map (LAFHM)



FLOOD ZONE CLEARANCE REQUIREMENTS

Appointment is required. Please call (213) 485-4820 or email ENG.NFIP@lacity.org to make your appointment. Make sure to have the permit application PCIS number ready before you make your appointment.

| | | |
|----------------------|--|---|
| SCOPE OF PROJECT | <p align="center">SUBSTANTIAL IMPROVEMENT</p> <ol style="list-style-type: none"> 1. Submit the Building Permit application, Clearance Summary Worksheet, site, floor, foundation, survey and cross-section/ elevation plans electronically in PDF format in person or through the NFIP email at: eng.nfip@lacity.org 2. For Flood Zone AO, provide a topographic survey that shows the natural grade (corner elevations) of the existing & proposed footprint of the structure on the permit. The survey must be stamped, dated and signed by licensed Surveyor or a Civil Engineer who licensed prior to No. 33966. The survey needs to reference (NAVD) 1988 Datum and City's Benchmark I.D. number. 3. Floor and elevation plans shall indicate the Base Flood Elevation (BFE) and minimum Lowest Finished Floor Elevation (LFFE) If the BFE is unknown, it will be determined from the Highest Adjacent Grade (HAG), to the improvement from the provided survey, plus the flood depth. The minimum LFFE will be the BFE plus one foot for freeboard (factor of safety) per City Ordinance No. 172081. 4. Floodproofing is required below the min. LFFE per FEMA TB-2. Concrete and masonry are considered to be floodproofing materials. An Elevation Certificate will be required at the end of construction for all substantial improvement projects prior to the issuance of the Certificate of Occupancy. 5. Plans must also show flood venting for all building enclosures, i.e. crawlspace, foundations, garage, etc. Flood Vents required is based on the ratio of one square inch of venting (net area) per one square foot of first floor area of the addition. The bottom of the vents must be within 12 inches from the adjacent grade. Vents are to be on at least 2 sides of the building enclosures. 6. For building additions, if substantial improvements are also made to the existing structure such as removing a wall, the existing floor must be raised to the new minimum LFFE and flood vents and floodproofing shall also be required. 7. Additional information may be required for Flood Zone A such as documentation or calculations confirming that the new or improved structure will withstand potential flooding including (but not limited to): <ol style="list-style-type: none"> a. Hydraulic and hydrologic calculations b. Federal Emergency Management Agency (FEMA) established calculations for hydrostatic, hydrodynamic and buoyancy forces. c. Written correspondence from any government agency confirming approval of improvement within an agency easement. d. Structural plans and calculations wet-stamped and signed with original signature of a licensed civil or structural engineer. | <p align="center">NON-SUBSTANTIAL IMPROVEMENT (for Residential and Non-Residential Buildings)</p> <p>If you contend that your improvements are less than 50% of the value of the existing structure, you will need to provide the following documents for verification.</p> <ol style="list-style-type: none"> 1. Recent appraisal of existing structure by a certified appraiser dating from no more than six months prior. The appraisal needs to indicate the Depreciated Cost of Improvement value. Current year County Assessor's tax records may be used in lieu of an appraisal report. 2. Cost estimate from the contractor/engineer/architect with breakdowns for labor, material, profit and overhead. (Material costs must be further broken down by unit cost and quantity of each type of material). A sample construction estimate will be provided. 3. Affidavits signed and notarized by the owner and contractor/engineer/architect confirming the scope of work in the construction estimate. |
| | <p align="center">LETTER OF MAP AMENDMENT (LOMA)</p> <p>If you believe that your property does not sit within a floodplain, you may file a LOMA with FEMA to remove your property from the SFHA. Issuance of a LOMA may eliminate flood clearance requirements for building permit applicants and also the flood insurance purchase requirement for a federally backed financing. There is no fee for the application. You may file for a LOMA directly with FEMA through the Map Service Center at https://msc.fema.gov/portal/home or call 1-877-FEMA Map (1-877-336- 2627) for assistance.</p> | <p align="center">NON-RESIDENTIAL SUBSTANTIAL IMPROVEMENT (WITH/WITHOUT SUBGRADE STRUCTURES)</p> <p>In addition to the documents listed under the Substantial Improvement column to the left, a flood proofing certificate, emergency evacuation plan and a covenant agreement (samples can be provided) shall be required and attached to the title of the property until your property is no longer in a Special Flood Hazard Area (SFHA). Dry floodproofing is also required below the BFE + 1 Elevation per FEMA P-936 Bulletin.</p> |
| Letter of Map Change | <p align="center">LETTER OF MAP REVISION (LOMR)</p> <p>If you would like to revise or modify the effective Flood Insurance Rate Map (FIRM) and wish to request a re-drawing of the flood boundary, you must file a LOMR with FEMA or a Letter of Map Revision based on Fill (LOMR-F). The LOMR application shall include, but is not limited to, calculations specified on the MT-1 and MT-2 forms. The City will need to review the application and sign the acknowledgment form. There are fees associated with this application. Please contact the FEMA Map Service Center at https://msc.fema.gov/portal/home or call 1-877-FEMA Map (1- 877-336-2627) for assistance.</p> | <p align="center">LETTER OF MAP REVISION (LOMR)</p> <p>If you would like to revise or modify the effective Flood Insurance Rate Map (FIRM) and wish to request a re-drawing of the flood boundary, you must file a LOMR with FEMA or a Letter of Map Revision based on Fill (LOMR-F). The LOMR application shall include, but is not limited to, calculations specified on the MT-1 and MT-2 forms. The City will need to review the application and sign the acknowledgment form. There are fees associated with this application. Please contact the FEMA Map Service Center at https://msc.fema.gov/portal/home or call 1-877-FEMA Map (1- 877-336-2627) for assistance.</p> |
| | <p align="center">An initial Base Fee of \$300.30 will be charged at the time of plan submission for review. Payments can be made on-line. Flood clearance review fees will be charged prior to the sign-off.</p> | |

DRAINAGE SYSTEM MAINTENANCE

The original storm drain system was developed in the 1930 by the Army Corps of Engineers. As the City began to grow rapidly in the 1920s and 1930s, rainwater that was once absorbed by miles of undeveloped land began to run off the newly paved and developed areas, increasing amount of water flowing into Los Angeles rivers and local creeks. These waterways could not contain the increased amount of water and the region experienced massive flooding. Because of this, the Army Corp of Engineers lined the Los Angeles River and Ballona Creek with concrete and started the development of an underground urban drainage system. As Los Angeles continued to grow, a complex drainage system developed.

Today, the City's storm drain system total 35,000 catch basins, over 1,500 miles of underground pipes, and 100 miles of open channels. Runoff from approximately 1,060 square miles of developed land reach Santa Monica and San Pedro Bays through approximately 60 storm drain outfalls. Approximately 100 million gallons of water flow through Los Angeles' storm drain system on an average dry day. When it rains, the amount of water flowing through the channels can increase to 10 billion gallons reaching speeds of 35 mph and depths of 25 feet. Runoff from streets, parking lots, yards, etc. enters the storm drain, receives no treatment and flows directly to the ocean. Paint thinner and paint products, motor oil, pesticides, styrofoam cups, paper, human and animal wastes, anti-freeze, golf balls, dirty diapers and dead animals are found everyday in the storm drain system. Every year, roughly 40 tons of trash and debris are deposited onto our local beaches from stormwater runoff. It's important to our environment and safety that we keep our waterways clean.

A stream is a watercourse that is a naturally occurring swale or depression, or engineered channel which carries fresh or estuarine water either seasonally or year round. It is the desire of the City of Los Angeles to protect streams and the native riparian area vegetation along stream systems and riparian areas. Los Angeles Municipal Code Sections 64.07, 64.08, and 64.09 prohibit anything that obstructs or interferes with the flow of water through a water course or channel in any manner without proper permits.

If you want to know more about our watershed protection program including clean water, please log on to:

<https://www.lastormwater.org>

Typical Flood Problems

Hillside Drainage Problem

This is the cause of most insurance claims in the City of Los Angeles. This occurs on properties located at the bottoms of steep hills. Floods happen when the drainage system is deficient or inadequately designed. Runoff is not diverted to the street and enters the home or garage. In some situations, neighbors change the normal drainage patterns, creating flood risks to other properties.

Mudslides from slope failures are also common problems. If erosion on your property is a problem or if others have changed the normal drainage patterns, you can call (213) 485-4820 to request an investigation, or information on how to protect your home. Sandbags are provided free during the rainy season (please refer to the City Services Phone List provided).

Street Drainage Problem

Flooding may occur when street runoff enters private property. If the property is located on a street sump area (lowest point of the nearby streets), or if the building pads on these properties are lower than the street level, and/or the driveway is sloped toward the house and garage, the street flow can pond. Drainage problems can be caused by undersized or broken City storm drains, or clogged City catch basins. If this problem applies to you, you can call the Bureau of Engineering to request a drainage investigation, and the Bureau of Sanitation at (800) 974-9794 to request that the catch basins be cleaned or obstructions removed from City drains.

On-Site Drainage Problem

When private drain inlets or v-ditches are inadequate or become plugged with yard debris, water ponds within the property and cannot drain to the street. Underground garages with insufficient drainage are also commonly flooded.

Other Hazards

These properties have site-specific problems that need special and individual attention. For example:

- Buildings damaged by coastal flooding exacerbated by a storm drain failure;
- Catastrophic rains far exceeding drain capacity;
- Buildings built too low into the bed of a natural watercourse;
- Groundwater seepage enters the lower level of the house, flooding the basement after heavy storms.

Flood Prevention Tips

- Keep drainage areas (ditches, swales, small channels) free of debris.
- Consult an engineer to design a permanent water/flood debris control device, if needed.
- Ensure that drainage pipes within your property are cleared and work properly.
- Landscape slope areas with plants suitable for fire retardant and erosion control.
- Report clogged catch basins to request cleaning and floodwaters overtopping the curb for engineering investigations.

CITY SERVICES AND PHONE LIST

For Information & Services

Please call **311**

Free Flood Information

The City of Los Angeles provides free flood zone information. Copies of the Federal Emergency Management Agency Flood Insurance Rate Maps are available for review in all Bureau of Engineering district offices. For flood zone information and availability of elevation certificates, contact us by email at Eng.nfip@lacity.org, or call (213) 485-4820 (*call back time is within 3 business days*). This information is also available to you directly through the Internet at:

<https://navigatela.lacity.org/navigatela>

Investigation of Drainage Deficiencies

Request a drainage investigation when the water in the streets overtops the curb by calling your local Bureau of Engineering (BOE) District office:

Harbor District.....(310) 732-4677

West L.A.....(310) 575-8384

Valley District.....(818) 374-5090

Central District.....(213) 482-7030

If requested, the Bureau of Engineering staff will visit your property to review your flood problem and recommend measures to stop flooding or prevent flood damage. Call the City's Bureau of Engineering at (213) 485-4820. These services are free.

Report Clogged Catch Basins

The City of Los Angeles Bureau of Sanitation routinely cleans out the city's 35,000 catch basins at least once a year, some with more frequency. However, if your neighborhood catch basin becomes clogged with debris, please call the City Hot Line (800) 974-9794 or (800) 773-2489 between 7:30 a.m. and 5 p.m. Monday through Friday, or (213) 495-7575 after 4 p.m. and on weekends. And remember, storm drains are for rainwater only!



Sand Bags

Free sand and sandbags are offered through the Fire Stations and the Bureau of Street Services yards during the storm season. A complete list of maintenance yards and local fire stations offering sand bags is available on line at the following web site (or call 311 to request a copy of this list). <https://www.lafd.org/news/lafd-provides-sandbags-homeowners>



Before you build in the floodplain

All new development and construction in the floodplain is regulated and requires a special review before a building permit is issued.

Contact the NFIP Information Line at (213) 485-4820, or by email at: Eng.nfip@lacity.org during the planning stages to inquire about the regulations applicable to your project. *Suspected illegal floodplain development can be reported at the same number.*

Hillside Problems

Report problems with hillsides as well as temporary erosion caused by construction projects, and alteration or modifications to natural drainage that affect your property to the Building and Safety Call Center at: (888) 524-2845 or 3-1-1. You can download the brochure "*Be Prepared: Homeowner's Guide for Flood, Debris, and Erosion Control*"

published by the City of Los Angeles, Department of Building and Safety at: <https://ladbs.org/docs/default-source/publications/misc-publications/homeowners-guide-for-flood-debris-flow-and-erosion-control.pdf> or call to request a copy at: (888) 524-2845.



Illegal Dumping

Used motor oil, discarded food, trash and other debris are just some of the items routinely dumped into storm drains throughout the city. Curbside catch basins are the entry points of the storm drain system, which eventually discharges out into the ocean. Additionally, catch basins filled with debris can create unhealthy conditions in residential neighborhoods by becoming a breeding ground for rats, roaches and disease. An ordinance passed in 1999 (LAMC Sec 64.70) makes it illegal to dump or discharge trash, debris, chemicals, contaminated water, or any other liquid or solid material into the storm drain system. Violators are subject to stiff fines and criminal prosecution. Residents are encouraged to report illegal dumping by visiting <https://www.lacity.org/myla311> to create a service request or simply call 3-1-1. Alternatively, you can call (800) 974-9794 or (800) 996-2489 for illegal dumping into storm drain. More information are available at: <https://www.lacitysan.org/san/faces/home/service/service-request>

Floodplain Management

Additional information regarding flood protection, floodplain management and the NFIP can be found through the FEMA web site at: <https://www.fema.gov/floodplain-management>



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OWNERS / RESIDENTS
SHERMAN CANAL
VENICE CA 90291-4639

As a covered entity under Title II of the American with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

Recent Activities (Continued from page 1)

CRS Cycle Visit

The City of Los Angeles is participating in the 5 year cycle visit recertification as a requirement of the CRS program. This year, BOE Stormwater Group received a cycle visit notice on January 9th, 2020 and the cycle visit was conducted on September 30th, 2020. Recertification helps determine the CRS rating level which currently provides a 15% discount in the flood insurance premium for residents who live in a SFHA. BOE staff worked diligently with LA Building and Safety, EMD, Council Offices, and Mayor's Office in preparing the recertification package that consisted of CRS questionnaires, permit list for all substantial development within Special Flood Hazard Area(s) of the City, over 457 Elevation Certificate (EC) documents, annual NFIP related newsletters and mailers, sign-in sheets for community workshops hosted by staff for public outreach/education efforts, and draft of Floodplain Management Plan (FMP). The packet has been completed and submitted to FEMA for recertification.

2020 Floodplain Management Plan Update

The Flood Management Plan was adopted by the City Council on October 27, 2020. One of our goals with the FMP 2020 update is to incorporate as much public input as possible. We have developed a survey for the general public in order for us to gauge the major issues that concern our community with regards to flooding and flood insurance. This information will lead us to implementing refined measures that will help us better protect life and property.

The adopted 2020 FMP can be downloaded at <https://eng.lacity.org/fmp-updates>

La Nina Conditions in Southern California

California's forecast looks warm and dry for the winter 2020-2021 season. The National Oceanic and Atmospheric Administration is expecting the La Nina climate pattern to persist and intensify during the winter. The official outlook from NOAA's Climate Prediction Centers favors drier, warmer condition across the Sun Belt and cooler, wetter conditions in the Northern tier of the U.S. More information on La Nina weather condition can be found at: <https://www.latimes.com/california/story/2020-10-16/with-dry-la-nina-conditions-persistent-western-drought-looms-large-in-winter-outlook>

For property protection advice or to request a site visit, please contact Mr. Romano Galassi by phone at (213) 847-0405 or by email at romano.galassi@lacity.org. Mr. Galassi is a NFIP Specialist with 12 years of experience working with DWR and FEMA representatives. He is also a Licensed Professional Engineer License No. 57274 in the State of California.



Exhibit E

Letter Submitted on October 20, 2020
by Voice of the Canals



VIA ELECTRONIC MAIL (ira.brown@lacity.org)

Deputy Advisory Agency
Department of City Planning
City of Los Angeles
200 N. Spring Street
Los Angeles, CA 90012

Re: 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 - 2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-82288; CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-6667-SE

Honorable Members of the Deputy Advisory Agency and City Hearing Officer:

I write on behalf of the *Voice of the Canals*, a residents' organization in the Venice Canal Community, to voice strong opposition to the proposed Reese Davidson Community development and all attempts to take away the last of Venice's open space zoning.

Outreach for this project in 2017 began as a 90-unit project. Residents were repeatedly assured a thorough EIR would be completed before moving ahead with the project. Attached to this document is a letter from our two residents organizations requesting EIR scoping for the project.

Much has changed since that initial outreach. The project is now up to 140 Units and is seeking multiple entitlements for the development which marks the entrance to Venice Beach, the second largest tourist attraction in California next to Disneyland. Developers have no experience managing a development of this size that is now way beyond the scope of what the initial RFDQ called for. The largest project Venice Community

Housing Corporation has managed to date is the 20 unit Gateway project, also in Venice.

Most troubling to the community, the development is now seeking exemption from environmental review through AB1197. The little outreach completed for this project was conducted with the understanding and promise of full CEQA review. The community is understandably outraged by this blatant disregard of residents, visitors and environmental safety with this request for CEQA exemption.

The canals are a unique coastal community designated in the Venice Land Use Plan as an Environmentally Sensitive Area. Most of us chose to live here and have purchased or rented our homes, knowing we are vulnerable as a community to the sea, nature and natural or disasters. We chose this as our home with the understanding we are protected by safeguards enforced by regulatory organizations. We depend on these regulations to be enforced by the Coastal Commission and the Venice Land Use Plan to protect us in this unique coastal environment.

Before seeking exemption from through AB1197, developers began an EIR which made the following conclusions (*Reese Davidson Community Initial Study B-5- City of Los Angeles, December 2018*) . All impact should be completely explored before going ahead with this project. The study cited:

Potentially Significant Impact.

Based on the analysis contained in this Initial Study, the Project could result in potentially significant impact with regard to the following topics: aesthetics; air quality; cultural resources; geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology and soils; green house gas emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; public service (fire protection, police protection, schools, parks and other public services); recreation; transportation/circulation; tribal cultural resources; and utilities (water, wastewater, and energy). As a result, these potential effects will be analyzed further in the EIR.

Not honoring Venice residents with a proper environmental study in this extremely sensitive, unique, densely populated community is unconscionable. To knowingly go ahead with such a massive project without this review is to put all residents and visitors in harms way and cause permanent damage to our beachside community.

Developers, in seeking a zone change from Open Space to Neighborhood Commercial refer to this development site as “under utilized”. Nothing could be further from the truth.

The proposed location is a much used, public beach parking lot and essential as open space in the community. Venice desperately needs this last open space. Aside from being the primary parking lot for the entrance to the iconic Venice Beach, this open space serves the community in the event of a natural disaster. Re-zoning and joining 40

continuous lots, jeopardizes neighborhood safety in an area of sea level rise, a flood zone, a tsunami zone and designated Tsunami escape route. Emergency rescue and staging areas would be effected by this land use change and the safety of all residents and visitors will be jeopardized.

Developers have not shared all the information. What we've been given is inadequate and incomplete:

We have yet to see plans for the parking component of this project which developers admit is fully intertwined with the RDC. CEQA exemption or any entitlements can not be considered without having access to all elements of the project. Tract Map. Joining of 40 lots in the canals, while current code can only join two, should not be considered, especially without having complete information for the project.

The proposed development is not just adjacent to the Historic Venice Canals, but directly on the canals and the Grand Canal footprint.

-Plans call to destroy the apron of the historic bridge and change the use. Plans also call to demolish and rebuild the existing boat launch. An action that certainly would not be covered by AB1197 exemption.

The new community is within the footprint of the Historic, sensitive Venice Canals.

-The canals are "coastal dependent" wetlands and a tributary to the Ballona Creek. Should anything happen within our Canal system, sea water from within the canals runs through the balloon creek and out to the ocean effecting all coastal dependent areas.

Developers plan to "improve" the Grand Canal Bridge by replacing and leveling out of the existing boat launch.

The launch is mandated by California Coastal Commission as determined during the renovation of the Venice Canals in 1986. Canal residents were permitted to build a controlled number of private docks, providing public access was given to launch a boat through the site at Grand Canal. To replace the dock and remove the sloped function eliminates the practical use for which the launch was intended.

- The Mariposa Maintenance Team uses this launch regularly to keep the canals clean. A catamaran is regularly launched from the dock with waste and planned algae removal being loaded at this ramp with the coordination of the Bureau of Sanitation.

-The launch is also used by film crews as coordinated through FilmLA. Any boats or docks with equipment for filming are launch from this location. There is no where else in the canals to serve this purpose.

- The launch as it presently exists gives access to all of the public for full use and enjoyment of the Venice Canals.

Attached below is a picture of the boat launch being used as intended by the the public.



Boat launch as used on Sunday, October 19th and throughout the year.

Change of use of Grand Canal Bridge increases harm to pedestrians.

The Grand Canal Bride is currently used for pedestrians to gain beach access from the additional East parking lot #701 and surrounding street parking.

Through developer's current plans East-West access to the beach would be blocked by the development, forcing pedestrians onto substandard sidewalks.

Through the City mobility plan MB2035, residents and tourists are encouraged to walk and ride bikes though developers have made no provisions for this and are in fact, diminishing such access and further looking to reduce it through additional entitlements. The entitlements developers are seeking will cut corners around the perimeters and create a dangerous situation for pedestrians (many carrying surfboards and beach gear) with strollers, bikes and scooters- creating a dangerous situation.

The Venice Median itself has always been a “refuge for pedestrians” by definition.

Removing it takes away beach access and builds a barrier between residents and tourists and the sea. The entitlements, re-zoning and new tract map would put all those accessing the neighborhood and beach at risk.

Attached is picture illustrating the normal use of Grand Canal as a beach access point (on a slow October day, during the summer crowds only intensify).

Pedestrians on the Grand Canal Bridge crossing East/West to access other lot and street parking will be unable to do this with current development plans.



Wild life and Environment will be ignored and negatively impacted:

The development could cause substantial environmental damage and injury to fish or wild life in their habitat. An Environmentally Sensitive Habitat Area calls for “Identification of existing clam beds and domestic duck feeding and nesting areas, if any in the Ballona Lagoon and adjacent Canals, and protection and preservation of the same”.

In September of 1986, a supplemental environmental impact report was prepared for the Venice Canals Rehabilitation Project (City of LA, Dept. of Public Works). According to this report, six species of fish were present in the canal system: ... the majority of the bird utilization of the Venice Canals is by domestic birds such as ducks and geese. Yet occasionally individual California Least Terns are observed in the canals area. The California Least Tern (*Sterna albifrons* brown), is a Federal-and-State-listed endangered bird species...the Least Tern is afforded Federal and State protection under the Endangered Species Act of 1973 and the US Fish and Wildlife Coordination Act of 1976 (VLUP V1).

Canal rehabilitation of September, 1986 called for protection to the environment in the form of Salt Bush rather than man made fencing fo protect pedestrians and wildlife. making a step path for ducks and young ducklings to enter and exit the canals as seen in this picture on Sherman Canal (including ducks, herons, cormorants, and large pelican).



The canals were rehabilitated to cater to the wildlife with salt bush barriers to the water rather than fencing and stone grading along canal the banks making for easy entry and exit of ducks and ducklings.

The developers again claim to improve the canals when in actuality, they are removing all permeable surfaces along Grand Canal as required by Coastal Commission and the VLUP on the west side of the development. No fencing of any kind is incorporated completely disregarding the protection of the natural wildlife (including the endangered Least Tern).

The depicted drawing by the RDC architects illustrates the lack of permeable surface and setbacks from Grand Canal. Wildlife and the natural environment would not consider this to be an “improvement”.



Perspective Looking Southeast Along Grand Canal

The proposed map is inconsistent with the Venice Land Use Plan Throughout. According to VLUP, Exhibit 22B The canals are an Environmentally Sensitive Habitat Area. The development could cause substantial environmental damage and injury to fish or wild life in their habitat. An Environmentally Sensitive Habitat Area calls for “Identification of existing clam beds and domestic duck feeding and nesting areas, if any in the Ballona Lagoon and adjacent Canals, and protection and preservation of the same”.

The Venice Canal infrastructure is failing.

As mentioned in our first letter of opposition to this project, Canal leakage is a continual problem that has yet to be addressed.

Flood control is managed by gates at the end of Washington and Grand that work in sync with city gates at the Marina channel. Water has been leaking from the canals since first reported in BOE testing in 2015. Repairs to remedy the situation have failed or proved too costly.

There is also the possibility of flooding due to this failing tidal gate system with water over flowing into the canals and surrounding streets with cause to examine surrounding soil as it takes on additional water from a yet to be determined leaking source which could compromising existing homes and the new development.

* Previous flooding in the canals is reference in attached EIR scoping letter.

BOE tests report a possibility of a leak around the sewer pipe and did not rule out the possibility of a sink hole on Washington Blvd. (see attached BOE report obtained in CPRA request, 2). An email is attached from April 2017 with a full explanation from City Engineer. Full resolution as to how to handle this situation has not been determined and would seem practical before adding another 2.6 acres of development to an already fragile, sensitive infrastructure.

Canals as a “Special Coastal Community”:

As per the Venice Local Coastal Plan, the Canals are designated as a “Special Coastal Community” (VLCP 1-16)

“The canals are an important visitor destination center on the coastline, characterized by a particular cultural, historical or architectural heritage that is distinctive, provides opportunities for pedestrian and bicycle access for visitor to the coast, and adds the the visual attractiveness to the coast.”

Entitlements ask to break from all regulations of the Venice Land Use Policies and Implementation Strategies 11-5. Regarding lot consolidations. “In order to preserve the nature and character of existing residential neighborhoods, lot consolidations shall not be permitted in the Venice Canals (policy 1b)

In order to provide a setback for public access, visual quality and to protect the biological productivity of the canals, an average setback of 15 feet, but not less than 10ft. Shall be maintained in the front yard and adjacent to the property line nearest the water:.

Another concern in Merging lots is the runoff of water into the canals. Adequate drainage is a mandate of VLP 1-5.

It's incomprehensible that Developers and our Councilman could consider a project of this magnitude, which violates every existing land policy and safety issue, as appropriate for this site in the environmentally sensitive area of the Venice Canals and surrounding beachside community.

We urge the advisory committee to deny this application.

Sincerely,

Marjorie Weitzman
Voice of the Canals
voiceofthecanals@pobox.com

Attachments-

VOC/VCA EIR Scoping Letter,
Leaking Canal Emails and Reports

Exhibit F

Letter Submitted on January 13, 2021
by Voice of the Canals



VIA ELECTRONIC MAIL (ira.brown@lacity.org)

Re: 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 - 2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-82288; CPC - 2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP;ENV-2018-6667-SE

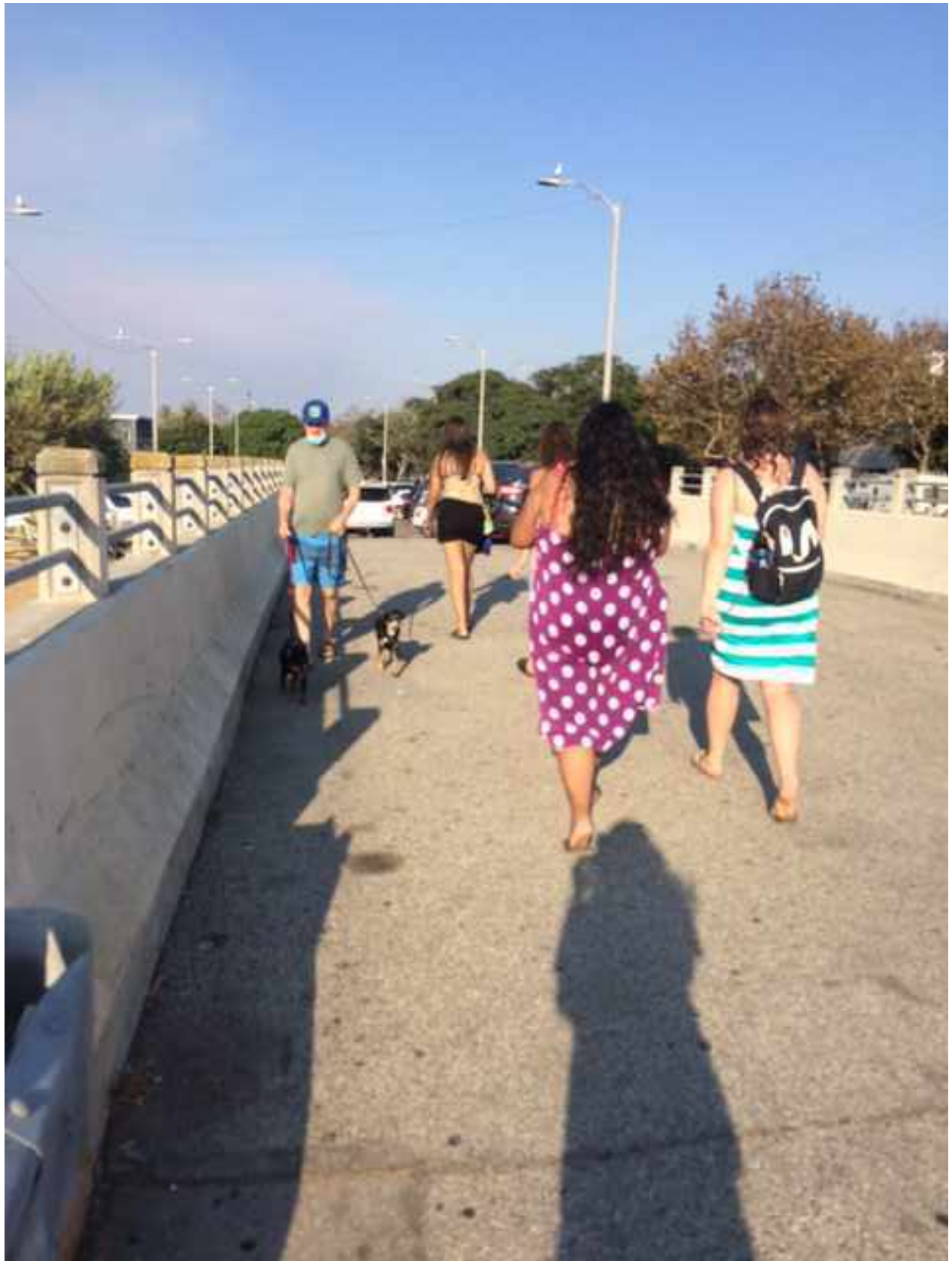
Honorable Members of the Deputy Advisory Agency and City Hearing Officer:

I write in follow up to my comment letter of 10/21/20 opposing the proposed Reese Davidson Community Development and change of zoning with entitlements.

I expressed concern for pedestrian access to the beach, which will essentially be blocked by two massive structures blocking the Grand Canal. Recent documents, from the latest file CBC-201807344 Applicant Presentation show drawings illustrating just this point.

City Parking lot #701 is the last viable beach parking option on Venice Blvd. before the proposed development site, with the entrance on Dell Ave. Lot #701 is heavily used and directly across from what is now the open space/ parking and proposed site for the project. Lot #701 is the first opportunity to park when traveling west towards the beach and often the first lot to completely fill. Pedestrian traffic now moves from the lot, across the current open space/parking lot, over the connecting Grand Canal Bridge and through the next open space/parking lot to gain access to the entrance to Venice Beach on Venice Blvd. North.

The current development would essentially block all pedestrian traffic coming from lot #701 and funnel beach goers, onto substandard surrounding sidewalks in order to access the beach. All other pedestrian traffic coming from street parking or residential use would be blocked to east/west bridge access as well.



A change of use of the Historic Grand Canal Bridge and change in zoning from Open Space to allow the joining of 40 lots, will block this path of public beach access. Developers claim to be enhancing the historic bridge but the opposite is true. This change of use serves only the developers and residents of the project- not the greater community and the people of Los Angeles.

I'd also like to add further comment on the current boat launch. The launch is used year round for public use and canal maintenance. Based on the current developer plan, it is inoperable for it's designed use. A boat launch requires access to back in with a vehicle attached to a trailer with a hitch, in order to release a boat into the water. This is not possible if the current access changes and doesn't allow vehicles to back a trailer in. In the developer's new illustration, it would be impossible to launch anything other than a small canoe or kayak that can be carried in from a distance. Many times film crews bring in larger boats with electric motors and can only access the canals through this launch. Larger gondolas and recreational boats for public use are all dependent on this launch. It's loss of use allowing access to all, would be a great loss to the community and to Los Angeles as a whole.



Furthermore, in the new design Venice Blvd. North is now marked as a "temporary loading zone", presumably for people to carry boats to a launch. The traffic must be considered for a loading zone designated for this purpose with the inevitable consequence of cars backed up while pedestrians are forced to walk around into traffic.

This plan is ill-conceived and in no way enhances the community. Additionally, any traffic study should include a newly added "temporary loading zone" for this boat launch on what is a primary access road to the entrance of Venice Beach.

I'm attaching the referenced document from the latest file CBC-201807344 Applicant Presentation which illustrates these obvious flaws.

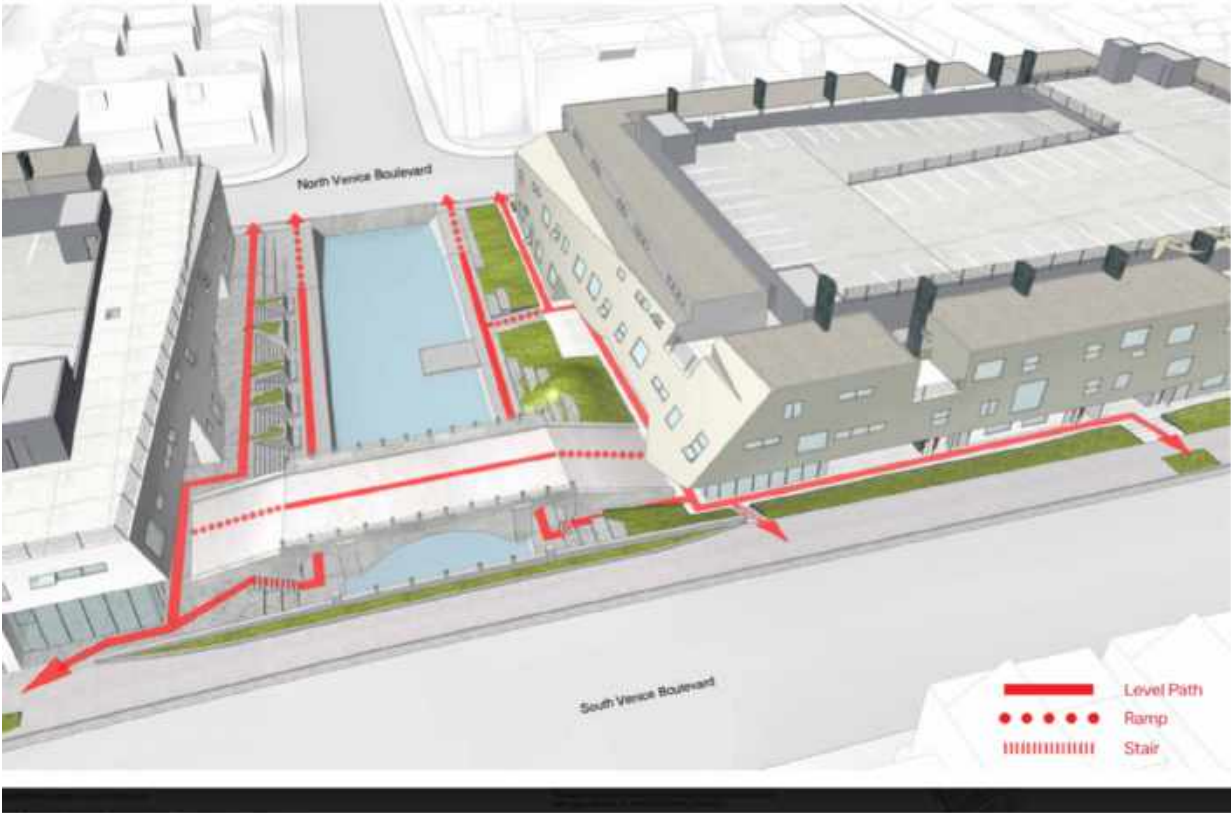
Also attaching a video to show the proximity of Lot #701 to the proposed development and to demonstrate the flow of pedestrian traffic.

Thank you for including this in my comments. I continue to urge the advisory committee to deny this application.

Sincerely,

Marjorie Weitzman
marjorieweitzman@gmail.com

Pathways Through Site



Boat Launch Access

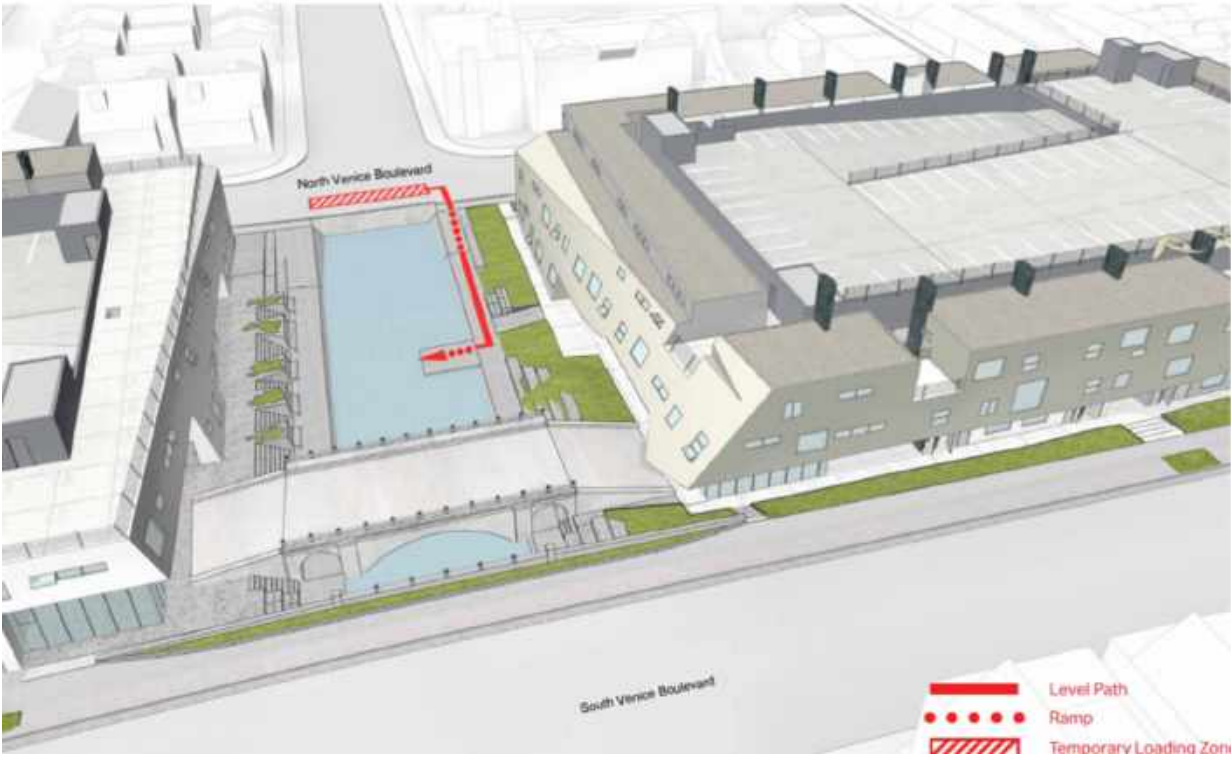


Exhibit G

Letter Submitted on May 17, 2021
by Venice Vision

VENICE VISION
P.O. BOX 778
VENICE, CALIFORNIA 90294

May 17, 2021

VIA ELECTRONIC MAIL

Los Angeles Planning Commission
200 N. Spring Street
Los Angeles, CA 90012
ira.brown@lacity.org
cpc@lacity.org

Re: 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 - 2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-82288; CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-6667-SE

Honorable Members of the City Planning Commission and Planning Department Personnel:

I write regarding the Reese Davidson Community (the "Project") and cases VTT-82288, CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP, and ENV-2018-6667-SE.

Venice Vision and our attorney, Jamie Hall of the Channel Law Group, have already submitted numerous documents in connection with the Reese Davidson Community and VTT-82288, CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP and ENV-2018-6667-SE, including, without limitation, submissions dated October 21, 2020, January 12, 2021, and January 25, 2021. All of those submissions, including all exhibits, are incorporated in their entirety herein by reference.

This letter is intended to supplement our prior submissions by addressing information and issues that have arisen since the January 13, 2021 hearing of the Deputy Advisory Agency ("DAA").

As set forth below, the approval process for the Reese Davidson Community must be halted because:

- the Project plans ("Plans") submitted to the City and provided to the public for review and comment are inaccurate and, indeed, grossly misleading with respect to parking;
- the Project is not exempt from the California Environmental Quality Act ("CEQA") under A.B. 1197 (or otherwise) and the required Environmental Impact Report ("EIR") for the Project has not been completed;

- the public parking required as a precondition for the Project is not exempt from CEQA under any theory and the required EIR for such parking has not been completed;
- the environmental file for the Project has improperly been withheld from the public;
- it is improper to consider a project of this magnitude on such a sensitive and risky site before the Venice Coastal Zone Specific Plan has been finalized, and while the City's General Plan and the Westside Community Plan are being updated; and
- the DAA's recommendation to approve the VTT was based on erroneous, outdated flood information and must be thrown out in light of new FEMA maps showing that the building site is in a Special Flood Hazard Area.

Further, even if this approval process is permitted to proceed for some reason, the Project must be rejected as proposed because it does not provide the requisite parking or conform to the Venice Specific Plan. In addition, as we will explain in a subsequent filing as we receive responses to pending public records requests, the Project violates the City's anti-containment policy, constitutes an obscene waste of taxpayer funds (at more than \$1 million per 460-sq.-ft. unit, including a \$7.15 million developer fee), and cannot possibly come online fast enough to provide the immediate relief required for the City's (largely self-inflicted) homelessness crisis.

I. THE APPROVAL PROCESS MUST BE HALTED

The approval process for the Reese Davidson Project must be halted for the following reasons.

A. The Project Plans Are Materially Inaccurate and Grossly Misleading

The operative set of Plans for the project is materially inaccurate and grossly misleading in at least two respects that make them usable for purposes of review and approval.

First, the Plans indicate that there is only one project planned for proposed building site. Records from Mayor Garcetti's Office and the Los Angeles Department of Transportation, however, conclusively show that the parking tower sitting to the east of Grand Canal (the "East Parking Tower") will be funded, developed, owned and operated separately from the Reese Davidson Project and, thus, constitutes a separate project in its own right for all purposes, including approvals and environmental review.

Second, the Plans represent that the East Parking Tower will comprise 252 conventional parking spaces on four levels. Documents Venice Vision has secured through public records requests, however, show that, in truth, a hodgepodge of tandem parking and robotic parking—including "double decker" robotic parking on the roof and robotic parking of some sort directly

abutting virtually every residential unit in the East Facility—is required to provide the minimum number of public parking spaces required by law (even when factoring in parking incentives for supportive and homeless housing that do not necessarily apply to this project).

As discussed further below, authorization for making use of the publicly owned Venice-Dell-Pacific Site for homeless housing under the City’s Affordable Housing Opportunity Site program (“AHOS”) expressly conditions Project approval on providing replacement beach parking. This hearing process must, therefore, be suspended until accurate plans for the East Parking Tower have made available for public comment, subjected to comprehensive environmental review, and approved by the City and the Coastal Commission.

B. Required Environmental Review Has Not Been Conducted

1. The Project Is Not Exempt from CEQA Under A.B. 1197 Because, *Inter Alia*, It Does Not Satisfy the Funding Source Requirement or the “3% Supportive Services” Requirement

Section 21080.1, subdivision (a), of the California Public Resources Code states as follows:

- (a) The lead agency shall be responsible for determining whether an environmental impact report, a negative declaration, or a mitigated negative declaration shall be required for any project which is subject to this division. That determination shall be final and conclusive on all persons, including responsible agencies, unless challenged as provided in Section 21167.

In 2018, the Los Angeles Department of City Planning, as the lead agency for the Reese Davidson Community, found that the Reese Davidson Project may have a potentially significant impact with respect to no less than 16 environmental factors, ranging from aesthetics to public services, and issued a determination that an Environmental Impact Report (“EIR”) is required for the Project.¹

¹ Exhibit A: LA Dept. of Planning, Initial Study: Reese Davidson Community Project.

| ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: | | |
|--|---|--|
| The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. | | |
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Recreation |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Hydrology / Water Quality | <input checked="" type="checkbox"/> Transportation / Traffic |
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Land Use / Planning | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Utilities / Service Systems |
| <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population / Housing | |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Public Services | |
| DETERMINATION (to be completed by Lead Agency) | | |
| On the basis of this initial evaluation: | | |
| <input type="checkbox"/> I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. | | |
| <input type="checkbox"/> I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigations on the project have been made by or agreed to by the project proponent. ANTI-GATED NEGATIVE DECLARATION will be prepared. | | |
| <input type="checkbox"/> I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. | | |
| <input checked="" type="checkbox"/> I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must address only the effects that remain to be addressed. | | |
| <input type="checkbox"/> I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION (pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including measures or mitigation measures that are imposed upon the proposed project, nothing further is required. | | |
| <div><div>Melva Zayas PROJECT NAME  SIGNATURE</div><div>City Planner TITLE (213) 647-3030 TELEPHONE NUMBER</div></div> | | |

Home Division Community Initial Study ISS-0 City of Los Angeles Department DTR

That determination has not been challenged pursuant to Section 21167 of the California Public Resources Codes, as CEQA expressly requires, and therefore remains “final and conclusive on all persons” in this case. No EIR has been conducted for the Project and this approval process, therefore, cannot proceed.

Moreover, the Project is not exempt from CEQA under A.B. 1197 (or otherwise).

The Developers’ contention that the Project is exempt from CEQA under A.B. 1197 is incorrect for a variety of reasons that we have set forth in previous submissions relating to VTT-82288, CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP, and ENV-2018-6667-SE, but we will emphasize two points in particular here.

First, Section 21080.27, subdivision (3), of the California Public Resources Code with respect to funding sources (the relevant part of the A.B. 1197 codification) states as follows:

(3) “Supportive housing” means supportive housing, as defined in Section 50675.14 of the Health and Safety Code, that meets the eligibility

requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division 1 of Title 7 of the Government Code or the eligibility requirements for qualified supportive housing or qualified permanent supportive housing set forth in Ordinance No. 185,489 or 185,492, and is funded, in whole or in part, by any of the following:

- (A) The No Place Like Home Program (Part 3.9 (commencing with Section 5849.1) of Division 5 of the Welfare and Institutions Code).
- (B) The Building Homes and Jobs Trust Fund established pursuant to Section 50470 of the Health and Safety Code.
- (C) Measure H sales tax proceeds approved by the voters on the March 7, 2017, special election in the County of Los Angeles.
- (D) General bond obligations issued pursuant to Proposition HHH, approved by the voters of the City of Los Angeles at the November 8, 2016, statewide general election.

In other words, only “supportive housing” funded by one or more of four specified funding sources can qualify for the A.B. 1197 exemption.

The Developers assert through legal counsel² that this requirement is satisfied by because the “Venice Community Housing Corporation submitted a Measure H funding commitment letter from the Los Angeles Department of Health Services Housing for Health Division” stating “that the Department will enter into a contract with an approved Intensive Case Management Services provider at an estimated funding amount of up to \$367,200 per year.” According to the Developers, “this funding will provide supportive services for 68 formerly homeless households in the Project.”

This argument, however, fails to address the crucial distinction between funding “supportive housing,” as A.B. 1197 expressly requires, and merely funding “supportive services,” which is totally irrelevant to the A.B. 1197 exemption determination.

The County letter cited by Developers’ counsel reads in pertinent part as follows:

² Exhibit B: January 2021 Letter re: A.B. 1197 Exemption.

Support Services Commitment

The County intends to provide supportive services for up to 68 homeless DHS patients at the Reese-Davidson Community project. The County shall enter into contract with an approved Intensive Case Management Services (ICMS) provider at an estimated funding amount of up to \$367,200 per year. The County, the ICMS provider, and VCHC will collaborate to ensure tenants receive the support they need to remain housed and stable, including attending and/or convening periodic meetings with partners to problem-solve around tenant, building, and community issues. DHS will also provide in-kind clinical services on-site and through referral to primary care homes to ensure that each tenant receives high quality medical care.

A.B. 1197, as well as Section 50675.14 of the Health and Safety Code,³ both clearly distinguish between “supportive housing” on the one hand, and mere “supportive services,” on the other, as does Measure H itself. Even assuming the letter cited by Developers’ counsel somehow constitutes an enforceable funding commitment (which, as we explain in a prior submission, it does not), Developers’ own attorneys admit that the funding in question will “provide supportive services for ... households in the Project,” with no reference at all to housing. Since the funding addresses “services” – not “housing”—the Project fails the threshold funding requirement and cannot qualify for the A.B. 1197 CEQA exemption.

Further, A.B. 1197 and the relevant section of the California Government Code provide that “at least 3 percent of the total nonresidential floor area [must] be provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens.” Cal. Gov. Code § 65651, subd. (a)(5)(B).

The Plans state that the “Floor-Area Ratio” is 1.15:1, based on Buildable Area and that the Buildable Area is 90,573 sq. ft. Thus, according to the developers themselves, the total floor area for the RDC is 1.15 x 90,573, or 104,159 sq. ft. (104,140 sq. ft., similarly, is the floor area indicated in the Area Tabulation in the Plans.)

³ See California Health and Safety, Section 50675.14, subd. (a)(2) (“(2) Supportive housing means housing with no limit on length of stay, that is occupied by the target population, and that is linked to onsite or offsite services that assist the supportive housing resident in retaining the housing, improving his or her health status, and maximizing his or her ability to live and, when possible, work in the community.”); see also California Public Resources Code, Section 21080.27, subd. (a)(3) (adopting the definition of “supportive housing”—and, thus, the black and white distinction between “housing” and “services”—set forth in Section 50675.14).

| PROJECT DATA | |
|---|---|
| Project Name: Riccas Davidson Community | Gross Lot Area: 115,674 sq ft (Existing property line per County of Los Angeles, Office of the Assessor) |
| Community Plan Area: Venice | Net Lot Area: 97,060 sq ft (Gross Lot Area excluding dedications) |
| Area Planning Commission: West Los Angeles | Buildable Area: 90,173 sq ft (Net Lot Area excluding setbacks required by Venice Coastal Zone Specific Plan) |
| Neighborhood Council: Venice | Floor Area Ratio: Option B: 1.18:1 (Based on Buildable Area) |
| Council District: CO 11 - Mike Smith | Allowable Dwelling Units: 144 (115,674 sq ft at 800 sq ft per dwelling unit) (per LAMC 12.14 C.3 and 12.21 C.4) |
| LADBS District Office: West Los Angeles | Dwelling Units: West Building: 56 East Building: 88 Total: 144 |
| 560-Fac-School Zone: No | Number of Floors: West Building: 3 (With 5-story architectural campanile at NW corner of North Venice Blvd. and Pacific Ave.) East Building: 3 |
| General Plan Land Use: Current: Open Space Proposed: Neighborhood Commercial | Proposed Setbacks: Front: 5'-0" Side: 10'-0" Rear: 15'-0" average, no less than 10'-0" (per Venice Specific Plan 10.E.3.a) |
| Zoning: Current: OS-10L Proposed: C2-1L | Maximum Building Height: The building would not exceed 35 feet in height except for a 65-foot in height community room at the corner of Venice Boulevard and Pacific Avenue. Roof railing, elevator, and a roof access structure would extend 12 feet above the community room. Height is requested per LADBS Information Bulletin PIZC 2002-066 |
| Specific Plan Area: Venice Coastal Zone Los Angeles Coastal Transportation Corridor | |
| Zoning Information (Z): Z1-2452 Transit Priority Area in the City of Los Angeles Z1-2471 Coastal Zone Z1-2456 Director's Interpretation of the Venice SIF for Small Lot Subdivisions | |
| Applicable Codes: 2014 Venice Coastal Zone Specific Plan 2015 Los Angeles Building Code 2016 Los Angeles Municipal Code 2019 California Building Code | |

According to the Plans, there is 64,280 sq. ft. of residential space, including 13,640 sq. ft. of live/work micro-apartments (i.e., “artist lofts”), 16,675 of studio apartment, 13,375 of 1-bedroom apartments and 20,590 of 2-bedroom apartments.

| AREA TABULATION | | | | | | | | | | | | | |
|----------------------------|--------------|-----------------------|--------|--------|--------|-----------|--------|-----------|--------|-------------|------|-------------------|-------|
| AREA PROVIDED BY OCCUPANCY | | | | | | | | | | | | | |
| | | ADULT-USE RESIDENTIAL | | STUDIO | | 1 BEDROOM | | 2 BEDROOM | | COMMON AREA | | SUPPORTING OFFICE | |
| | | # | Area | # | Area | # | Area | # | Area | # | Area | # | Area |
| WEST SITE | Ground Floor | 10 | 4,810 | 4 | 1695 | - | - | - | - | 1,100 | 280 | 2,250 | 810 |
| | 2nd Floor | - | - | 20 | 8,806 | 3 | 1,525 | - | - | 105 | - | - | - |
| | 3rd Floor | - | - | 10 | 2,808 | 2 | 1,525 | 2 | 1,520 | 216 | - | - | 2,390 |
| | 4th Floor | - | - | - | - | - | - | - | - | 205 | - | - | - |
| | Basement | - | - | - | - | - | - | - | - | 103 | - | - | - |
| West Site Subtotal | | 10 | 4,810 | 43 | 12,809 | 5 | 3,050 | 2 | 1,520 | 1,597 | 280 | 2,250 | 810 |
| EAST SITE | Ground Floor | 21 | 8,898 | - | - | - | - | 2 | 1,940 | 1,888 | 425 | - | 2,875 |
| | 2nd Floor | - | - | 7 | 3,228 | 12 | 8,680 | 11 | 8,888 | 1,200 | - | - | 5,048 |
| | 3rd Floor | - | - | 8 | 1,575 | 8 | 4,165 | 11 | 8,688 | - | - | - | 3,000 |
| | 4th Floor | - | - | - | - | - | - | - | - | - | - | - | - |
| | Basement | - | - | - | - | - | - | - | - | - | - | - | - |
| East Site Subtotal | | 21 | 8,898 | 17 | 3,798 | 20 | 13,225 | 24 | 19,000 | 3,118 | 425 | - | 2,875 |
| Total | | 31 | 13,708 | 60 | 16,607 | 25 | 13,275 | 26 | 20,520 | 4,715 | 705 | 2,250 | 810 |

Common area includes lobbies, enclosed bike storage, laundry facilities, and community rooms.

Supporting office areas include office space for tenant supportive services and on-site storage, intended for use by internal staff and tenants only.

All 743 Special Needs Residential Units defined by California Health and Safety Code 17142.9.1.

*For purposes of this chapter, "special needs housing" means any housing, including supportive housing, intended to benefit, in whole or in part, persons identified as having special needs relating to any of the following: (A) Mental health; (B) Physical Disabilities; (C) Developmental disabilities, including, but not limited to, intellectual disability, cerebral palsy, epilepsy, and autism; (D) The risk of homelessness.

Thus, the “total nonresidential floor area” is the total floor area—as stated by the developers—of 104,159 sq. ft minus the residential floor area—as stated by the developers—of 64,280 sq. ft., which comes to 39,879 sq. ft.

The Plans further state that there is 685 sq. ft. of “supporting office” space and that “[s]upporting office areas include office space for tenant supportive services and on-site storage[,] [i]ntended for use by internal staff and tenants only.” There is no indication how “on-site storage” could constitute “supportive services” under applicable law, so according to the

plans something less than 685 sq. ft. has been allocated for “supportive services.” As such, something less than 1.7% of (685 sq. ft. / 39,879 sq. ft.) of total nonresidential floor area is “provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens.”

The Developers fail to address this analysis and employs an arbitrary—and obviously self-serving—method of calculating non-residential floor area that does not map to the terminology in the Plans or relevant law.

Further, the Developers intend to provide walk-up services at their other new homeless housing projects in Venice (including their Marian Place and Lincoln Apartments Projects) and have made no showing that supportive services will be limited to tenants in this case, as the law requires for a CEQA exemption under A.B. 1197.

For these reasons and others set forth in our previous submissions, the A.B. 1197 CEQA exemption does not apply to the Project and all further review must be halted until an exhaustive EIR has been completed.

2. The East Parking Tower Is a Separate Project in Its Own Right That Cannot Qualify for an A.B. 1197 Exemption and Plainly Requires Complete Environmental Review.

Even if the City were to somehow find that the Project qualifies for the A.B. 1197 CEQA exemption (which is plainly not the case), there is no conceivable basis for finding the CEQA exemption applies to the East Parking Tower, which City records provided by the Mayor’s Office,⁴ City Administrative Officer⁵ and Los Angeles Department of Transportation⁶ show to be a separate project (as to land, financing, ownership, operation, etc.) that does not “further supportive housing” (in that it only provides public parking) and does not make use of any of A.B. 1197’s required funding sources.

Since the Project cannot be approved until parking requirements set forth in the RFP and City Council action relating to the building site have been satisfied, it follows that an exhaustive EIR must be completed for the East Parking Tower—and the East Parking Tower must be approved, financed and so forth—before approval of the Project can move forward.

C. Crucial Environmental Information Relating to the Project Has Been Improperly Withheld from the Public

As set forth in our previous submissions, multiple requests have been submitted to the City for production of the complete environmental file for the Reese Davidson Community, but

⁴ Exhibit C: Documents Produced by Mayor Garcetti’s Office.

⁵ Exhibit D: Documents Produced by Los Angeles Chief Administrative Officer.

⁶ Exhibit E: Documents Produced by Los Angeles Department of Transportation.

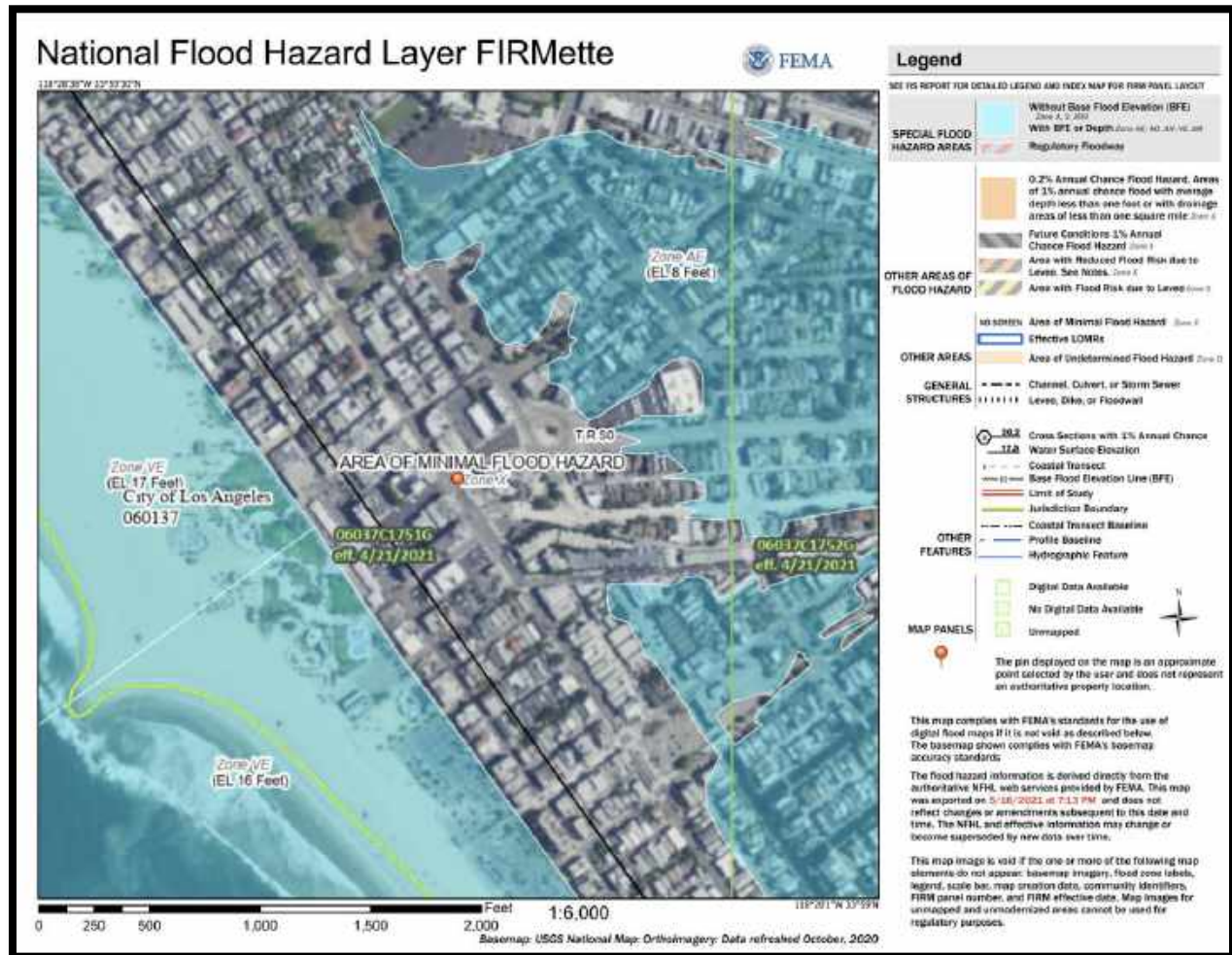
the City has withheld the most relevant portions of the file—including studies, communications and other records relating to environmental impacts—without a valid basis for doing so. Also, the public has not been provided with accurate information regarding parking or the cost of the Project. The public is entitled to review and comment on such information, and competent determinations regarding the Project cannot be made without it.

D. A Project of This Magnitude, Complexity and Significance Cannot Be Considered Before the Venice Local Coastal Program Is Finalized

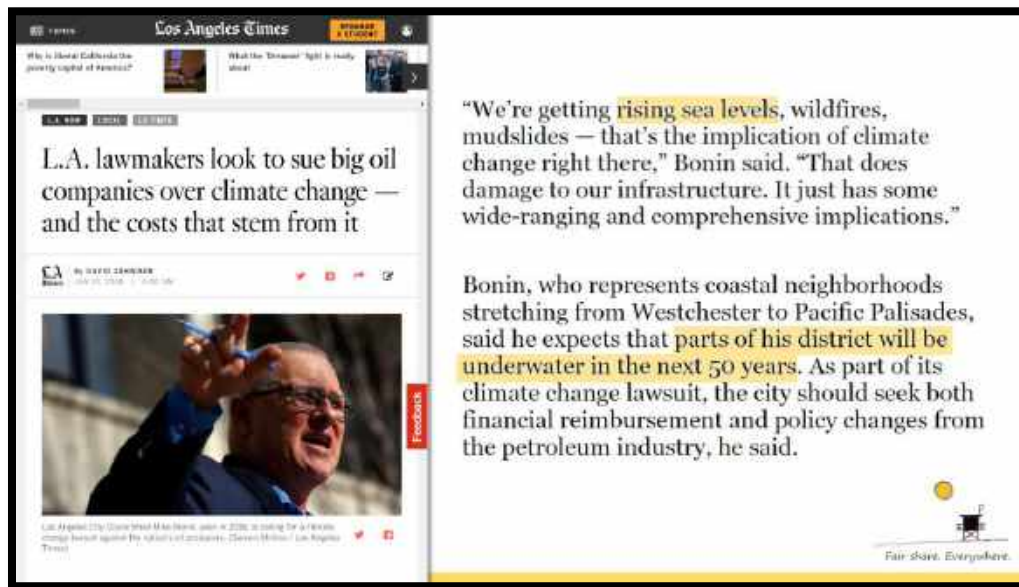
The Local Coastal Program (“LCP”) is a policy and regulatory document required by the California Coastal Act that establishes land use, development, natural resource protection, coastal access, and public recreation policies for the Venice Coastal Zone. See <https://planning.lacity.org/plans-policies/community-plan-update/venice-local-coastal-program>. In order to comply with the Coastal Act, Los Angeles City Planning is undertaking a multi-year effort, with public input, to prepare, adopt, and certify the Venice LCP as the coastal planning tool for the area. Specifically, the City has found that “[n]ew policies are necessary to address emerging issues, such as sea level rise and climate change” in Venice and that the Venice LCP must be updated to include all mandatory Coastal Act sections. <https://planning.lacity.org/plans-policies/community-plan-update/venice-local-coastal-program>.

The Venice-Pacific-Dell Site is the largest remaining open space parcel in Venice; has an elevated water table; overlaps and abuts the Historic Venice Canals District (which is on the National Historic Register); and sits directly on Grand Canal, just a couple hundred yards from the beach in a tsunami zone and sea-level-rise zone at one of the lowest points along the Santa Monica Bay. It also sits at the access point for the majority of Venice’s millions of annual visitors from all over the city, country and world.

As discussed at greater length below, FEMA issued new maps less on April 21, 2021—several months after this approval process commenced—showing that the proposed building in a Special Flood Hazard Area subject to flooding reaching 8 feet above sea level or more.



And Project proponent Councilman Mike Bonin has himself publicly predicted that low-lying portions of Council District 11 such as the proposed building site will be underwater in 50 years.



Approving a development of this size to provide housing for a vulnerable population and parking for visitors on such a consequential, complex and problematic site before the Venice LCP has been finalized is simply unthinkable.

E. Entitlements of the Magnitude Sought for the Project Cannot Be Granted While the Westside Community Plan and Los Angeles General Plan Are Being Updated

The comprehensive update to the City's General Plan "will guide the physical and economic future of Los Angeles through the year 2040" and "aims to chart a course for the City's growth and change over the coming decades, tackling issues related to land use and economic development, water and energy, parks and open space, housing, mobility, air quality, and historic preservation." See <https://planning.lacity.org/plans-policies/general-plan-updates#updates>. It includes an update to the Housing Element of the General Plan, also known as "the Plan to House LA," that is intended to "guide the creation and implementation of the City's housing policy from 2021 to 2029," by "identif[y]ing] Los Angeles's housing needs and opportunities and establish[ing] clear goals and objectives to inform future housing decisions." See <https://planning.lacity.org/plans-policies/housing-element-update>. It also involves reviewing the existing Safety Element, the Local Hazard Mitigation Plan, the Floodplain Management Plan, Resilient Los Angeles, and LA's Green New Deal. See <https://planning.lacity.org/plans-policies/community-plan-update/general-news-item/housing-element-update-and-safety-element>.

In addition, Los Angeles City Planning is in the process of developing a regional community plan for West Los Angeles, Palms-Mar Vista-Del Rey, Venice and Westchester-

Playa del Rey addressing similar issues. See <https://ncwpdr.org/westside-community-plan-update/>.

The Project Developers seek amendments to the General Plan rezoning the building site from open space to commercial and striking any reference to the “Venice Median,” as well as amendments to the Venice Specific Plan, creating a brand new “special interest subarea,” specifically for supportive housing, slashing parking requirements; and allowing for a 67-foot height district.

The Developers also seek waiver of dedications and improvements with respect to street and sidewalk widths that are required for the building site and surrounding area to be a Pedestrian Enhanced District, Neighborhood Enhanced Network, Transit Enhanced Network and Bicycle Enhanced Network –with protected bike lanes, expanded sidewalks, pedestrian refuges and such—as called for under the City’s Mobility Plan 2035 and the Coastal Transportation Corridor Specific Plan. Indeed, the sidewalk surrounding this massive project on the primary corridor to L.A.’s only beach will be little more than 5 feet wide in most places.



Finally, the Plans expressly call for permission to destroy the west and east aprons of Abbot Kinney’s historic Short Line Bridge in the Venice Canals District. Both the Short Line Bridge and the Venice Canals District in which it sits are on the National Historic Register.



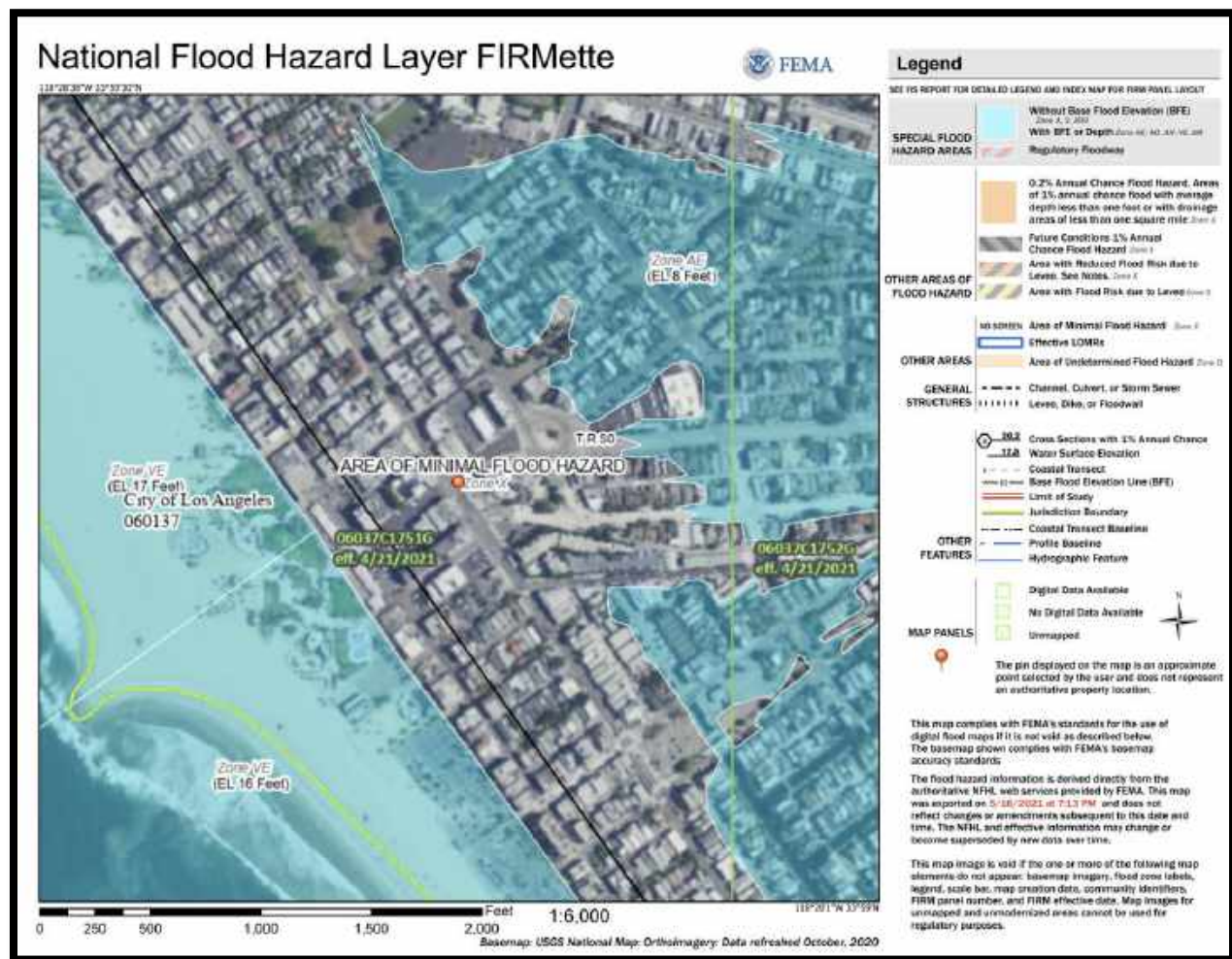
The building site sits at the world's primary access point to Venice Beach, which receives more than 16 million visitors a year as California's second most popular tourist destination. Approving a project that could define—and cripple—Venice for the next 50 years or more without benefit of updated land use plans is unfair to Venice residents, unfair to Venice visitors, destructive of Venice history, and altogether impossible to defend.

F. The DAA's Recommendation to Approve the VTT Was Based on Erroneous, Outdated Flood Information and Must Be Thrown Out in Light of New FEMA Maps Showing That the Site Is in a Special Flood Hazard Area

As noted above, new FEMA flood hazard maps adopted April 21, 2021 show the building site sits squarely in a Special Flood Hazard Area designated Zone AE-EL8. [See https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/jf746486d773d4564906f0b4ae6566cca/scratch/FIRMETTE_2ca747bf-7bda-431c-909b-2e47459212bf.pdf](https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/jf746486d773d4564906f0b4ae6566cca/scratch/FIRMETTE_2ca747bf-7bda-431c-909b-2e47459212bf.pdf); see also, <https://pw.lacounty.gov/floodzone/>.

The “AE” designation means the Project has at least a 1% chance of flooding in any given year and more than a 50% chance of flooding in the 55-year lease period for the Project. See <https://www.fema.gov/flood-maps/coastal/insurance-rate-maps>. In addition to creating risk to life and property, this means the Project will require expensive flood insurance, adding yet more exorbitant costs. Further, the “EL8” designation indicates a base flood elevation

requirement of 8 feet. That means the first habitable floor of the project must be more than 8 feet above sea level. See <https://pocketsense.com/ae-flood-zone-5407910.html>; <https://www.fema.gov/node/404233> (defining Base Flood Elevation (“BFE”) as “[t]he elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.”).



In other words, the BFE line indicates the highest predicted water level during a flood, measured by number of feet above the average high tide. In a Special Flood Hazard Area there is a 1% chance (or more) every year of flood water that equals or exceeds the BFE.

The International Building Code is now staying on top of the BFE (literally), by requiring a Design Flood Elevation of +1'. Meaning, if a structure falls within a AE-EL8 zone, the number

8 indicates the BFE. With the +1' rule in effect, the bottom of the structure must be at 9' above sea level ($8' + 1' = 9'$).

According to the Developers themselves, the elevation of the Building Site ranges from 5.66 feet above sea level to 7.91 feet above sea level. Consequently, the first floor of the Project will have to sit at a minimum of about 1 foot to more than 3 feet above street level.

The Project developers commissioned a December 8, 2020 report by GeoSoil. Inc. purporting to address “potential coastal hazards” relating to the Project.⁷ The report states that “[t]he site is not currently vulnerable to flooding” and that the “lowest finished floor (FF) elevation (not garage floor) should be 2 feet, or more, above the street flow line until reaching 11 feet NAVD88, and for street flow lines above +11 feet NAVD88 the FF elevation should be a minimum of 1 foot above the flow line.” The report also calls for waterproof retrofitting as needed in the future. Id. This report is inaccurate and outdated, but even the Developers’ own engineers—who directly contradict FEMA—cannot avoid acknowledging the tremendous flood risk and related costs in connection with the project, as well as acknowledging that the Project will have to be “built up” above street level to reduce flood risk.

Venice homeowners have recently received government notice that they will collectively have to spend millions—and over time, potentially billions—in flood insurance to cover their beach adjacent properties. It is unthinkable to overlook these issues in connection with the Project.

Also, the Project application incorrectly indicates, based on outdated information, that the site is not subject to a 100-year hazard and that it “is not affected” by base flood. The DAA relied on both of those statements in recommending the VTT for approval, and the recommendation is therefore invalid.

⁷ Exhibit E.1: Geo Soils Report

[illegible]

It hardly bears stating that review of this Project cannot continue without a valid recommendation from the DAA regarding the VTT. This hearing process should be suspended at least until the DAA has reconsidered its recommendation in light of FEMA's April 21, 2021 determination that the building site is in a Special Flood Hazard Area subject to flooding in excess of 8 feet above sea level.

For the foregoing reasons, the hearing process must be halted. Assuming the City for some reason decides to proceed with the approval process, the following are reasons additional to those in our previous submissions why the Project should not be approved as proposed.

II. THE PROJECT CANNOT BE APPROVED AS PROPOSED

A. AHOS Requirements for Using the Building Site Have Not Been Satisfied

The requirements for including the proposed building site in the AHOS program are set forth in a City Council motion and a Request for Qualifications/Proposals issued by the City.

The Mary 24, 2016 City Council motion approving a Request for Proposal (“RFP”) for a homeless housing project on LADOT Lot No. 731 at 200 N. Venice Boulevard expressly adopts a Transportation Committee Report requiring “replacement parking and an appropriate mix of additional public parking and/or other uses as necessary to comply with the Venice Coastal Zone Specific Plan.” See City Council File No. 15-1138-S9 (available at <https://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=15-1138-S9>). The transportation committee report adopted by the City Council further states that the RFP “require that any project . . . be consistent with the Venice Coastal Zone Specific Plan”;

include “elements to ensure neighborhood compatibility”; and “[] increase public access to parking.” *Id.*

File No. 15-18-08-08

TRANSPORTATION COMMITTEE REPORT relative to a Request for Proposals (RFP) to provide an affordable housing project to seven homeless persons at City-owned Parking Lot No. 731 located at 200 North Venice Boulevard.

Recommendations for Council action as submitted by Motion (Boris - Harris-Dawson):

1. INSTRUCT the Los Angeles Department of Transportation (LADOT) and City Administrative Officer (CAO), with the assistance of the Housing and Community Investment Department, to inform all RFPs to provide for an affordable housing project to seven homeless persons, along with replacement parking and an equivalent rate of additional public parking and/or other means as necessary to comply with the Venice Coastal Zone Specific Plan (the "Coastal Zone") and Regional Parking L-14, No. 731 located at 200 North Venice Boulevard.

2. DIRECT that the RFP described above in Recommendation No. 1 include that any project:

a. To be consistent with the Venice Coastal Zone Specific Plan;

b. Include elements to ensure neighborhood compatibility, that it increase public access to parking; and that the applicant for the project undertake significant community outreach leading up to and during the project's entitlement process.

Factual Statement: Neither the City Administrative Officer nor the Chief Legislative Analyst has completed a financial analysis of this report.

Community Impact/Concerns: None submitted.

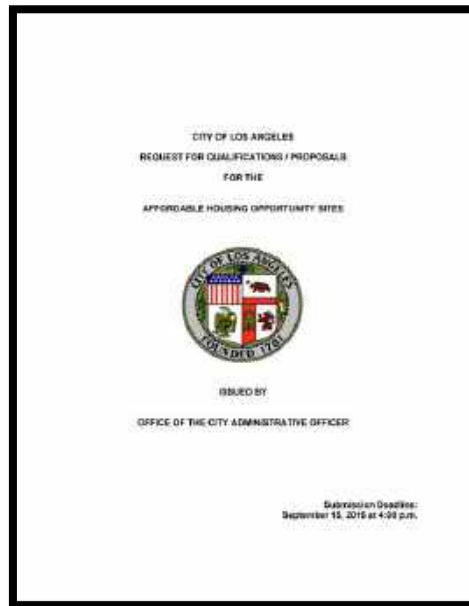
Summary:

On May 11, 2016, the Committee considered a Motion (Boris - Harris-Dawson) relative to a Request for Proposals (RFP) to provide an affordable housing project to seven homeless persons at City-owned Parking Lot No. 731 located at 200 North Venice Boulevard. According to the Motion, the City's Comprehensive Homeless Strategy (CHS) makes several recommendations to increase the inventory of affordable housing and housing for the homeless. In particular, the CHS recommends the City offer incentives, assurances, including additional parking lots, as potential locations for the development of residential affordable housing.

In Venice, with the skyrocketing costs of real estate, using publicly-owned property may be one of the only viable affordable housing sites to be built. The LADOT currently manages one of the City-owned parking lots located south of the Venice Lagoon, which is located in Venice where parking is difficult to find and where land for developing new parking facilities is scarce. In 2014, Council District 11 released a Request for Information (RFI) for potential development of additional parking property on City-owned parking lots in Venice. The RFI contemplated the development of additional parking structures to increase parking capacity and other contemplated development of affordable housing on the City-owned lots in an effort to address two of the planning issues facing Venice.

After consideration and hearing provided on opportunity for public comment, the Committee

⁸ Exhibit F: Project RFQ/P.

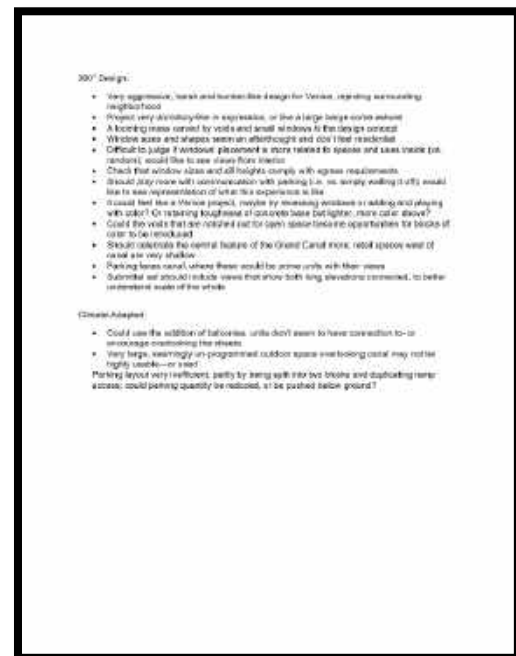


As set forth below, the Project does not satisfy the black and white requirements mandated by the RFP and related City Council action.

1. The Project Does Not “Ensure Neighborhood Compatibility”

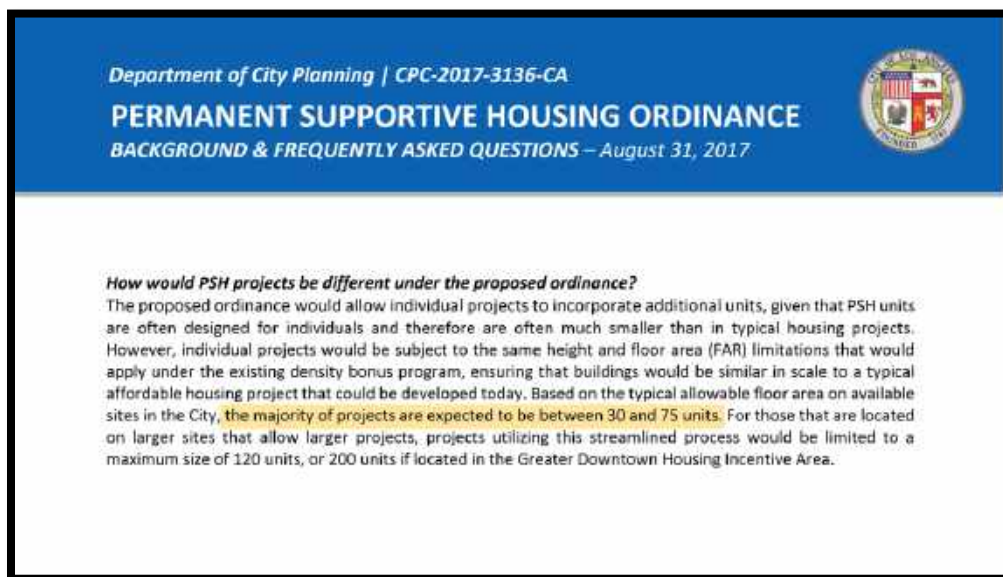
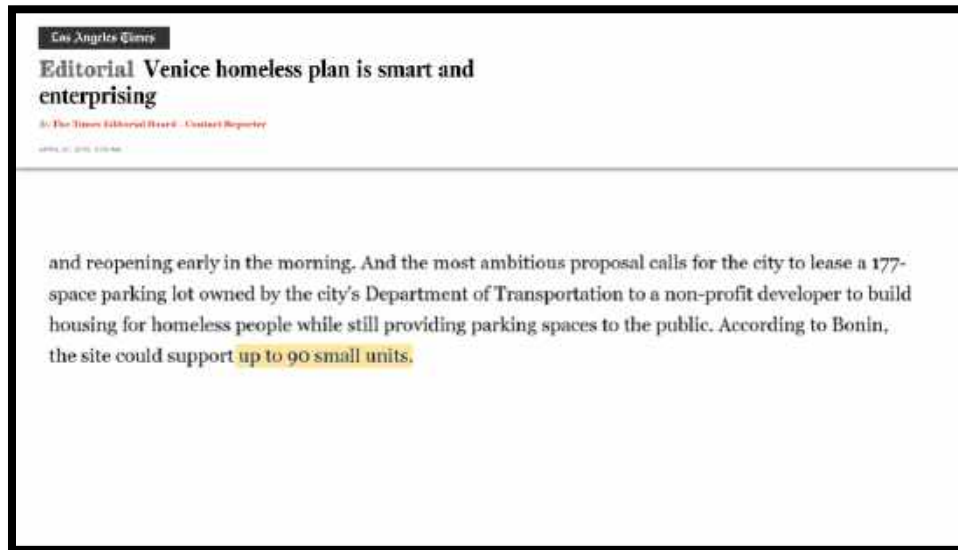
The Project was reviewed by the Los Angeles City Planning Department’s Urban Design Studio Professional Volunteer Program (“PVP”) for architectural evaluation, including a “360° Design” review, on September 3, 2019.⁹ The licensed architects participating in the review expressly found that it did not “feel like a Venice Project” and that it is a “[v]ery aggressive, harsh and bunker-like design for Venice, rejecting [the] surrounding neighborhood.” See Reese Davidson Community PVP Notes, September 3, 2019. Further, the architects found that the project is “very dormitory-like in expression, or like a large barge come ashore” and characterized it as “[a] looming mass,” while also stating that the “[w]indow sizes and shapes seem an afterthought and don’t feel residential.” Id.

⁹ Exhibit G: RDC PVP Notes



As reflected in the various sets of Project plans submitted to the City prior to and after the PVP “360° Design” Review, the Developers have made no modifications of consequence to address these issues.

Moreover, at 140 units, the Project is about twice the size of the typical supportive housing project in Los Angeles (not even counting the parking and commercial components) and much larger than the development of “up to 90 small units” Councilman Bonin originally proposed for the site.



The Project also requires exemption (through amendment to the Venice Coastal Zone Specific Plan) from height limits, setbacks, parking requirements and rules for mixed-use development applicable to other builds in the area.

[illegible]

VCHC'S "SUBAREA A"

Neighborhood Commercial Area of Special Interest

- a. Subarea A (Exhibit 10b). The lots within Subarea A shall be developed with a Qualified Permanent Supportive Housing Project that meets the requirements of Policy I.A.18 and the following development standards. Qualified Permanent Supportive Housing Projects are not subject to the standards outlined in Policy I.B.7.
1. **Density.** No project shall exceed the density permitted in the R3 zone.
 2. **Height.**
 - i. All projects shall be limited to a maximum height of 35 feet.
 - ii. One (1) campanile structure may exceed the maximum height of 35 feet. A maximum height of 67 feet is permitted, measured to the top of the Roof Access Structure.

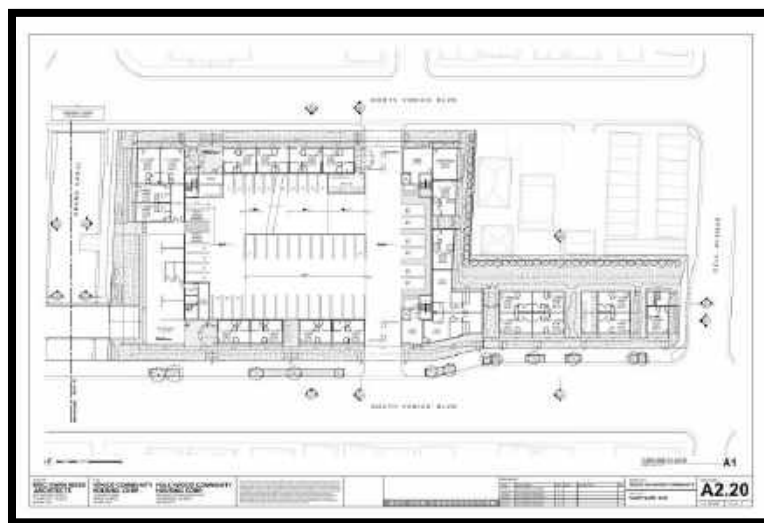
These facts simply precludes a finding that the Project complies with the requirement to “ensure neighborhood compatibility,” and the Project must be denied on that basis alone.

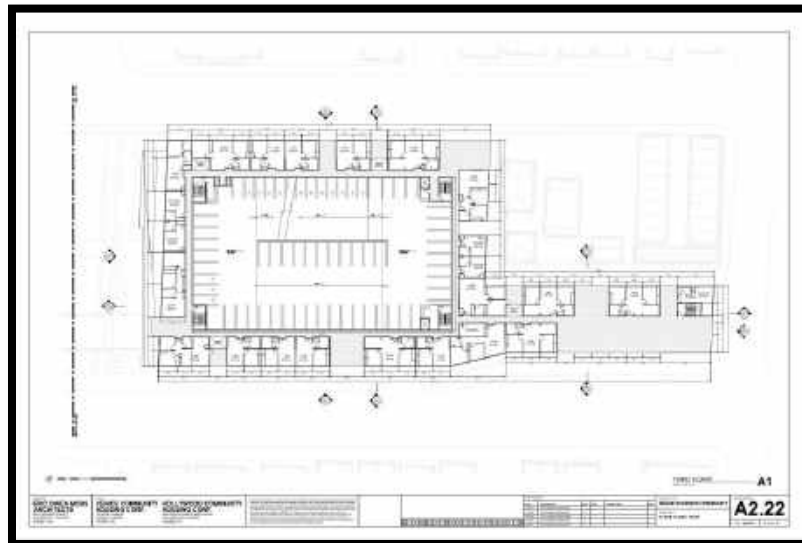
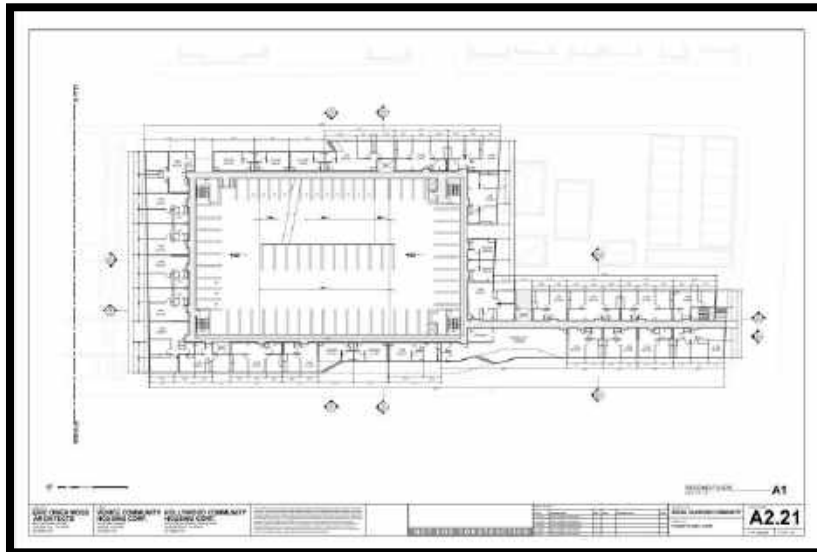
2. The Project Does Not “Increase Public Access to Parking” or Even Provide 1:1 Replacement Parking

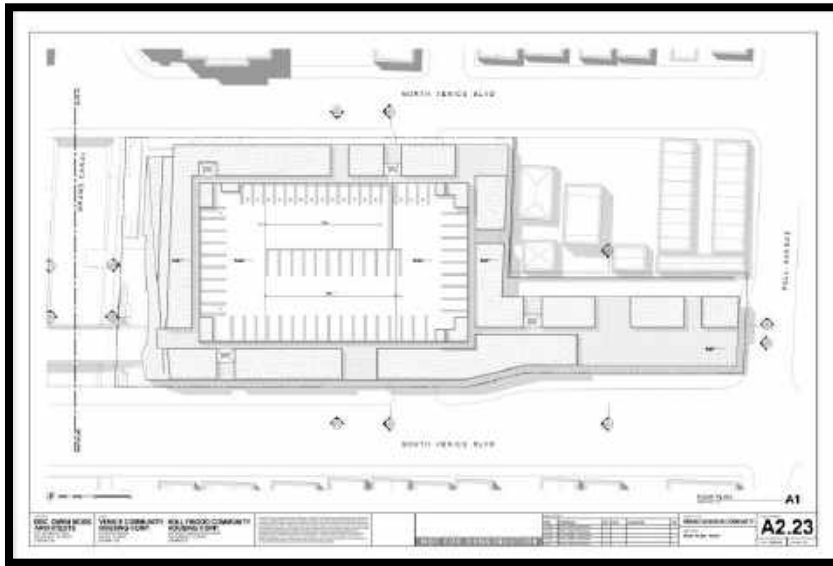
The Project Plans call for two parking towers: a West Parking Tower and an East Parking Tower. As those names imply, the West Parking Tower sits to the west of Grand Canal, toward the beach, and the East Parking Tower sits to the east of Grand Canal, further away from the beach.

Under the Plans, all parking for the Project (including both residential and commercial) is in the West Parking Tower, and all public parking, except a single boat launch parking space, is in the East Parking Tower.

The Plans purport to provide a total of 252 parking spaces in the East Parking Tower, including 27 “New Parking (Beach Impact)” spaces; 196 “Replacement Parking (Public)” spaces; 2 “New Parking – Boat Launch” spaces; 27 “New Parking (Non-Required)” spaces. Further, the Plans show a conventional four-level, above-ground parking structure comprising 188 standard and 64 compact self-park spaces.





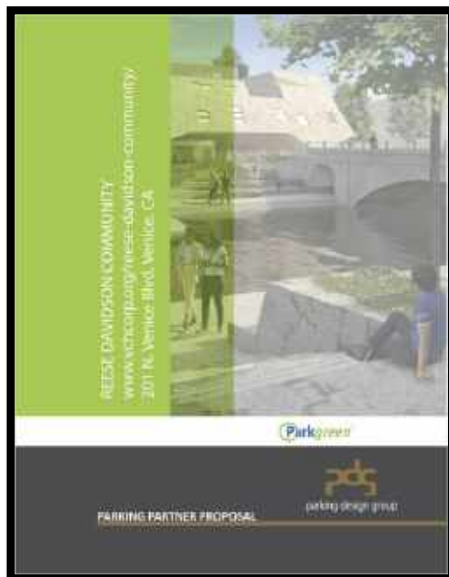


Even if these representations were accurate (which they are not), the Plans would not satisfy the parking requirements set forth in the Project RFP and City Council action related thereto for at least the following reasons:

1. Placing all public parking (including all beach parking) in the East Parking Tower means moving 40% of existing beach parking 500 feet further away from the beach;
2. The Coastal Commission—and the developers themselves—recognize that, particularly for purposes of beach access, surface parking is inherently more convenient and more desirable than structure parking;
3. The Plan as submitted purports to provide only 188 standard parking spaces, which is less than the 196 standard spaces currently painted out in LADOT No. 731. The rest are substandard, compact spaces that cannot properly be characterized as 1:1 replacement parking for standard spaces, which obviously accommodate a larger array of vehicles and uses; and
4. At 115,674 square feet, LADOT No. 731 can accommodate well over the 196 standard parking spaces that are currently painted out on the lot. No finding that the Plan provides adequate replacement parking can be made until the true capacity of LADOT No. 731 has been determined.

In any event, and more important, documents secured through hard-fought public records requests show that the Developers were informed by their parking contractor on August 14, 2020 that the proposal for the East Parking Tower that was provided to the City is utterly fallacious could accommodate even the Developers' low-ball estimates as to the required parking.

Specifically, that August 14, 2020 reports states that 60 robotic—or “lift”—parking spaces would be required to fit just 220 parking spaces in the East Parking Tower.¹⁰



The report further states that to construct and operate the type of parking structure required, the City of Los Angeles would have to “guarantee[] debt service payments” for the East Parking Tower for a period of 30 years. In addition, it proposes a discriminatory four-tiered retail scheme featuring “Premium,” “Value,” “Economy” and “ADA” parking, and assumes an “average ticket/transaction” \$13 to \$14 in the near term—well above the current cost of parking at LADOT No. 731.

¹⁰ Exhibit H: PDG Report.

May 17, 2021
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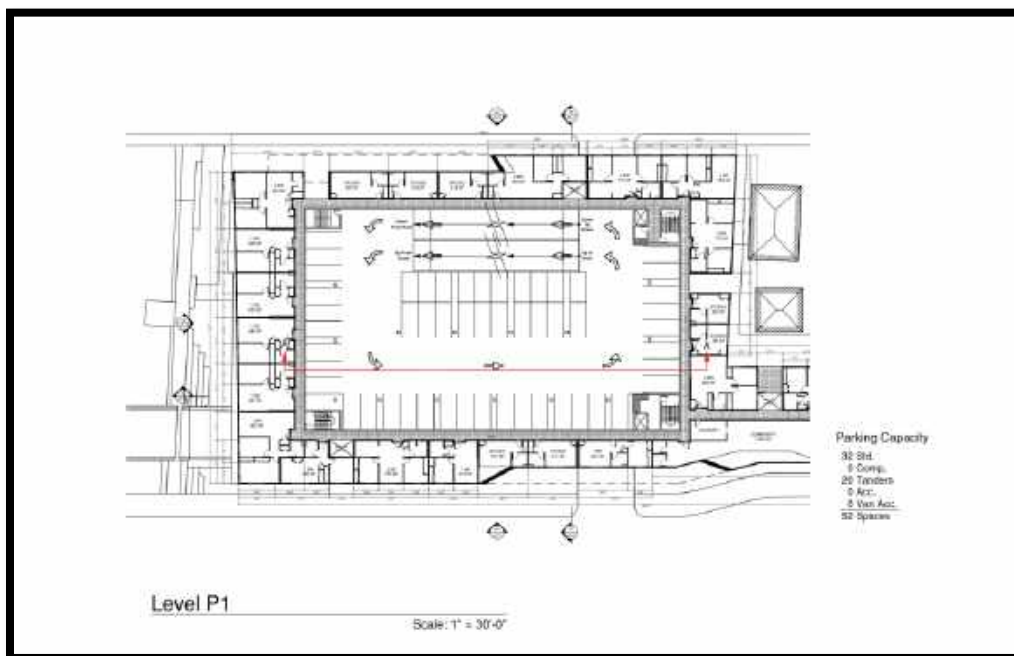
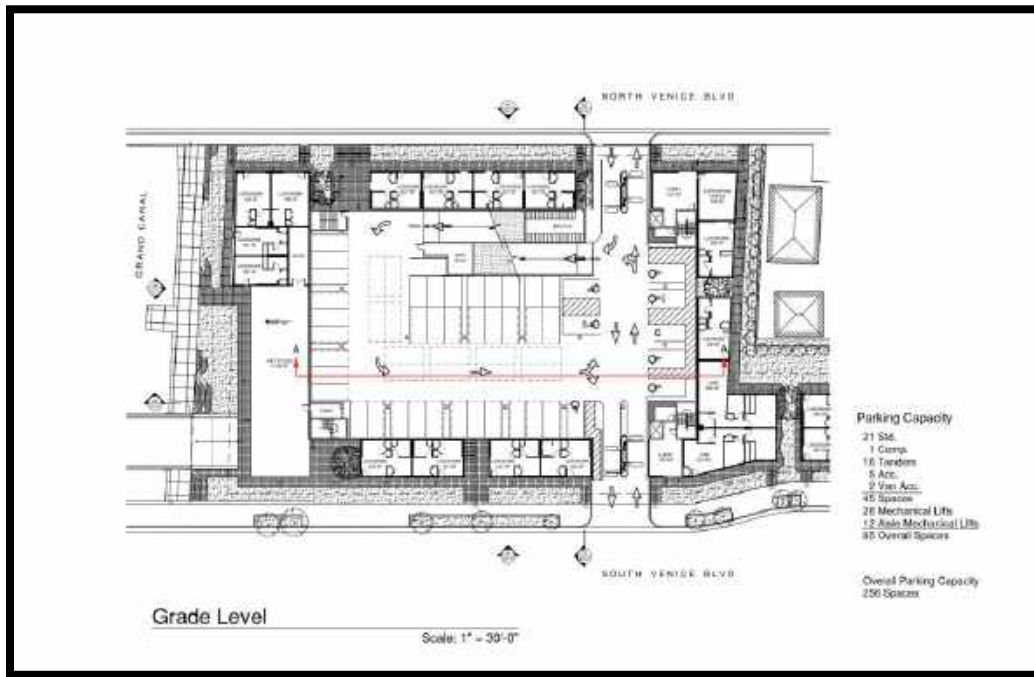
Finally the report (which was kept secret until we unearthed it) states that “the space assigned to [a] customer will be conveyed to them visually and audibly at the entry device” and that customers will then locate their Premium, Value, Economy or ADA space in either the conventional or robotic portion of the structure “via static and dynamic signage,” such as the following:

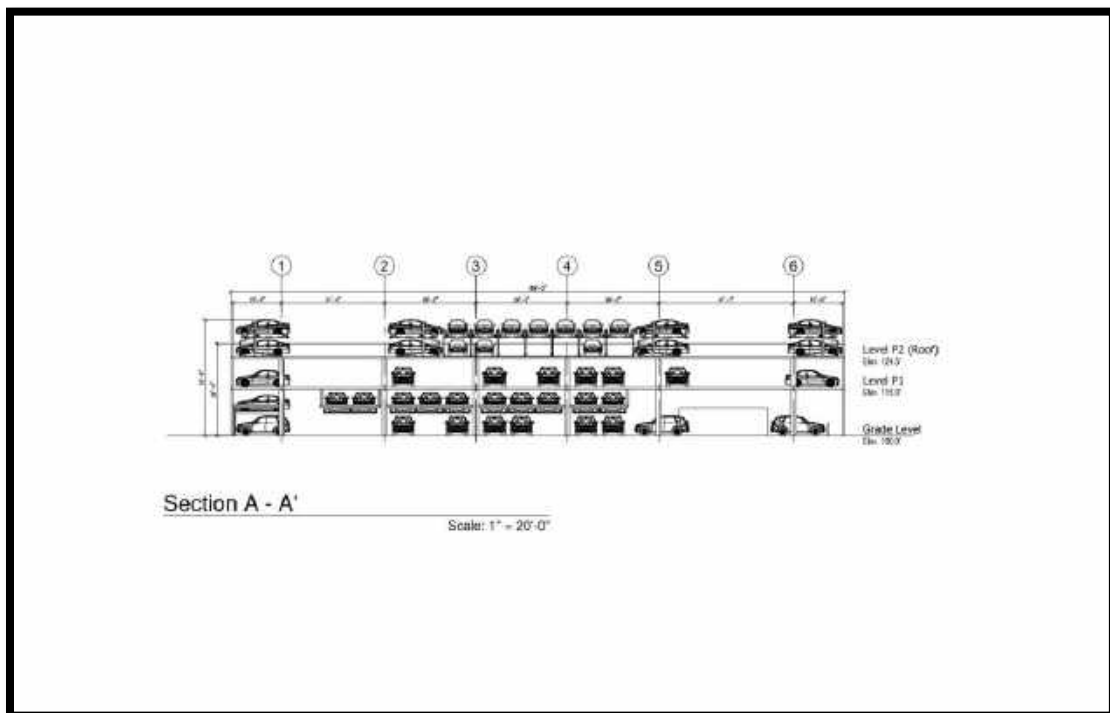
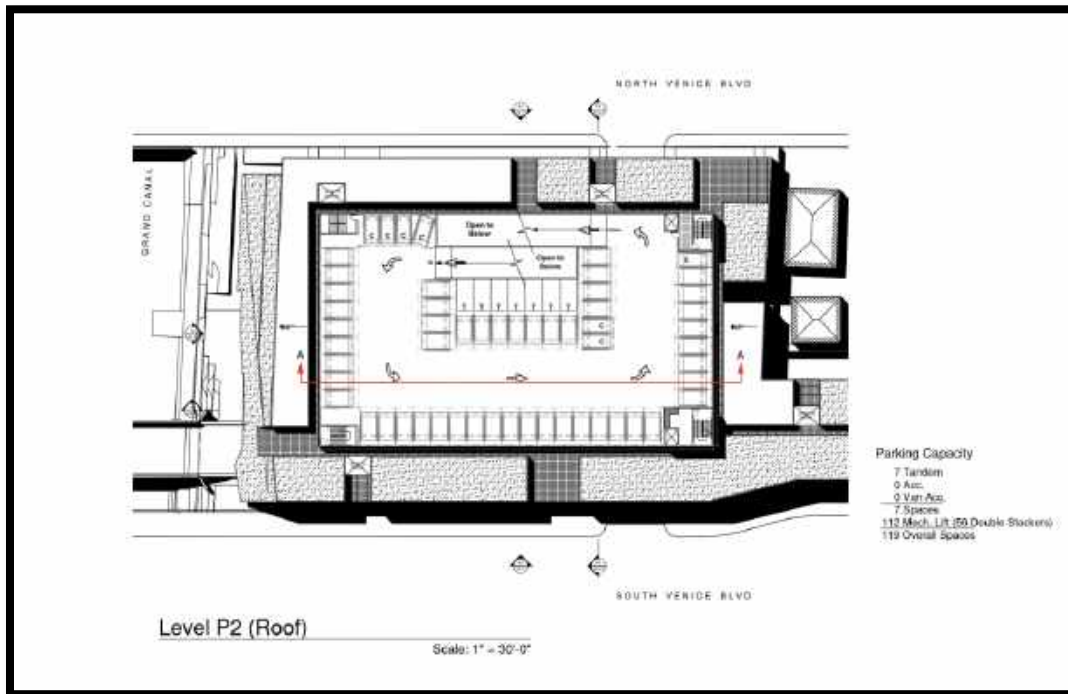


On January 19, 2021—more than two months before the Developer’s submitted the operative March 31, 2021 plans to the City—PDG updated this proposal with schematics calling for 256 parking spaces in the East Tower,¹¹ comprising:

- 40 single mechanical lift spaces in interior of the structure;
- 112 mechanical lift spaces in 56 so-called “double-stackers” on the roof of the structure;
- 43 tandem parking spaces (such that half the parkers are blocked in); and
- Just 60 standard or accessible spaces.

¹¹ Exhibit I: January 29, 2021 PDG Layouts.





This expensive and inaccessible indoor parking is no substitute for existing beach parking because it moves 40% of existing beach parking at LADOT Lot No. 731 500 feet further away from the beach and forces beachgoers of all ages to traffic substandard 5-foot sidewalks to get too and from the beach. Further, robotic parking makes unreasonably difficult for beachgoers to retrieve forgotten items and such from their vehicles in the course of a “beach day,” and loading and unloading families and beach equipment in robotic pods is laborious and unpleasant. In addition, robotic operations in a enclosed space is likely to raise significant contamination, pollution, health and safety issues that have not been addressed by the Developers in any fashion.

Moreover, all of these issues are certain to have a disproportionate impact on minority beachgoers—raising a number of civil issues and potential claims—and a study commissioned by the City itself shows that parking in the area will be “frozen” for 50 years after implementation of whatever parking plan is ultimately approved.¹²

TIERRA WEST

VENICE PARKING

- If the future proposed development projects provide a number of parking spaces based on City Municipal Code, the parking demand should be lower than parking spaces required, based on current demand that was observed
 - However, the parking demand that was observed in this Parking Study may not be the same in the future
 - Public parking spaces will become effectively “Frozen” for the next 50+ years after completion of the Project; the area is fully built out
 - There is no best-practice tool to accurately forecast parking demand 50+ years into the future with reliable precision
 - Therefore, it is possible that in the future new developments or other outside factors could cause the area’s parking demand to increase, and the current proposed public parking inventory could be insufficient in the future.

LADOT

CITY OF LOS ANGELES

TIERRA WEST PROJECT, INC.
PARKING STUDY FOR THE VENICE BEACH PROJECT
LADOT CONTRACT NO. 19-0000000000000000
FEBRUARY 2021

¹² Exhibit J: Tierra West Venice Parking Study

B. Even If the Plan Amendments Sought by the Developers Are Approved, the Project Will Still Not Comply with the Venice Specific Plan

As set forth above, Developers are seeking an amendment to the Venice Specific Plan creating a subarea of “special interest” that allows for the construction of mixed-used supportive housing projects up to 35-feet in height (excluding the 67-foot campanile).

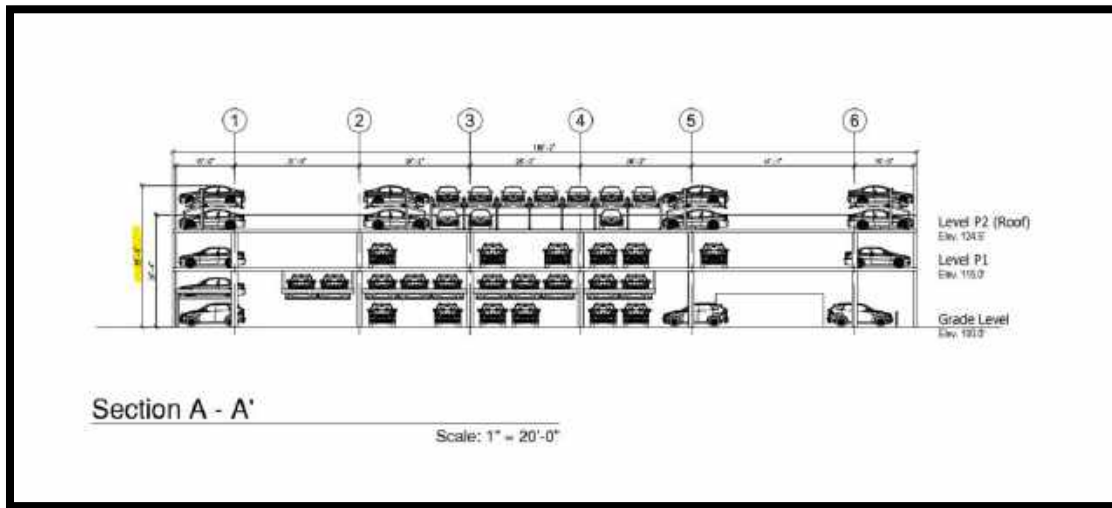
Further, the Plans call for 35-foot heights in many places, including much of the East Facility.



These calculations, however, omit at least two factors:

- The additional height required for “double-decker” robotic parking on the roof of the East Parking Tower; and
- The extra first floor elevation required by FEMA to account flooding.

PDG’s schematics show that the roof-top lifts will push the height of the East Parking Tower to 35’ 9” (or likely higher).



And allowing for the 1-to-3 ½-foot first-floor boosters required under the new April 21, 2021 FEMA maps will push portions of the East Facility to more than 38 feet in height.

Thus, even assuming all Project entitlements are approved, the Project still cannot be built.

In addition to the foregoing points, the Project violates the City's anti-containmentment policy, constitutes a gross misuse of taxpayer money at projected cost of more than \$1 million per 460-sq.-ft. unit, and cannot be brought online quickly enough to provide meaningful relief for the current homeless crisis. These topics will be addressed in more detail in a later filing, as collect additional information through public records requests.

Thank you,

Christian K. Wrede

Christian K. Wrede
for Venice Vision

Exhibit H

Letter Submitted on May 25, 2021
by Channel Law Group, LLP

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jamie.hall@channellawgroup.com

**ALSO Admitted in Texas

May 25, 2021

VIA ELECTRONIC MAIL

City of Los Angeles
200 N. Spring Street
Los Angeles, CA 90012
cpc@lacity.org

Re: **Vesting Tentative Tract for 2102 - 2120 S. Pacific Avenue, 116 - 302 E. North Venice Boulevard, 2106 - 2116 S. Canal Street, and 319 E. South Venice Boulevard; VTT-8228-1A; CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP; ENV-2018-6667-SE**

Honorable Members of the Planning Commission:

As acknowledged in the Staff Report for the Vesting Tentative Tract (VTT) for the Reese Davidson Community, the proposed project would result in the construction of 136 permanent supportive housing units and four Manager Units on a site bisected by the Venice's historic Grand Canal, in a liquefaction zone, Methane Zone, flood hazard zone, tsunami inundation area, and an area which staff acknowledges has the potential to be affected by a 5.6 to 6.15 feet sea level rise (SLR) over the life of the project.¹ However, according to the Staff Report, because the project is now, as a result of our prior comments, conditioned to require the that lowest finished floor elevation should be a minimum of 2 feet above the street flow line until reaching an elevation of 11 feet NAVD88 (above sea level) or that the first floor and foundations be waterproofed, it is acceptable to place this vulnerable population in a hazard area, where access is likely to be impacted by sea level rise or flooding during the life of the proposed project. The site is clearly not suitable for the intended use, the required findings cannot be made, and the Vesting Tentative Tract must be denied. There are better, less hazardous and more cost-efficient ways to serve the intended population and to address homelessness in the City than approval of a project which is inconsistent with the existing General Plan, zoning and Height District, Specific Plan, and Venice Coastal Zone Land Use Plan, and which may place residents in harm's way.

¹ <https://planning.lacity.org/StaffRpt/InitialRpts/VTT-82288-A1.pdf>

This firm represents Venice Vision. In our October 21, 2020 letter to the Deputy Advisory Agency and City Hearing Officer we provided substantial evidence documenting why the Reese Davidson Community (proposed project)² is not eligible for a statutory exemption from the requirements of the California Environmental Quality Act (CEQA) under California Public Resources Code (PRC) Section 21080.27(b)(1) and documenting that it has the potential to result in significant environmental impacts necessitating the preparation of an Environmental Impact Report (EIR). Additional documentation was provided by Venice Vision in their October 21, 2020 letter as well as community members and groups. Those letters and our February 16, 2021 letter documenting the basis for our appeal of the Vesting Tentative Tract (VTT) for the proposed project are incorporated herein by reference and provide substantial evidence as to why the required findings for the VTT cannot be made.

This letter provides a brief summary of why the City cannot make the required findings for approval of the Vesting Tentative Tract permit required for the project. Pursuant to Government Code Section 66474.61, the City is required to deny approval of the tentative map if any of the following is true:

- (a) That the proposed map is not consistent with applicable general and specific plans as specified in Section 65451.
- (b) That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.
- (c) That the site is not physically suitable for the type of development.
- (d) That the site is not physically suitable for the proposed density of development.
- (e) That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.
- (f) That the design of the subdivision or the type of improvements is likely to cause serious public health problems.
- (g) That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the legislative body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.

² Detailed project information is available at: <https://www.vchcorp.org/new-developments/reese-davidson-community-2/>

A. The Proposed Project Is Not Consistent with Applicable General and Specific Plans and the Design or Improvement of The Proposed Subdivision Is Not Consistent with Applicable General and Specific Plans

The proposed project and its design are not consistent with the existing General and Specific Plans. As detailed in our October 21, 2020 letter, the proposed project is not consistent with the existing zoning, the existing General Plan designation for the site, the existing Venice Community Plan, the existing Venice Coastal Zone Specific Plan or the existing Certified Venice Local Coastal Program Land Use Plan (LUP). The proposed project thus requires spot zoning in the form of: (1) a General Plan Amendment to change the Project's Site's land use designation from Open Space to Neighborhood Commercial; (2) a Vesting Zone Change and Height District Change from OS-1XL- O to (T)[Q]C2-1L-O; and (3) a Specific Plan Amendment to the Venice Coastal Zone Specific Plan to create a new subarea "Subarea A" to require a Permanent Supportive Housing project and establish new land use regulations and development standards; (4) a Project Permit Compliance Review for a project within the Venice Coastal Zone Specific Plan; (5) a Coastal Development Permit for a project located in the Dual Permit Jurisdiction of the Coastal Zone; (6) a Mello Act Compliance Review for demolition of four Residential Units and the construction of 140 Residential Units in the Coastal Zone; and (7) a Site Plan Review for a mixed-use development that would consist of 140 residential units. Even with the proposed amendments and zoning changes, the proposed project remains inconsistent with a number of General and Specific Plan policies, as well as with the Venice Local Coastal Program Land Use Plan (LUP) as outlined in our prior submittals. The proposed project is inconsistent with the General Plan's Open Space Element, including Policy 2, Policy 6.1. The proposed project is inconsistent with a number of LUP policies, including Parking Policy II.A.1, Policy II.A.2, Coastal Waterways Policy II.D.2, Policy I.D.1, I.E.2, IV.A.2, IV.A.3, and IV.A.4

B. That the Site Is Not Physically Suitable for The Type and Density of Development

The proposed project would introduce permanent supportive housing in an area subject to numerous hazards. As detailed in our October 21, 2020 letter, the project site would be subject to flooding as a result of Sea Level Rise (SLR) in combination with storm events. Even the Sea Level Rise Report for the project prepared for the applicant by GeoSoils, Inc., dated December 28, 2020, in response to our October 21, 2020 letter, acknowledges that the project buildings would be subject to flooding when SLR exceeds 6 feet, and that there is the potential for SLR over the life of the project to be 5.6 to 6.15 feet. There is thus a potential for the project buildings will experience flooding during the life of the project.

Even if the project buildings do not experience flooding, it is likely that project access will be impacted by SLR. According to page 14-21 the City's 2018 Local Hazard Mitigation Plan a 25-cm sea level rise would impact roads serving the project site:

The following major roads in the planning area cross through areas at risk from 25-cm sea level rise with 100-year storm:

- E North Venice Blvd
- E Sepulveda Blvd
- E South Venice Blvd
- E Washington Blvd
- E Pacific Coast Hwy
- Ocean Blvd
- S Lincoln Blvd
- S Sepulveda Blvd
- W Culver Blvd
- W Jefferson Blvd

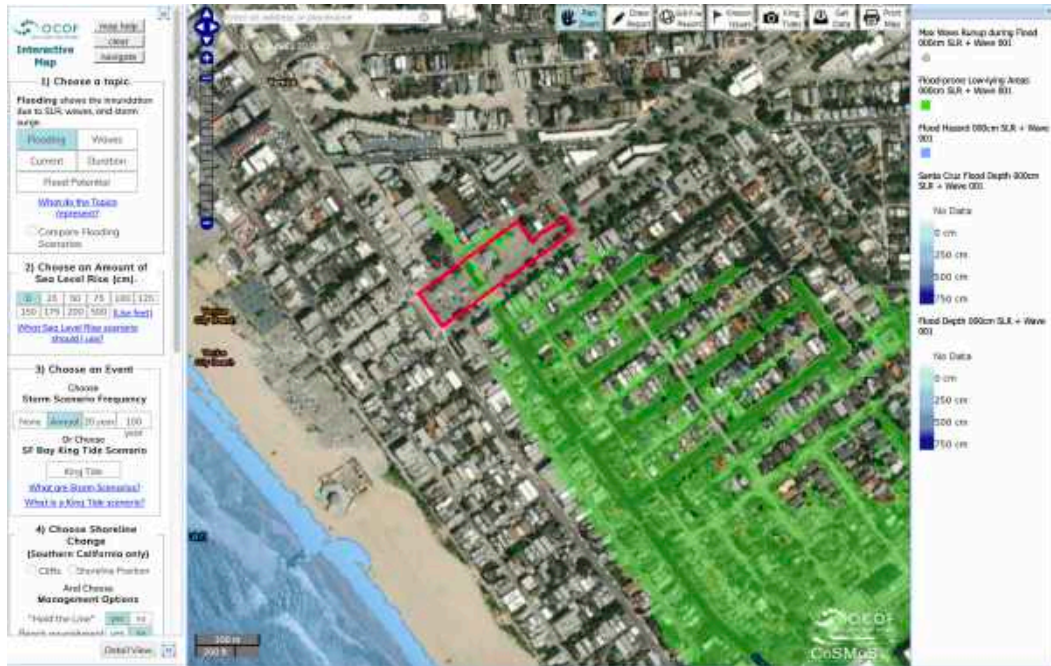
Project access is via two one-way streets identified as impacted by SLR: North and South Venice Boulevard. Thus, project access is likely to be impacted by SLR during a 100-year storm with only a 25-cm sea level rise. However, as noted in our October 21, 2020 letter, the Venice Sea Level Rise Vulnerability Assessment anticipates a 50-cm SLR in the 2040-2080 timeframe, likely rendering the risk assessment in the 2018 Local Hazard Mitigation Plan understated. Even the new report by GeoSoils shows that the portion of the site and roadway on N. Venice Blvd is prone to flooding.

As noted on page 10-7 of the City's 2018 Local Hazard Mitigation Plan: the "City of Los Angeles experienced significant flooding in 1914, 1916, 1927, 1934, 1938, 1941, 1943, 1952, 1956, 1969, 1978, 1980, 1983, 1993, 1995, 1998, 2005, 2010, and 2017. Large floods occur approximately every 5 to 6 years in the City." While the GeoSoils report did address SLR, it does not provide a breakdown of risk due to SLR alone and SLR combined with storm events.

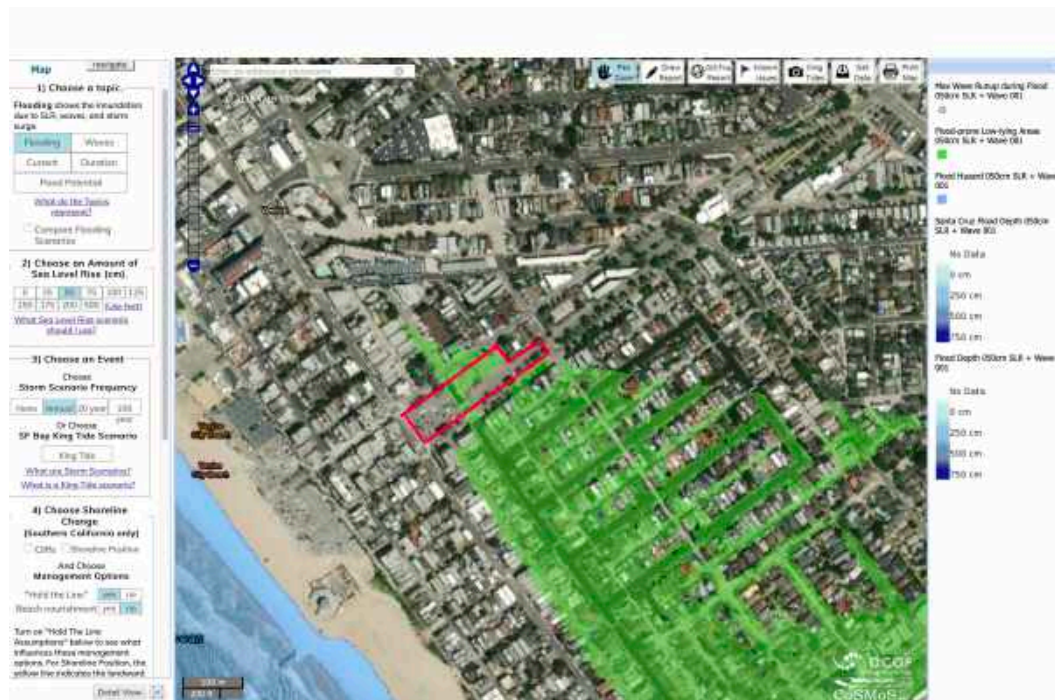
The proposed project would thus put a vulnerable and more transit-dependent population at risk of experience flood-related impacts during the life of the proposed project.

This would be further exacerbated by the fact the proposed project is bisected by the Venice Canal. As noted in the GeoSoils report prepared for the applicant, a source of potential site flooding is the Venice Canal. Flood control on the canal system is dependent on the proper operation of two tide gates and any failure in the operation of both tide gates can result in flooding as explained in the City's Venice Sea Level Rise Vulnerability Assessment, as detailed in our October 21, 2020 letter.

As shown in the following figures from our October 21, 2020 letter, flooding on the site is could occur even based on an annual storm event, and could render the project's location on the Venice Canal unsafe, given the way the historical canal is integrated into the project design.



POTENTIAL FOR FLOODING WITH AN ANNUAL STORM EVENT UNDER EXISTING CONDITIONS



POTENTIAL FOR FLOODING WITH AN ANNUAL STORM EVENT AND 50 CM RISE IN SEA LEVEL

As detailed in our October 21, 2020 letter, the project site is not physically suitable for the proposed use as it contains physical hazards which render residential uses inappropriate.

These include location within: a methane zone, a liquefaction area, and a tsunami inundation zone. The project site and adjacent roadway system is also anticipated to be subject to flood risk due to sea level rise and storm events. The project site is also unsuitable due to the hazards presented by left-turn only site access/egress necessitated by the one-way street system adjacent to the project site as detailed more fully in our October 21, 2020 letter.

C. That the Design of The Subdivision or The Proposed Improvements Are Likely to Cause Substantial Environmental Damage or Substantially and Avoidably Injure Fish or Wildlife or Their Habitat

As detailed in our October 21, 2020 letter, and/or the City's own Initial Study for the project, the proposed project has the potential to result in the following categories of environmental impacts:

- Air quality
- Excess cancer risk
- Biological resource impacts including a lack of consistency with the Venice coastal Zone Land Use Plan (LUP) policies, including policies I.D.1, I.E.2, IV.A.2, IV.A.3, and IV.A.4
- Cultural resources
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality
- Land use and planning
- Noise
- Public services
- Recreation
- Transportation and traffic
- Tribal cultural resources
- Utilities and service systems

While staff has attempted to address biological resource and flooding impacts through the preparation of additional studies in response to our comments and supporting studies, the City has failed to demonstrate that the proposed project will not result in significant environmental impacts in these other issue areas.

D. That the Design of The Subdivision or The Type of Improvements Is Likely to Cause Serious Public Health Problems

As detailed in a screening-level Health Risk Assessment prepared by SWAPE, and included as Attachment A to our October 21, 2020 letter, the project will result in an excess cancer risk to adults, children, infants, and during the 3rd trimester of pregnancy at the maximally exposed individual resident (MEIR) located approximately 100 meters away.

E. The Project Does Not Meet the Requirements for A PRC Section 21080.27 Statutory Exemption

As detailed in our February 16, 2021 letter documenting the basis for our appeal, the proposed project includes uses that do not meet the definition of supportive housing and are thus not eligible for the Section 21080.27 exemption. These uses include:

- 2,255 square feet of retail uses,
- 810 square feet of restaurant uses with 500 square feet of outdoor Service Floor area,
- 3,155 square feet of community arts center/art studio uses (philanthropic uses).
- Parking in excess of the 61 residential spaces, including: 42 commercial spaces, 196 public spaces (replacement), 23 Beach Impact Zone (BIZ) spaces and 38 non-required spaces; and 136 bicycle parking spaces (19 short-term and 117 long-term).

Just because these uses share a site with a supportive housing functions does not make them exempt from CEQA evaluation. If they were located off-site, they would be clearly subject to CEQA review. These proposed uses on the project site do not become immune from environmental review requirements by virtue of their proximity to proposed “supportive housing.”

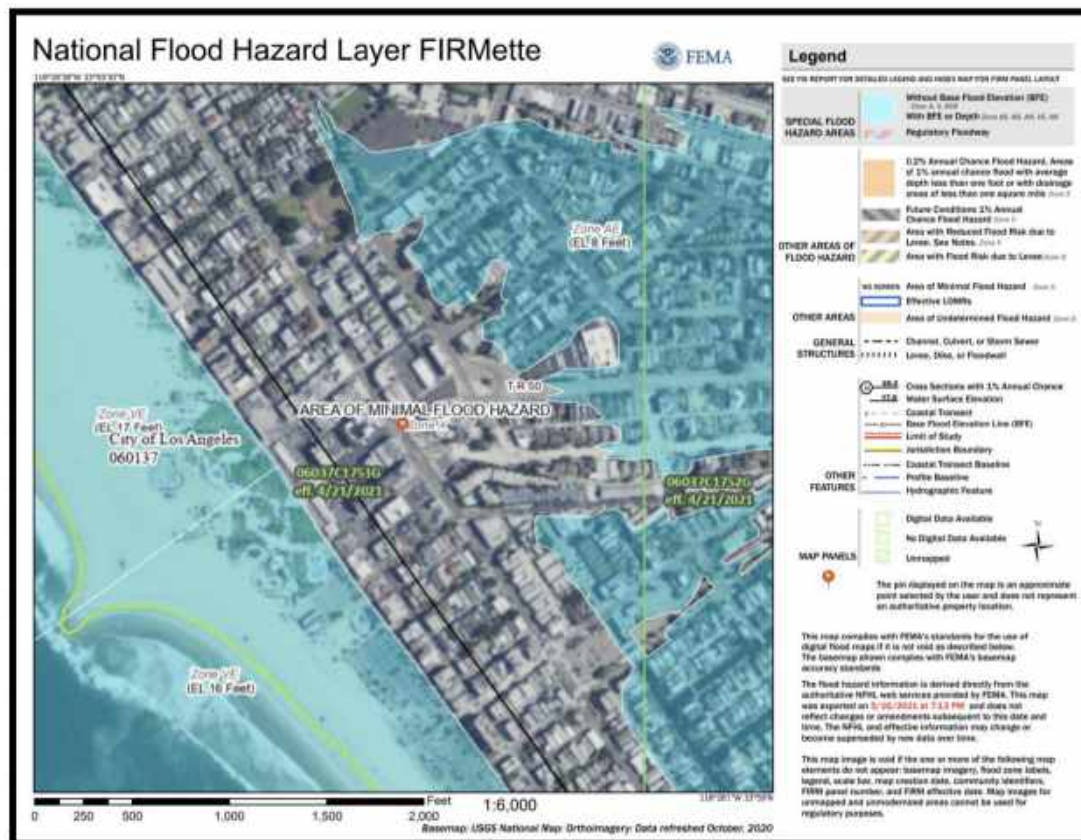
Government Code 65650 et. seq. sets out various requirements that a project must meet to be considered a “supportive housing” project. Gov. Code 65651 essentially provides a compliance checklist. As demonstrated in the analysis contained in our February 16, 2021 appeal letter, the proposed project is not a by right development, and fails to satisfy all of the requirements of Government Code Section 65651. Most importantly, it fails to provide at least 3 percent of the total nonresidential floor area for onsite supportive services that are limited to tenant use. The proposed project includes a total of 64,280 square feet of residential uses. The proposed project includes a number of uses that are not limited to tenant use including: retail (2,225 sf), restaurant (810 sf), and art studio (3,155 sf). The project plans indicate the project has a FAR of 1.15:1 or 104,140 square feet. This means that the 685 square feet dedicated to supportive services would represent only 1.72% of the non-residential floor area. If exterior walkways are excluded from the calculation, then the 685 square feet dedicated to supportive services would represent only 2.62% of the non-residential floor area.

The proposed project meets neither the conditions for a statutory exemption from CEQA, or the required findings for issuance of a Vesting Tentative Tract. The City should deny the application for the Vesting Tentative Tract and should deny the requested waivers.

F. The DAA’s Recommendation to Approve the VTT Was Based on Erroneous, Outdated Flood Information and Must Be Thrown Out in Light of New FEMA Maps Showing That the Site Is in a Special Flood Hazard Area

New FEMA flood hazard maps adopted April 21, 2021 show the building site sits squarely in a Special Flood Hazard Area designated Zone AE-EL8. See <https://pw.lacounty.gov/floodzone/>.

The “AE” designation means the Project has at least a 1% chance of flooding in any given year and more than a 50% chance of flooding in the 55-year lease period for the Project. See <https://www.fema.gov/flood-maps/coastal/insurance-rate-maps>. Further, the “EL8” designation indicates a base flood elevation requirement of 8 feet. That means the first habitable floor of the project must be more than 8 feet above sea level. See <https://pocketsense.com/ae-flood-zone-5407910.html>; <https://www.fema.gov/node/404233> (defining Base Flood Elevation (“BFE”) as “[t]he elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.”).



In other words, the BFE line indicates the highest predicted water level during a flood, measured by number of feet above the average high tide. In a Special Flood Hazard Area there is a 1% chance (or more) every year of flood water that equals or exceeds the BFE.

The International Building Code is now staying on top of the BFE (literally), by requiring Design Flood Elevation of +1'. Meaning, if a structure falls within a AE-EL8 zone, the number 8 indicates the BFE. With the +1' rule in effect, the bottom of the structure must be at 9' above sea level ($8' + 1' = 9'$).

According to the applicant, the elevation of the Building Site ranges from 5.66 feet above sea level to 7.91 feet above sea level. Consequently, the first floor of the Project will have to sit at a minimum of about 1 foot to more than 3 feet above street level.

The Project developers commissioned a December 8, 2020 report by GeoSoil. Inc. purporting to address “potential costal hazards” relating to the Project. The report states that “[t]he site is not currently vulnerable to flooding” and that the “lowest finished floor (FF) elevation (not garage floor) should be 2 feet, or more, above the street flow line until reaching 11 feet NAVD88, and for street flow lines above +11 feet NAVD88 the FF elevation should be a minimum of 1 foot above the flow line.” The report also calls for waterproof retrofitting as needed in the future. Id. This report is inaccurate and outdated, but even the applicant’s own engineers—who directly contradict FEMA—cannot avoid acknowledging the tremendous flood risk and related costs in connection with the project, as well as acknowledging that the Project will have to be “built up” above street level to reduce flood risk. Venice homeowners have recently received government notice that they will collectively have to spend millions—and over time, potentially billions—in flood insurance to cover their beach adjacent properties. It is unthinkable to overlook these issues in connection with the Project.

Also, the Project application incorrectly indicates, based on outdated information, that the site is not subject to a 100-year hazard and that it “is not affected” by base flood. The DAA relied on both of those statements in recommending the VTT for approval, and the recommendation is therefore invalid.

Raising the first floor of the project to conform to the International Building Code will necessarily cause the project to exceed the applicable height limit. Because the project will no longer conform to the zoning and building code (because it will exceed the height limit), the City cannot make the required findings for the VTT.

I may be contacted at 310-982-1760 or at jamie.hall@channellawgroup.com if you have any questions, comments or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jamie T. Hall', written in a cursive style.

Jamie T. Hall



LOS ANGELES CITY PLANNING COMMISSION

200 North Spring Street, Room 272, Los Angeles, California, 90012-4801, (213) 978-1300

www.planning.lacity.org

LETTER OF DETERMINATION

MAILING DATE: JUL 13 2021

Case No. CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-SPR-PHP

CEQA: ENV-2018-6667-SE
Plan Area: Venice
Related Case: VTT-82288-1A

Council District: 11 – Bonin

Project Site: 2102 – 2120 South Pacific Avenue; 116 – 302 East North Venice Boulevard;
2106 – 2116 South Canal Street; 319 East South Venice Boulevard

Applicant: Sarah Letts, Hollywood Community Housing Corporation;
Rebecca Dennison, Venice Community Housing
Representative: Christopher Murray, Rosenheim & Associates, Inc.

At its meeting of **May 27, 2021**, the Los Angeles City Planning Commission took the actions below in conjunction with the approval of the following project:

Demolition of an existing surface parking lot (LADOT Lot 731) containing 196 vehicular parking spaces (bisected by Grand Canal) and a two-story, four-unit residential structure; and the merger and re-subdivision of a 115,674 square foot site to create two ground lots and seven airspace lots for the construction, use and maintenance of a 103,957 square foot, mixed-use, 100 percent affordable housing development (a 36,157 square foot structure west of Grand Canal and a 67,800 square foot, structure east of Grand Canal) consisting of 140 dwelling units of which 34 are Joint Living and Work Quarters (136 restricted affordable dwelling units and four unrestricted Manager Units), 685 square feet of supportive services, 2,255 square feet of retail uses, an 810 square-foot restaurant with 1,060 square feet of indoor and outdoor Service Floor area, and 2,875 square feet of art studio.

The structure west of Grand Canal (West Site) is three-stories and 35 feet in height with a 59-foot in height architectural campanile located at the northwest corner of the subject site with a roof access structure resulting in a structure with a maximum of 67 feet in height and four stories with a mezzanine. The structure east of Grand Canal (East Site) is three-stories and 35 feet in height. The Project will provide a total of 357 automobile parking spaces comprising of 61 residential spaces, 42 commercial spaces, 27 Beach Impact Zone (BIZ) spaces, 226 public spaces, and 136 bicycle parking spaces (19 short-term and 117 long-term).

The Project also includes the export of 9,100 cubic yards of building material and soil, and the removal of 24 non-protected on-site trees and 11 non-protected street trees.

1. **Determined**, based on the whole of the administrative record, the Project is exempt from CEQA pursuant to Public Resources Code, Section 21080.27(b)(1);
2. **Approved and recommended** that the Mayor and City Council **adopt**, pursuant to Los Angeles City Charter Section 555 and Section 11.5.6 of the Los Angeles Municipal Code (LAMC), a General Plan Amendment to the Venice Community Plan, the certified Venice Local Coastal Program Land Use Plan (LUP) to change the land use designation from Open

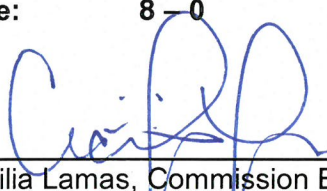
Space and Low Medium II Multiple Family Residential to Neighborhood Commercial, and text pertaining to the proposed development;

3. **Approved and recommended** that the City Council **adopt**, pursuant to LAMC Sections 12.32 F and 12.32 Q, a Vesting Zone and Height District Change from OS-1XL-O to (T)(Q)C2-1L-O using the below Developer Incentives, pursuant to LAMC Section 11.5.11(e) and California Government Code Section 65915(k):
 - a. Reduced residential parking pursuant to AB744;
 - b. Permit required residential parking for the building on the East Site to be located in the building on the West Site; and
 - c. Utilize the side yard requirements for the RAS3 Zone;
4. **Approved and recommended** the City Council **approve**, pursuant to LAMC Section 11.5.7 G, a Specific Plan Amendment to the Venice Coastal Zone Specific Plan to:
 - a. Amend the Existing Zoning Map from OS-1XL and RD1.5 to (T)(Q)C2-1L-O for consistency with the proposed zone;
 - b. Amend the Existing Zoning Map to remove the proposed Alberta Avenue right-of-way between North Venice Boulevard and South Venice Boulevard and replace it with (T)(Q)C2-1L-O to be consistent with the existing conditions and proposed zone; and
 - c. Amend Section 10 to create a new subarea "Subarea A", that would establish new land use and development regulations;
5. **Approved**, pursuant to LAMC Section 11.5.7, a Project Permit Compliance Review for a project within the Venice Coastal Zone Specific Plan;
6. **Approved**, pursuant to LAMC Section 12.20.2.1, a Coastal Development Permit for a Project located within the Dual Permit Jurisdiction of the Coastal Zone;
7. **Approved**, pursuant to Sections 65590 and 65590.1 of the California Government Code and the City of Los Angeles Interim Mello Act Compliance Administrative Procedures, a Mello Act Compliance Review for the demolition of four Residential Units and the construction of 140 new Residential Units within the Coastal Zone; and
8. **Approved**, pursuant to LAMC Section 16.05, a Site Plan Review for a project which creates or results in an increase of 50 or more dwelling units;
9. **Adopted** the attached Conditions of Approval; and
10. **Adopted** the attached Findings.

The vote proceeded as follows:

Moved: Millman
 Second: Perlman
 Ayes: Choe, Hornstock, Leung, López-Ledesma, Mack, Wilson

Vote: 8 - 0


 Cecilia Lamas, Commission Executive Assistant
 Los Angeles City Planning Commission

Fiscal Impact Statement: There is no General Fund impact as administrative costs are recovered through fees.

Effective Date/Appeals: The decision of the Los Angeles City Planning Commission as it relates to the General Plan Amendment is final. The Zone Change and Height District is appealable by the Applicant only, if disapproved in whole or in part by the Commission. The decision of the Los Angeles City Planning Commission, regarding the remaining approvals, is appealable to the Los Angeles City Council within 20 days after the mailing date of this determination letter. Any appeal not filed within the 20-day period shall not be considered by the Council. All appeals shall be filed on forms provided at the Planning Department's

Development Service Centers located at: 201 North Figueroa Street, Fourth Floor, Los Angeles; 6262 Van Nuys Boulevard, Suite 251, Van Nuys; or 1828 Sawtelle Boulevard, West Los Angeles.

FINAL APPEAL DATE: AUG 02 2021

Notice: An appeal of the CEQA clearance for the Project pursuant to Public Resources Code Section 21151(c) is only available if the Determination of the non-elected decision-making body (e.g., ZA, AA, APC, CPC) **is not further appealable** and the decision is final.

Pursuant to Section 12.20.2 I of the Los Angeles Municipal Code, the City's action on the Coastal Development Permit shall be deemed final only after 20 working days have expired from the date the City's action is deemed received by the Executive Officer of the California Coastal Commission and provided that a timely, valid appeal is not taken by the California Coastal Commission within said time frame. Furthermore, the amendment to the certified Venice Land Use Plan is subject to review and certification by the California Coastal Commission.

This Coastal Development Permit shall be subject to revocation as provided in Section 12.20.2 J of the Los Angeles Municipal Code.

If you seek judicial review of any decision of the City pursuant to California Code of Civil Procedure Section 1094.5, the petition for writ of mandate pursuant to that section must be filed no later than the 90th day following the date on which the City's decision became final pursuant to California Code of Civil Procedure Section 1094.6. There may be other time limits which also affect your ability to seek judicial review.

Attachments: Ordinances, Maps, Conditions of Approval, Findings, Resolution, Interim Appeal Filing Procedures, HCID Letter

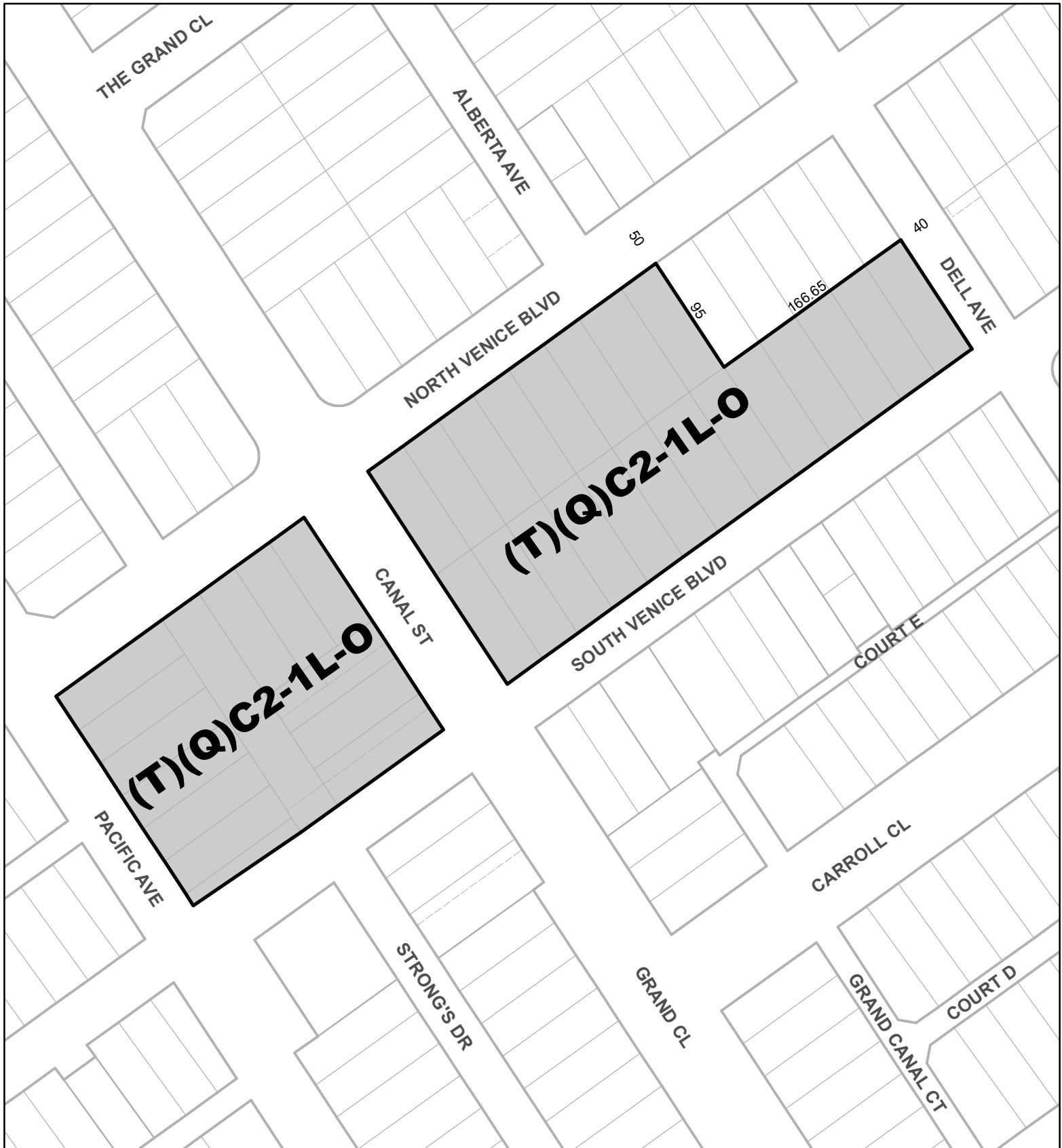
c: Juliet Oh, Senior City Planner
Elizabeth Gallardo, City Planner
Ira Brown, City Planning Associate

ORDINANCE NO. _____

An ordinance amending Section 12.04 of the Los Angeles Municipal Code by amending the zoning map.

THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Section 1. Section 12.04 of the Los Angeles Municipal Code is hereby amended by changing the zone and zone boundaries shown upon a portion of the zone map attached thereto and made a part of Article 2, Chapter 1 of the Los Angeles Municipal Code, so that such portion of the zoning map shall be as follows:



THE INTENT OF THIS ORDINANCE
IS FOR THE BOUNDARIES OF THIS
ZONE CHANGE TO COINCIDE WITH
THOSE OF RECORDED TR 82288.



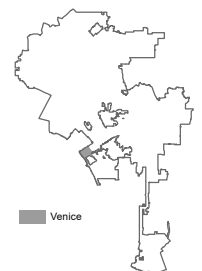
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City of Los Angeles



(Q) QUALIFIED CONDITIONS OF APPROVAL

Pursuant to Section 12.32 G of the Municipal Code, the following limitations are hereby imposed upon the use of the subject property, subject to the “Q” Qualified classification.

1. **Site Plan.** Except as modified herein, the project shall be in substantial conformance with the plans and materials submitted by the Applicant, stamped Exhibit “A,” and attached to the subject case file. No change to the plans will be made without prior review by the Department of City Planning, West/South Project Planning Division, and written approval by the Director of Planning. Each change shall be identified and justified in writing. Minor deviations may be allowed in order to comply with the provisions of the Los Angeles Municipal Code or the project conditions. The plans shall comply with provisions of the Municipal Code, the subject conditions, and the intent of the subject permit authorization.
2. **Affordable Housing.** Prior to the issuance of a building permit, projects of ten or more dwelling units shall submit proof of compliance with the Affordable Housing provisions of Los Angeles Municipal Code (“LAMC”) Section 11.5.11 to the satisfaction of the Department of City Planning.
3. **Use.** The project shall be limited to a maximum density of 140 Permanent Supportive Housing units, including four (4) manager’s units and supportive services, commercial uses comprised of art gallery, restaurant, and retail uses, and a public parking lot.
4. **Labor Requirement.** Pursuant to Los Angeles Municipal Code Section 11.5.11, certified by City Council on December 13, 2017 and codified as Section 5.522 of the Administrative Code, the applicant shall confer with Department of Public Works, Bureau of Contract Administration, Office of Contract Compliance, and shall provide the following to the Department of City Planning:
 - a) A signed Preconstruction Checklist Agreement between the Applicant and the Bureau of Contract Administration (maintained in the case file), prior to clearing any Building Permit, which covers the following:
 - i. **Licenses.** All building and construction work on the project will be performed at all tiers by contractors that are licensed by the State of California and the City of Los Angeles. The project will employ only construction workers that possess all licenses and certifications required by the State of California and the City of Los Angeles.
 - ii. **Local Hire.** At least 30% of all respective workforces’ construction workers’ hours of Project Work will be performed by permanent residents of the City of Los Angeles. Of these, at least 10% of all their respective workforces’ construction workers’ hours of Project Work shall be performed by Transitional Workers whose primary place of residence is within a 5-mile radius of the covered project. If such minimums are not met, evidence of a good faith effort to solicit such local workers shall be evidenced.
 - iii. **Wages.** The project will pay construction workers performing Project Work hourly wage rates for those classifications in compliance with the applicable prevailing wage rate determination established pursuant to the California Labor Code.
 - iv. **Training.** At least 60% of construction workforces employed on the project will be:

- a. Workers who graduated from a Joint Labor Management apprenticeship training program approved by the State of California.
 - b. Alternatively, workers employed that have minimum hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program.
 - c. Workers who are registered apprentices in an apprenticeship training program approved by the State of California or an out-of-state, federally-approved apprenticeship program.
- v. **Bond.** A Bond may be required to ensure compliance.
- b) After the project has completed construction, and prior to any Certificate of Occupancy, a signed report from the Bureau of Contract Administration that indicates compliance with the above licenses, local hire, wages and training requirements shall be added to the case file.

ORDINANCE NO. _____

An ordinance amending Ordinance No. 175,693, Venice Coastal Zone Specific Plan to create a new Subarea A

THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Section 1. Section 2 of Ordinance No. 175,693 is amended to read as follows:

Establishment of the Venice Coastal Zone Specific Plan

- A. The City Council establishes this Venice Coastal Specific Plan applicable to that area of the City of Los Angeles shown on the Specific Plan Area map, Exhibit 1a and 1b. The Specific Plan area is divided into ~~eight~~ nine subareas, as shown by Exhibits 2 through 5.

Ballona Lagoon West Bank Subarea, generally bounded by Driftwood Street on the north, Via Marina on the south, Ballona Lagoon on the east, and Strongs Drive, Canal Court and Pacific Avenue on the west, as shown on Exhibit 2.

Ballona Lagoon (Grand Canal) East Bank Subarea, generally bounded by Washington Boulevard on the north, the northern terminus of the Ballona Lagoon on the south, Via Dolce on the east, and Grand Canal on the west, as shown on Exhibit 2.

Silver Strand Subarea, generally bounded by the eastern extension of Driftwood Street on the north, Via Marina on the south, the Los Angeles County boundary on the east, and Ballona Lagoon on the west, as shown on Exhibit 2.

Marina Peninsula Subarea, generally bounded by Thirtieth Place and the Washington Boulevard Pier on the north, Via Marina on the south, Strongs Drive, Canal Court and Pacific Avenue on the west, and the Pacific Ocean on the west, as shown on Exhibit 2.

Venice Canals Subarea, adjacent to Grand, Sherman, Howland, Linnie, Carroll and Eastern Canals, located south of Virginia Court, north of Washington Boulevard and Sherman Canal Court, east of Strongs Drive and west of Patricia Court and Grand Canal Court as shown on Exhibit 3b.

North Venice Subarea, generally bounded by the Los Angeles City boundary line on the north, Thirtieth Place, Virginia Court and North Venice Boulevard on the south, Hampton Drive, Electric Avenue, Ocean Avenue, Patricia Court, and Strongs Drive on the east and Ocean Front Walk on the west, as shown on Exhibits 3a and 3b.

Oakwood-Milwood-Southeast Venice Subarea, generally bounded by the Los Angeles City boundary line on the north, Washington Boulevard on the south, Lincoln Boulevard on the east, and Hampton Drive, Electric Avenue, Patricia Court and Strongs Drive on the west, as shown on Exhibits 4a and 4b.

Oxford Triangle Subarea, generally bounded by Washington Boulevard on the north, the Los Angeles City boundary on the southwest, and Lincoln Boulevard on the east, as shown on Exhibit 5.

Subarea A: generally bounded by Dell Avenue, North Venice Boulevard, South Venice Boulevard and Pacific Avenue, as shown on Exhibit 3b.

Section 2. Section 5 of Ordinance No. 175,693 is amended to read as follows:

DEFINITIONS. The following words, whenever used in this Specific Plan, shall be construed as defined in this section. Words and phrases not defined here shall be construed as defined in LAMC Section 12.03 or 12.20.2.1, if defined there:

- a. **Architectural Features.** Features including, but not limited to, sculpture, bas relief, mosaic, mural, vents, porch, balcony, chimney, window and doorway.
- b. **Blank Wall.** A Street Wall or vehicle entry facing the street and having no architectural detailing, windows, doors or similar features.
- c. **Building Frontage.** The maximum length of a line or lines formed by connecting the points representing projections of the exterior building walls onto a public street or onto a courtyard that is directly accessible by pedestrians from a public street, whichever distance is greater.
- d. **Beach Impact Zone.** All lots located in the Marina Peninsula, Ballona Lagoon West Bank, Venice Canals and North Venice subareas described in Section 1, Exhibits 2, 3a and b, of this Specific Plan.
- e. **Change in Intensity of Use.** A change in intensity of use includes but is not limited to any addition, expansion or change in use on a site that involves: (a) a change in the total number of dwelling units; or (b) a change in the amount of Service Floor to a commercial or industrial use; or (c) a change in the number of trips as calculated in the Trip Table, Appendix C; or (d) a change in the number of provided or required parking spaces as calculated in Section 12 D and E of this Specific Plan.
- f. **Change of Use.** A change from (1) an existing residential use to a commercial or industrial use; or (2) an existing commercial use to a residential or industrial use; or (3) an existing industrial use to a residential or commercial use.
- g. **Encroachment.** Any structure or building or portion of a structure or building that projects into a right-of-way or required setback.
- h. **Environmentally Sensitive Habitat Area.** Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

- i. **Feasible.** Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.
- j. **Fill.** Earth or any other substance or material, including pilings placed for the purposes of erecting a structure on it.
- k. **Flat Roof.** Any roof form which has a slope of 2 vertical inches or fewer to 12 horizontal inches.
- l. **Grand Canal Lot.** Any lot shown on Exhibit 2 of this Specific Plan that is immediately adjacent to Grand Canal.
- m. **Ground Floor.** The lowest story within a building, which is accessible to the street, the floor level of which is within three feet above or below curb level, which has frontage on or is primarily facing any pedestrian-oriented street, and which is at least 20 feet in depth or the total depth of the building, whichever is less.
- n. **Lagoon Buffer Strip.** The strip of land immediately adjacent to the Ballona Lagoon that separates the developable portion of a lot from the waters of Ballona Lagoon as approved in Coastal Commission Permit No. A-266-77 and Appeal No. A-266-77.
- o. **Lagoon Lot.** Any lot that is immediately adjacent to the Ballona Lagoon as shown on Exhibit 2 of this Specific Plan.
- p. **Local Coastal Program.** A program that includes land use plans, zoning ordinances, zoning district maps, and within sensitive coastal resource areas, other implementing actions, which when taken together meet the requirements and provisions of the California Coastal Act.
- q. **Lot Consolidation.** Lot consolidation occurs when: (1) one or more structures are built over a lot line that divided two existing lots; or (2) a lot line is abandoned, a lot line is adjusted, lots are merged, or other action is taken by the City, for the purpose of allowing a structure to be built extending over what were previously two or more separate lots.
- r. **Permeable.** A material that permits water penetration to a soil depth of 18 inches or more, including non-porous surface material poured or laid in sections not exceeding one square foot in area and collectively comprising less than two-thirds of the total surface area of loosely laid material such as crushed stone or gravel.
- s. **Premise.** A building or portion of a building used as a location for a single business or non-commercial use.
- t. **Replacement Affordable Unit.** Any affordable housing unit to be provided as replacement for an existing unit on a Venice Coastal Development Project site. Affordable housing units are dwelling units or guest rooms for which rental or mortgage payments do not exceed the limits stated in Section 65915 of the California Government Code. Dwelling units or guest rooms designated for lower income households, as defined in Section 50079.5 of the California Health and Safety Code, shall have rents not exceeding 30 percent of 60 percent of the area median income as set forth

on a rent schedule prepared by the City's Housing Department or any successor agency. In order for a Venice Coastal Development Project to qualify as a project containing affordable housing units, the owner shall record a document with the Los Angeles County Recorder guaranteeing that these affordability criteria will be observed for at least 30 years from the issuance of the Certificate of Occupancy.

- u. **Roof Access Structure.** An enclosed stairway or elevator housing that provides access to a roof, but contains no storage, habitable or living area.
- v. **Qualified Permanent Supportive Housing Project.** The construction of, addition to, or remodeling of a building or buildings offering Supportive Housing; and where all of the total combined Dwelling Units or Guest Rooms, exclusive of any manager's units, are affordable. For the purposes of this subdivision, affordable means that rents or housing costs to the occupying residents do not exceed 30 percent of the maximum gross income of Extremely Low, Very Low or Low Income households, as those income ranges are defined by the United States Department of Housing and Urban Development (HUD) or any successor agency, as verified by the Housing & Community Investment Department (HCIDLA). A minimum of 50 percent of the total combined Dwelling Units or Guest Rooms is occupied by the Target Population.
- w. **Service Floor.** All areas where the customer can be served, except the restroom, including the indoor and outdoor dining area, bar, waiting room and tavern.
- x. **Store Frontage.** The horizontal length of a Premise abutting the exterior public access level walkway that serves the Premise.
- y. **Street Wall.** An exterior wall of a building that faces a street.
- z. **Supportive Housing.** Housing with no limit on length of stay for persons with low incomes who have one or more disabilities and may include, among other populations, adults, emancipated minors, families with children, elderly persons, young adults aging out of the foster care system, individuals exiting from institutional settings, veterans, and homeless people. The housing is linked to onsite or offsite Supportive Services, and any Floor Area used for Supportive Services shall be considered accessory to the residential use.
- aa. **Supportive Services.** Services that are provided on a voluntary basis to residents of Supportive Housing and Transitional Housing, including, but not limited to, a combination of subsidized, permanent housing, intensive case management, medical and mental health care, substance abuse treatment, employment services, benefits advocacy, and other services or service referrals necessary to obtain and maintain housing.
- bb. **Target Population.** Persons with qualifying lower incomes who (i) have one or more disabilities, including mental illness, HIV or AIDS, substance abuse, or other chronic health condition, and are homeless as defined by any Los Angeles City, Los Angeles County, State of California, or Federal guidelines; or (ii) are chronically homeless, as defined by any Los Angeles City, Los Angeles County, State of California, or Federal guidelines.
- cc. **Trip.** A single or one direction vehicle movement with either origin or destination (exiting or entering) inside the Venice Coastal Development Project site.

dd. Varied Roofline. Any roof that has a slope in excess of 2 inches to 12 inches, including but not limited to a sloped or curved roofline.

ee. Venice Coastal Development Project. Any of the following actions taken on any lot located in whole or in part within the area identified in Exhibit 1a and b of this Specific Plan. On land, in or under water, the placement or erection of any solid material or structure; the discharge or disposal of any dredged material or of any gaseous, liquid, solid or thermal waste; the grading, removing, dredging, mining or extraction of any materials; any change in the density or intensity of use of land, including, but not limited to, subdivisions pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of the land by a public agency for public recreational use; any change in the intensity of use of water or of access to the water; construction, reconstruction, demolition or alteration of the size of any structure, including any facility of any private, public or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations, which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511 of the Public Resources Code). On-site and off-site parking areas that serve a Venice Coastal Development Project shall be considered a part of the project.

ff. Venice Coastal Zone. The area within the Venice Community Plan area west of Lincoln Boulevard, including those lots fronting on the west side of Lincoln Boulevard and shown on the Specific Plan Area map, Exhibit 1a and b.

gg. Walk Street. A public street in the Venice Coastal Zone that has been improved for public pedestrian use over part of its width and is landscaped (publicly or privately) over the remainder, but which has not been improved for public vehicular access, as identified in Appendix A of this Specific Plan and as shown on Exhibits 16 a and b.

Section 3. Section 9 of Ordinance No. 175,693 is amended to read as follows:

GENERAL LAND USE AND DEVELOPMENT REGULATIONS. In addition to the regulations contained in Chapter 1 of the LAMC and as shown on Exhibits 6-15, the following regulations shall apply. These provisions shall not apply to Qualified Permanent Supportive Housing Projects in Subarea A.

Section 4. A new Section 10.I is added to Ordinance No. 175,693 to read as follows:

I. SUBAREA A

a. **Use.** The use and area regulations of the C2 zone shall apply to all lots in Subarea A, except that residential uses are permitted provided the project meets the definition of Qualified Permanent Supportive Housing Project and comply with the following requirements:

i. **Supportive Services.** Applicants shall provide documentation

describing the Supportive Services that will be provided onsite and offsite. Prior to any approval of a Qualified Permanent Supportive Housing Project, the applicant shall submit information demonstrating that Supportive Services will be provided to residents of the project. The applicant shall indicate the name of the entity or entities that will provide the Supportive Services, the Local Public Agency funding source(s) for those services, and proposed staffing levels. If a preliminary funding commitment is needed, the applicant shall also submit a signed letter of intent from the Local Public Agency verifying that it is providing a preliminary funding commitment for the Supportive Services. If no funding commitment is needed, the applicant shall demonstrate that the entity or entities that will provide the Supportive Services are service providers prequalified by a Local Public Agency.

- ii. Affordable Housing Covenant. Projects shall record a covenant acceptable to HCIDLA that reserves and maintains the total combined number of Dwelling Units and Guest Rooms designated as restricted affordable for at least 55 years from the issuance of the Certificate of Occupancy.
- iii. Housing Replacement. Projects shall meet any applicable dwelling unit replacement requirements of California Government Code Section 65915(c)(3), or as thereafter amended, as verified by HCIDLA, and all applicable covenant and monitoring fees in Section 19.14 of this Code shall be paid by the applicant prior to the issuance of any building permit.

b. **Density.** No project shall exceed the density permitted in the R3 zone.

c. **Height.**

- i. All projects shall be limited to a maximum height of 35 feet.
- ii. One (1) campanile structure may exceed the maximum height of 35 feet. A maximum height of 67 feet is permitted, measured to the top of the Roof Access Structure.

d. **Canal Setback**

- i. An average setback of 15 feet, but not less than ten feet shall be maintained in the front yard adjacent to the property line which faces the canal.
- ii. An open, Permeable yard with an area of at least 15 times the lot width and a minimum area of 450 square feet shall be maintained between the property line that faces the canal and the front of any structure. No Fill nor building extensions, including stairs and balconies, shall be placed in or over the required Permeable front yard area except fences up to 42

inches in height or Permeable decks at grade level not more than 18 inches high.

e. **Access.**

- i. Driveways and vehicular access to Venice Coastal Development Projects shall be provided from North Venice and South Venice Boulevards, unless the Department of Transportation determines that it is not Feasible. New and existing curb cuts shall be minimized in order to protect and maximize public on-street parking opportunities.

Section 5. Maps of Ordinance 175,693 is amended as follows:



Exhibit 2a Venice Coastal Zone

Note: Map does not show area of Palms • Del Rey portion of coastal zone that is located inland of Lincoln Boulevard.



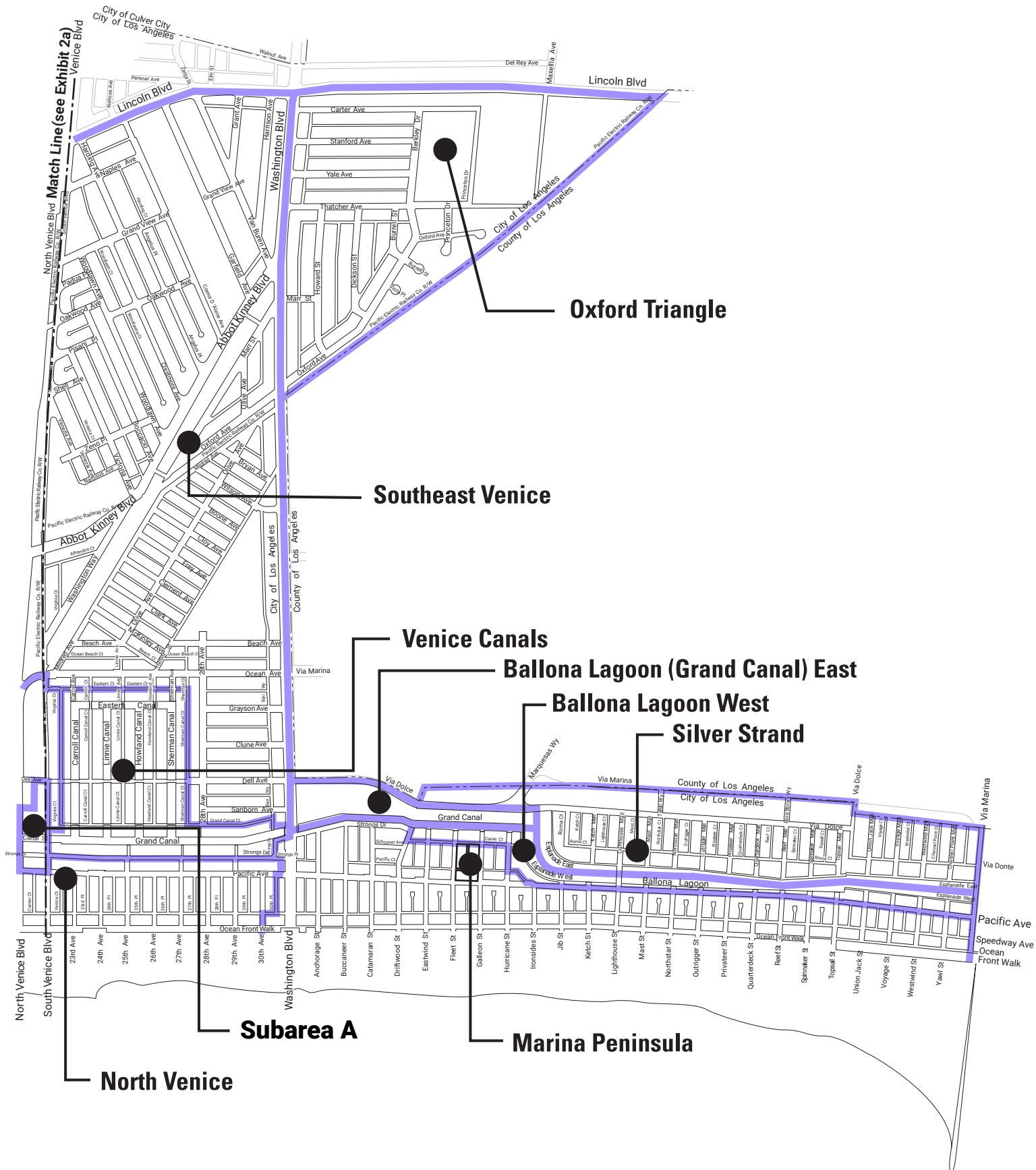


Exhibit 2b
Venice Coastal Zone

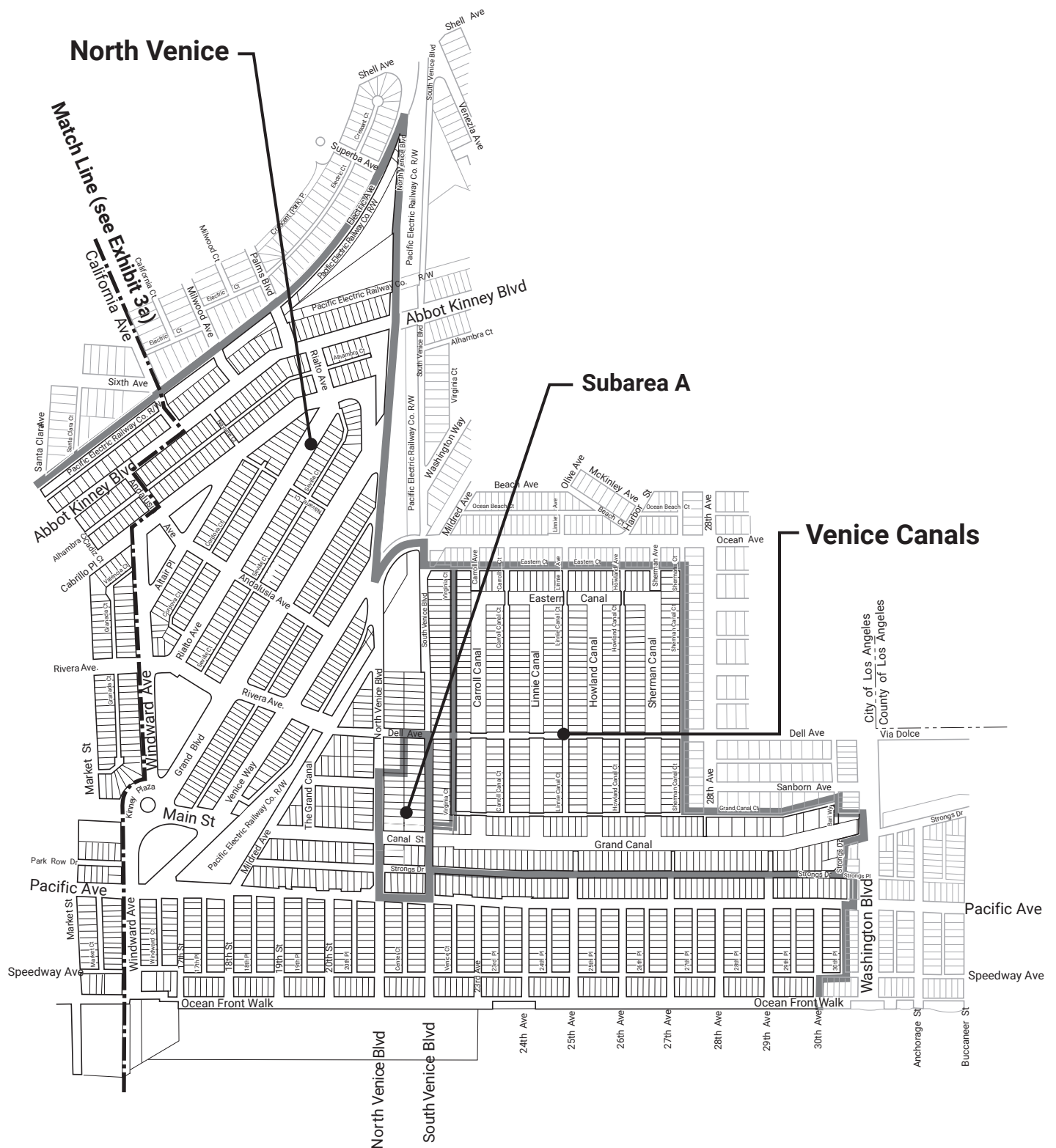


Exhibit 3b
Subarea: North Venice • Venice Canals



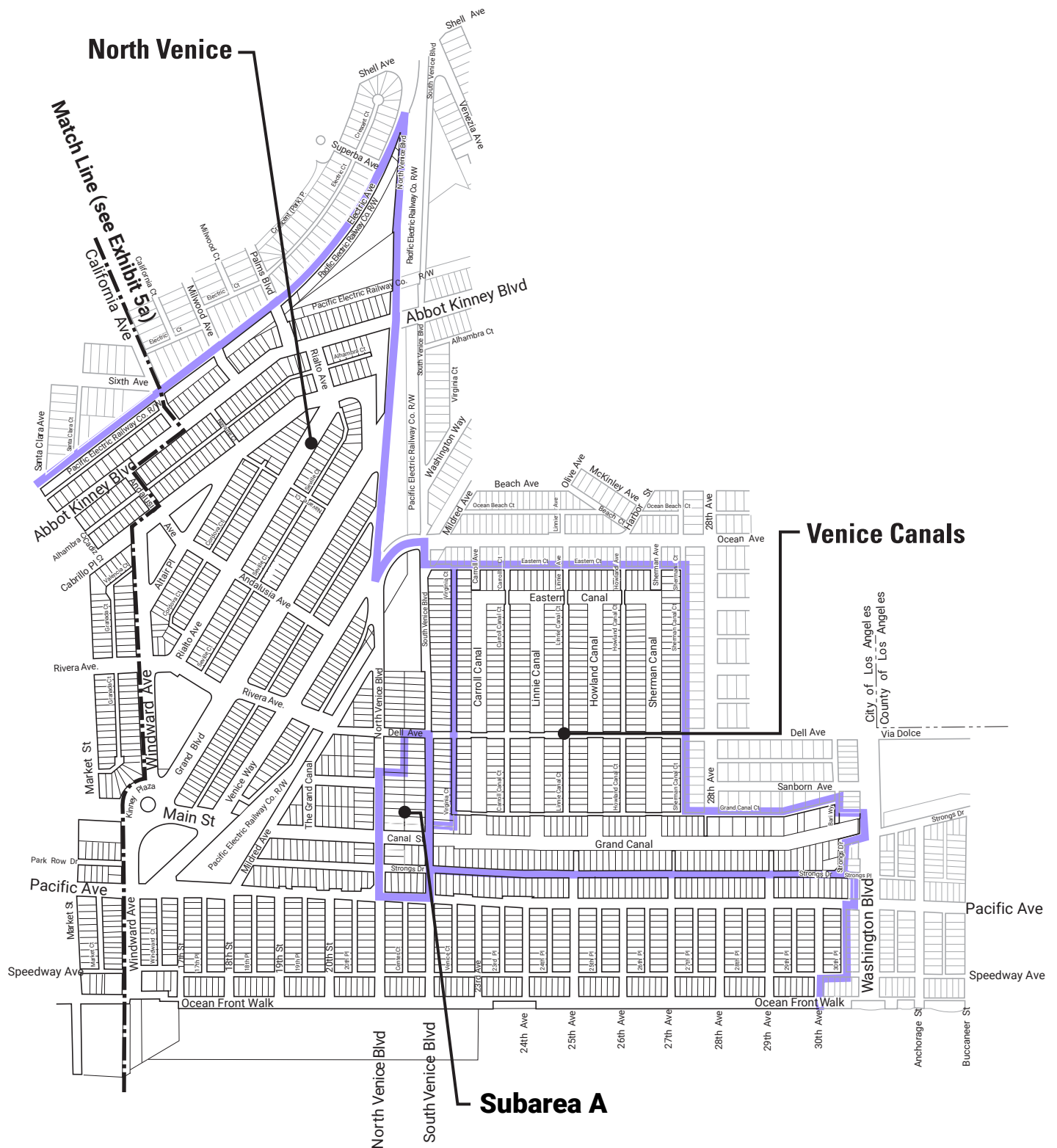


Exhibit 5b
Subarea: North Venice • Venice Canals



CONDITIONS FOR EFFECTUATING (T) TENTATIVE CLASSIFICATION REMOVAL

Pursuant to Section 12.32-G of the Municipal Code, the (T) Tentative Classification shall be removed by the recordation of a final parcel or tract map or by posting of guarantees through the B-permit process of the City Engineer to secure the following without expense to the City of Los Angeles, with copies of any approval or guarantees provided to the Department of City Planning for attachment to the subject planning case file.

1. Dedications and Improvements. Prior to the issuance of any building permits, public improvements and dedications for streets and other rights-of-way adjoining the subject property shall be guaranteed to the satisfaction of the Bureau of Engineering, Department of Transportation, Fire Department (and other responsible City, regional, and Federal government agencies as may be necessary).

A. Responsibilities/Guarantees:

- 1) As part of early consultation, plan review, and/or project permit review, the applicant/developer shall contact the responsible agencies to ensure that any necessary dedications and improvements are specifically acknowledged by the applicant/developer.
- 2) Prior to the issuance of sign-offs for final site plan approval and/or project permits by the Department of City Planning, the applicant/developer shall provide written verification to the Department of City Planning from the responsible agency acknowledging the agency's consultation with the applicant/developer. The required dedications and improvements may necessitate redesign of the project. Any changes to the project design required by a public agency shall be documented in writing and submitted for review by the Department of City Planning.

B. Dedications Required:

- 1) A 5-foot wide strip of land be dedicated along North Venice Boulevard adjoining the tract in addition, dedicate a 20-foot radius property line return or 15-foot by 15-foot property line cut corner at intersection with Pacific Avenue. Above cut corner area dedication shall be limited to the height of 30-feet measured from the finished sidewalk surface. Additional public sidewalk easement areas shall be provided at the locations of the public utilities including street lights, fire hydrants and street trees satisfactory to the City Engineer.
- 2) A 19.5-foot wide strip of land be dedicated along Pacific Avenue adjoining the tract in addition, dedicate a 20-foot radius property line return or 15-foot by 15-foot property line cut corner at intersection with South Venice Boulevard.
- 3) A 20-foot wide strip of land be dedicated along South Venice Boulevard adjoining the tract in addition, dedicate a 20-foot radius property line return or 15-foot by 15-foot property line cut corner at intersection with Dell Avenue.
- 4) A 5-foot width public sidewalk easement be provided along Dell Avenue. This easement is necessary to include the existing sidewalk as a path of travel for the public. Additional public sidewalk easement areas shall be provided at the locations of the public utilities including street lights, fire hydrants and street trees to provide a 5-foot path of travel clear of obstructions to the satisfaction of the City Engineer.

C. Improvement Required:

- 1) Improve Dell Avenue within area of the required easement and North Venice Boulevard being dedicated and adjoining the subdivision by the construction of additional concrete sidewalks at the locations of the public utilities and or obstructions including any necessary removal and reconstruction of existing improvements.
 - 2) Improve all newly dedicated cut corners with additional concrete sidewalks.
2. Department of Transportation. Suitable arrangements shall be made with the Department of Transportation to assure that a parking area and driveway plan be submitted to the Citywide Planning Coordination Section of the Department of Transportation for approval prior to submittal of building permit plans for plan check by the Department of Building and Safety. Transportation approvals are conducted at 201 N. Figueroa Street Suite 400, Station 3. For an appointment, call (213) 482-7024.
 3. Street Lighting. Prior to the recordation of the final map or issuance of the Certificate of Occupancy (C of O), street lighting plans shall be submitted for review and the owner shall provide a good faith effort via a ballot process for the formation or annexation of the property within the boundary of the development into a Street Lighting Maintenance Assessment District.
 4. Urban Forestry – Street Trees. Prior to the issuance of a grading permit, a plot plan prepared by a reputable tree expert, indicating the location, size, type, and condition of all existing trees on the site shall be submitted for approval by the Department of City Planning. All trees in the public right-of-way shall be provided per the current Urban Forestry Division standards.

Replacement by a minimum of 24-inch box trees in the parkway and on the site of to be removed, shall be required for the unavoidable loss of desirable trees on the site, and to the satisfaction of the Advisory Agency. Note: Removal of all trees in the public right-of-way shall require approval of the Board of Public Works. Contact: Urban Forestry Division at: (213) 485-5675. Failure to comply with this condition as written shall require the filing of a modification to this tract map in order to clear the condition.
 5. Department of Building and Safety, Grading Division. Comply with any requirements with the Department of Building and Safety, Grading Division for recordation of the final map and issuance of any permit.
 6. Fire Department. Prior to the issuance of a building permit, a plot plan shall be submitted to the Fire Department for approval.

Notice: Certificates of Occupancy for the subject property will not be issued by the City until the construction of all the public improvements (streets, sewers, storm drains, etc.) as required herein, are completed to the satisfaction of the City Engineer.

CONDITIONS OF APPROVAL

Pursuant to Sections 11.5.11(e), 11.5.7, 12.20.2, and 16.05 of the Los Angeles Municipal Code, the following conditions are hereby imposed upon the use of the subject property.

Entitlement Conditions

1. **Site Development.** Except as modified herein, the project shall be in substantial conformance with the plans and materials submitted by the applicant, stamped Exhibit "A" attached to the subject case file. No change to the plans will be made without prior review by the Department of City Planning and written approval by the Director of Planning. Each change shall be identified and justified in writing. Minor deviations may be allowed in order to comply with the provisions of the Los Angeles Municipal Code or the project conditions.
2. **Dual Permit Jurisdiction Area.** The project is located within the Dual Permit Jurisdiction area of the California Coastal Zone. The applicant shall file an application for a second (or "dual") coastal development permit with the Coastal Commission and shall submit proof of a valid ("dual") permit issued by the Coastal Commission.
3. **Use.** The project site shall be limited to a Qualified Permanent Supportive Housing Project with commercial uses (art gallery and studio, retail and restaurant), and a public parking lot.
4. **Residential Density.** The project shall be limited to a maximum density of 140 dwelling units including 34 Joint Living and Work Quarters.
5. **Restricted Affordable Units.** A minimum of 136 units shall be designated as Restricted Affordable Units with 129 units reserved for Low-Income Households and seven (7) units reserved for Extremely Low Income Households, as defined by Government Code Section 65915(c)(2). Four (4) unrestricted manager's units may be provided.
6. **Housing Requirements.** Prior to issuance of a building permit, the owner shall execute a covenant to the satisfaction of the Los Angeles Housing and Community Investment Department (HCIDLA) to reserve 129 units for Low Income Households and seven (7) units for Very Low Income Households for rent, as determined to be affordable to such households by HCIDLA for a period of 55 years or sale or rental as determined to be affordable to such households by HCIDLA for a period of 55 years as determined by HCD. Enforcement of the terms of said covenant shall be the responsibility of HCIDLA. The Applicant will present a copy of the recorded covenant to the Department of City Planning for inclusion in this file. The project shall comply with the Guidelines for the Affordable Housing Incentives Program adopted by the City Planning Commission and with any monitoring requirements established by the HCIDLA.
7. **Changes in Restricted Units.** Deviations that change the composition of units shall be consistent with LAMC Section 11.5.11(a)(3).
8. **Qualified Permanent Supportive Housing.** A minimum of 68 units shall be occupied by the Target Population, as defined by Section 50675.14 of the Health and Safety Code.
9. **Supportive Services Plan.** The applicant shall submit a plan for providing supportive services, to the satisfaction of the Department of City Planning, with documentation demonstrating that supportive services will be provided onsite to residents in the project. The description of those services shall include all of the following:
 - a. The name of the proposed entity or entities that will provide supportive services.
 - b. The funding sources or proposed funding sources for the onsite supportive services.

- c. Proposed staffing levels.

10. **Onsite Supportive Services.** At least 3 percent of the total nonresidential floor area shall be provided for onsite supportive services that are limited to tenant use, including, but not limited to, community rooms, case management offices, computer rooms, and community kitchens. The project will provide a minimum of 685 square feet of case management services, as provided in Exhibit "A".

11. **Developer Incentives:**

- a. **Residential Parking.** The project shall provide 57 residential parking spaces pursuant to AB744.
- b. **Off-site Residential Parking.** Residential parking for the building on the East Site may be located in the building on the West Site.
- c. **Side Yards.** The project shall provide RAS3 side yard requirements per LAMC 12.10.5 in lieu of the yard requirements in the underlying C2 zone .

12. **Height.** The proposed buildings shall be subject to the following height limits as shown in "Exhibit A.":

- a. **West Site.** The structure west of Grand Canal (West Site) shall not exceed a maximum height of 59 feet, measured to the highest point of the solid parapet wall. The Roof Access Structure is limited to 8 feet with a maximum height of 67 feet measured from the centerline of North Venice Boulevard.
- b. **East Site.** The structure east of Grand Canal (East Site) shall not exceed a maximum height of 35 feet, measured to the highest point of the solid parapet wall.

13. **Setbacks:** An average setback of 15 feet, but not less than ten feet shall be maintained in the front yard adjacent to the property line which faces the canal.

14. **Roof Structures.** Chimneys, exhaust ducts, ventilation shafts, and other similar devices essential for building function may exceed the height limit by a maximum of five feet. The Roof Access Structures and shade structures are limited to 12 feet above the parapet wall.

15. **Parking and Access.** As shown in "Exhibit A" and as approved by the Department of Building and Safety, the project shall provide 357 parking spaces; all vehicle access shall be from South Venice Boulevard and North Venice Boulevard.

- a. **Residential Parking** (Developer Incentive). Vehicle parking for the Affordable Housing Units shall be provided consistent with AB 744 providing 57 parking spaces.
- b. **Commercial Parking.** 10 parking spaces are required for the 2,255 square-foot retail use (1/225 SF), 11 parking spaces are required for the 2,875 square-foot art studio (1/250 SF), and 21 parking spaces are required for the restaurant use. The restaurant shall be limited to 1,060 of Service Floor (1/50 SF).
- c. **Beach Impact Zone (BIZ).** 27 BIZ parking spaces shall be provided, one space for each 640 square feet of Ground Floor Commercial area and one space for each 1,000 square feet of Ground Floor Residential area.
- d. **Public Parking.** A minimum of 226 public parking spaces shall be provided. As shown in "Exhibits A," a minimum of 3 parking spaces shall be designated as loading spaces for the public boat launch.

16. **Electric Vehicle Parking.** All electric vehicle charging spaces (EV Spaces) and electric vehicle charging stations (EVCS) shall comply with the regulations outlined in Sections 99.04.106 and 99.05.106 of Article 9, Chapter IX of the LAMC.
17. **Commercial Use.** As shown in “Exhibit A,” the proposed development shall provide a mix of commercial uses as follows:
 - a. **Restaurant Uses (Service Floor Area).** The 810 square-foot restaurant shall be limited to 1,060 square feet of combined indoor and outdoor Service Floor area.
 - b. **Retail.** The development shall be limited to a maximum of 2,255 square feet of retail use.
 - c. **Art Studio.** The development shall be limited to a maximum of 2,875 square feet of art studio use.
18. **Floor Area Ratio (FAR).** The proposed project shall be limited to a maximum FAR of 1.15:1.
19. **Pedestrian Access Easement and Areas for Public Use.** As shown on sheet A1.12 of Exhibit A, the applicant shall record a minimum 5-foot-wide pedestrian access easement from South Venice Boulevard and North Venice Boulevard to the Venice Canal and Short Line Bridge. To a minimum depth of 10 feet and a minimum of 4,530 square feet west of Canal Street and a minimum of 4,600 square feet east of Canal Street shall remain open and accessible to the public as a public recreation area, as shown in Exhibit A.
20. **Wayfinding Signage.** Prior to the issuance of the certificate of occupancy, the applicant shall submit a pedestrian wayfinding sign program for on-site signage providing directional and distance information to the Venice Beach, Venice Canals and other points of interests to the satisfaction of the Director of Planning.
21. **Boat Launch Parking and Access.** As shown on “Exhibit A,” the project shall provide on-site and on-street (North Venice Boulevard) loading areas for the loading and unloading of watercrafts to the Venice Canal Public Boat Launch to the satisfaction of the Director of Planning. The on-street loading area shall be subject to the review and approval of the Department of Transportation. In the East Site parking garage, two parking spaces shall be designated as loading spaces for the loading and unloading of small watercrafts. Direct access shall be provided from the East Site parking garage to the boat launch, for the carrying of small watercrafts. In the West Site parking garage, one parking space shall be reserved to provide parking for vehicles with an attached trailer transporting small watercrafts. The dimensions of the parking space shall accommodate a vehicle with an attached small trailer. Access to the loading zone in East Site and the parking space in the West Site garages shall be consistent with the hours of operation for the Venice Canal Public Boat Launch.
22. **Bicycle Parking.** Bicycle parking shall be provided consistent with LAMC Section 12.21-A.16.
23. **Open Space.** The project shall provide open space consistent with LAMC Section 12.21-G.
24. **Street Trees.** New street trees shall be planted within the public right-of-way, where feasible, at a ratio of at least one (1) tree for every 25 feet of lot length, to the satisfaction of the Bureau of Street Services, Urban Forestry Division, Department of Public Works.
25. **Trees:** The Board of Public Works approval shall be obtained prior to the issuance of the Certificate of Occupancy for the proposed project for the removal of any trees in the existing or proposed public right-of-way. The Bureau of Street Services, Urban Forestry Division is the lead agency for obtaining Board of Public Works approval for the removal of such trees.

26. **Landscaping.** A final landscape plan shall be submitted that is substantial conformance with the landscape plan in Exhibit "A". Open areas not used for buildings, driveways, parking areas, recreational facilities, pedestrian amenities, or walkways shall be landscaped. The landscape plan shall include an irrigation plan. Landscaping shall be maintained in good health for the life of the project.
27. **Permeable Yard.** An open Permeable yard with an area of at least 15 times the lot width and a minimum area of 450 square feet shall be maintained between the property line that faces the canal and the front of any structure. No Fill nor building extensions, including stairs and balconies, shall be placed in or over the required Permeable front yard area.
28. **Finished Floor.** The lowest finished floor (FF) elevation (not garage floor) shall be 2 feet, or more, above the street flow line until reaching elevation 11 feet NAVD88, and for street flow lines above + 11 feet NAVD88 the FF elevation should be a minimum of 1 foot above the flow line, unless other adaptive waterproofing alternatives are incorporated in the design.
29. **Stormwater/irrigation.** The project shall implement on-site stormwater infiltration as feasible based on the site soils conditions, the geotechnical recommendations, and the City of Los Angeles Department of Building and Safety Guidelines for Storm Water Infiltration. If on-site infiltration is deemed infeasible, the project shall analyze the potential for stormwater capture and reuse for irrigation purposes based on the City Low Impact Development (LID) guidelines.
30. **Solar Panels.** The project shall dedicate a minimum of 15% of the available rooftop space, for the installation of a solar power system as part of an operational photovoltaic system to be maintained for the life of the project, in substantial conformance with the plans stamped "Exhibit A".
31. **Solar and Electric Generator.** Generators used during the construction process shall be electric or solar powered. Solar generator and electric generator equipment shall be located as far away from sensitive uses as feasible.
32. **Solar-ready Buildings.** The Project shall comply with the Los Angeles Municipal Green Building Code, Section 99.05.211, to the satisfaction of the Department of Building and Safety.
33. **Lighting.** Outdoor lighting shall be designed and installed with shielding, such that the light source cannot be seen from adjacent residential properties, the public right-of-way, nor from above.
34. **Lighting Design.** Areas where nighttime uses are located shall be maintained to provide sufficient illumination of the immediate environment so as to render objects or persons clearly visible for the safety of the public and emergency response personnel. All pedestrian walkways, storefront entrances, and vehicular access ways shall be illuminated with lighting fixtures. Lighting fixtures shall be harmonious with the building design. Wall mounted lighting fixtures to accent and complement architectural details at night shall be installed on the building to provide illumination to pedestrians and motorists.
35. **Graffiti.** All graffiti on the site shall be removed or painted over to match the color of the surface to which it is applied within 24 hours of its occurrence.
36. **Vesting Tentative Tract.** The project shall comply with the Conditions of the Approval outlined in case no. VTT-82288, which are incorporated herein by reference.
37. A copy of the first page of this grant and all Conditions and/or any subsequent appeal of this grant and its resultant Conditions and/or letters of clarification shall be printed on the building plans submitted to the Department of City Planning and the Department of Building and Safety for purposes of having a building permit issued at any time during the term of this grant.

38. Prior to the effectuation of this grant, a covenant acknowledging and agreeing to comply with all the terms and conditions established herein shall be recorded in the County Recorder's Office. The agreement (standard master covenant and agreement form CP-6770) shall run with the land and shall be binding on any subsequent owners, heirs or assigns. The agreement with the conditions attached must be submitted to the Department of City Planning for approval before being recorded. After recordation, a certified copy bearing the Recorder's number and date shall be provided for inclusion in case file. Fees required per LAMC Section 19.01-E,3 for Monitoring of Conditional Use Permits and Inspection and Field Compliance Review of Operations shall be paid to the City prior to the final clearance of this condition.

Administrative Conditions

39. **Final Plans.** Prior to the issuance of any building permits for the project by the Department of Building & Safety, the applicant shall submit all final construction plans that are awaiting issuance of a building permit by the Department of Building & Safety for final review and approval by the Department of City Planning. All plans that are awaiting issuance of a building permit by the Department of Building & Safety shall be stamped by Department of City Planning staff "Final Plans". A copy of the Final Plans, supplied by the applicant, shall be retained in the subject case file.
40. **Notations on Plans.** Plans submitted to the Department of Building & Safety, for the purpose of processing a building permit application shall include all of the Conditions of Approval herein attached as a cover sheet, and shall include any modifications or notations required herein.
41. **Approval, Verification and Submittals.** Copies of any approvals, guarantees or verification of consultations, review of approval, plans, etc., as may be required by the subject conditions, shall be provided to the Department of City Planning prior to clearance of any building permits, for placement in the subject file.
42. **Code Compliance.** Use, area, height, and yard regulations of the zone classification of the subject property shall be complied with, except where granted conditions differ herein.
43. **Covenant.** Prior to the issuance of any permits relative to this matter, an agreement concerning all the information contained in these conditions shall be recorded in the County Recorder's Office. The agreement shall run with the land and shall be binding on any subsequent property owners, heirs or assign. The agreement must be submitted to the Department of City Planning for approval before being recorded. After recordation, a copy bearing the Recorder's number and date shall be provided to the Department of City Planning for attachment to the file.
44. **Department of Building & Safety.** The granting of this determination by the Director of Planning does not in any way indicate full compliance with applicable provisions of the Los Angeles Municipal Code Chapter IX (Building Code). Any corrections and/or modifications to plans made subsequent to this determination by a Department of Building & Safety Plan Check Engineer that affect any part of the exterior design or appearance of the project as approved by the Director, and which are deemed necessary by the Department of Building & Safety for Building Code compliance, shall require a referral of the revised plans back to the Department of City Planning for additional review and sign-off prior to the issuance of any permit in connection with those plans.
45. **Enforcement.** Compliance with these conditions and the intent of these conditions shall be to the satisfaction of the Department of City Planning.
46. **Indemnification and Reimbursement of Litigation Costs.**

Applicant shall do all of the following:

- (i) Defend, indemnify and hold harmless the City from any and all actions against the City relating to or arising out of, in whole or in part, the City's processing and approval of this entitlement, including but not limited to, an action to attack, challenge, set aside, void, or otherwise modify or annul the approval of the entitlement, the environmental review of the entitlement, or the approval of subsequent permit decisions, or to claim personal property damage, including from inverse condemnation or any other constitutional claim.
- (ii) Reimburse the City for any and all costs incurred in defense of an action related to or arising out of, in whole or in part, the City's processing and approval of the entitlement, including but not limited to payment of all court costs and attorney's fees, costs of any judgments or awards against the City (including an award of attorney's fees), damages, and/or settlement costs.
- (iii) Submit an initial deposit for the City's litigation costs to the City within 10 days' notice of the City tendering defense to the Applicant and requesting a deposit. The initial deposit shall be in an amount set by the City Attorney's Office, in its sole discretion, based on the nature and scope of action, but in no event shall the initial deposit be less than \$50,000. The City's failure to notice or collect the deposit does not relieve the Applicant from responsibility to reimburse the City pursuant to the requirement in paragraph (ii).
- (iv) Submit supplemental deposits upon notice by the City. Supplemental deposits may be required in an increased amount from the initial deposit if found necessary by the City to protect the City's interests. The City's failure to notice or collect the deposit does not relieve the Applicant from responsibility to reimburse the City pursuant to the requirement in paragraph (ii).
- (v) If the City determines it necessary to protect the City's interest, execute an indemnity and reimbursement agreement with the City under terms consistent with the requirements of this condition.

The City shall notify the applicant within a reasonable period of time of its receipt of any action and the City shall cooperate in the defense. If the City fails to notify the applicant of any claim, action, or proceeding in a reasonable time, or if the City fails to reasonably cooperate in the defense, the applicant shall not thereafter be responsible to defend, indemnify or hold harmless the City.

The City shall have the sole right to choose its counsel, including the City Attorney's office or outside counsel. At its sole discretion, the City may participate at its own expense in the defense of any action, but such participation shall not relieve the applicant of any obligation imposed by this condition. In the event the Applicant fails to comply with this condition, in whole or in part, the City may withdraw its defense of the action, void its approval of the entitlement, or take any other action. The City retains the right to make all decisions with respect to its representations in any legal proceeding, including its inherent right to abandon or settle litigation.

For purposes of this condition, the following definitions apply:

"City" shall be defined to include the City, its agents, officers, boards, commissions, committees, employees, and volunteers.

"Action" shall be defined to include suits, proceedings (including those held under alternative dispute resolution procedures), claims, or lawsuits. Actions includes actions,

as defined herein, alleging failure to comply with any federal, state or local law.

Nothing in the definitions included in this paragraph are intended to limit the rights of the City or the obligations of the Applicant otherwise created by this condition.

FINDINGS

General Plan/Charter Findings

1. General Plan Land Use Designation.

The subject site is located within the Venice Community Plan, adopted by the City Council on September 29, 2000. The approximate 2.65-acre Project Site is bounded by North Venice Boulevard to the north, South Venice Boulevard to the south, Pacific Avenue to the west, and Dell Avenue to the east. The Community Plan designates the subject site as Open Space with a corresponding zone of OS. The subject site is also located within the area covered by the Venice Local Coastal Program Land Use Plan (LUP), certified by the California Coastal Commission on June 14, 2001. The Venice LUP designates the project site as Open Space and Low Medium II Multiple Family Residential.

The requested General Plan Amendment would designate the subject site as Neighborhood Commercial with a corresponding zone of (T)(Q)C2-1L-O. The proposed zone of C2 is a corresponding zone for the Neighborhood Commercial designation in the Venice Community Plan.

The recommended Zone Change to C2 and the Venice Coastal Zone Specific Plan amendment creating Subarea A (Permanent Supportive Housing) for the subject site would be consistent with the adoption of the recommended general plan amendment and would be in substantial conformance with the purpose, intent, and provisions of the General Plan as it is reflected within the Venice Community Plan and certified Venice Local Coastal Program Land Use Plan.

2. General Plan Text

The General Plan serves as a blueprint for the future, prescribing goals, policies and objectives to shape and guide the physical development of the City. Further, the General Plan is a vision for how the City will evolve, reflecting the values and priorities of its communities. As such, the General Plan is intended to inform land use decisions. The General Plan consists of the Framework Element, 35 Community Plans and ten specific-subject elements.

Framework Element

The Framework Element of the General Plan was adopted by the City of Los Angeles in December 1996 and re-adopted in August 2001. The Framework Element is the organizing Element of the General Plan. Its policies address and connect all the Elements of the General Plan. The Framework Element is the strategy for long-term growth that sets a citywide context to guide amendments to the Community Plans, zoning ordinances, and other land use decisions. The Framework Element defines Citywide policies regarding seven topic areas including Land Use, Housing, Urban Form and Neighborhood Design, Open Space and Conservation, Economic Development, Transportation, and Infrastructure and Public Services.

The subject site is located within the area covered by the Venice Community Plan, adopted by the City Council on September 29, 2000. The Community Plan designates the Project site as Open Space with a corresponding zone of OS. The subject site is also located within the area covered by the Venice Local Coastal Program Land Use Plan (LUP), certified by the California Coastal Commission on June 14, 2001. The Venice LUP designates the project site as Open Space and Low Medium II Multiple Family Residential.

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The recommended Zone Change to C2 and the Venice Coastal Zone Specific Plan amendment creating Subarea A (Permanent Supportive Housing) for the subject site would be consistent with the adoption of the recommended Plan Amendment and would be in substantial conformance with the purpose, intent, and provisions of the General Plan as it is reflected within the Venice Community Plan and certified Venice Local Coastal Program Land Use Plan.

The project includes the demolition of an existing surface parking lot containing 196 vehicular parking spaces and a two-story, four-unit residential structure; and the construction of a 103,957-square foot, mixed-use, 100 percent affordable housing development consisting of 140 residential dwelling units of which 34 units are Joint Living and Work Quarters (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supporting (social service) office uses, 2,255 square feet of retail uses, 810 square feet of restaurant uses with 1,060 square feet of outdoor and indoor Service Floor area, and 2,875 square feet art studio uses.

The Framework Element includes the following goals, objectives and policies relevant to the subject site and the requested General Plan Amendment and Zone Change.

Land Use

The Land Use chapter of the Framework Element provides objectives and supporting policies to support the viability of the City's residential neighborhoods, commercial and industrial districts, and encourage sustainable growth in appropriate locations. The Land Use chapter establishes seven land use categories: Neighborhood Districts, Community Centers, Regional Centers, Downtown Center, Mixed- Use Boulevards, and Industrial Districts. Each land use categories recommends an appropriate range of density, height, and uses, and those land use categories are broadly assigned through-out the City. The subject site is located in the Neighborhood District land use category. The proposed project will comply with and supports the following goals, objectives, and policies of the Land Use chapter of the Framework Element.

Goal 3: Pedestrian-oriented, high activity, multi- and mixed-use centers that support and provide identity for Los Angeles' communities.

Objective 3.8: Reinforce existing and establish new neighborhood districts which accommodate a broad range of uses that serve the needs of adjacent residents, promote neighborhood activity, are compatible with adjacent neighborhoods, and are developed as desirable places to work and visit.

Policy 3.8.1: Accommodate the development of neighborhood-serving uses in areas designated as "Neighborhood District" in accordance with Tables 3-1 and 3-4. The range and densities/intensities of uses permitted in any area shall be identified in the community plans.

Policy 3.8.2: Encourage the retention of existing and development of new commercial uses that primarily are oriented to the residents of adjacent neighborhoods and promote the inclusion of community services (e.g., childcare and community meeting rooms).

Policy 3.8.4: Enhance pedestrian activity by the design and siting of structures in accordance Chapter 5 Urban Form and Neighborhood Design policies of this Element and Pedestrian-Oriented District Policies 3.16.1 through 3.16.3.

Policy 3.8.6: Encourage outdoor areas within neighborhood districts to be lighted for night use, safety and comfort commensurate with their intended nighttime use.

The Project is located within walking distance of Venice beaches and canals, within close proximity to local and regional public transit opportunities, and a surrounding area that is characterized by a mix of commercial, retail, and residential uses. The Project enlivens the area by contributing to the identity of the area through the replacement of an underutilized site with the provision of new affordable and supportive housing and commercial/retail uses, amenities and employment opportunities within a high-quality development. Access to the Grand Canal is maintained and enhanced by the addition of a loading area and parking spaces specifically for vehicles carrying (or towing) non-motorized watercraft.

The ground-level retail and art studio spaces will also enhance the community services available to adjacent neighborhoods. At night, low-level security lighting would provide illumination to the building, entrances, walkways and parking areas, and would be designed to be directed onsite and shielded to eliminate spillover onto adjacent properties. The Project also enhances the public realm by stepping back the Grand Canal frontages to create ground level plazas for residents and pedestrians interspersed with landscaping, seating and trees.

Housing

The Housing chapter of the Framework Element provides an overview of the critical issues related to housing in Los Angeles and provides goals to guide future actions, and policies to address housing issues.

The Housing chapter identifies insufficient vacant properties to accommodate the cumulative amount of population growth which has been forecasted. The supply of land zoned for residential development is the most constrained in the context of population growth forecasts. Thus, should growth and new development in the City occur, most likely it will require the recycling and/or intensification of existing developed properties or conversion of certain uses, where there is insufficient market demand, to an alternative use.

Further the Housing chapter indicates that housing production has not kept pace with the demand for housing. Affordability is particularly a problem to families with very low- and low-incomes. Over 70 percent of very low-income families spend more than 30 percent of their income on housing. Some areas of the City have overconcentration of low-income housing and other areas have very little housing available even to moderate-income families.

Lastly, the Housing chapter recommends a balance between the need to produce new housing units and the desire to conserve the livability and character of existing neighborhoods.

In that regard, the Housing chapter provides policies to increase the capacity for new housing units, encouraging production of housing for households of all income levels, while at the same time preserving existing residential neighborhood stability and promoting livable neighborhoods.

The proposed project will comply with and supports the following goals, objectives and policy of the Housing chapter of the Framework Element.

Goal 4A: *An equitable distribution of housing opportunities by type and cost accessible to all residents of the City.*

Objective 4.1: *Plan the capacity for and develop incentives to encourage production of an adequate supply of housing units of various types within each City subregion to meet the projected housing needs by income level of the future population to the year 2010.*

Policy 4.1.1: *Provide sufficient land use and density to accommodate an adequate supply of housing units by type and cost within each City subregion to meet the twenty-year projections of housing needs.*

Policy 4.1.2: *Minimize the overconcentration of very low- and low-income housing developments in City subregions by providing incentives for scattered site development citywide.*

Policy 4.1.3: *Minimize the over concentration of public housing projects in a City subregion.*

Policy 4.1.7: *Establish incentives for the development of housing units appropriate for families with children and larger families.*

Objective 4.2: *Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher-density developments and surrounding lower-density residential neighborhoods.*

Objective 4.3: *Conserve scale and character of residential neighborhoods.*

The affordable housing crisis in California is driving a regional increase in homelessness. The County of Los Angeles is the least affordable County for housing in the state of California. In Los Angeles County, there are 721,000 families and individuals are severely overburdened with rental payments. Despite housing 21,631 people in 2018, homelessness in the County increased by 12 percent.

According to the 2019 Los Angeles Homeless Service Authority (LAHSA) Homeless Count, there are 58,936 people experiencing homelessness in Los Angeles County, of which there are 16,528 people experiencing chronic homelessness. The subject site is located in the Service Planning Area (SPA) 5, which has a population of 5,223 individuals experiencing homelessness.

Specifically in Venice, the 2018 Homeless Count revealed 975 persons experiencing homelessness in Venice. The next year, according to the Homeless Count that number was up 29 percent to 1,260 persons experiencing homelessness. The 2020 homeless count revealed 1,981 persons experiencing homelessness, a 57% increase from 2019.

Further drawing attention to this trend, there has not been significant affordable housing production in Venice since the 1990s. There are approximately 6,000 Supportive Housing units available Citywide and only a small fraction of those is located in the Venice community. There are currently only 42 supportive housing units in Venice.

As such, the proposed project would provide critically needed affordable housing units in the Venice Community Plan area. The proposed project includes 140 dwelling units, of which 68 units are designated for permanent supportive housing (PSH) for those experiencing homelessness, 34 Joint Living and Work Quarters for low-income households, 34 units are designated for low-income families/households and four units will be occupied

by on-site property managers.

The proposed project also includes on-site support services for the residents to improve their physical and mental health and ensure housing stability. Further, residents can receive referrals to off-site services such as health care, food assistance and job training.

Urban Form and Neighborhood Design

The proposed project will comply with and supports the following goals, objectives and policy of the Urban Form and Neighborhood Design Chapter.

Goal 5A: A livable City for existing and future residents and one that is attractive to future investment. A City of interconnected, diverse neighborhoods that builds on the strengths of those neighborhoods and functions at both the neighborhood and citywide scales.

Open Space and Conservation

The Open Space and Conservation Chapter provides an overview of the critical issues related to the preservation and production of new open space in Los Angeles.

The proposed project will comply with and balance the following critical issues identified in the Open Space and Conservation Chapter.

1. *Open space conservation and development are often competing goals. Conserving ecologically and aesthetically important areas while meeting the needs of the developing community can create some difficult choices. Given that the City is largely built out, the pressure for development to intrude into these areas will likely continue.*
2. *There is a deficiency of open space in the City. As the City urbanizes, and the pressures of population growth and encroaching development activity increases, the amount of land available for open space continues to diminish. The difficulty in acquiring large, contiguous tracts of land reduces the likelihood of creating new regional parks the size of Griffith Park or smaller community and neighborhood parks. In addition, there are insufficient local funds to purchase open space land.*
3. *The Los Angeles River presents numerous opportunities for enhancing the City's open space network.*
4. *Park acquisition is limited due to existing patterns of development and lack of funding. Since the availability of open space acquisition funds is based in part on local development activity, areas of Los Angeles that experience little or no development have more limited resources to acquire open space. Not surprisingly, such communities are often also the areas with the greatest open space need.*

The City has traditionally acquired open space through Quimby fees, park dedication requirements, and a dwelling unit construction surcharge. Quimby fees differ from the construction tax in that they are collected from development projects and must be spent in the community in which they are collected. Some areas of the City are recipients of both the Quimby fees and the construction surcharge fee. Older areas of the City in which little new residential development occurs receive considerably lesser levels of funds and are characterized by the highest development densities. Discrepancies in the amount of open space that exists among communities results in the more densely populated areas having insufficient open space to meet the needs of their population.

5. *Park standards do not reflect current conditions and needs. Existing open space standards (and, more significantly, existing open space acquisition policies) do not sufficiently recognize the full range of potential open space resources at the neighborhood and community levels. As opportunities for traditional open space resources are diminished, it is important to identify areas of open space that have not traditionally been considered as resources. Thus, vacated railroad lines, drainage channels, planned transit routes and utility rights-of-way, or pedestrian-oriented streets and small parks, where feasible, might serve as important resources for serving the open space and recreation needs of City residents in communities where those resources are currently in short supply. Additionally, as resources diminish, the quality, intensity, and maintenance of existing open space (especially in more dense neighborhoods) becomes more important.*

The requested General Plan Amendment from Open Space and Low Medium II Residential to Neighborhood Commercial and the corresponding Vesting Zone Change/Height District Change from OS-1XL-O to the (T)(Q)C2-1L-O will allow the development of a permanent supportive housing development and further allow the City to address the pressing need for affordable housing the City, specifically in the Coastal Zone.

The Open Space land use designation and zoning district are applied to parcels that are planned for or developed with park land, open space or habitat conservation. The existing use on the subject site is a surface parking lot and a four-unit multi-family residential building. The site is intended to provide parking for the approximately 320 acres of designated Open Space within Venice Beach, but the existing use does not correspond to the Open Space land use designation. Changing the zoning and land use designation from Open Space to Neighborhood Commercial would result in the reduction in the acreage designated for open space. However, the current use is an underutilized site where there are no plans for park development or habitat conservation

The approval of the requested legislative action would facilitate the replacement and expansion of the existing 196-space surface parking lot and contribute to the supply of affordable housing in the Venice Community Plan area. The project balances the competing policy priorities to provide housing for all income segments and to provide open space opportunities for residents and visitors. The proposed project increases the number of public parking spaces while providing for Permanent Supportive Housing and affordable housing.

Economic Development

The economic development policies presented in the Economic Development chapter are designed to facilitate business retention and job growth in several important ways. These include providing appropriate sites and infrastructure to accommodate future commercial and industrial growth; streamlining the City's permitting and regulatory processes; focusing the City's economic development efforts to more effectively utilize available resources; and, where appropriate, providing financial incentives to attract development to targeted districts, centers, and boulevards.

Transportation

The Transportation Chapter of the Framework Element envisions a transportation system of the future that will be a fully integrated, multimodal system that offers multiple travel choices to Los Angeles travelers. Choices for person trips must include numerous forms of transit (rail, bus, Smart Shuttle, jitney, taxi, and other), highway (drive-alone, carpool, and vanpool), and non-vehicle options (telecommuting, electronic communication, and bicycling). New facilities and services will greatly enhance accessibility within communities, particularly in these communities with limited economic resources.

Infrastructure and Public Services

To support population growth, Los Angeles needs a strong, expanding economy, healthy neighborhoods, and a tax base that can support the basic public services necessary to maintain and improve its quality of life. In order for the City to provide services that the public expects, it must embrace the vision of becoming a sustainable city: one which manages its infrastructure and public services in a manner that avoids depletion or permanent damage of its natural resources.

Infrastructure improvements will be required to support the needs of the City's growth and, at the same time, to replace existing facilities that have deteriorated due to age or have become obsolete. The costs for such improvements will be shared by new development and existing residents and businesses. New development's share of these costs will be in proportion to the demands that it generates.

Venice Community Plan

The Venice Community Plan was adopted by the City Council on September 29, 2000. The Venice Community Plan Area contains approximately 2,061 acres, representing 0.7 percent of the land in the City of Los Angeles. The Community Plan's purpose is to promote an arrangement of land use, circulation, and services, which all encourage and contribute to the economic, social, health, and welfare of the Community. In that regard, the Venice Community Plan establishes land use designations and corresponding zones that can be applied to properties. The Project site is located within the Venice Community Plan, which designates the site for Open Space land uses with a corresponding zone of OS-1XL-O. The Venice Community Plan sets forth goals, objectives, policies, and programs that can assist decision makers to review new development proposals or to consider a proposed ordinance or policy.

The proposed project will comply with and supports the following goals, objectives and policy of the Venice Community Plan:

Goal 1: A safe, secure, and high-quality residential environment for all community residents.

Objective 1-1 To provide for the preservation of the housing stock and its expansion to meet the diverse economic and physical needs of the existing residents and projected population of the Plan area to the year 2010.

Policy 1-1.1 Designate specific lands to provide for adequate multi-family residential development.

Policy 1-1.3 Protect existing single-family residential neighborhoods from new out-of-scale development and other incompatible uses.

Objective 1-2 To reduce vehicular trips and congestion by developing new housing in proximity to services and facilities.

Policy 1-2.1 Locate higher residential densities near commercial centers and major bus routes where public service facilities and infrastructure will support this development.

Policy 1-2.2 Encourage multiple-family residential development in commercial zones.

Objective 1-3 To preserve and enhance the varied and distinct residential character

and integrity of existing residential neighborhoods.

Policy 1-3.1 *Seek a higher degree of architectural compatibility and landscaping for new infill development to protect the character and scale of existing residential neighborhoods.*

Objective 1-4: *To promote the adequacy and affordability of multiple-family housing and increase its accessibility to more segments of the population.*

Policy 1-4.1: *Promote greater individual choice in type, quality, price and location of housing.*

Policy 1-4.2: *Ensure that new housing opportunities minimize displacement of residents.*

Goal 5: *A community with sufficient open space in balance with new development to serve the recreational, environmental, health and safety needs of the community and to protect environmental and aesthetic resources.*

Objective 5-1 *To preserve existing open space resources and where possible develop new open space.*

Policy 5-1.1 *Encourage the retention of passive and visual open space which provides a balance to the urban development of the community.*

Policy 5-1.4 *Protect and maintain unique open space areas, including the Venice Canals, Grand Canal, Ballona Lagoon and beaches.*

Goal 13: *A sufficient system of well-designed and convenient on-street parking and off-street parking facilities throughout the plan area.*

Objective 13-1: *To provide an adequate supply of parking at appropriate locations in accordance with Citywide standards and community needs.*

Policy 13-1.2 *New parking lots and garages shall be developed in accordance with design standards.*

Policy 13-1.3 *Increase parking opportunities for both visitors and residents of Venice.*

The subject site is generally located on the block bounded by North Venice Boulevard, Pacific Boulevard, Dell Avenue and South Venice Boulevard and is separated into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard).

The project site is currently developed with a surface parking lot containing 196 vehicular parking spaces, the Pacific Electric Venice Short Line Bridge, and a two-story, 1,970-square-foot, 4-unit apartment building, located on the northern portion of the project site. The West Site and East Site are connected by the Short Line Bridge, which provides vehicular access between the two bisected areas of the Project Site. The Short Line Bridge will remain and provide pedestrian access between the two bisected areas of the project site. The surface parking lot is operated by LADOT. Vehicular access to the Project Site is currently available at driveways along North Venice Boulevard, Dell Avenue, and South Venice Boulevard. The Project Site is relatively flat with limited ornamental landscaping that includes 24 non-protected trees onsite and 11 non-protected street trees.

The proposed project would demolish the existing surface parking lot and the four-unit residential structure and construct a 103,957-square foot, mixed-use, 100 percent affordable housing development (a 36,157 square-foot structure west of Grand Canal and a 67,800 square-foot, structure east of Grand Canal) consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supporting (social service) office uses, 2,255 square feet of retail uses, 810 square feet of restaurant with 1,060 square feet of outdoor and indoor Service Floor area, and 2,875 square feet of art studio uses. The project will provide 357 automobile parking spaces as follows: 57 parking spaces for the dwelling units, 42 spaces for the commercial uses, 27 Beach Impact Zone (BIZ) spaces, 226 public parking spaces and 5 surplus parking spaces. The project provides 136 bicycle parking spaces (19 short-term and 117 long-term).

The recommended amendment to redesignate the subject site to the Neighborhood Commercial land use designation and recommended zone change to C2-1 would allow the site to be developed with the proposed project.

The Project offers new and much needed affordable and supportive housing dwelling units within a mixed-use development that has access to multiple forms of transportation. The residential component of the Project contains 140 residential dwelling units consisting of 68 dwelling units reserved for low-income, formerly homeless, households (with permanent supportive housing services); 34 affordable dwelling units for low-income artists (Joint Living and Work Quarters); 34 affordable dwelling units for lower-income households; and 4 non-restricted dwelling units for on-site property management staff. The dwelling units are comprised of studios, 1-bedroom and 2-bedroom units. On-site supportive services are offered to tenants. Case managers and community partners will provide a comprehensive approach to tenants to identify actions and services that can improve physical and mental health outcomes. Further tenants can receive referrals to off-site services, such as health care, food assistance, job training, and other similar support services. The Project expands commercial opportunities by providing ground floor, pedestrian-oriented, neighborhood-serving commercial uses along the Pacific Avenue and the Grand Canal frontages. Further the area fronting the Grand Canal provides for community open space for tenants and neighborhood residents alike. The Project also includes an arts studio, which provides a flexible arts space that can be used by both tenants and the broader Venice community.

The public parking and beach access for the general public is maintained. There are approximately 196 automobile parking spaces provided in the existing surface parking lot. The Project will provide 357 automobile parking spaces, which include the required parking for residential uses, commercial / retail uses, and Beach Impact Parking, as well as 196 replacement public parking spaces, and nonrequired parking spaces within a public parking structure located on the East Site that is operated by LADOT.

The General Plan and the Housing Element 2013-2021 identify the critical need for more affordable housing to be built in the City of Los Angeles. As discussed more fully in the findings for the Housing Element, the assessment is that the City of Los Angeles is “facing an unprecedented housing crisis,” and this crisis impacts all segments of the housing market. The housing crisis is most acute for the homeless population, as observed in the City’s Comprehensive Homeless Strategy which reports that a 9,049-bed deficit for permanent supportive housing for single individuals represents the highest need the City is facing relative to the housing gap for the homeless in Los Angeles.

The lack of adequate housing supply has resulted in the increased need for affordable housing for lower income families. The Housing Element notes that housing production is likely insufficient to meet future demands, as the City has not kept pace with projected growth according to the Regional Housing Needs Assessment and that the City has been producing an average of 1,100 affordable units per year since 2006, which falls far below the provision of adequate housing for persons of Extremely Low to Low Income.

As recommended, the General Plan Amendment to the land use designation from Open Space and Low Medium II Residential to Neighborhood Commercial, and the Zone Change from Open Space to C2-1 would be consistent with the above referenced objectives, policies, and programs of the Venice Community Plan.

Housing Element.

The 2013-2021 Housing Element was adopted by the City Council on December 3, 2013. The Housing Element is one of the nine state-mandated elements of the General Plan. The Housing Element of the General Plan identifies the City's housing conditions and needs, establishes the goals, objectives, and policies that are the foundation of the City's housing strategy, and provides an array of programs to create sustainable, mixed-income neighborhoods across the City.

The proposed project will comply with and supports the following goals, objectives and policy of the Housing Element:

Goal 1: *A City where housing production and preservation result in an adequate supply of ownership and rental housing that is safe, healthy and affordable to people of all income levels, races, ages, and suitable for their various needs.*

Objective 1.1: *Produce an adequate supply of rental and ownership housing in order to meet current and projected needs.*

Policy 1.1.2: *Expand affordable rental housing for all income groups that need assistance.*

Policy 1.1.3: *Facilitate new construction and preservation of a range of different housing types that address the particular needs of the city's households.*

Policy 1.1.7: *Strengthen the capacity of the development community to develop affordable housing.*

Goal 2: *A City in which housing helps to create safe, livable and sustainable neighborhoods.*

Objective 2.1: *Promote safety and health within neighborhoods.*

Policy 2.1.2: *Establish development standards and other measures that promote and implement positive health outcomes.*

Policy 2.2.1: *Provide incentives to encourage the integration of housing with other compatible land uses.*

Objective 2.5: *Promote a more equitable distribution of affordable housing opportunities throughout the City.*

Policy 2.5.2: *Foster the development of new affordable housing units citywide and within each Community Plan area.*

Goal 4: *A City committed to preventing and ending homelessness.*

Objective 4.1: *Provide an adequate supply of short-term and permanent housing and services throughout the City that are appropriate and meet the specific needs of all persons who are homeless or at risk for homelessness.*

Policy 4.1.3: Provide permanent supportive housing options with services for homeless persons and persons/families at risk of homelessness to ensure that they remain housed and get the individualized help they may need.

Policy 4.1.4: Target chronically homeless individuals and prioritize the most vulnerable among them for services and Permanent Supportive Housing, including through the coordination of service provision and the efficient access to information so as to rapidly match available services to those in need of services.

Policy 4.1.6: Provide housing facilities and supportive services for the homeless and special needs populations throughout the City and reduce zoning and other regulatory barriers to their placement and operation in appropriate locations.

The subject site is generally located on the block bounded by North Venice Boulevard, Pacific Boulevard, Dell Avenue and South Venice Boulevard and is separated into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard).

The project site is currently developed with a surface parking lot containing 196 vehicular parking spaces, the Pacific Electric Venice Short Line Bridge, and a two-story, 1,970-square-foot, 4-unit apartment building, located on the northern portion of the project site. The West Site and East Site are connected by the Short Line Bridge, which provides vehicular access between the two bisected areas of the Project Site. The Short Line Bridge will remain and provide pedestrian access between the two bisected areas of the project site. The surface parking lot is operated by LADOT. Vehicular access to the Project Site is currently available at driveways along North Venice Boulevard, Dell Avenue, and South Venice Boulevard. The Project Site is relatively flat with limited ornamental landscaping that includes 24 non-protected trees onsite and 11 non-protected street trees.

The proposed project would demolish the existing surface parking lot and the four-unit residential structure and construct a 103,957-square foot, mixed-use, 100 percent affordable housing development (a 36,157 square-foot structure west of Grand Canal and a 67,800 square-foot, structure east of Grand Canal) consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supporting (social service) office uses, 2,255 square feet of retail uses, 810 square feet of restaurant uses with 1,060 square feet of outdoor and indoor Service Floor area, and 2,875 square feet of art studio uses. The project will provide 357 automobile parking spaces as follows: 57 parking spaces for the dwelling units, 42 spaces for the commercial uses, 27 Beach Impact Zone (BIZ) spaces, 226 public parking spaces and 5 surplus parking spaces. The project provides 136 bicycle parking spaces (19 short-term and 117 long-term).

The Project offers new and much needed affordable and supportive housing dwelling units within a mixed-use development that has access to multiple forms of transportation. The residential component of the Project contains 140 residential dwelling units consisting of 68 dwelling units reserved for low-income, formerly homeless, households (with permanent supportive housing services); 34 affordable dwelling units for low-income artists (Joint Living and Work Quarters); 34 affordable dwelling units for lower-income households; and 4 non-restricted dwelling units for on-site property management staff. The dwelling units are comprised of studios, 1-bedroom and 2-bedroom units. On-site supportive services are offered to tenants. Case managers and community partners provide a comprehensive approach for tenant to identify actions and services that can improve physical and mental health outcomes. Further tenants can receive referrals to off-site services, such as health care, food assistance, job training, and other similar support services. The Project expands

commercial opportunities by providing ground floor, pedestrian-oriented, neighborhood-serving commercial uses along the Pacific Avenue and the Grand Canal frontages. Further the area fronting the Grand Canal provides for community open space for tenants and neighborhood residents alike. The Project also includes an arts studio, which provides a flexible arts space that can be used by both tenants and the broader Venice community.

The Housing Element 2013-2021 identifies the critical need for more affordable housing to be built in the City of Los Angeles. As discussed more fully in the Housing Element, the assessment is that the City of Los Angeles is “facing an unprecedented housing crisis,” and this crisis impacts all segments of the housing market. The housing crisis is most acute for the homeless population, as observed in the City’s Comprehensive Homeless Strategy which reports a 9,049-bed deficit for permanent supportive housing for single individuals represents the highest need the City is facing relative to the housing gap for the homeless in Los Angeles.

The lack of adequate housing supply has resulted in the increased need for affordable housing for lower income families. The Housing Element notes that housing production is likely insufficient to meet future demands, as the City has not kept pace with projected growth according to the Regional Housing Needs Assessment and that the City has been producing an average of 1,100 affordable units per year since 2006, which falls far below the provision of adequate housing for persons of Extremely Low to Low Income.

Consistent with Policy 1.1.2, the project expands the availability of affordable rental housing. The requested General Plan Amendment from Open Space and Low Medium II Residential to Neighborhood Commercial land use designation corresponding to the C2 Zone allows the development of 136 restricted affordable dwelling units for persons that need assistance in a location that is in close proximity to several transit options and neighborhood-serving uses.

As recommended, the General Plan Amendment to the land use designation from Open Space and Low Medium II Residential to Neighborhood Commercial would be consistent with the City’s Housing goals, objectives, and policies.

Mobility Element.

The Mobility Plan was adopted by the City Council on September 7, 2016. The Mobility Plan is a guide for the development of a citywide transportation system which provides for the efficient movement of people and goods. The Plan recognizes that primary emphasis must be placed on maximizing the efficiency of existing and proposed transportation infrastructure through advanced transportation technology, through reduction of vehicle trips, and through focusing growth in proximity to public transit.

The Mobility Plan provides goals, objectives, policies and programs to continually meet the changing mobility, air quality and health challenges faced by the City.

The proposed project will comply with and supports the following goals, objectives and policy of the Mobility Plan 2035:

Goal 3: *Access for all Angelenos.*

Objective: *Ensure that 90% of households have access within one mile to the Transit Enhanced Network by 2035.*

Objective: *Ensure that 90% of all households have access within one-half mile to high quality bicycling facilities by 2035.*

Objective: *Provide access to bicycle sharing within a quarter mile of 50% of*

households by 2035.

Policy 3.3: (Land Use Access and Mix) Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.

Policy 3.8: (Bicycle Parking) Provide bicyclists with convenient, secure and well-maintained bicycle parking facilities.

The project site is an approximately 115,674 square feet (approximately 2.65 acres) level, irregularly shaped parcel of land, consisting of 40 lots located within the Venice Community Plan area. The subject site is generally located on the block bounded by North Venice Boulevard, Pacific Boulevard, Dell Avenue and South Venice Boulevard and is separated into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard).

North Venice Boulevard is designated by the Mobility Plan as a Boulevard II. Pacific Avenue is designated by the Mobility Plan as an Avenue II. South Venice Boulevard is designated by the Mobility Plan as a Boulevard II. Dell Avenue is designated by the Mobility Plan as a Local Street – Standard. Canal Street is designated by the Mobility Plan as a Local Street – Standard and is improved as a waterway.

The subject site is well-served by multiple transit operators including Los Angeles Metro, Santa Monica Big Blue Bus and Culver City Bus transit systems.

Culver City Bus Line 1 stops on Pacific Avenue at subject site and provides daily eastbound/westbound service from Washington Boulevard and Fairfax Avenue to Venice Beach with intersections with seven Metro bus lines (17, 35, 38, 108, 358, Commuter Express 437) and five Santa Monica Big Blue Bus bus lines, (R3, 12, 14, 16, and 18). The eastern terminus of the Culver City Bus Line 1, at the West Los Angeles Transit Center, provides connections to seven Metro buses (35, 37, 38, 105, 217, 705, and 780).

Approximately 1,500 feet north of the subject site, near the intersection of Venice Way and Main Street, there are two bus stops served by Metro Local Bus Line 33, Metro Rapid Bus Line 733 and, Santa Monica Big Blue Bus Line 1. Metro Local Bus Line 33 and Metro Rapid Bus Line 733 provides eastbound/westbound service from Santa Monica to Downtown Los Angeles. Santa Monica Big Blue Bus Line 1 provides northbound /southbound service from Venice Beach to UCLA.

In addition, there is a Metro Bike Share station, located adjacent to the Property, at the intersection of Pacific Avenue and North Venice Boulevard. This bicycle station currently has 12 bicycle “docks”. Further, the subject site is located approximately 750 feet from the Marvin Braude Bike Trail providing regional bicycle access.

Primary regional access to the subject site is provided by the Marina Freeway (SR-90), Venice Boulevard (SR-187), and Lincoln Boulevard (SR-1), which are all accessible within 1.5 miles of the Project Site. Major arterials providing regional access to the Project Site include Pacific Avenue, West Washington Boulevard, and Abbot Kinney Boulevard. The Project site is less than 0.25 miles east of the Pacific Ocean.

The project will provide new affordable housing opportunities on a site that is within a transit priority area and in close proximity to several mass transit options and as such, would be consistent with the purposes of the Mobility Plan. With data showing that residents of 100 percent restricted affordable housing developments would be less likely to own personal vehicles, thereby relying on alternative modes of travel, including pedestrian, bicycle and transit modes.

Sewerage Facilities Element

The Sewerage Facilities Element of the General Plan will not be affected by the recommended action. While the sewer system might be able to accommodate the total flows for the proposed project, further detailed gauging and evaluation may be needed as part of the permit process to identify a specific sewer connection point. If the public sewer has insufficient capacity, then the developer will be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit will be made at that time. Ultimately, this sewage flow will be conveyed to the Hyperion Treatment Plant, which has sufficient capacity for the project.

Health and Wellness Element

The Health and Wellness Element was adopted by the City Council on March 25, 2015. The Plan for a Healthy Los Angeles provides high-level policy vision with measurable objectives and implementation programs to elevate health as a priority for the City's future growth and development. Through a new focus on public health from the perspective of the built environment and City services, the City of Los Angeles strives to achieve better health and social equity through its programs, policies, plans, budgeting, and community engagement.

The proposed project will comply with and supports the following goals, objectives and policy of the Health and Wellness Element:

Policy 2.1: (Access to goods and services) Enhance opportunities for improved health and well-being for all Angelenos by increasing the availability of and access to affordable goods and services that promote health and healthy environments, with a priority on low-income neighborhoods.

Policy 2.2: (Healthy building design and construction) Promote a healthy built environment by encouraging the design and rehabilitation of buildings and sites for healthy living and working conditions, including promoting enhanced pedestrian-oriented circulation, lighting, attractive and open stairs, healthy building materials and universal accessibility using existing tools, practices, and programs.

Policy 2.6: (Repurpose underutilized spaces for health) Work proactively with residents to identify and remove barriers to leverage and repurpose vacant and underutilized spaces as a strategy to improve community health.

Policy 2.10: (Social connectedness) Acknowledge the mental and physical health benefits of social connectedness by promoting and valuing public spaces, social interaction, relationship building, and resilience in community and urban design.

Policy 5.7 (Land Use Planning for Public Health and GHG Emission Reductions) Promote land use policies that reduce per capita greenhouse gas emissions, result in improved air quality and decrease air pollution especially for children, seniors, and others susceptible to respiratory disease.

Policy 7.6: (Diversion) Proactively collaborate with public, private, and nonprofit partners to divert vulnerable populations such as homeless individuals, veterans, individuals with mental health issues, at-risk youth and young adults, and other non-violent offenders from conviction and incarceration to supportive services that promote access to economic, education, housing, and health resources within their communities.

The Project consists of a mixed-use affordable housing project with ground floor, neighborhood-serving retail and services, and a public parking structure operated by

LADOT. The Project includes 68 residential dwelling units dedicated to serving formerly homeless, low-income households, 34 affordable dwelling units for low-income artists, including live/work studios, 34 affordable dwelling units for lower-income households, and 4 non-restricted onsite manager units. The housing for chronically homeless individuals meets a critical need for affordable housing within the Venice Community Plan area.

The Property is currently improved with a City-owned and operated surface public parking lot and a four-unit multi-family residential building. The Project provides a much-needed affordable and supportive housing development and neighborhood-serving commercial uses on an underutilized site. The project would provide case managers who work with tenants to identify actions and services that can improve physical and mental health and address other needs and goals as well as ensure housing stability. Community partners also provide services on-site to deliver a comprehensive and accessible service approach for tenants. Additionally, tenants receive referrals to off-site services they may need such as health care, food assistance, and other similar services. The art gallery is flexible arts space, to be used by tenants and the broader community, providing space for workspace and exhibition space.

The Project would be compatible and consistent with goals, objectives and policies of the Plan for a Healthy Los Angeles, a Health and Wellness Element of the General Plan.

Venice Coastal Zone Land Use Plan

The Venice Land Use Plan (LUP) was adopted by the City Council on October 29, 1999 and certified by the California Coastal Commission on June 14, 2001. The LUP is part of the Local Coastal Program intended for the Venice Coastal Zone. However, the necessary Implementation Plan was not adopted. The LUP was adopted by means of a plan amendment to the Community Plan and provides policies applicable to development in the Venice Coastal Zone.

The subject site is located within the North Venice and Venice Canals Subareas with a land use designation of Open Space and Low Medium II Residential. Chapter II of the LUP outlines the land use policies for new development in the Venice Coastal Zone.

The proposed project will comply with and supports the following goals, objectives, and policy of the certified Venice Coastal Zone Land Use:

Policy I. E. 2. Scale. New development within the Venice Coastal Zone shall respect the scale and character of community development. Buildings which are of a scale compatible with the community (with respect to bulk, height, buffer and setback) shall be encouraged. All new development and renovations should respect the scale, massing, and landscape of existing residential neighborhoods. Lot consolidations shall be restricted to protect the scale of existing neighborhoods. Roof access structures shall be limited to the minimum size necessary to reduce visual impacts while providing access for fire safety. In visually sensitive areas, roof access structures shall be set back from public recreation areas, public walkways, and all water areas so that the roof access structure does not result in a visible increase in bulk or height of the roof line as seen from a public recreation area, public walkway, or water area. No roof access structure shall exceed the height limit by more than ten (10') feet. Roof deck enclosures (e.g. railings and parapet walls) shall not exceed the height limit by more than 42 inches and shall be constructed of railings or transparent materials. Notwithstanding other policies of this LUP, chimneys, exhaust ducts, ventilation shafts and other similar devices essential for building function may exceed the specified height limit in a residential zone by five feet.

Policy I. E. 3. Architecture. Varied styles of architecture are encouraged with building

facades which incorporate varied planes and textures while maintaining the neighborhood scale and massing.

Policy I. B. 2. Mixed-Use Development. *Mixed-use residential commercial development shall be encouraged in all areas designated on the Land Use Policy Map for commercial use. Residential density in commercial land use designations shall not exceed one unit per 800-1200 square feet of lot area and shall comply with the Floor Area Ratio (FAR) limits set forth in Policy I.B.7. The design of mixed-use development is intended to help mitigate the impact of the traffic generated by the development on coastal access roads and reduce parking demand by reducing the need for automobile use by residents and encouraging pedestrian activity. Such development shall comply with the density and development standards set forth in this LUP.*

Policy I. B. 5. Neighborhood Commercial Land Use. *The Neighborhood Commercial designation is intended to accommodate local neighborhood commercial facilities and services which provide daily convenience goods and services to persons living in nearby residential areas. Small scale neighborhood stores and community services shall be preserved and encouraged. Neighborhood retail goods and services include, but are not limited to the following: art galleries; barber shops or beauty parlors; dry cleaners; laundry services; shoe repair; tailors; florists; hardware stores; drug stores; food/grocery stores; newsstands; medical facilities; and job service centers. Drive-thru facilities and billboards shall be prohibited on properties designated as neighborhood commercial. Community services include day-care, community-meeting rooms, recreational, religious or cultural facilities and similar uses. The clustering of uses minimizes multiple vehicle trips and encourages walking to and from adjacent residential neighborhoods. Areas designated for Neighborhood Commercial Land Use are shown in Exhibits 9 through 12.*

Physically, Neighborhood Commercial areas are generally characterized by one- and two-story low-rise structures. Pedestrian activities shall be encouraged by the emphasis on local serving uses, design of buildings, and the incorporation of streetscape amenities.

Policy I. B. 12. Parking Structures. *Multi-level parking structures may be permitted in all commercially designated areas provided that the use, design, scale and height of the structure is compatible with adjacent uses and the neighboring community.*

Policy II. A. 2. Expansion of Public Beach Parking Supply. *The construction of new public parking facilities should be implemented, as well as maximizing the use of existing ones by restriping existing parking lots or converting them to multi-level structures where consistent with other Coastal Act policies. The parking lots located west of the Ocean Front Walk shall remain surface parking lots. In no case shall such structures obstruct ocean views or be inconsistent with other Coastal Act or LUP Policies.*

Policy III. D. 2. Boating Use of Canals and Lagoon. *Recreational boating use of the Venice Canals shall be limited to non-commercial shallow-bottom, non-motorized boats such as canoes and rafts, in order to permit recreation while protecting the environmentally sensitive habitat area and maintain a quiet ambience within the neighborhoods of the plan area. A public boat launch facility was built as part of the Venice Canals Rehabilitation Project at the Grand Canal and North Venice Boulevard. The City shall protect the public's ability to access the canals by boat by maintaining public access to the Grand Canal public boat launch. The facility shall provide adequate on-site public parking consistent with the sizes and types of boats to be launched and frequency of launching pursuant to the County Department of Small Craft Harbors standards.*

Policy I. D. 3. Views of Natural and Coastal Recreation Resources. *The scale of development shall comply with height limits, setbacks and standards for building massing specified in Policy Groups I.A and I.B, Residential and Commercial Land Use and Development Standards of this LUP, in order to protect public views of highly scenic coastal areas and vista points, including, but not limited to, the canals, lagoon, jetty, pier, Ocean Front Walk, walk streets and pedestrian oriented special communities.*

Policy I. F. 3. Venice Canals. *The historic integrity of the Venice Canals shall be preserved. The canals are deemed to be significant as an early example of community recreational planning in a coastal marshlands area. Included in the historic district are the six canals, their associated sidewalks and a number of pedestrian and vehicular bridges. The Venice Canals are listed on the National Register of Historic Places as an historic district (August 30, 1982). Additionally, the City of Los Angeles Cultural Heritage Commission declared the Venice Canal System a Los Angeles City Historic-Cultural Monument (HCM No. 270, August 2, 1983).*

The Project Site is located in the Venice Community Plan area, less than 0.25 miles east of the Pacific Ocean. The approximate 2.65 acre, irregularly shaped, subject site is generally located on the block bounded by North Venice Boulevard, Pacific Boulevard, Dell Avenue and South Venice Boulevard and is separated into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard).

Surrounding properties are within the [Q]C1-1-O, R3-1-O, RD1.5-1-O and RD1.5-1-O-CA, OS-1XL-O and [T][Q]C1.5-1-O-CA Zones and are characterized by level topography and fully improved streets. In general, the properties to the west and north are primarily developed with multi-family residential and commercial uses and zone R3, RD1.5 and C1.5. The properties to the south are developed with multi-family and single-family residential and zoned R3 and RW.

The bulk and massing of the proposed project is divided into two structure separated by the Grand Canal such that the development is not a monolithic structure. The buildings fronting the Grand Canal are stepped back to provide variation in the massing and to reduce the shade and shadow impacts on the canal and adjacent landscaped open space area. Further, the campanile provides variation in height that further breaks up the massing of the building and provides visual interest.

In addition, the mass of the building is broken up vertically with sloping features as well as material changes at commercial, retail and community spaces at the ground floor level, providing architectural variety. The building façades are clad with stucco intermixed with fixed and operable windows on the upper levels, and glazed roll-up doors on the ground level. Further, the components of the building will be differentiated not only by color, but by textures. The color palette is a combination of white, beige and gray – each with its own corresponding texture.

The proposed project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. Moreover, landscaping is also provided in the form of new trees and mounded grass planters that line the perimeter of the Project.

In addition, ground floor retail and the art gallery space flank the west and east sides of the Grand Canal, respectively, to further promote pedestrian activity and access. The existing bridge across the Grand Canal remains in place to facilitate pedestrian access between the West Site and East Site. The provision for publicly accessible open space, and local serving retail, restaurant and commercial uses activates the public street.

The parking structures are wrapped by the residential and commercial components and not visible from the street. As previously discussed, the proposed mixed-use structure is consistent with the existing neighborhood character. The proposed project will provide reduced residential parking in accordance with AB 744 for 100% affordable housing project and will provide code required parking for the commercial uses per the Los Angeles Municipal Code and Venice Coastal Zone Specific Plan. An Affordable Housing Referral Form, dated October 16, 2018, was prepared for the proposed project requesting Developer's Incentives (Measure JJJ). As provided in the Referral Form, the project qualifies for reduced parking pursuant to AB 744. The project will replace all of the 196 existing public parking spaces contained at the subject site and provide an additional 27 new public parking spaces.

The Project preserves the historic integrity of the Venice Canals. The subject site straddles the east and west banks of the Grand Canal, between North and South Venice Boulevards. Landscape enhancements and improved public access to the Grand Canal is provided on the West Site and East Site. The proposed project provides averaged 15-foot setbacks on both the West Site and East Site facing the Grand Canal, incorporating public open space including terraced seating, landscaping and plaza areas.

In addition, ground floor retail and the art gallery space flank the west and east sides of the Grand Canal, respectively, to further promote pedestrian activity and access. The existing bridge across the Grand Canal remains in place to facilitate pedestrian access between the West Site and East Site. The provision for publicly accessible open space and local serving commercial uses activates the public street and Grand Canal frontages and provides opportunities for local residents and businesses.

As such, the proposed project is consistent with neighborhood character and neighborhood policies of the certified Venice LUP.

3. **Charter Finding 555.** The General Plan may be amended in its entirety, by subject elements or parts of subject elements, or by geographic areas, provided that the part or area involved has significant social, economic, or physical identity.

The General Plan Amendment represents an Amendment in Part of the Venice Community Plan and certified Land Use Plan. The Project's initiated General Plan Amendment from Open Space and Low Medium II Residential to Neighborhood Commercial, and recommended Vesting Zone Change and Height District Change from OS-1XL-O to (T)(Q)C2-1L-O would allow for the proposed mix of commercial and residential uses.

The Project Site has a significant social, economic and physical identity in that it is comprised of approximately 2.65 acres and 40 contiguous lots improved with a surface parking lot in an area developed with residential and commercial uses, proximate to Venice Beach and adjacent to the Venice Canals. The Site would be developed with commercial uses, residential units, and public parking spaces, consistent with existing development in the area.

The project site is generally bounded by North Venice Boulevard to the north, South Venice Boulevard to the south, Pacific Avenue to the west, and Dell Avenue to the east and is bisected into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of South Venice Boulevard). This area has a physical identify as the previous right-of-way for the Venice Short Line railroad. The property is zoned OS and is developed with a surface parking containing 196 vehicular parking spaces, the Pacific Electric Venice Short Line Bridge (Short Line Bridge), and a two-story, 1,970-square-foot residential building containing four dwelling units, located on the northern portion of the Project Site. The northernmost section of the Venice Canal system (also known as the

Grand Canal), bisects the Project Site into two portions: the West Site and East Site. The West Site and East Site are connected by the Short Line Bridge, which provides vehicular access between the two bisected areas of the Project Site. The Short Line Bridge is considered a historical resource for purposes of CEQA as it was surveyed and identified as eligible for individual listing in the National Register of Historic Places, the California Register of Historical Resources, and as a City of Los Angeles Historic Cultural Monument (HCM) by SurveyLA, the City's citywide historic resources survey. The Short Line Bridge will remain as part of the Project and provide pedestrian access between the two bisected areas of the Project Site.

Surrounding properties are within the [Q]C1-1-O, R3-1-O, RD1.5-1-O and RD1.5-1-O-CA, OS-1XL-O and [T][Q]C1.5-1-O-CA Zones and are characterized by level topography and fully improved streets. Properties to the south of the subject site, across South Venice Boulevard, are in the R3-1-O Zone, and are developed primarily with three- to four-story multi-family residential buildings interspersed with single-story bungalows. Properties to the west of the Property, across Pacific Avenue, are in the [T][Q]C1.5-1-O-CA, RD1.5-1-O-CA and R3-1-O Zones and are developed primarily with two-story multi-family residential buildings. Properties to the north of the Property, across North Venice Boulevard, are in the [Q]C1-1-O and R3-1-O Zones and are developed with some commercial but primarily multi-family residential uses comprised of two- and three-story single- and multi-family homes. Properties to the east of the subject site, across Dell Avenue, are within the RD1.5-1-O and OS-1XL-O Zones, and are developed with single-story residential buildings and a surface parking lot.

The Project Site maintains a surface parking lot and is underutilized. While the lots adjacent to the Site are zoned for multifamily and commercial development, the existing Open Space designation and zone limits future development of the site. Like much of the City and County, the Venice area has seen an increase in housing costs and people experiencing homelessness. While public parking is essential in facilitating access to the Venice Coastal Zone, the lack of housing for the homeless remains a persistent problem and individuals experiencing homelessness is a growing social identity for the immediate area due to insufficient Permanent Supportive Housing units in this area and throughout the City. The recent 2020 report from The Los Angeles Homeless Services Authority (LAHSA) stated that the homeless population in the City of Los Angeles has increased 16.1% since the 2019 homeless count.

The Proposed Project would develop 136 permanent supportive housing units, create ground floor commercial and recreational spaces, improve and enhance public access to the Venice Canals, and replace and increase the number of parking spaces available for the public. Additionally, the request would not be eliminating or displacing an existing open space use since the site is currently developed with a surface parking lot, the Pacific Electric Venice Short Line Bridge (Short Line Bridge), which will remain in place, and a residential building. The Project Site has its own physical identity in that it is currently improved with a use similar to the adjacent properties and residential neighborhood, and consistent with the proposed zone.

Redesignating the land use of the Project Site reinforces an area that has its own economic and physical identity in the form of: 1) contributing to the available housing stock within the City and towards alleviating the housing crisis in the City, 2) furthering the General Plan Land Use Element's policies to focus development in areas that are accessible to existing activity centers and transit, providing compatible residential and commercial uses in the immediate area around the Project Site, which supports the provisions of the Venice Community Plan.

Therefore, the General Plan should be amended in part through the Venice Community Plan and Land Use Plan, as the Project would contribute to and strengthen an area which has

significant social, economic or physical identity.

4. **Charter Finding 556.** When approving any matter listed in Section 558, the City Planning Commission and the Council shall make findings showing that the action is in substantial conformance with the purposes, intent and provisions of the General Plan. If the Council does not adopt the City Planning Commission's findings and recommendations, the Council shall make its own findings.

The project site is located within the Venice Community Plan area, which is one of 35 community plans that collectively comprises the Land Use Element of the General Plan. The Community Plan designates the site with a land use designation of Open Space and Low Medium II Residential, which lists OS as the corresponding zone. The site is presently zoned OS, which is consistent with the existing land use designation, but is developed with a non-conforming use, including a surface parking lot since 1991, and a residential building built in 1965

As recommended, the amendment would re-designate the project site to the Neighborhood Commercial land use designation, which has the following corresponding zones: C1, C1.5, C2, C4, RAS3 and RAS4. The amendment of the land use designation for the subject site, in conjunction with the recommended zone change to C2 and Venice Specific Plan Amendment to create Subarea A (Permanent Supportive Housing), would maintain the consistency between the General Plan land use designation and the zoning.

As discussed in Finding No. 2 above, the initiated General Plan Amendment complies with Los Angeles City Charter Section 556 in that it is in substantial conformance with the purposes, intent and provision of the General Plan and its elements, including the Framework Element, Housing Element, Mobility Element, Health and Wellness and Air Quality Elements and the Land Use Element – Venice Community Plan and certified Venice Land Use Plan. The development of the proposed project is an opportunity to achieve the goals of the Venice Community Plan including providing safe, secure and high-quality residential development for all economic segments of the housing market. As further elaborated in section for the Housing Element, the project would also contribute to the goals of expanding the rental housing stock, providing affordable housing, and contributing to a range of housing types by providing Qualified Permanent Supportive Housing. Furthermore, the granting of the General Plan Amendment request allows for the intensification of an underutilized site to provide new affordable housing and neighborhood-serving commercial uses near public transit.

5. **Charter Finding 558.**

The proposed Amendment to the Venice Community Plan will be in conformance with public necessity, convenience, general welfare and good zoning practice.

The subject site is located within the Venice Community Plan and certified Venice Land Use Plan (LUP), which designates the site for Open Space land uses with a corresponding zone of OS-1XL-O. The Open Space zone does not permit buildings or structures except those used for park and recreation facilities and does not have height of FAR limitations. The General Plan Amendment request from Open Space and Low Medium II Residential to the Neighborhood Commercial land use designation, and corresponding Vesting Zone Change / Height District Change from OS-1XL-O to (T)(Q)C2-1L-O, will redesignate the subject site to Neighborhood Commercial to allow for a mixed-use, 100 percent affordable housing development with supportive services and ground floor, neighborhood-serving commercial / retail uses within close proximity to public transportation.

Public Necessity, Convenience and General Welfare.

The Project Site is located within the Venice Community Plan area. The site is located within an area that is immediately improved with a variety of land uses including multi-family uses, commercial, and open space including the northernmost section of the Venice Canal system (also known as the Grand Canal), that bisects the Project Site into two portions. The surrounding area is improved with a mix of residential, commercial, and public serving uses that are compatible with the proposed use.

The affordable housing crisis in California is driving a regional increase in homelessness. The County of Los Angeles is the least affordable County for housing in the state of California. In Los Angeles County, there are 721,000 families and individuals that are severely overburdened with rental payments. Despite housing 21,631 people in 2018, homelessness in the County increased by 12 percent.

According to the 2020 Los Angeles Homeless Service Authority (LAHSA) Homeless Count, there are 41,290 people experiencing homelessness in the City of Los Angeles. The subject site is located in the Service Planning Area (SPA) 5, which has a population of 6,009 individuals experiencing homelessness.

Specifically in Venice, the 2018 Homeless Count revealed 975 persons experiencing homelessness in Venice. The next year, according to the Homeless Count that number was up 29 percent to 1,260 persons experiencing homelessness. The 2020 homeless count revealed 1,981 persons experiencing homelessness, a 57% increase from 2019.

Further drawing attention to this trend, there has not been significant affordable housing production in Venice since the 1990s. There are approximately 6,000 Supportive Housing units available Citywide and only a small fraction of those is located in the Venice Community Plan area. There are currently only 42 supportive housing units in Venice.

In 2016 in response to these alarming trends, the City developed the Affordable Housing Opportunity Sites program, which identified city-owned sites for new affordable housing and permanent supportive housing. The subject site is identified as one such opportunity site.

As such, the proposed project would provide critically needed affordable housing units in the Venice Community Plan area. The proposed project includes 140 dwelling units, of which 68 units are designated for permanent supportive housing (PSH) for those experiencing homelessness, 34 Joint Living and Work Quarters for low-income households, 34 units are designated for low-income families/households and four units will be occupied by on-site property managers.

The proposed project also includes on-site support services for the residents to improve their physical and mental health and ensure housing stability. Further, residents can receive referrals to off-site services such as health care, food assistance and job training.

In addition, the requested legislative action is beneficial to Public Convenience by providing permanent supportive housing within close proximity to public transit and increasing access to the Venice Canals. The subject site is well-served by multiple transit operators including the Los Angeles Metro, Santa Monica Big Blue Bus and Culver City Bus transit systems.

The Culver City Bus Line 1 stops on Pacific Avenue adjacent to the subject site and provides daily eastbound/westbound service from Washington Boulevard and Fairfax Avenue to Venice Beach with intersections with seven Metro bus lines (17, 35, 38, 108, 358, Commuter Express 437) and five Santa Monica Big Blue Bus bus lines, (R3, 12, 14, 16, and 18). The eastern terminus of the Culver City Bus Line 1, at the West Los Angeles Transit Center, provides connections to seven Metro buses (35, 37, 38, 105, 217, 705, and 780).

Approximately 1,500 feet north of the subject site, near the intersection of Venice Way and

Main Street, there are two bus stops served by Metro Local Bus Line 33, Metro Rapid Bus Line 733 and, Santa Monica Big Blue Bus Line 1. Metro Local Bus Line 33 and Metro Rapid Bus Line 733 provides eastbound/westbound service from Santa Monica to Downtown Los Angeles. Santa Monica Big Blue Bus Line 1 provides northbound/southbound service from Venice Beach to UCLA.

In addition, there is a Metro Bike Share station, located adjacent to the subject site, at the intersection of Pacific Avenue and North Venice Boulevard. This bicycle station currently has 12 bicycle “docks”. Further, the subject site is located approximately 750 feet from the Marvin Braude Bike Trail providing regional bicycle access.

The proposed project provides gateway features to increase visibility of and access to the Grand Canal. The proposed project features new public amenity space abutting the canal including landscape enhancements and commercial activity to increase pedestrian circulation and enjoyment of the Grand Canal for the larger community. Further improved access to the boat launch is provided by on-site and off-site loading of small watercrafts and improved wayfinding signage.

In short, the Land Use Designation amendment and Zone Change provides for the Public Necessity and Convenience and is beneficial to the General Welfare by 1) contributing to the availability of affordable and supportive housing within the Venice Community Plan area, 2) providing affordable and supportive housing near transit and employment centers and 3) increasing access to the Venice Canals. Therefore, the Project would be consistent with the public necessity, convenience, and general welfare of the surrounding area.

Good Zoning Practice

The requested General Plan Amendment from Open Space and Low Medium II Residential to Neighborhood Commercial and the corresponding Vesting Zone Change/Height District Change from OS-1XL-O to the (T)(Q)C2-1L-O will redesignate the subject site to allow the development of a permanent supportive housing development..

The Open Space land use designation and zoning district are applied to parcels that are planned for or developed with park land, open space or habitat conservation. The subject site is currently improved with non-conforming uses, including a surface parking lot and a four-unit multi-family residential building. The site is intended to provide parking for the approximately 320 acres of designated Open Space within Venice Beach, but the existing use does not correspond to the Open Space land use designation. Changing the zoning and land use designation from Open Space to Neighborhood Commercial would result in the reduction in the acreage designated for open space. However, the current use is an underutilized site where there are no plans for park development or habitat conservation

The approval of the requested legislative action would facilitate the replacement and expansion of the existing 196-space surface parking lot and contribute to the supply of affordable housing in the Venice Community Plan area.

As previously stated, the Venice Community Plan area, and the City as a whole, have been experiencing an acute supportive housing shortage, made worse by rapidly increasing housing prices. An increased Permanent Supportive Housing supply will help house the most vulnerable in the community, and provide much needed supportive service including job training and independent living skills, which will help to reduce the rate of return to homelessness.

The proposed project is visually compatible with the character of surrounding areas and sited and designed to protect views to the Grand Canal.

The last update to the Venice Community Plan, adopted on September 29, 2000 and the Venice Local Coastal Program Land Use Plan (LUP), certified by the California Coastal Commission on June 14, 2001, did not change or update the zoning for this site. Because the site has an existing use that is inconsistent with the current Open Space zone and land use designation, it is non-conforming.

In short, the granting the Neighborhood Commercial Community Plan Map designation and corresponding C2 Zone permits the proposed mixed-use development on the Property. Following the principles of Good Zoning Practice, granting the subject request re-designates the underutilized site to permit a mixed-use development that is compatible with the surrounding land uses and expands the affordable and supportive housing supply, provides for an art gallery, enhances the public open space adjacent to the Grand Canal, and provides commercial retail opportunities in the Venice community.

Entitlement Findings

6. Vesting Zone Change, Height District Change, and “T” and “Q” Classification Findings.

- a. **Pursuant to Section 12.32-F of the Municipal Code, and based on these findings, the recommended action is deemed consistent with public necessity, convenience, general welfare and good zoning practice.**

Public Necessity and General Welfare

Granting the requested legislative action is a public necessity and is beneficial to the general welfare by expanding the available housing opportunities for lower income households within the Venice Community Plan area.

In conjunction with the requested General Plan Amendment, the applicant has also requested a Zone Change to change the site’s zoning designation from OS to C2 and a change in Height District from 1XL to 1L. The existing OS zone would prohibit the residential development.

The project involves the demolition of an existing surface parking lot containing 196 vehicular parking spaces (bisected by Grand Canal) and a two-story, four-unit residential structure; and the construction, use and maintenance of a 103,957-square foot, mixed-use, 100 percent affordable housing development (a 36,157 square-foot structure west of Grand Canal and a 67,800 square-foot, structure east of Grand Canal) consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supporting (social service) office uses, 2,255 square feet of retail uses, 810 square feet of restaurant uses with 1060 square feet of outdoor and indoor Service Floor area, and 2,875 square feet of art studio uses.

The proposed Zone Change to the C2 Zone is consistent with the proposed land use designation of Neighborhood Commercial and would facilitate the much-needed housing for an underserved segment of the community, and as a result, the Zone Change would promote the public necessity, convenience and general welfare to accommodate a population that would benefit from housing and supportive services for those in the greatest need. The project is compatible with the goals, objectives and policies of the Venice Community Plan and certified Land Use Plan, as discussed in the findings for the Community Plan.

The General Plan and the Housing Element 2013-2021 identify the critical need for more affordable housing to be built in the City of Los Angeles. As discussed more fully in the findings for the Housing Element, the assessment is that the City of Los Angeles is

“facing an unprecedented housing crisis,” and this crisis impacts all segments of the housing market. The housing crisis is most acute for the homeless population, as observed in the City’s Comprehensive Homeless Strategy which reports that a 9,049-bed deficit for permanent supportive housing for single individuals represents the highest need the City is facing relative to the housing gap for the homeless in Los Angeles.

The lack of adequate housing supply has resulted in the increased need for affordable housing for lower income families. The Housing Element notes that housing production is likely insufficient to meet future demands, as the City has not kept pace with projected growth according to the Regional Housing Needs Assessment and that the City has been producing an average of 1,100 affordable units per year since 2006, which falls far below the provision of adequate housing for persons of Extremely Low to Low Income.

Specifically in Venice, the 2018 Homeless Count revealed 975 persons are experiencing homelessness in Venice. The next year, according to the Homeless Count that number was up 29% to 1,260 persons experiencing homelessness. The 2020 homeless count revealed 1,981 persons experiencing homelessness, a 57% increase from 2019.

Further drawing attention to this trend, there has not been significant affordable housing production in Venice since the 1990s. There are approximately 6,000 Supportive Housing units available Citywide and only a small fraction of those is located in the Venice community. There are currently only 42 supportive housing units in Venice.

As such, the proposed project would provide critically needed affordable housing units in the Venice Community Plan area. The proposed project includes 140 dwelling units, of which 68 units are designated for permanent supportive housing (PSH) for those experiencing homelessness, 34 Joint Living and Work Quarters for low-income households, 34 units are designated for low-income families/households and four units will be occupied by on-site property managers.

The proposed project also includes on-site support services for the residents to improve their physical and mental health and ensure housing stability. Further, residents can receive referrals to off-site services such as health care, food assistance and job training.

In short, the granting of the requested legislative action is a public necessity and is beneficial to the general welfare by expanding the available housing opportunities for lower income households within the Venice Community Plan area.

Convenience

In addition, the granting of the requested legislative action is beneficial to public convenience by providing supportive and affordable housing within close proximity to public transit and employment centers. The subject site is well-served by multiple transit operators including the Los Angeles Metro, Santa Monica Big Blue Bus and Culver City Bus transit systems.

In addition, there is a Metro Bike Share station, located adjacent to the subject site at the intersection of Pacific Avenue and North Venice Boulevard. This bicycle station currently has 12 bicycle “docks”. Further, the subject site is located approximately 750 feet from the Marvin Braude Bike Trail providing regional bicycle access. The Marvin Braude Bike Trail is a 22-mile segment of the California Coastal Trail

The Project includes landscape enhancements, enhanced pedestrian walkways through the site and to the Venice Canals, improved public access to the canal, new public amenity spaces, and 226 public parking spaces.

Therefore, the Project would be consistent with the public necessity, convenience, and general welfare of the surrounding area.

Good Zoning Practice

Granting the requested legislative action is consistent with good zoning practice.

The requested General Plan Amendment from Open Space and Low Medium II Residential to Neighborhood Commercial and the corresponding Vesting Zone Change/Height District Change from OS-1XL-O to the (T)(Q)C2-1L-O will appropriately redesignate the subject site to a better and higher use. The General Plan Framework notes that the City of Los Angeles has "insufficient vacant properties to accommodate forecast population increases. Consequently, the City's growth will require the reuse and intensification of existing developed properties." The existing project site consists of a two-story, four-unit residential structure and a large amount of surface parking lot areas that should be utilized to accommodate an intensification of the land use in order to construct an affordable housing development.

The Open Space land use designation and zoning district are applied to parcels that are planned for or developed with park land, open space or habitat conservation. Per LAMC 12.04.05, the Open Space Zone purpose is "to provide regulations for publicly owned land in order to implement the City's adopted General Plan, including the recreation, parks and open space designations in the City's adopted district and community plans, and other relevant elements, including the Open Space, Conservation and Public Recreation Elements." The project is on a site that has been identified as underutilized. The existing use on the subject site is a surface parking lot and a four-unit multi-family residential building. The site is currently utilized to provide parking for the approximately 320 acres of designated Open Space within Venice Beach, but the existing use does not correspond to the Open Space land use designation. Changing the zoning and land use designation from Open Space to Neighborhood Commercial would result in the reduction in the acreage designated for open space. However, the current use is an underutilized site where there are no plans for park development or habitat conservation. The requested General Plan Amendment to Neighborhood Commercial would create a development site compatible with the Venice Community Plan's recognition of a residential community issue that there is a need to accommodate more affordable housing.

As previously stated, the Venice Community Plan area, and the City as a whole, have been experiencing an acute supportive housing shortage, made worst by rapidly increasing housing prices. An increased Permanent Supportive Housing supply will help house the most vulnerable in the community, and provide much needed supportive service including job training and independent living skills, which will help to reduce the rate of return to homelessness. The proposed project supports the objective in the Venice Community Plan to provide housing for all income levels in the Venice Community Plan area.

In general, the properties to the west and north are primarily developed with multi-family residential and commercial uses and zone R3, RD1.5 and C1.5. The properties to the south are developed with multi-family and single-family residential and zoned R3 and RW.

As recommended, granting the Neighborhood Commercial Community Plan Map designation and corresponding C2 Zone permits the proposed mixed-use permanent supportive housing development on the Property, a project identified as a high priority in addressing the city's housing needs. Following the principles of Good Zoning Practice, granting the subject request re-designates the underutilized site to permit a permanent

supportive housing mixed-use development that is compatible with the surrounding land uses and expands the affordable and supportive housing supply, and enhances the public open space adjacent to the Grand Canal in the Venice Community Plan area. As such, the zoning is compatible and consistent with the objectives and policies of the General Plan, Mobility Plan, Health and Wellness Elements, the Community Plan, and the certified Venice Land Use Plan (LUP). Thus, the project reflects good zoning practice.

- b. **Pursuant to Section 12.32-G and Q of the Municipal Code “T” and “Q” Classification Findings.** The current action, as recommended, has been made contingent upon compliance with new “T” and “Q” conditions of approval imposed herein for the proposed project. As recommended, the Zone Change has been placed in temporary “T” and temporary “Q” Classification in order to ensure consistency with the amendment to the land use designation from Open Space and Low Medium II Residential to Neighborhood Commercial. The “T” Conditions are necessary to ensure the identified dedications, improvements, and actions are undertaken to meet the public’s needs, convenience, and general welfare served by the actions required. These actions and improvements will provide the necessary infrastructure to serve the proposed community at this site. The “Q” conditions that limit the scale and scope of future development on the site are also necessary to protect the best interests of and to assure a development more compatible with surrounding properties and the overall pattern of development in the community, to secure an appropriate development in harmony with the General Plan, and to prevent or mitigate the potential adverse environmental effects by the recommended action.

7. Specific Plan Amendment Findings

Pursuant to Section 12.32 of the Municipal Code, and based on these findings, the recommended action to amend the Venice Coastal Zone Specific Plan is deemed consistent with public necessity, convenience, general welfare and good zoning practice.

Public Necessary and General Welfare

Granting the requested legislative action is a public necessity and is beneficial to the general welfare by expanding the available housing opportunities for lower income households within the Venice Community Plan area.

In conjunction with the requested General Plan Amendment, the applicant has also requested a Zone Change to change the site’s zoning designation from OS to C2 and a change in Height District from 1XL to 1L. The existing OS zone would prohibit the residential development.

The project involves the demolition of an existing surface parking lot containing 196 vehicular parking spaces (bisected by Grand Canal) and a two-story, four-unit residential structure; and the construction, use and maintenance of a 103,957-square foot, mixed-use, 100 percent affordable housing development (a 36,157 square-foot structure west of Grand Canal and a 67,800 square-foot, structure east of Grand Canal) consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supportive services, 2,255 square feet of retail uses, 810 square feet of restaurant uses with 1060 square feet of outdoor and indoor Service Floor area, and 2,875 square feet of art studio uses.

The proposed Zone Change to the C2 Zone is consistent with the proposed land use designation of Neighborhood Commercial and would facilitate the much-needed housing for an underserved segment of the community, and as a result, the Zone Change would promote the public necessity, convenience and general welfare to accommodate a

population that would benefit from housing and supportive services for those in the greatest need. The project is compatible with the goals, objectives and policies of the Venice Community Plan and certified Land Use Plan, as discussed in the findings for the Community Plan.

The General Plan and the Housing Element 2013-2021 identify the critical need for more affordable housing to be built in the City of Los Angeles. As discussed more fully in the findings for the Housing Element, the assessment is that the City of Los Angeles is “facing an unprecedented housing crisis,” and this crisis impacts all segments of the housing market. The housing crisis is most acute for the homeless population, as observed in the City’s Comprehensive Homeless Strategy which reports that a 9,049-bed deficit for permanent supportive housing for single individuals represents the highest need the City is facing relative to the housing gap for the homeless in Los Angeles.

The lack of adequate housing supply has resulted in the increased need for affordable housing for lower income families. The Housing Element notes that housing production is likely insufficient to meet future demands, as the City has not kept pace with projected growth according to the Regional Housing Needs Assessment and that the City has been producing an average of 1,100 affordable units per year since 2006, which falls far below the provision of adequate housing for persons of Extremely Low to Low Income.

Specifically in Venice, the 2018 Homeless Count revealed 975 persons are experiencing homelessness in Venice. The next year, according to the Homeless Count that number was up 29% to 1,260 persons experiencing homelessness. The 2020 homeless count revealed 1,981 persons experiencing homelessness, a 57% increase from 2019.

Further drawing attention to this trend, there has not been significant affordable housing production in Venice since the 1990s. There are approximately 6,000 Supportive Housing units available Citywide and only a small fraction of those is located in the Venice community. There are currently only 42 supportive housing units in Venice.

As such, the proposed project would provide critically needed affordable housing units in the Venice Community Plan area. The proposed project includes 140 dwelling units, of which 68 units are designated for permanent supportive housing (PSH) for those experiencing homelessness, 34 Joint Living and Work Quarters for low-income households, 34 units are designated for low-income families/households and four units will be occupied by on-site property managers.

The proposed project also includes on-site support services for the residents to improve their physical and mental health and ensure housing stability. Further, residents can receive referrals to off-site services such as health care, food assistance and job training.

In short, the granting of the requested legislative action is a public necessity and is beneficial to the general welfare by expanding the available housing opportunities for lower income households within the Venice Community Plan area.

Convenience

In addition, the granting of the requested legislative action is beneficial to public convenience by providing supportive and affordable housing within close proximity to public transit and employment centers. The subject site is well-served by multiple transit operators including the Los Angeles Metro, Santa Monica Big Blue Bus and Culver City Bus transit systems.

In addition, there is a Metro Bike Share station, located adjacent to the subject site at the intersection of Pacific Avenue and North Venice Boulevard. This bicycle station currently has 12 bicycle “docks”. Further, the subject site is located approximately 750 feet from the

Marvin Braude Bike Trail providing regional bicycle access. The Marvin Braude Bike Trail is a 22-mile segment of the California Coastal Trail

The Project includes landscape enhancements, enhanced pedestrian walkways through the site and to the Venice Canals, improved public access to the canal, new public amenity spaces, and 226 public parking spaces.

Therefore, the Project would be consistent with the public necessity, convenience, and general welfare of the surrounding area.

Good Zoning Practice

Granting the requested legislative action is consistent with good zoning practice.

The requested General Plan Amendment from Open Space and Low Medium II Residential to Neighborhood Commercial and the corresponding Vesting Zone Change/Height District Change from OS-1XL-O to the (T)(Q)C2-1L-O will appropriately redesignate the subject site to a better and higher use. The General Plan Framework notes that the City of Los Angeles has "insufficient vacant properties to accommodate forecast population increases. Consequently, the City's growth will require the reuse and intensification of existing developed properties." The existing project site consists of a two-story, four-unit residential structure and a large amount of surface parking lot areas that should be utilized to accommodate an intensification of the land use in order to construct an affordable housing development.

The Open Space land use designation and zoning district are applied to parcels that are planned for or developed with park land, open space or habitat conservation. Per LAMC 12.04.05, the Open Space Zone purpose is "to provide regulations for publicly owned land in order to implement the City's adopted General Plan, including the recreation, parks and open space designations in the City's adopted district and community plans, and other relevant elements, including the Open Space, Conservation and Public Recreation Elements." The project is on a site that has been identified as underutilized. The existing use on the subject site is a surface parking lot and a four-unit multi-family residential building. The site is currently utilized to provide parking for the approximately 320 acres of designated Open Space within Venice Beach, but the existing use does not correspond to the Open Space land use designation. Changing the zoning and land use designation from Open Space to Neighborhood Commercial would result in the reduction in the acreage designated for open space. However, the current use is an underutilized site where there are no plans for park development or habitat conservation. The requested General Plan Amendment to Neighborhood Commercial would create a development site compatible with the Venice Community Plan's recognition of a residential community issue that there is a need to accommodate more affordable housing.

As previously stated, the Venice Community Plan area, and the City as a whole, have been experiencing an acute supportive housing shortage, made worst by rapidly increasing housing prices. An increased Permanent Supportive Housing supply will help house the most vulnerable in the community, and provide much needed supportive service including job training and independent living skills, which will help to reduce the rate of return to homelessness. The proposed project supports the objective in the Venice Community Plan to provide housing for all income levels in the Venice Community Plan area.

In general, the properties to the west and north are primarily developed with multi-family residential and commercial uses and zone R3, RD1.5 and C1.5. The properties to the south are developed with multi-family and single-family residential and zoned R3 and RW.

As recommended, granting the Neighborhood Commercial Community Plan Map

designation and corresponding C2 Zone permits the proposed mixed-use permanent supportive housing development on the Property, a project identified as a high priority in addressing the city's housing needs. Following the principles of Good Zoning Practice, granting the subject request re-designates the underutilized site to permit a permanent supportive housing mixed-use development that is compatible with the surrounding land uses and expands the affordable and supportive housing supply, and enhances the public open space adjacent to the Grand Canal in the Venice Community Plan area. As such, the zoning is compatible and consistent with the objectives and policies of the General Plan, Mobility Plan, Health and Wellness Elements, the Community Plan, and the certified Venice Land Use Plan (LUP). Thus, the project reflects good zoning practice.

As discussed in Finding No. 2, the recommended Specific Plan Amendment is consistent with the General Plan Framework, Venice Community Plan (Land Use), Mobility Plan, and Health and Wellness Elements. The project requests a Specific Plan Amendment to change the boundaries of two existing subareas, "North Venice" and "Venice Canals," to create a new subarea, "Subarea A." The Specific Plan Amendment would only apply to the subject site to permit the construction, maintenance, and use of a 140 unit affordable and permanent supportive housing development with commercial uses and a public parking facility. The site is located in an urbanized and developed area and as a City-owned site affords a unique opportunity to provide a Permanent Supportive Housing project with supportive services. With the approval of the Specific Plan Amendment, the project would be consistent with the following purposes outlined by the Specific Plan:

Section 3.C. To protect, maintain, enhance and, where feasible, restore the overall quality of the Coastal Zone environment and its natural and man-made resources.

The subject site is improved with a surface parking lot abutting the terminus of the Grand Canal at Canal Street. The Grand Canal at Canal Street differs in character from the rest of the canal system and does not feature a landscape buffer. Rather, Canal Street (Grand Canal) consists of concrete embankment directly adjacent to the concrete sidewalks that run along either side of the canal. The proposed project enhances the natural environment providing approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. Moreover, 1,500 square feet of the landscaped area on the east banks of the Grand Canal is Permeable, allowing adequate storm water drainage and facilitating groundwater recharge. Lastly, landscaping is provided in the form of new trees and mounded grass planters that line the perimeter of the Project.

Section 3.D. To assure that public access to the coast and public recreation areas is provided as required by the Coastal Act and the LCP.

The subject site is located 0.25 miles from the Venice Beach shoreline and abuts the terminus of the Grand Canal at Canal Street. The subject site improved with a surface parking lot providing public parking for visitors to Venice Beach. The proposed Specific Plan Amendment will facilitate the development of a Permanent Supportive Housing project and public parking garage. The proposed project will assure public access to the coast by replacing the existing 196 parking spaces within a new parking structure and providing an additional 27 parking spaces. Further, as explained in the Tierra West Parking Study Addendum, the City does not anticipate a significant increase in parking demand for the parking in Venice within the next 20 years. See Exhibit M.

In addition, the proposed project includes increased access to the Venice Canal. The Grand Canal at Canal Street differs in character from the rest of the canal system, and does not feature a landscape buffer. Rather, Canal Street (Grand Canal) consists of concrete

embankment directly adjacent to the concrete sidewalks that run along either side of the canal. The proposed project would provide a gateway to the canal by providing landscaping and terrace seating adjacent to the Canal Street. This improvement will increase the visibility from the street and usage of the Venice Canal.

Section 3.E. To prepare specific provisions tailored to the particular conditions and circumstances of Venice Coastal Zone, consistent with the general policies of the adopted Los Angeles General Plan.

The Specific Plan Amendment will establish a new Subarea A “Permanent Supportive Housing” what with associated Development Standards and Guidelines and will change the Subarea designation for the subject site from North Venice and Venice Canals to Subarea A. Subarea A will contain development regulations tailored specifically for Permanent Supportive Housing. These regulations are intended to accommodate a Qualified Permanent Supportive Housing project while requiring the project to provide the necessary support services, affordability covenants, housing replacement requirements and overall performance standards including adherence to development regulations that ensure improved building design that is otherwise compatible with adjacent development. The Specific Plan Amendment creates regulations for allowable uses, density, open space, and parking. It also includes design guidelines that address landscaping, open space, streetscape elements, pedestrian and vehicular circulation, building design, roof appurtenances, and ground floor requirements.

The Specific Plan Amendment would only apply to the subject site. Subarea A contains specific requirements for eligibility: project site must meet the definitions of a Qualified Permanent Supportive Housing Project, provide Support Services, and must serve the Target Population.

Further, the Specific Plan Amendment requires the project achieve almost the same design criteria as required for residential developments in other Subareas. A few design criteria would be modified in recognition of the unique development constraints for a Permanent Supportive Housing and affordable housing.

8. Project Permit Compliance Findings

a. The project substantially complies with the applicable regulations, findings, standards, and provisions of the Venice Coastal Zone Specific Plan.

Section 8.C of the Specific Plan outlines the following required findings:

- i. That the Venice Coastal Development Project is compatible in scale and character with the existing neighborhood, and that the Venice Coastal Development Project would not be materially detrimental to adjoining lots or the immediate neighborhood.**

The project involves the demolition of an existing surface parking lot (bisected by Grand Canal) and a four-unit apartment building and the construction of a 103,957-square foot, mixed-use, 100 percent affordable housing development (a 36,157 square-foot structure west of Grand Canal and a 67,800 square-foot, structure east of Grand Canal) consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supportive services, 2,255 square feet of retail uses, 810 square feet of restaurant uses with 1,060 square feet of outdoor and indoor Service Floor area, and 2,875 square feet of art studio uses.

The structure west of Grand Canal (West Site) is three-stories and 35 feet in height

with a 59-foot in height architectural campanile located at the northwest corner of the subject site with a roof access structure resulting in a structure with a maximum of 67 feet in height and five stories. The structure east of Grand Canal (East Site) is three-stories and 35 feet in height. The project will provide a total of 357 on-site automobile parking spaces comprising of 57 residential spaces, 42 commercial spaces, 196 public spaces (replacement), 27 Beach Impact Zone (BIZ) spaces three (3) boat launch parking spaces and 32 non-required spaces.

The project site is located in a developed urban area, less than 0.25 miles east of the Pacific Ocean. The project site is generally bounded by North Venice Boulevard to the north, South Venice Boulevard to the south, Pacific Avenue to the west, and Dell Avenue to the east and is bisected into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard).

Surrounding properties are within the [Q]C1-1-O, R3-1-O, RD1.5-1-O and RD1.5-1-O-CA, OS-1XL-O and (T)(Q)C1.5-1-O-CA Zones and are characterized by level topography and fully improved streets. Properties to the south of the Property, across South Venice Boulevard, are in the R3-1-O Zone, and are developed primarily with three- to four-story multi-family residential buildings interspersed with single-story bungalows. Properties to the west of the Property, across Pacific Avenue, are in the (T)(Q)C1.5-1-O-CA, RD1.5-1-O-CA and R3-1-O Zones and are developed primarily with two-story multi-family residential buildings. Properties to the north of the Property, across North Venice Boulevard, are in the [Q]C1-1-O and R3-1-O Zones and are developed with some commercial but primarily multi-family residential uses comprised of two- and three-story single- and multi-family homes. Properties to the east of the Property, across Dell Avenue, are within the RD1.5-1-O and OS-1XL-O Zones, and are developed with single-story residential buildings in addition to a surface automobile parking lot.

There are 13 parcels to the north of the Project Site, across North Venice Boulevard that are developed with six (6) one-story structures, four (4) two-story structures and three (3) three-story structures. There are two parcels to the west of the Project Site, across Pacific Avenue that are developed with two (2) two-story structures. There are 15 parcels to the south of the Project Site, across South Venice Boulevard developed with two (2) one-story structures, seven (7) two-story structures and six (6) three-story structures. There are two parcels to the east of the Project Site, across Dell Avenue that developed with one (1) one-story structure.

The proposed project is visually compatible with the character of surrounding areas and sited and designed to protect views to the Grand Canal. The West Site would be developed with a mixed-use structure that is three-stories and 35 feet in height with a 59-foot in height architectural campanile with a maximum height of 67 feet and five stories. The East Site would be developed with a mixed-use structure that is three-stories and 35 feet in height.

Notwithstanding the campanile, the proposed three-story structures are consistent with the adjacent structures. The campanile does introduce a structure that is higher than the allowed height for the adjacent subarea; however, as shown in Exhibit D, the neighborhood is developed with structures that are 60 and 70 feet in height, on Venice Boulevard. The bulk and mass of the proposed project is divided into two structures separated by the Grand Canal such that the development is not a monolithic structure. The buildings fronting the Grand Canal are stepped back to provide variation in the massing and to reduce the shade and shadow impacts on the canal and adjacent landscaped open space area. Further, the campanile

provides variation in height that further breaks up the massing of the building and provides visual interest.

In addition, the mass of the building is broken up vertically with sloping features as well as material changes at commercial, retail and community spaces at the ground floor level, providing architectural variety. The building façades are clad with stucco intermixed with fixed and operable windows on the upper levels, and glazed roll-up doors on the ground level. Further, the components of the building will be differentiated not only by color, but by textures. The color palette is a combination of white, beige and gray – each with its own corresponding texture.

The segment of the Grand Canal abutting the subject site is an artificially constructed waterway with minimal aquatic vegetation, and unlike the rest of the canal system, this segment of the Grand Canal does not feature a landscape buffer. Rather, the Grand Canal consists of concrete embankments directly adjacent to the concrete esplanades that run along both sides of the canal.

The proposed project provides averaged 15-foot setbacks on both the West Site and East Site facing the Grand Canal, incorporating public open space including terraced seating, landscaping and plaza areas. Of this 15-foot setback area, approximately 1,645 square feet of this open space is landscaped. As conditioned, the landscaped and paved areas adjacent to the canal will be open and accessible to the public; a minimum five-foot-wide pedestrian access easement will be provided through the site.

Further, ground floor retail and the art gallery space flank the west and east sides of the Grand Canal to promote pedestrian activity and access. The existing bridge across the Grand Canal remains in place to facilitate pedestrian access between the West Site and East Site. The provision for publicly accessible open space and local serving commercial uses activates the public street and Grand Canal frontages restores and enhances visual quality for the neglected segment of the Grand Canal.

The massing of the residential buildings is articulated in a wide range of configurations. Portions of the ground level facades are recessed to provide landscaped pedestrian areas along the sidewalk. The corners of the buildings along Pacific Avenue are rounded and set back to increase pedestrian and automobile visibility and provide increased public space along the sidewalk. Additionally, Exterior stair landings at upper levels provide “look out” points for residents.

In addition, ground floor retail and the art gallery space flank the west and east sides of the Grand Canal, respectively, to further promote pedestrian activity and access. The existing bridge across the Grand Canal remains in place to facilitate pedestrian access between the West Site and East Site. The provision for publicly accessible open space, and local serving retail, restaurant and commercial uses activates the public street and Grand Canal frontages and provides opportunities for local residents and businesses.

The subject site straddles the Grand Canal between North and South Venice Boulevards. The Project includes landscape enhancements and improved public access to the Grand Canal at this location, thus promoting access to this public amenity space to the broader community.

The scale of the proposed development is consistent with the existing scale and character of the single-family neighborhood to the south and the multi-family

neighborhood to the east, west and north, and would not be materially detrimental to adjoining lots or the immediate neighborhood.

ii. That the Venice Coastal Development Project is in conformity with the certified Venice Local Coastal Program.

A Local Coastal Program is comprised of a Land Use Plan and Implementation Plan, certified by the California Coastal Commission. The Venice Local Coastal Land Use Plan ("LUP") was certified by the Coastal Commission on June 14, 2001, however, the necessary Implementation Plan was not certified. As such, a certified Venice Local Coastal Program does not exist. The proposed project conforms to the applicable policies of the certified Venice LUP, as outlined in Finding Nos. 2 and 9.b.

iii. That the applicant has guaranteed to keep the rent levels of any Replacement Affordable Unit at an affordable level for the life of the proposed Venice Coastal Development Project and to register the Replacement Affordable Units with the Los Angeles Department of Housing.

The project includes the demolition of a four-unit apartment building and surface parking lot in the Venice Coastal Zone. A Determination issued by the Los Angeles Housing and Community Investment Department (HCIDLA) dated August 13, 2019 states that four (4) units are subject to replacement under AB 2556. HCIDLA reviewed data from August 2013 to August 2018.

No tenant income documents were provided by the applicant for the four dwelling units. Pursuant to AB 2556 where incomes of the existing or former tenants are unknown, the required percentage of affordability is determined by the percentage of extremely low, very low- and low-income rents in the HUD Comprehensive Housing Affordability Strategy (CHAS) database. As such, pursuant to CHAS, three (3) units need to be replaced with one (1) unit restricted to Extremely Low-Income Household, one (1) restricted to Very Low-Income Household, one (1) restricted to Low Income Household. The one (1) remaining unit is presumed to have been occupied by an above-lower income household but nonetheless, this unit will be subject to the provisions of the Rent Stabilization Ordinance (RSO).

This Affordable Replacement Units request is reflected in the Conditions of Approval.

iv. That the Venice Coastal Development Project is consistent with the special requirements for low and moderate income housing units in the Venice Coastal Zone as mandated by California Government Code Section 65590 (Mello Act).

The project includes the construction of a 100 percent affordable housing development consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units). Of the 136 low-income units, 68 units are designated for permanent supportive housing for those experiencing homelessness and 68 units are designated for low-income individuals or households, restricted by covenant for 55 years. The project is consistent with the requirements of the Mello Act and the City's Interim Administrative Procedures for Complying with the Mello Act, as further discussed in Finding No. 10.

b. The project incorporates mitigation measures, monitoring measures when necessary, or alternatives identified in the environmental review, which would mitigate the negative environmental effects of the project, to the extent physically

feasible.

The proposed project is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.27(b)(1) and AB 1197. Pursuant to Public Resources Code Section 21080.27(a)(3), there is substantial evidence demonstrating that the proposed project 1) qualifies as supportive housing pursuant to Health and Safety Code Section 50675.14; 2) meets the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division I of Title 7 of the Government Code; and 3) is funded, in part, by the Measure H sales tax proceeds approved by the voters in the March 17, 2017, special election in the County of Los Angeles. All actions to approve the proposed project were taken in furtherance of providing vitally needed Supportive Housing to house and serve the homeless in the City of Los Angeles.

See Justification for Statutory Exemption Case No. ENV-2019-5597-SE in the case file for the narrative demonstrating that the project meets the eligibility requirements outlined in AB 1197.

9. Coastal Development Permit Findings**a. The development is in conformity with Chapter 3 of the California Coastal Act of 1976.**

The proposed development consists of the redevelopment of a city-owned site on two parcels adjacent to a canal waterway known as Canal Street and includes an amendment to the certified Venice Coastal Zone Land Use Plan. The proposed development is comprised of the following:

- Redesignation of the land use from Open Space and Low Medium II Residential to Neighborhood Commercial with a zone and height district change from OS to (T)(Q)C2-1L-O. An amendment to the certified Venice Coastal Zone Land Use Plan to amend the maps and policies to allow the development of a permanent supportive housing project on the site.
- A vesting tentative tract map for the merger and resubdivision of existing parcels to create two ground lots and seven airspace lots.
- The demolition of a four-unit residential structure and 196-space surface public parking lot.
- The construction of a 103,957 square-foot, mixed-use, 100 percent affordable permanent supportive housing project on two sites. The mixed-use structure on the West Site is three-stories and 35 feet in height with a 59-foot in height architectural campanile with a roof access structure resulting in a structure with a maximum of 67 feet in height and four stories with a mezzanine level. The mixed-use structure on the East Site is three-stories and 35 feet in height. The new development includes the following:
 - 140 dwelling units, of which 136 units are restricted affordable units and 4 units are manager units,
 - 685 square feet of supportive services,
 - 2,255 square feet of retail uses,
 - A 810 square-foot restaurant with 1,060 square feet of outdoor and indoor Service Floor area,
 - A 2,875 square-foot art studio space,
 - A public parking lot with 357 parking spaces, and

- Grading, excavation, and improvements to the site for construction; the export of 9,100 cubic yards of building material and soil, the removal of 24 non-protected on-site trees and 11 non-protected street trees.
- A total of 357 parking spaces are provided:

| Use | |
|--|-------------------|
| Residential | 57 spaces |
| Commercial | |
| Retail (1/225 SF) | 10 spaces |
| Restaurant (1/50 SF) | 21 spaces |
| Art Studio (1/250 SF) | 11 spaces |
| Surplus (additional spaces) | 5 spaces |
| Beach Impact Zone (BIZ) | |
| Residential (1/1,000 SF ground floor area) | 10 spaces |
| Commercial (1/640 SF ground floor area) | 17 spaces |
| Public Parking | |
| Replacement | 196 spaces |
| New | 27 spaces |
| Boat Launch | 3 spaces |
| West Site Parking Structure | 105 Spaces |
| East Site Parking Structure | 252 Spaces |
| Total | 357 spaces |

- Parking lifts are provided in the East Site Parking Structure to achieve the required number of parking spaces.

Chapter 3 of the Coastal Act includes provisions that address the impact of development on public services, infrastructure, traffic, the environment and significant resources, and coastal access. The applicable provisions are as follows:

Article 2 Public Access

Section 30211 Development not to interfere with access. *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30212 New development projects. *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) Adequate access exists nearby, or, (3) Agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

Section 30212.5 Public facilities; distribution. *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30214 Implementation of public access policies; legislative intent. *(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:*

- (1) Topographic and geologic site characteristics.

- (2) The capacity of the site to sustain use and at what level of intensity.*
 - (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.*
 - (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.*
- (b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution. (c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.*

The project site is not located between the nearest public road and the sea or shoreline of any body of water located within the coastal zone. The project site would be redesignated from Open Space and Low Medium II Residential to Neighborhood Commercial land use to allow the development of a permanent supportive housing project. As discussed, the site maintains a public parking lot, owned by the City, which will be replaced and expanded in the proposed development. The certified Land Use Plan identifies the site as a public parking lot with potential for additional parking but does not include policies that require the development of a recreational use (consistent with the OS designation) on the subject site. The proposed development is limited to the subject property with the exception of required improvements to the right-of-way including new street trees.

The subject site abuts the Grand Canal (Canal Street) and is located .25 miles from the Venice Beach Shoreline. The existing surface parking lot would be developed with a new mixed-use development and improvements to enhance access to coastal resources such as the canal, Short Line Bridge, and public boat launch. As discussed in Finding No. 2, the proposed project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. Moreover, landscaping is also provided in the form of new trees and mounded grass planters that line the perimeter of the Project. As provided in Condition No. 18, the landscaped areas adjacent to Canal Street and the Esplanade will remain open and accessible to the public. The areas will provide paved pedestrian walkways through the site, to the bridge, and to the canal. The right of ways adjacent to the subject site will be improved and reconstructed to provide sidewalks that comply with ADA standards and unused driveways will be closed to provide more on-street parking opportunities.

During construction of the site, visitors to the Venice Coastal Zone will be able to use the Parking Lot No. 701, which is currently only used when Lot 731 is full. The proposed public parking lot will replace the existing 196 parking spaces and provide 27 additional parking spaces. As discussed in the LADOT Venice Parking Study, prepared by Tierra West Advisors, dated June 2020 and Addendum dated March 2021 (Exhibit M), the projected demand for parking in the area from 2020 to 2040 is 1.041. The Addendum states that the proposed number of parking spaces would adequately meet the expected demand and further highlights the citywide multi-modal policies and planned infrastructure improvements that would further offset future parking demand in the area.

The project will replace a surface parking lot with a supportive housing project that include physical improvements to increase access to the canal resources (walkway, public boat launch, and bridge), but will also provide affordable housing for formerly homeless individuals with access to necessary support services onsite. The project will increase the supply of affordable housing in the Venice Coastal Zone, expanding access to existing coastal resources to those formerly homeless residents while maintaining and improving existing access for the public. The new parking lot will increase the number of parking spaces for visitors to the area and will include new signage for drivers to the lot and pedestrians walking to the canal, public boat launch, and Venice Beach.

As such, the proposed LUP amendment and development conforms to the applicable Public Access policies of Chapter 3.

Article 3 Recreation

Section 30222 Private lands; priority of development purposes. *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Section 30223 Upland areas. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Section 30224 Recreational boating use; encouragement; facilities. *Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting nonwater-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.*

The proposed development includes the redesignation of city-owned land from Open Space and Low Medium II Residential to Neighborhood Commercial land use. As discussed, the subject site is developed with a public parking lot and is identified in the certified LUP as an existing public parking lot (LUP, Exhibit 17a-b). Although the site is currently designated as Open Space, Policy II.A.2 of the LUP provides that existing surface parking lots in the Venice Coastal Zone will be maintained and expand parking capacity. As such, the site would not be developed with a recreational use. The existing recreational areas of the Venice Coastal Zone are identified in Exhibits 20a-21b of the LUP. Policy III.D.6 of the LUP provides the potential for a Venice Canals Park with both parking and recreational uses. Consistent with Policy II.A.2 and III.D.6, the proposed development includes landscaped recreational areas adjacent to Canal Street, open and accessible for public use.

While Section 30222 of the Coastal Act prioritizes the development of visitor serving commercial recreational facilities, the LUP does not prioritize the development of recreational uses on the site. Policy III.D.6 states: “New parks, with parking to the rear, shall be considered on some of the City-owned lots on the canals, provided that such facilities are compatible with the existing residential use of the area.” As previously discussed, the Venice Coastal Zone and City of Los Angeles is in the midst of a housing crisis with great demand for affordable housing. The proposed supportive housing project would development affordable housing in a predominately residential neighborhood and create an open and accessible public recreational area adjacent to the existing canal waterway and Esplanade. Furthermore, the project would maintain and expand the current supply of public parking for visitors to Venice Beach and the

Venice Coastal Zone.

Consistent with Section 30224, the project proposes not change to an existing public boat launch. The boat launch is located within the Venice Canal, adjacent to the site, and is available for small non-motorized boats/watercraft. The project will increase public access to the canal boat launch by providing pedestrian access from the public parking garage and providing a new on-street loading area on North Venice Boulevard, adjacent to the Esplanade ramp/walkway.

As such the proposed LUP amendment and development are consistent with the Recreation policies of Chapter 3.

Article 4 Marine Environment

Section 30230 Marine resources; maintenance. *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 Biological productivity; water quality. *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

The project site is bisected by the Grand Canal and is improved with a surface parking lot containing 196 vehicular parking spaces, a two-story, four-unit residential structure and the Short Line Bridge connecting the West Site and East Site. The project site contains minimal vegetation of the non-native ornamental variety. The segment of the Grand Canal abutting the project site is an artificially constructed waterway with concrete embankments directly adjacent to concrete sidewalks that run along either side of the canal. This segment of the Grand Canal contains minimal aquatic vegetation.

Although this segment of the Grand Canal is designated an Environmentally Sensitive Habitat Area (ESHA) in the Venice LUP, the project site is not suitable habitat and foraging for wildlife. A Biological Technical Report prepared by Glenn Lukos Associates, Inc, dated March 2021 (Exhibit L), concluded that the proposed project would not result in permanent impacts to the ESHA and no mitigation would be necessary.

As noted in the Biological Technical Report, the Project Site is already “developed”, consisting of an asphalt parking lot with additional areas of hardscape and limited areas vegetated with ornamental trees and shrubs, as well as small areas of disturbed ground that support non-native weedy annual species adapted to human disturbance. The Project Site supports no native habitat. The report further notes the terminus of the Grand Canal abutting the project site differs in character from the rest of the canal system and does not feature a landscape buffer. Rather, the onsite segment consists of concrete embankments directly adjacent to concrete sidewalks that run along either side of the canal...This segment is the terminal segment of the Grand Canal and ranges in depth from one or two feet to over four feet during high tides. The segment exhibits limited biological values.

In addition, the researchers conducted focused surveys for foraging California least tern within this segment of the Grand Canal that bisects the Project Site. The researchers found that foraging least terns were not detected using the Grand Canal abutting the subject site on the site or 500-feet south of this segment of the Grand Canal. As such, given the low value of the site for foraging least terns, the proposed project would not have significant indirect impacts on least terns.

Further, the Project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. Moreover, landscaping is also provided in the form of new trees and mounded grass planters that line the perimeter of the Project.

As such, the proposed LUP amendment and development conforms to the applicable Marine Environment policies of Chapter 3.

Article 5 Land Resources

Section 30240 Environmentally sensitive habitat areas; adjacent developments.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30244 Archaeological or paleontological resources. *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

The project site is located within a developed urbanized area.

The project site is bisected by the Grand Canal and is improved with a surface parking lot containing 196 vehicular parking spaces, a two-story, four-unit residential structure and the Short Line Bridge connecting the West Site and East Site. The project site contains minimal vegetation of the non-native ornamental variety. The segment of the Grand Canal abutting the project site is an artificially constructed waterway with concrete embankments directly adjacent to concrete sidewalks that run along either side of the canal. This segment of the Grand Canal contains minimal aquatic vegetation.

Although this segment of the Grand Canal is designated an Environmentally Sensitive Habitat Area (ESHA) in the Venice LUP, the project site is not suitable habitat and foraging for wildlife. A Biological Technical Report prepared by Glenn Lukos Associates, Inc, dated March 2021 (Exhibit L), concluded that the proposed project would not result in permanent impacts to the ESHA and no mitigation would be necessary.

As noted in the Biological Technical Report, the Project Site is already “developed”, consisting of an asphalt parking lot with additional areas of hardscape and limited areas vegetated with ornamental trees and shrubs, as well as small areas of disturbed ground that support non-native weedy annual species adapted to human disturbance. The Project Site supports no native habitat. The report further notes the terminus of the Grand Canal abutting the project site differs in character from the rest of the canal system and does not feature a landscape buffer. Rather, the onsite segment consists of concrete embankments directly adjacent to concrete sidewalks that run along either side

of the canal...This segment is the terminal segment of the Grand Canal and ranges in depth from one or two feet to over four feet during high tides. The segment exhibits limited biological values.

In addition, the researchers conducted focused surveys for foraging California least tern within this segment of the Grand Canal that bisects the Project Site. The researchers found that foraging least terns were not detected using the Grand Canal abutting the subject site on the site or 500-feet south of this segment of the Grand Canal. As such, given the low value of the site for foraging least terns, the proposed project would not have significant indirect impacts on least terns.

Further, the Project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. Moreover, landscaping is also provided in the form of new trees and mounded grass planters that line the perimeter of the Project.

Further the Project site is not located in an area identified to contain paleontological or archaeological resources. The proposed excavation and grading are subject to review by the Los Angeles Department of Building and Safety (LADBS) and compliance with the Los Angeles Building Code. In the event archaeological or paleontological resources are discovered during excavation or grading activities, the project is subject to compliance with Federal, State and Local regulations already in place.

As such, the proposed LUP amendment and development conforms to the applicable Land Resources policies of Chapter 3.

Article 6 Development

Section 30250 Location; existing developed area. *(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas. (c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.*

The subject site is located within an existing developed area with the existing infrastructure and public services to accommodate the proposed project.

The project site is generally located on the block bounded by North Venice Boulevard to the north, Pacific Avenue to the south, Dell Avenue to the east and South Venice Boulevard to the south and is bisected into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard).

Surrounding properties are zoned [Q]C1-1-O, R3-1-O, RD1.5-1-O and RD1.5-1-O-CA, OS-1XL-O and [T][Q]C1.5-1-O-CA Zones with level topography and fully improved streets. The area is zoned for residential, commercial, and open space uses. Properties to the south of the Property, across South Venice Boulevard, are in the R3-1-O Zone, and are developed primarily with three- to four-story multi-family residential buildings interspersed with single-story bungalows. Properties to the west of the Property, across Pacific Avenue, are in the [T][Q]C1.5-1-O-CA, RD1.5-1-O-CA and R3-1-O Zones and

are developed primarily with two-story multi-family residential buildings. Properties to the north of the Property, across North Venice Boulevard, are in the [Q]C1-1-O and R3-1-O Zones and are developed with some commercial but primarily multi-family residential uses comprised of two- and three-story single- and multi-family homes. Properties to the east of the Property, across Dell Avenue, are within the RD1.5-1-O and OS-1XL-O Zones, and are developed with single-story residential buildings in addition to a surface automobile parking lot.

Primary regional access is provided by the Marina Freeway (SR-90), Venice Boulevard (SR-187), and Lincoln Boulevard (SR-1), which are all accessible within 1.5 miles of the Project Site. Major arterial roads providing regional access to the Project Site include Pacific Avenue, West Washington Boulevard, and Abbot Kinney Boulevard. The Project site is less than 0.25 miles east of the Pacific Ocean. In addition, the project area is within the service area of the Los Angeles Fire Department Station 63 and the Pacific Division of the Los Angeles Police Department. The proposed development will connect to all public services required for residential and commercial uses, including water and sewage, waste disposal, gas, and electricity. As such, the project will be located in an existing developed area contiguous with similar residential uses, in an area that is able to accommodate new development

Section 30251 Scenic and Visual Qualities. *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

The project site is located in a developed urban area, less than 0.25 miles east of the Pacific Ocean. The project site is generally bounded by North Venice Boulevard to the north, South Venice Boulevard to the south, Pacific Avenue to the west, and Dell Avenue to the east and is bisected into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard). The surrounding area does not contain natural landforms nor does it maintain views of the ocean.

The proposed project is visually compatible with the character of surrounding areas and sited and designed to protect views to the Grand Canal. The proposed development would replace a surface parking lot and two-story multi-family structure with two mixed use structures on site adjacent to Canal Street. The proposed structure on the West Site is 36,157 square feet, three-stories and 35 feet in height with a 59-foot in height architectural campanile located at the northwest corner of the subject site with a roof access structure resulting in a structure with a maximum of 67 feet in height and four stories with a mezzanine. The structure on the East Site is 67,800 square feet, three-stories and 35 feet in height. The structures maintain 5-foot setbacks from the adjacent right of ways and a 10-foot setback from Canal Street. Both structures contain multi-level parking garages. However, the parking uses are wrapped with groundfloor commercial uses and residential uses to ensure the structures are visually compatible with existing commercial and residential uses. Further, the proposed parking lifts located on the roof level do not exceed the height of the parapet walls.

The properties to the west and north are primarily developed with multi-family residential and commercial uses and zone R3, RD1.5 and C1.5. The properties to the south are developed with multi-family and single-family residential and zoned R3 and RW. There are 13 parcels to the north of the Project Site, across North Venice Boulevard that are

developed with six (6) one-story structures, four (4) two-story structures and three (3) three-story structures. There are two parcels to the west of the Project Site, across Pacific Avenue that are developed with two (2) two-story structures. There are 15 parcels to the south of the Project Site, across South Venice Boulevard developed with two (2) one-story structures, seven (7) two-story structures and six (6) three-story structures. There are two parcels to the east of the Project Site, across Dell Avenue that developed with one (1) one-story structure.

Notwithstanding the campanile, the proposed project provides three levels of residential dwelling units and is consistent with the height of adjacent structures. The campanile does introduce a structure that is higher than the allowed height for the adjacent subarea; however, as shown in Exhibit D, the neighborhood is comprised of structures that are 60 and 70 feet in height, on Venice Boulevard. The campanile provides variation in height that further breaks up the massing of the building and provides visual interest

The bulk and massing of the proposed project is divided into two structure separated by the Grand Canal such that the development is not a monolithic structure. The buildings fronting the Grand Canal are stepped back to variation in the massing and to reduce the shade and shadow impacts on the canal and adjacent landscaped open space area. In addition, the mass of the building is broken up vertically with sloping features as well as material changes at commercial, retail and community spaces at the ground floor level, providing architectural variety. The building façades are clad with stucco intermixed with fixed and operable windows on the upper levels, and glazed roll-up doors on the ground level. Further, the components of the building will be differentiated not only by color, but by textures. The color palette is a combination of white, beige and gray – each with its own corresponding texture.

The Project preserves the historic integrity of the Venice Canals. The subject site straddles the east and west banks of the Grand Canal between North Venice Boulevard and South Venice Boulevard. Landscape enhancements and improved public access to the Grand Canal is provided on the West Site and East Site. The segment of the Grand Canal abutting the subject site is an artificially constructed waterway with minimal aquatic vegetation, and unlike the rest of the canal system, this segment of the Grand Canal does not feature a landscape buffer. Rather, the Grand Canal consists of concrete embankments directly adjacent to the concrete esplanades that run along both sides of the canal.

The Project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of Canal Street. The proposed project provides an averaged 15-foot setbacks on both the West Site and East Site facing the Grand Canal, incorporating public open space including terraced seating, landscaping and plaza areas. Approximately 3,285 square feet of landscaped open space area is located within the north side yard adjacent to Dell Avenue. Moreover, landscaping is also provided in the form of new trees and mounded grass planters that line the perimeter of the Project.

The ground level of the project is designed to be compatible with the existing residential and commercial uses proximate to the area. Ground floor retail, restaurant, and art studio spaces flank the west and east sides of the Grand Canal to promote pedestrian activity and access. The existing bridge across the Grand Canal remains in place to facilitate pedestrian access between the West Site and East Site. The provision for publicly accessible open space and local serving commercial uses activates the public street and Grand Canal frontages restores and enhances visual quality for this neglected segment of the Grand Canal.

Furthermore, redesignation of the site for Neighborhood Commercial uses and the proposed amendments to create a new “Subarea A” will result in development that is visually compatible with the existing area. The area adjacent to the site is designated for Medium Residential and Artcraft land uses and generally developed with structure between one and three stories. The new development standards for the “Subarea A” were crafted to be generally consistent with the height and density standards contained in the other subarea of the Venice Specific Plan with a new exception to facilitate the development of a 100 percent affordable project. The project is generally three stories and 35 feet in height, which is consistent with the adjacent structures and the height regulations in the Specific Plan.

The bulk and massing of the proposed project is divided into two structures separated by the Grand Canal such that the development is not a monolithic structure. The buildings fronting the Grand Canal are stepped back to provide variation in the massing and to reduce the shade and shadow impacts on the canal and adjacent landscaped open space area. Further, the campanile provides variation in height that further breaks up the massing of the building and provides visual interest. Further the density of “Subarea A” is consistent with existing C2 density standards in the Specific Plan.

Section 30252 Maintenance and enhancement of public access. *The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.*

The subject site is well-served by multiple transit operators including Los Angeles Metro, Santa Monica Big Blue Bus and Culver City Bus transit systems. Culver City Bus Line 1 stops on Pacific Avenue at subject site and provides daily eastbound/westbound service from Washington Boulevard and Fairfax Avenue to Venice Beach with intersections with seven Metro bus lines (17, 35, 38, 108, 358, Commuter Express 437) and five Santa Monica Big Blue Bus bus lines, (R3, 12, 14, 16, and 18). The eastern terminus of the Culver City Bus Line 1, at the West Los Angeles Transit Center, provides connections to seven Metro buses (35, 37, 38, 105, 217, 705, and 780).

Approximately 1,500 feet north of the subject site, near the intersection of Venice Way and Main Street, there are two bus stops served by Metro Local Bus Line 33, Metro Rapid Bus Line 733, and Santa Monica Big Blue Bus Line 1. Metro Local Bus Line 33 and Metro Rapid Bus Line 733 provides eastbound/westbound service from Santa Monica to Downtown Los Angeles. Santa Monica Big Blue Bus Line 1 provides northbound/southbound service from Venice Beach to UCLA.

In addition, there is a Metro Bike Share station, located adjacent to the Property, at the intersection of Pacific Avenue and North Venice Boulevard. This bicycle station currently has 12 bicycle “docks”. Further, the subject site is located approximately 750 feet from the Marvin Braude Bike Trail providing regional bicycle access.

The proposed residential development will maintain and enhance public access to the coast by creating affordable and permanent supportive housing in the coastal zone. Such affordable housing supports the provision of equitable access consistent with the Commission’s adopted Environmental Justice Policy.

The proposed project provides a gateway features to increase access and visibility of the at the terminus of the Grand Canal. Project feature a new public amenity space abutting the canal including landscape enhancements and commercial activity to increase pedestrian activity and access to the Grand Canal for the larger community. Further improved access to the boat launch is provided on-site and thought improvement wayfinding signage.

The subject site is bisected by the Grand Canal. This segment of the Grand Canal is an artificially constructed waterway with concrete embankments directly adjacent to concrete sidewalks that run along either side of the canal and public boat launch ramp.

The subject site contains vehicular access to the public boat launch ramp, which is proposed to be relocated. Vehicle access for the loading and unloading of small watercrafts will be provided by three different methods. First, a new curbside loading zone will be provided at the entrance to the Grand Canal on North Venice Boulevard adjacent to the boat launch. Second, three parking spaces are reserved for vehicles to load and unload of small watercrafts within the West Site parking garage. Direct access to the public boat launch is provided from the garage. Third, reserved boat launch parking for vehicles with trailers is provided in the West Site parking garage. This method would require vehicles with trailers to first unload their small watercraft at the curbside loading zone.

The Project preserves the historic integrity of the Venice Canals. The subject site straddles the east and west banks of the Grand Canal, between North and South Venice Boulevards. Landscape enhancements and improved public access to the Grand Canal is provided on the West Site and East Site. The proposed project provides averaged 15-foot setbacks on both the West Site and East Site facing the Grand Canal, incorporating public open space including terraced seating, landscaping and plaza areas.

In addition, ground floor retail and the art gallery space flank the west and east sides of the Grand Canal, respectively, to further promote pedestrian activity and access. The existing bridge across the Grand Canal remains in place to facilitate pedestrian access between the West Site and East Site. The provision for publicly accessible open space and local serving commercial uses activates the public street and Grand Canal frontages and provides opportunities for local residents and businesses.

The Project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. Moreover, landscaping is also provided in the form of new trees and mounded grass planters that line the perimeter of the Project.

The project involves the demolition of an existing surface parking lot (LADOT Lot 731) containing 196 vehicular parking spaces (bisected by Grand Canal) and a two-story, four-unit residential structure; and the construction of a 103,957-square foot, mixed-use, 100 percent affordable housing development (a 36,157 square-foot structure west of Grand Canal and a 67,800 square-foot, structure east of Grand Canal) consisting of 140 residential dwelling units (136 restricted affordable dwelling units and 4 unrestricted Manager Units), 685 square feet of supportive services, 2,255 square feet of retail uses, 810 square feet of restaurant uses with 1,060 square feet of outdoor and indoor Service Floor area, and 2,875 square feet of art studio uses.

The development provides a total of 357 automobile parking spaces for the proposed residential and commercial uses, as well as the public parking lot. The proposed project

will provide reduced residential parking in accordance with AB 744 for 100% affordable housing project, as shown in the Affordable Housing Referrable Form dated October 16, 2018. A report prepared by Fehr and Peers, *Infill and Complete Streets Study Task 2.1 A Local Affordable Housing Trip Generation Study*, dated April 20, 2017, analyzed vehicle trip generation and parking demand of affordable housing project in the City. Based on a review of 42 affordable housing sites, the study found that trip generation and parking demand were lower than standard apartments, that the parking demand for family affordable housing range from 0.82 to 0.85 spaces per unit and demand for senior and supportive affordable housing range from 0.20 to 0.48 spaces per unit. As such, the proposed 61 residential parking spaces is sufficient for the new supportive housing units. The project will provide 42 parking spaces for the new commercial uses and 27 Beach Impact Zone spaces, consistent with the requirements of the Venice Specific Plan and Land Use Plan. The new public parking garage will replace 196 existing parking spaces and provide 27 new parking spaces.

Vehicle access is provided by two-way driveways on North Venice Boulevard and South Venice Boulevard. Unused driveways and curb cuts will be closed and improved with sidewalk and new on-street parking spaces. As such, the proposed development will maintain and enhance access public access.

Section 30253 Minimization of Adverse Impacts. *New development shall: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development. (4) Minimize energy consumption and vehicle miles traveled. (5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.*

The proposed development is located within a methane zone, liquefaction area, and tsunami inundation zone, and within 5.51 kilometers of the Santa Monica Fault. As such, the project is subject to compliance with Zoning and Building Code requirements that will minimize risks to life and property in such hazard areas. The development of the Property is in compliance with the Los Angeles Department of Building and Safety ("LADBS") processes and procedures and is designed in accordance with the California Building Code, ensuring that risks to life and property are minimized.

The project site is also located within an area that may be affected by Sea Level Rise. On August 12, 2015, the Coastal Commission adopted a Sea Level Rise Policy Guidance document, updated and adopted On November 7, 2018. This policy document provides a framework and directions for local jurisdictions to address sea level rise (SLR) in Local Coastal Programs (LCPs) and Coastal Development Permits (CDPs). In May 2018, the City completed an initial sea level rise vulnerability assessment for the Venice Coastal Zone. The report provides that: *Existing wide beaches generally protect Venice from coastal hazards. Coastal assets along or near the beachfront are potentially vulnerable during a large storm event in combination with SLR greater than 3.3 feet. After 4.9 feet SLR, beachfront assets are more vulnerable to damage from flooding or potential erosion of the beach. A SLR of 6.6 feet is a tipping point for Venice's exposure to extreme coastal wave events. Beachfront and coastal assets could flood annually, beaches could be greatly reduced in width, and high water levels could greatly increase potential for flooding of inland low-lying areas. As discussed in the analysis, there is considerable uncertainty around the timing of SLR, how coastal processes may be affected, and what adaptation approaches will be applied in the future (VSLRVA, pg. 45).* Policies and development standards to address the potential impacts of SLR would

be addressed in the City's LCP for the Venice Coastal Zone.

A Sea Level Rise Report was prepared by GeoSoils, Inc., dated December 28, 2020. The report analyzes current flood hazards, potential for future flooding due to sea level rise, and the risk of tsunamis. Based on a study of the best available science and the latest SLR projections, the report estimates the maximum (0.5%) SLR over the next 75 years would be 5.6 to 6.15 feet. While the site is not currently vulnerable to flooding, sea level rise would increase the vulnerability of the site to flooding. The report estimates that SLR would need to be in excess of 6 feet before the buildings maybe subject to flooding. The Coastal Storm Modeling System (CoSMoS) was utilized to analyze the project's vulnerability to flood hazards, considering a scenario of a minimum 6.6-foot sea level rise and a 100-year storm scenario. Based on this scenario, the proposed development could potentially be affected by flooding as a result of SLR, however, the potential for such flooding in severe storm events is likely to increase towards the end of the project life (based on a typical development life of 75 years). No subterranean levels are proposed, and the project is conditioned to require the lowest finished floor (FF) elevation (not garage floor) should be 2 feet, or more, above the street flow line until reaching elevation 11 feet NAVD88, and for street flow lines above +11 feet NAVD88 the FF elevation should be a minimum of 1 foot above the flow line or that the first floor and foundations be waterproofed. Furthermore, the Project is limited to the site, would not impact emergency access along North and South Venice Boulevard, and is subject to the regulations of the Flood Hazard Zone Specific Plan.

While the subject site is not a popular visitor's destination and does not have unique characteristics, the site is currently developed with a public parking lot and is adjacent to the Venice Canals and Short Line Bridge. In addition, the Venice LUP identifies the Venice Coastal Zone as a Special Coastal Community. The subject site is proximate to popular visitor destination points such as the Venice Canals, Venice Beach, and Ocean Front Walk. As discussed in Finding 9.b. of this report, the proposed amendment and development are consistent with LUP Policies I.E.1 to I.E.3 (Preservation of Venice as a Special Coastal Community). The proposed amendment includes new development standards for "Subarea A" to ensure new structures are compatible with existing development and that portions of the building with frontage on the canal provide an average 15-foot wide setback and permeable yard, consistent with the development standards of the adjacent Venice Canals Subarea. As further discussed in this section, the proposed amendment and development is consistent with the Article 2 and 3 policies regarding public access and recreation as well as Section 30251 of the Coastal Act. As such, the proposed amendment and development is consistent with Section 30253 of the Coastal Act.

The proposed LUP amendment and development will have no adverse impacts on public access, recreation, public views, or the marine environment. The project will neither interfere nor reduce access to the shoreline or beach. There will be no dredging, filling or diking of coastal waters or wetlands associated with the request, and there are no sensitive habitat areas, archaeological or paleontological resources identified on the site. The proposed development will not block any designated public access views. The LUP amendment allows for the redevelopment of an underutilized city-owned surface parking lot with a supportive housing project. The designation of Neighborhood Commercial allows the development of affordable housing and additional public parking, expanding housing opportunities for all income levels and increasing public access. As proposed and conditioned, the LUP amendment and development conforms with Chapter 3 of the California Coastal Act.

- b. The development will not prejudice the ability of the City of Los Angeles to prepare a local coastal program that is in conformity with Chapter 3 of the California Coastal Act of 1976.***

Coastal Act Section 30604(a) states that prior to the certification of a Local Coastal Program ("LCP"), a coastal development permit may only be issued if a finding can be made that the proposed development is in conformance with Chapter 3 of the Coastal Act. The Venice Local Coastal Land Use Plan ("LUP") was certified by the California Coastal Commission on June 14, 2001; however, the necessary implementation ordinances were not adopted. The City is in the initial stages of preparing the LCP; prior to its adoption the guidelines contained in the certified LUP are advisory.

The subject site is located within the North Venice and Venice Canals Subareas with a land use designation of Open Space and Low Medium II Residential. The proposed project includes an amendment to the LUP to redesignate the site as Neighborhood Commercial and includes a new "Subarea A" for the proposed supportive housing project with development standards.

The following are applicable policies from the certified Venice LUP:

Replacement of Affordable Housing

Policy I. A. 13. Density Bonus Applications. Required replacement dwelling units shall be counted as reserved units in any related State mandated density bonus application for the same project.

Policy I.A.14. Parking Requirements for Affordable Housing. Reduced parking is permitted for low-income units only if: a) the project is consistent with LUP policy I.A.13; and b) it is demonstrated that the prospective occupants of the project will have a reduced demand for parking. However, if a unit changes its status from low or low-moderate income to market rate unit, parking should be provided for market rate units according to the parking standards listed in LUP Policies II.A.3 and II.A.4.

The Project consists of a 100% affordable housing development comprised of permanent supportive housing units. Although the project is not subject to Policy I.A.13 (Density Bonus Applications), the proposed restricted affordable units are subject to the same requirements for 55-year affordability covenants for Density Bonus Applications. As such, the reduced parking provisions outline in Policy I.A.14 apply to the project.

The applicant seeks a Developer's Incentive to utilize the parking provisions of AB 744. AB 744 amended State Density Bonus Law to allow alternative parking ratios for 100% affordable developments within a half-mile of a major transit stop, allowing 0.5 parking spaces per affordable rental unit and 0.3 spaces per affordable rental special needs unit. As previously discussed, the project is within a half-mile of a major transit stop at the time the application was filed, the intersection of Venice Way and Main Street includes the Metro Rapid Bus Line 733 which have service intervals of 15 minutes or less. A report prepared by Fehr and Peers, *Infill and Complete Streets Study Task 2.1 A Local Affordable Housing Trip Generation Study*, dated April 20, 2017, analyzed vehicle trip generation and parking demand of affordable housing project in the City. Based on a review of 42 affordable housing sites, the study found that trip generation and parking demand were lower than standard apartments, that the parking demand for family affordable housing range from 0.82 to 0.85 spaces per unit and demand for senior and supportive affordable housing range from 0.20 to 0.48 spaces per unit. As such, the reduced parking ratios and proposed 57 residential parking spaces is sufficient for the new supportive housing units. As such, the proposed parking is consistent with the policies for affordable housing and reduced parking of the LUP.

Policy I. B. 2. Mixed-Use Development. Mixed-use residential commercial development shall be encouraged in all areas designated on the Land Use Policy Map for commercial

use. Residential density in commercial land use designations shall not exceed one unit per 800-1200 square feet of lot area and shall comply with the Floor Area Ratio (FAR) limits set forth in Policy I.B.7. The design of mixed-use development is intended to help mitigate the impact of the traffic generated by the development on coastal access roads and reduce parking demand by reducing the need for automobile use by residents and encouraging pedestrian activity. Such development shall comply with the density and development standards set forth in this LUP.

Policy I. B. 5. Neighborhood Commercial Land Use. The Neighborhood Commercial designation is intended to accommodate local neighborhood commercial facilities and services which provide daily convenience goods and services to persons living in nearby residential areas. Small scale neighborhood stores and community services shall be preserved and encouraged. Neighborhood retail goods and services include, but are not limited to the following: art galleries; barber shops or beauty parlors; dry cleaners; laundry services; shoe repair; tailors; florists; hardware stores; drug stores; food/grocery stores; newsstands; medical facilities; and job service centers. Drive-thru facilities and billboards shall be prohibited on properties designated as neighborhood commercial. Community services include day-care, community-meeting rooms, recreational, religious or cultural facilities and similar uses. The clustering of uses minimizes multiple vehicle trips and encourages walking to and from adjacent residential neighborhoods. Areas designated for Neighborhood Commercial Land Use are shown in Exhibits 9 through 12.

Physically, Neighborhood Commercial areas are generally characterized by one- and two-story low-rise structures. Pedestrian activities shall be encouraged by the emphasis on local serving uses, design of buildings, and the incorporation of streetscape amenities.

The project proposes an LUP amendment to redesignate the site for Neighborhood Commercial land uses and the construction of a mixed-use permanent supportive housing development. The mixed-use project is comprised of residential dwelling units, retail spaces, a new restaurant, art studio space, community room (within the campanile), and public parking lot. The proposed commercial uses are consistent with those local-serving uses identified in Policy I.B.5. The proposed mixed use development is comprised of 140 dwelling units, consistent with the density of the R3 zone (1/800 square feet). Furthermore, the proposed FAR of 1.15:1 is less than the maximum FAR of 1.5:1 outlined in Policy I.B.7. As discussed below, the proposed LUP amendment includes new development standards for "Subarea A," consistent with Chapter 3 of the Coastal Act and the existing policies of the LUP.

Policy I. D. 3. Views of Natural and Coastal Recreation Resources. The scale of development shall comply with height limits, setbacks and standards for building massing specified in Policy Groups I.A and I.B, Residential and Commercial Land Use and Development Standards of this LUP, in order to protect public views of highly scenic coastal areas and vista points, including, but not limited to, the canals, lagoon, jetty, pier, Ocean Front Walk, walk streets and pedestrian oriented special communities.

Preservation of Venice as a Special Coastal Community

Policy I. E. 1. General. Venice's unique social and architectural diversity should be protected as a Special Coastal Community pursuant to Chapter 3 of the California Coastal Act of 1976.

Policy I. E. 2. Scale. New development within the Venice Coastal Zone shall respect the scale and character of community development. Buildings which are of a scale compatible with the community (with respect to bulk, height, buffer and setback) shall

be encouraged. All new development and renovations should respect the scale, massing, and landscape of existing residential neighborhoods. Lot consolidations shall be restricted to protect the scale of existing neighborhoods. Roof access structures shall be limited to the minimum size necessary to reduce visual impacts while providing access for fire safety. In visually sensitive areas, roof access structures shall be set back from public recreation areas, public walkways, and all water areas so that the roof access structure does not result in a visible increase in bulk or height of the roof line as seen from a public recreation area, public walkway, or water area. No roof access structure shall exceed the height limit by more than ten (10') feet. Roof deck enclosures (e.g. railings and parapet walls) shall not exceed the height limit by more than 42 inches and shall be constructed of railings or transparent materials. Notwithstanding other policies of this LUP, chimneys, exhaust ducts, ventilation shafts and other similar devices essential for building function may exceed the specified height limit in a residential zone by five feet.

Policy I. E. 3. Architecture. Varied styles of architecture are encouraged with building facades which incorporate varied planes and textures while maintaining the neighborhood scale and massing.

The proposed project is visually compatible with the character of surrounding areas and sited and designed to protect views to the Grand Canal. The proposed development would replace a surface parking lot and two-story multi-family structure with two mixed use structures on site adjacent to Canal Street. The proposed structure on the West Site is 36,157 square feet, three-stories and 35 feet in height with a 59-foot in height architectural campanile located at the northwest corner of the subject site with a roof access structure resulting in a structure with a maximum of 67 feet in height and four stories with a mezzanine. The structure on the East Site is 67,800 square feet, three-stories and 35 feet in height. The structures maintain 5-foot setbacks from the adjacent right of ways and a 10-foot setback from Canal Street. Both structures contain multi-level parking garages. However, the parking uses are wrapped with groundfloor commercial uses and residential uses to ensure the structures are visually compatible with existing commercial and residential uses.

The properties to the west and north are primarily developed with multi-family residential and commercial uses and zone R3, RD1.5 and C1.5. The properties to the south are developed with multi-family and single-family residential and zoned R3 and RW. There are 13 parcels to the north of the Project Site, across North Venice Boulevard that are developed with six (6) one-story structures, four (4) two-story structures and three (3) three-story structures. There are two parcels to the west of the Project Site, across Pacific Avenue that are developed with two (2) two-story structures. There are 15 parcels to the south of the Project Site, across South Venice Boulevard developed with two (2) one-story structures, seven (7) two-story structures and six (6) three-story structures. There are two parcels to the east of the Project Site, across Dell Avenue that developed with one (1) one-story structure.

Notwithstanding the campanile, the proposed project provides three levels of residential dwelling units and is consistent with the height of adjacent structures. The campanile does introduce a structure that is higher than the allowed height for the adjacent subarea; however, as shown in Exhibit D, the neighborhood is comprised of structures that are 60 and 70 feet in height, on Venice Boulevard. The campanile provides variation in height that further breaks up the massing of the building and provides visual interest. Two roof access structures are proposed, located at the opposite ends of the development, designed to reduce the massing near Street Canal (Grand Canal). Further, the project contains rooftop parking lift, which do not project beyond the parapet walls. The project also provides rooftop solar panels, which do extend 10 feet above the parapet wall; however, the solar panels would be setback between 20 and 30 from

the building line and thus would not be visible from the street and minimal impact on visual resources.

The bulk and massing of the proposed project is divided into two structures, on either side of Canal Street. The buildings fronting the Grand Canal maintain a setback of 15 feet to allow a variation in the massing and to reduce the shade and shadow impacts on the canal and adjacent landscaped open space area. In addition, the mass of the building is broken up vertically with sloping features and material changes at commercial, retail and community spaces at the ground floor level, providing architectural variety. The building façades are clad with stucco intermixed with fixed and operable windows on the upper levels, and glazed roll-up doors on the ground level. Further, the components of the building will be differentiated not only by color, but by textures. The color palette is a combination of white, beige and gray – each with its own corresponding texture.

The ground floor retail and the art gallery space flank the west and east sides of the Grand Canal, to further break up the massing at the ground level and promote pedestrian activity and access. The existing bridge across the Grand Canal remains in place to facilitate pedestrian access between the West Site and East Site, while adding an interesting architectural feature and break in building massing. The provision of publicly accessible open space and commercial uses further activates the ground level and adds variety to the facades on North and South Venice Boulevard.

Policy I. B. 12. Parking Structures. Multi-level parking structures may be permitted in all commercially designated areas provided that the use, design, scale and height of the structure is compatible with adjacent uses and the neighboring community.

Policy II. A. 2. Expansion of Public Beach Parking Supply. The construction of new public parking facilities should be implemented, as well as maximizing the use of existing ones by restriping existing parking lots or converting them to multi-level structures where consistent with other Coastal Act policies. The parking lots located west of the Ocean Front Walk shall remain surface parking lots. In no case shall such structures obstruct ocean views or be inconsistent with other Coastal Act or LUP Policies.

The project involves the demolition of an existing surface parking lot (LADOT Lot 731) containing 196 vehicular parking spaces (bisected by Grand Canal) and a two-story, four-unit residential structure; and the construction of a 103,957-square foot, mixed-use, 100 percent affordable housing development. The project will provide a public parking lot with 357 parking spaces (196 replacement parking spaces and 27 new spaces), 57 parking spaces for the dwelling units, 42 parking spaces for the commercial uses, and 27 Beach Impact Zone spaces.

The parking structures are wrapped by the residential and commercial components and not visible from the street. As previously discussed, the proposed mixed use structures are consistent with the existing neighborhood character. The proposed project will provide reduced residential parking in accordance with AB 744 for 100% affordable housing project and will provide code required parking for the commercial uses per the Los Angeles Municipal Code and Venice Coastal Zone Specific Plan. The project will replace all of this existing public parking space contained at the subject site and expand the public parking supply by providing 27 additional parking spaces.

Policy I. F. 3. Venice Canals. The historic integrity of the Venice Canals shall be preserved. The canals are deemed to be significant as an early example of community recreational planning in a coastal marshlands area. Included in the historic district are the six canals, their associated sidewalks and a number of pedestrian and vehicular bridges. The Venice Canals are listed on the National Register of Historic Places as an

historic district (August 30, 1982). Additionally, the City of Los Angeles Cultural Heritage Commission declared the Venice Canal System a Los Angeles City Historic-Cultural Monument (HCM No. 270, August 2, 1983).

The Project preserves the historic integrity of the Venice Canals. No work is proposed to alter or impact the Short Line Bridge. The subject site straddles the east and west banks of the Grand Canal, between North and South Venice Boulevards. Landscape enhancements and improved public access to the Grand Canal is provided on the West Site and East Site. The proposed project provides averaged 15-foot setbacks on both the West Site and East Site facing the Grand Canal, incorporating public open space including terraced seating, landscaping and plaza areas.

Policy III. D. 2. Boating Use of Canals and Lagoon. Recreational boating use of the Venice Canals shall be limited to non-commercial shallow-bottom, non-motorized boats such as canoes and rafts, in order to permit recreation while protecting the environmentally sensitive habitat area and maintain a quiet ambience within the neighborhoods of the plan area. A public boat launch facility was built as part of the Venice Canals Rehabilitation Project at the Grand Canal and North Venice Boulevard. The City shall protect the public's ability to access the canals by boat by maintaining public access to the Grand Canal public boat launch. The facility shall provide adequate on-site public parking consistent with the sizes and types of boats to be launched and frequency of launching pursuant to the County Department of Small Craft Harbors standards.

The subject site is bisected by the Grand Canal. This segment of the Grand Canal is an artificially constructed waterway with concrete embankments directly adjacent to concrete sidewalks that run along either side of the canal and public boat launch ramp.

The subject site currently provides a surface parking lot with vehicle access to the public boat launch ramp. The proposed development would replace the existing surface parking lot with: (1) an on-street loading area on North Venice Boulevard, (2) on-site loading area with two parking spaces dedicated for loading within the new public parking lot on the East Site, and (3) boat launch parking for vehicles with small trailers in the West Site parking garage; vehicles with trailers would need to first unload their small watercraft in the on-street loading area. A total of three boat launch parking spaces are provided.

The following are the proposed Amendments to the Venice LUP:

The proposed LUP Amendment includes the redesignation of the existing land uses from Open Space and Low Medium II Residential to Neighborhood Commercial and include new and modified text to the certified LUP, to allow the development of the proposed permanent supportive housing project within a new "Subarea A". Exhibit G provides the proposed maps and text changes.

Designation to Neighborhood Commercial Land Use

The subject site is developed with a public parking lot and is identified in the certified LUP as an existing public parking lot (LUP, Exhibits 17a-b). Although the site is currently designated as Open Space land use, there are no proposed plans (at the local level) to develop the site with a public park or other recreational use. Policy II.A.2 of the LUP provides that existing surface parking lots in the Venice Coastal Zone will be maintained and expand parking capacity. As such, the site would not be developed with a recreational use. The existing recreational areas of the Venice Coastal Zone are identified in Exhibits 20a-21b of the LUP. Policy III.D.6 of the LUP provides the potential for a Venice Canals Park with both parking and recreational uses. Consistent with Policy

II.A.2 and III.D.6, the proposed development includes landscaped recreational areas adjacent to Canal Street, open and accessible for public use. While Section 30222 of the Coastal Act prioritizes the development of visitor serving commercial recreational facilities, the LUP does not prioritize the development of recreational uses on the site. Policy III.D.6 states: “New parks, with parking to the rear, shall be considered on some of the City-owned lots on the canals, provided that such facilities are compatible with the existing residential use of the area.”

The proposed redesignation would allow the City to maintain and expand the current supply of public parking for visitors to Venice Beach and the Venice Coastal Zone. The proposed public parking lot will replace the existing 196 parking spaces and provide 27 additional parking spaces. As discussed in the LADOT Venice Parking Study, prepared by Tierra West Advisors, dated June 2020 and Addendum dated March 2021 (Exhibit M), the projected demand for parking in the area from 2020 to 2040 is 1.041. The Addendum states that the proposed number of parking spaces would adequately meet the expected demand and further highlights the citywide multi-modal policies and planned infrastructure improvements that would further offset future parking demand in the area.

As previously discussed, the Venice Coastal Zone and City of Los Angeles is in the midst of a housing crisis with great demand for affordable housing. In January 2016, a Comprehensive Homeless Strategy (CHS) report was issued jointly from the Office of the City Administrative Officer (CAO) and the Office of the Chief Legislative Analyst (CLA). The CHS analyzed various ways to solve homelessness and listed 64 specific short, medium and long-term strategies for achieving the goal of reducing the number of people in Los Angeles living without safe, decent housing. In the spring of 2016, City staff initiated a process of identifying City sites that may be appropriate for affordable housing, called Affordable Housing Opportunity Sites (AHOS). Through this coordinated effort, eight potential sites that include multiple parcels were identified. Each of the sites identified are either vacant or underutilized and recommended or approved by the Council office in which they are located. The subject site was identified as an AHOS and the City entered into an exclusive negotiating agreement with the project Applicant.

In recent decisions (see Finding 9.d.) the Coastal Commission emphasized the importance of preserving existing housing stock and encouraging more affordable housing in the Venice Coastal Zone, pursuant to Section 30604(f) of the Coastal Act.

Section 30604 provides: *Coastal development permit; issuance prior to certification of the local coastal program; finding that development in conformity with public access and public recreation policies; housing opportunities for low and moderate income persons...*
 (f) *The commission shall encourage housing opportunities for persons of low and moderate income. In reviewing residential development applications for low- and moderate-income housing, as defined in paragraph (3) of subdivision (h) of Section 65589.5 of the Government Code, the issuing agency or the commission, on appeal, may not require measures that reduce residential densities below the density sought by an applicant if the density sought is within the permitted density or range of density established by local zoning plus the additional density permitted under Section 65915 of the Government Code, unless the issuing agency or the commission on appeal makes a finding, based on substantial evidence in the record, that the density sought by the applicant cannot feasibly be accommodated on the site in a manner that is in conformity with Chapter 3 (commencing with Section 30200) or the certified local coastal program.*
 (g) *The Legislature finds and declares that it is important for the commission to encourage the protection of existing and the provision of new affordable housing opportunities for persons of low and moderate income in the coastal zone.*

Designating the site as Neighborhood Commercial land use would allow the

development of affordable housing and expand an existing public parking lot on an underutilized surface parking lot. The proposed supportive housing project would development affordable housing in a predominately residential neighborhood and create an open and accessible public recreational area adjacent to the existing canal waterway and Esplanade. As discussed in Finding Nos. 2 and 9.a., the proposed Amendment to redesignate the land use would be compatible with the adjacent land uses and consistent with the policies of the Coastal Act, General Plan, and applicable provisions of the certified LUP.

Subarea A – Permanent Supportive Housing Project

The proposed LUP Amendment includes modifications to the LUP text as follows:

- Add definitions for “Qualified Permanent Supportive Housing Project,” “Supportive Housing,” “Supportive Services,” and “Target Population.”
- Modify the Replacement Affordable Housing policy language to include a new policy for Permanent Supportive Housing Projects and reduced parking for Qualified Permanent Supportive Housing Projects and Supportive Housing.
- Create a new “Subarea A” within the Neighborhood Commercial land use designation for the project site with development standards that regulate density, height, setbacks along the canal, and vehicle access. The new subarea would not be subject to the Commercial Development Standards outlined in Policy I.B.7.

The proposed changes ensure the subject site would be developed with a Qualified Permanent Supportive Housing Project that meets the requirements and regulations for such development. As discussed in Finding Nos. 2 and 9.a., the proposed text changes reflect the proposed development and is consistent with the policies of the Coastal Act and General Plan.

Furthermore, as discussed in this section, the proposed development is consistent with existing policies of the certified LUP. The proposed development standards for density are consistent with the density limitations for the adjacent Artcraft and Neighborhood Commercial areas, which allow a density of one unit per 800-1200 square feet. The proposed height limitations are consistent with the height provisions of the North Venice Subarea, allowing a maximum height of 35 feet. However, development in “Subarea A” is not required to provide a sloped roofline. The subject site does not maintain scenic views and is in an area developed with three-story structures that are 30 feet in height; existing nonconforming development along North Venice Boulevard and Venice Boulevard exceed 30 feet in height. As discussed in this report, the proposed 35-foot height limit is visually compatible with the existing area and would allow the development of the proposed supportive housing project. The proposed setbacks along Canal Street are consistent with the setback requirements for residential development in the Venice Canals Subarea, requiring an average setback of 15 feet to allow adequate open space areas and an open permeable yard along the canal frontage to allow adequate onsite drainage of surface runoff to storm drains. Lastly, the proposed standards for vehicle access limit the location of driveways to North and South Venice Boulevards to maintain existing access and circulation patterns, while reducing the number of driveways and closing unused/excess driveways to create addition on-street parking.

The proposed LUP Amendment and development is consistent with the applicable policies of the certified LUP and Chapter 3 policies of the Coastal Act.

c. The Interpretive Guidelines for Coastal Planning and Permits as established by the California Coastal Commission dated February 11, 1977 and any subsequent

amendments thereto have been reviewed, analyzed and considered in light of the individual project in making this determination.

The Los Angeles County Interpretative Guidelines were adopted by the California Coastal and statewide guidelines, pursuant to Section 30620 (b) of the Coastal Act, are designed to assist local governments, the regional commissions, the commission, and persons subject to the provisions of this chapter in determining how the policies of this division shall be applied to the coastal zone prior to the certification of a local coastal program. As stated in the Regional Interpretative Guidelines, the guidelines are intended to be used “in a flexible manner with consideration for local and regional conditions, individual project parameters and constraints, and individual and cumulative impacts on coastal resources.” On June 14, 2001, the Coastal Commission certified the Venice Coastal Zone Land Use Plan (LUP), which provides policies and development standards to guide development in the Venice Coastal Zone. As discussed in Finding 9.b., the proposed development is consistent with the applicable policies of the certified LUP.

- d. The decision of the permit granting authority has been guided by any applicable decision of the California Coastal Commission pursuant to Section 30625(c) of the Public Resources Code, which provides that prior decisions of the Coastal Commission, where applicable, shall guide local governments in their actions in carrying out their responsibility and authority under the Coastal Act of 1976.**

The project consists of the redevelopment of a surface parking lot with a new permanent supportive housing project comprised of 140 dwelling units, supportive services, commercial uses and a public parking lot. The proposed development is within the dual permit jurisdiction area of the Coastal Zone, where the local jurisdiction (City of Los Angeles) issues Coastal Development Permits and the Coastal Commission will render a decision on a second Coastal Development Permit. The Coastal Commission took action on the following supportive housing projects in the Venice Coastal Zone:

Application No. A-5-VEN-20-0060 (appeal) – On December 10, 2020, the Commission found No Substantial Issue with the City’s approval of a Coastal Development Permit for the demolition of a 2,056 square-foot auto repair shop and addition to and conversion of a 2,482 square-foot philanthropic use, in conjunction with the construction of a four-story, 30,463 square-foot, mixed-use development comprised of 39 permanent supportive housing units and one manager’s unit, with 4,441 square feet of supportive services and 3,085 square feet of ground floor commercial (office) use; a total of six parking spaces are provided onsite at 2467-2471 South Lincoln Boulevard, in the single permit jurisdiction.

Application No. A-5-VEN-19-0020 (appeal) – On June 12, 2019, the Commission found No Substantial Issue with the City’s approval of a Coastal Development Permit for the development of a four-story, 44-foot tall, 35-unit affordable housing project (supportive housing) providing 17 vehicle and 48 bicycle parking spaces on two consolidated lots at 718-720 Rose Avenue, in the single permit jurisdiction.

Application No. A-5-VEN-05-206 (appeal) – On August 9, 2005, the Commission approved a Coastal Development Permit (de novo hearing) for the development of a three-story, 37- foot tall (up to 50 feet for one clock tower), mixed use project comprised of 70 residential condominium units of which seven are restricted for Very Low Income Households, five live/work units, and one ground floor commercial use (bakery/restaurant), providing 247 parking spaces within a subterranean garage; the project is located on eight consolidated lots at 512 Rose Avenue, in the single permit jurisdiction.

In these decisions, the Commission found that reduced parking was consistent with the

Policy I.A.14 (Parking Requirements for Affordable Housing) of the certified LUP, which states “reduced parking is permitted for low-income units only if: a) the project is consistent with LUP policy I.A.13; and b) it is demonstrated that the prospective occupants of the project will have a reduced demand for parking.” The Commission further stated “In a recent study conducted by Fehr & Peers on April 20, 2017, 42 affordable housing sites within the City of Los Angeles were surveyed for vehicle trip generation and parking.¹ The results indicate that parking utilization ratios are less than the ratios required in the certified LUP. The study indicated that permanent supportive affordable housing created a demand between 0.2 and 0.48 spaces per unit. Additionally, in March 2019, Crain and Associates produced a report on the effects of a 100% affordable housing project and transit availability on personal vehicle ownership and parking demand. That study concluded that substantial evidence and academic research support reduced car ownership and parking utilization by lower income households and housing in close proximity to public transit.” Furthermore, the Commission found that supportive housing project “supports the provision of equitable access consistent with the Commission’s adopted Environmental Justice Policy.”

As such, this decision of the permit granting authority has been guided by applicable decisions of the California Coastal Commission pursuant to Section 30625(c) of the Public Resources Code, which provides that prior decisions of the Coastal Commission, where applicable, shall guide local governments in their actions in carrying out their responsibility and authority under the Coastal Act of 1976.

- e. The development is located between the nearest public road and the sea or shoreline of any body of water located within the coastal zone, and the development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act of 1976.**

The project site is located between the nearest public road and the sea or shoreline of any body of water located within the coastal zone. As discussed, the site is adjacent to and bisected by Canal Street, part of the Venice Canal waterway and the Grand Canal. Finding No. 9.a. provides a full discussion of the Chapter 3 policies for public access and recreation, Articles 2 and 3 of the Coastal Act. As discussed in Finding No. 9.a. the proposed LUP amendment and development conforms with the applicable public access and public recreation policies of the Coastal Act.

- f. An appropriate environmental clearance under the California Environmental Quality Act has been granted.**

The proposed project is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.27(b)(1) and AB 1197. Pursuant to Public Resources Code Section 21080.27(a)(3), there is substantial evidence demonstrating that the proposed project 1) qualifies as supportive housing pursuant to Health and Safety Code Section 50675.14; 2) meets the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division I of Title 7 of the Government Code; and 3) is funded, in part, by the Measure H sales tax proceeds approved by the voters in the March 17, 2017, special election in the County of Los Angeles. All actions to approve the proposed project were taken in furtherance of providing vitally needed Supportive Housing to house and serve the homeless in the City of Los Angeles.

See Justification for Statutory Exemption Case No. ENV-2019-5597-SE in the case file for the narrative demonstrating that the project meets the eligibility requirements outlined in AB 1197.

- 10. Mello Act Compliance Review.** Pursuant to the City of Los Angeles Interim Administrative Procedures (IAP) for Complying with the Mello Act, all Conversions, Demolitions, and New

Housing Developments must be identified in order to determine if any Affordable Residential Units are onsite and must be maintained, and if the project is subject to the Inclusionary Residential Units requirement. Accordingly, pursuant to the settlement agreement between the City of Los Angeles and the Venice Town Council, Inc., the Barton Hill Neighborhood Organization, and Carol Berman concerning implementation of the Mello Act in the Coastal Zone Portions of the City of Los Angeles, the findings are as follows:

c. Demolitions and Conversions (Part 4.0)

The project includes the demolition of a multi-family structure containing four (4) Residential Units. The Applicant seeks a General Plan Amendment with a Vesting Zone and Height District change, proposing the development of 10 or more residential dwelling units and is subject to the affordable housing requirements of Measure JJJ. LAMC Section 11.5.11(a) provides that “All Projects qualifying for development bonuses pursuant to this Section shall be required to meet any applicable replacement requirements of California Government Code Section 65915(c)(3).”

The Los Angeles Housing and Community Investment Department (HCIDLA) reviewed the project for compliance with AB 2556 and the Mello Act (Exhibit J).

The AB 2556 (TOC/JJJ) Determination, dated August 13, 2019 found that four (4) units are subject to replacement under AB 2556. HCIDLA reviewed data from August 2013 to August 2018. Three (3) Affordable Replacement Units need to be replaced with one (1) unit restricted to Extremely Low-Income Household, one (1) restricted to Very Low-Income Household, one (1) restricted to Low Income Household. One (1) market rate RSO unit is required.

The Mello Act Determination, dated April 17, 2021, found that four (4) Replacement Affordable Units are required. HCIDLA review data from December 2015 to December 2018.

Part 1.2.3 of the IAP provides “...In the case of conflict between these Interim Administrative Procedures, and geographically specific plan, Local Coastal Program, or any other regulation, the requirement which results in the provision of the largest number of Affordable Replacement Units or Inclusionary Units shall apply...”

As such, the project is required to provide Replacement Units pursuant to the requirements of the AB 2556 Determination.

d. New Housing Developments (Part 5.0).

The proposed project consists of the development of 140 Residential Units comprised of 136 affordable units and four (4) manager's units. The Applicant seeks a General Plan Amendment with a Vesting Zone and Height District change, proposing the development of 10 or more residential dwelling units and is subject to the affordable housing requirements of Measure JJJ. In accordance with LAMC Section 11.5.11(a)(1)(iii), as a project involving a General Plan Amendment, Zone Change, or Height District Change for a rental project that allows a residential use where previously not allowed, the project shall provide no less than 5 percent of the total units at rents affordable to Extremely Low Income households, and either 11 percent of the total units at rents affordable to Very Low Income households or 20 percent of the total units at rents affordable to Lower Income households. LAMC Section 11.5.11(a)(3) states that for 100% affordable projects each residential unit in the Project, exclusive of a manager's unit or units, is affordable to, and occupied by, either a Lower or Very Low Income household.

Part 5.0 of the IAP requires New Housing Developments of 10 or more Residential Units to provide Inclusionary Residential Units and provides two options. Option 1 requires 20% of all Residential Units, be reserved for occupancy by Very Low or Low Income Households. Option 2 requires 10% of all Residential units, be reserved for occupancy by Very Low Income Households. Under Option 1, the project would be required to set aside 28 Residential Units for Very Low or Low Income Households and under Option 2, the project would be required to set aside a total of 14 Residential Units for Very Low Income Households.

The project proposes a 100% affordable housing project. Of the 136 affordable units, 129 units will be set aside for habitation by Low-Income Households and seven (7) units will be set aside for habitation by Extremely Low-Income Households, for a period of 55 years. The requirements of Measure JJJ and LAMC Section 11.5.11 would require the provision of 136 restricted affordable units.

Part 1.2.3 of the IAP provides "...In the case of conflict between these Interim Administrative Procedures, and geographically specific plan, Local Coastal Program, or any other regulation, the requirement which results in the provision of the largest number of Affordable Replacement Units or Inclusionary Units shall apply..."

As such, the project is required to provide Affordable Housing Units pursuant to LAMC Section 11.5.11.

1. Site Plan Review Findings

a. The project is in substantial conformance with the purposes, intent and provisions of the General Plan, applicable community plan, and any applicable specific plan.

The project site is located within the Venice Community Plan area, which is one of 35 Community Plans forming the Land Use Element of the General Plan. Properties within the Venice Coastal Zone are also subject to the provisions of the Venice Coastal Zone Land Use Plan (LUP), which was adopted by means of a plan amendment to the Community Plan. The Community Plan and Venice LUP designate the project site with an Open Space land use and Low Medium II residential designations, with a corresponding zone of OS.

As previous discussed in Finding Nos. 2, 8, and 9, the project is in substantial conformance with the purposes, intent, and provisions of the General Plan, Venice Community Plan, Venice Land Use Plan, and Venice Coastal Zone Specific Plan.

b. The project consists of an arrangement of buildings and structures (including height, bulk and setbacks), off-street parking facilities, loading areas, lighting, landscaping, trash collection, and other such pertinent improvements, which is or will be compatible with existing and future development on adjacent properties and neighboring properties.

The proposed project is designed to be compatible with the existing and future development on adjacent and neighboring properties. The project would redevelop an existing surface parking lot with a 103,957-square foot, mixed-use, 100 percent affordable housing development. The project site is bisected by Canal Street and the Grand Canal. The West Site would be developed with a 36,157 square-foot mixed use structure that is three stories and 35 feet in height with a 59-foot in height architectural campanile with a roof access structure resulting in a structure with a maximum of 67 feet in height and four stories with mezzanine level. The East Site would be developed with

a 67,800 square-foot mixed structure that is three-stories and 35 feet in height. The existing public parking lot would be replaced on the West Site with a multi-level parking garage, wrapped by the commercial and residential uses.

The properties to the west and north are primarily developed with multi-family residential and commercial uses and zoned R3, RD1.5 and C1.5. The properties to the south are developed with multi-family and single-family residential and zoned R3 and RW. There are 13 parcels to the north of the Project Site, across North Venice Boulevard that are developed with six (6) one-story structures, four (4) two-story structures and three (3) three-story structures. There are two parcels to the west of the Project Site, across Pacific Avenue that are developed with two (2) two-story structures. There are 15 parcels to the south of the Project Site, across South Venice Boulevard developed with two (2) one-story structures, seven (7) two-story structures and six (6) three-story structures. There are two parcels to the east of the Project Site, across Dell Avenue that developed with one (1) one-story structure.

The proposed Project consists of an arrangement of buildings and structures, off-street parking, lighting, landscaping and trash collection that is or will be compatible with existing and future development on the neighboring properties:

Height

The height of the proposed project is generally consistent with the height of the surrounding structures. As previously stated, the structure on the West Site is three-stories and 35 feet in height with a 59-foot in height architectural campanile located at the northwest corner of the subject site with a roof access structure resulting in a structure with a maximum of 67 feet in height and four stories with a mezzanine level. The structure on the East Site is three-stories and 35 feet in height.

As shown on Exhibit D There are 35 structures immediately adjacent to the subject site, of which 25 structures have a height of 35 feet or less (71%). The ten structures that have a height greater than 35 feet range in height from 37 feet to 56 feet. The height limit for the adjacent properties in the North Venice Subarea of the Venice Coastal Zone Specific Plan is 30 feet for structures with flat roofs and 35 feet for structures with Varied Roofline (slop roofs). Notwithstanding the campanile, the proposed project is consistent with the adjacent structures and with the heights for future development. The campanile does introduce a structure that is higher than the allowed height for the adjacent subarea; however, as shown in Exhibit D, the neighborhood does contain precedent examples of structures with buildings heights of 60 and 70 feet. The campanile provides variation in height that further breaks up the massing of the building and provides visual interest.

Bulk and Mass

The project site is bisected by Canal Street, a 60-foot-wide waterway with pedestrian walkways. The project is comprised of two structures on either side of the canal. The buildings fronting the Grand Canal are stepped back to provide variation in building plane, break up the massing, and to reduce the shade and shadow impacts on the canal and adjacent landscaped open space area. Further, the campanile provides variation in height that further breaks up the massing of the building and provides visual interest.

In addition, the bulk and mass of the building is broken up vertically with sloping features as well as material changes at commercial, retail and community spaces at the ground floor level, providing architectural variety. Further, lookout decks are provided at the upper level to provide breaks in the building façade. Lastly, the corners of the buildings along Pacific Avenue are rounded to increase pedestrian and automobile visibility and

provide increased public space along the sidewalk.

Building Materials

The building façades are clad with stucco intermixed with fixed and operable windows on the upper levels, and glazed roll-up doors on the ground level. Further, the components of the building will be differentiated not only by color, but by textures. The color palette is a combination of white, beige and gray – each with its own corresponding texture. The ground-level retail and art gallery feature storefront glazing to provide maximum visibility and natural light.

Setbacks

The subject site is generally located on the block bounded by North Venice Boulevard, Pacific Boulevard, Dell Avenue and South Venice Boulevard and is separated into a West Site and East Site by the terminus of the Grand Canal (which becomes Canal Street north of North Venice Boulevard). The project site is an approximately 2.65 acres, irregularly shaped parcel of land.

The project site has an approximately 174.75-foot frontage on the east side of Pacific Avenue, an approximately 550.75-foot frontage on the south side of North Venice Boulevard, an approximately 78.5-foot frontage on the west side of Dell Avenue, and an approximately 713.75-foot frontage on the north side of South Venice Boulevard. Due to the irregular shape and acreage, the subject site has two front yards on Pacific Avenue and Dell Avenue. In addition, the Property has frontage on both sides of Canal Street.

Pursuant to the Venice Coastal Zone Specific Plan, North Venice Subarea, the proposed project requires a front yard of no less than 5 feet. In addition, the Specific Plan requires the frontage along the canal to be an average of 15 feet, but not less than 10 feet.

The Project is requesting a Developer Incentive to utilize the setbacks requirements of the RAS3 Zone. RAS3 setback requirements allow a 5-foot side yard is required for all portions of buildings erected and used for residential purposes and a rear yard of no less than 15 feet is required when adjacent to a property in the RD Zone or more restrictive zone, otherwise a 5-foot rear yard is required.

As such, the proposed project provides a 5-foot front yard setback on Pacific Avenue, Dell Avenue, North Venice Boulevard and South Venice Boulevard. Further, the proposed project provides a side and rear yard setback of 5 and 16 feet, respectively, where subject site is abuts properties located within the RD1.5 Zone. In addition, the proposed project provides averaged 15-foot setbacks on the portions of the East Site and West Site that are facing the Grand Canal, incorporating public open space areas with terraced seating, landscaping, and plaza areas.

Parking/Loading

The project will provide a total of 357 automobile parking spaces. Pursuant to the Developer's Incentive (JJJ), the project will utilize the reduced parking ratios under AB 744 for 100% affordable housing, requiring 0.3 (special needs) and 0.5 spaces for each dwelling unit, and will also provide all required residential parking spaces in the West Site parking garage; 57 parking spaces will be provided for the 140 dwelling units. The project will provide 42 parking spaces for the retail and restaurant uses as well as 27 BIZ spaces, consistent with the requirements of the Venice Specific Plan. In addition to the required spaces for the residential and commercial uses, the project will replace 196 existing public parking spaces and provide 27 additional public parking spaces. A total

of 136 bicycle parking spaces are provided, 19 short-term and 117 long-term spaces.

Lighting

All open space areas and pedestrian walkways within the project site will be illuminated, designed with downward facing lights and shielded so the light source cannot be seen from adjacent residential properties. All lighting will comply with Building and Green Building Code requirements.

Landscaping/Open Space

The Project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. Moreover, landscaping is also provided in the form of new trees and mounded grass planters that line the perimeter of the Project.

Trash collection

Trash and recyclable collection, enclosures for trash and recycling bins are located on the ground level, within the building footprint, and are accessible from the ground level parking area. Trash and recycling areas are fully enclosed and shielded from public view.

As described above, the proposed project consists of an arrangement of buildings and structures (including height, bulk, and setbacks), off-street parking facilities and loading areas, lighting, landscaping, trash collection and other such pertinent improvements that will be compatible with existing and future development on adjacent and neighboring properties.

c. The residential project provides recreational and service amenities to improve habitability for its residents and minimize impacts on neighboring properties.

The proposed project is a Permanent Supportive Housing project that provides supportive service programs designed to help serve the unique needs of those experiencing homelessness and to help them successfully maintain independent living. Each person living in the building will have individualized assistance in the coordination of his or her housing and service needs. The Intensive Case Management Services (ICMS) will be available to the individuals who previously experienced homelessness will be available to all who live in the building. Residents will have access to on-site and off-site programs that are flexible and responsive to their needs. The services are population-specific, and culturally and linguistically appropriate. Housing is the primary intervention for tenants, emphasizing a model that incorporates “wrap-around” service delivery.

The Project provides approximately 16,250 square feet of open space, including approximately 4,930 square feet of landscaped open space. Of this landscaped open space, approximately 1,645 square feet is located within the east banks of the Grand Canal, and approximately 3,285 square feet is located within the north side yard near Dell Avenue. The areas adjacent to the Grand Canal are landscaped and include pedestrian pathways that provide access to the canal, Short Line Bridge, and public boat launch. The project includes a 2,875 square-foot art studio space at the ground level of the East Site and a 1,590 square-foot community room at fourth floor of the West Site structure. Both are available for use by residents and members of the public. The project's recreational and service amenities will improve the habitability for its residents.

The publicly accessible open space recreational areas and indoor gathering spaces, activate the street and Grand Canal frontages and provides opportunities for residents and visitors, and further minimize impacts on neighboring properties.

2. Environmental Finding

The proposed project is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.27(b)(1) and AB 1197. Pursuant to Public Resources Code Section 21080.27(a)(3), there is substantial evidence demonstrating that the proposed project 1) qualifies as supportive housing pursuant to Health and Safety Code Section 50675.14; 2) meets the eligibility requirements of Article 11 (commencing with Section 65650) of Chapter 3 of Division I of Title 7 of the Government Code; and 3) is funded, in part, by the Measure H sales tax proceeds approved by the voters in the March 17, 2017, special election in the County of Los Angeles. All actions to approve the proposed project were taken in furtherance of providing vitally needed Supportive Housing to house and serve the homeless in the City of Los Angeles.

See Justification for Statutory Exemption Case No. ENV-2019-5597-SE in the case file for the narrative demonstrating that the project meets the eligibility requirements outlined in AB 1197.

3. **Flood Insurance.** The National Flood Insurance Program rate maps, which are a part of the Flood Hazard Management Specific Plan adopted by the City Council by Ordinance No. 172,081, have been reviewed and it has been determined that this project is located in Zone AE, base flood elevations determine.

RESOLUTION

WHEREAS, the California Coastal Act of 1976 has declared that the California Coastal Zone is a distinct and valuable resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem; and

WHEREAS, one of the basic goals of the State is to protect; maintain, and where feasible, enhance and restore the overall quality of the Coastal Zone environment and its natural and manmade resources; and

WHEREAS, the California Coastal Act of 1976 requires each local government lying, in whole or in part, within the Coastal Zone to prepare a Local Coastal Program for that portion of the Coastal Zone within its jurisdiction to assure that maximum public access to the coast and public recreation areas is provided, consistent with Chapter 3 of the Act; and

WHEREAS, portions of the Venice Community Plan lie within the Coastal Zone, as designated by the State Legislature; and

WHEREAS, the portion of Venice west of Lincoln Boulevard lies within the Coastal Zone; and

WHEREAS, Venice is identified as an area of special significance which required zoning regulations beyond that the traditional zoning code as determined after conducting several public meetings in coastal communities to identify coastal issues of major concern and after conducting several public workshops in coastal communities to develop a Specific Plan to address major issues; and

WHEREAS, on October 29, 1999, and pursuant to California Public Resources Code Section 30510(a), the City Council of the City of Los Angeles adopted the Land Use Plan of the Venice Local Coastal Program; and

WHEREAS, on November 29, 1999, the adopted Land Use Plan of the Venice Local Coastal Program was transmitted to the California Coastal Commission for consideration and certification, consistent with Section 30511(b) of the Coastal Act; and

WHEREAS, on November 14, 2000, the California Coastal Commission approved the Land Use Plan of the Venice Local Coastal Program with suggested modifications; and

WHEREAS, on March 28, 2001, the City Council of the City of Los Angeles adopted the suggested modifications to the Land Use Plan of the Venice Local Coastal Program; and

WHEREAS, on June 14, 2001 the California Coastal Commission certified the Land Use Plan of the Venice Local Coastal Program; and

WHEREAS, the subject project is located within the Venice Coastal Zone in the area covered by the Venice Community Plan; and

WHEREAS, the City Planning Commission recommended approval of a General Plan Amendment from Open Space and Low Medium II Residential to Neighborhood Commercial for the subject property and recommended approval of a Zone Change from OS-1XL-O to (T)(Q)C2-1L-O; and

WHEREAS, the City Planning Commission recommended approval of a Specific Plan Amendment to create a new subarea for Qualified Permanent Supportive Housing and related Land Use Regulations and Development Standards in the Venice Coastal Zone Specific Plan; and related Map Exhibit changes to add the new subarea and change the zoning from OS-1XL and RD1.5 to C2-1LO for the new subarea; and

WHEREAS, the City Planning Commission approved a project for the demolition of a surface parking lot and a four-unit apartment building and the construction of a three-story with a four-story campanile, 103,957-square foot, mixed-use, 100 percent affordable housing development consisting of 140 dwelling units, providing a total of 357 parking spaces; and

WHEREAS, the City Planning Commission at its meeting on May 27, 2021 approved the General Plan Amendment and recommended approval by the City Council of a General Plan Amendment for the subject property; and

WHEREAS, pursuant to the provisions of the Los Angeles City Charter, the Mayor and City Planning Commission have transmitted their recommendations; and

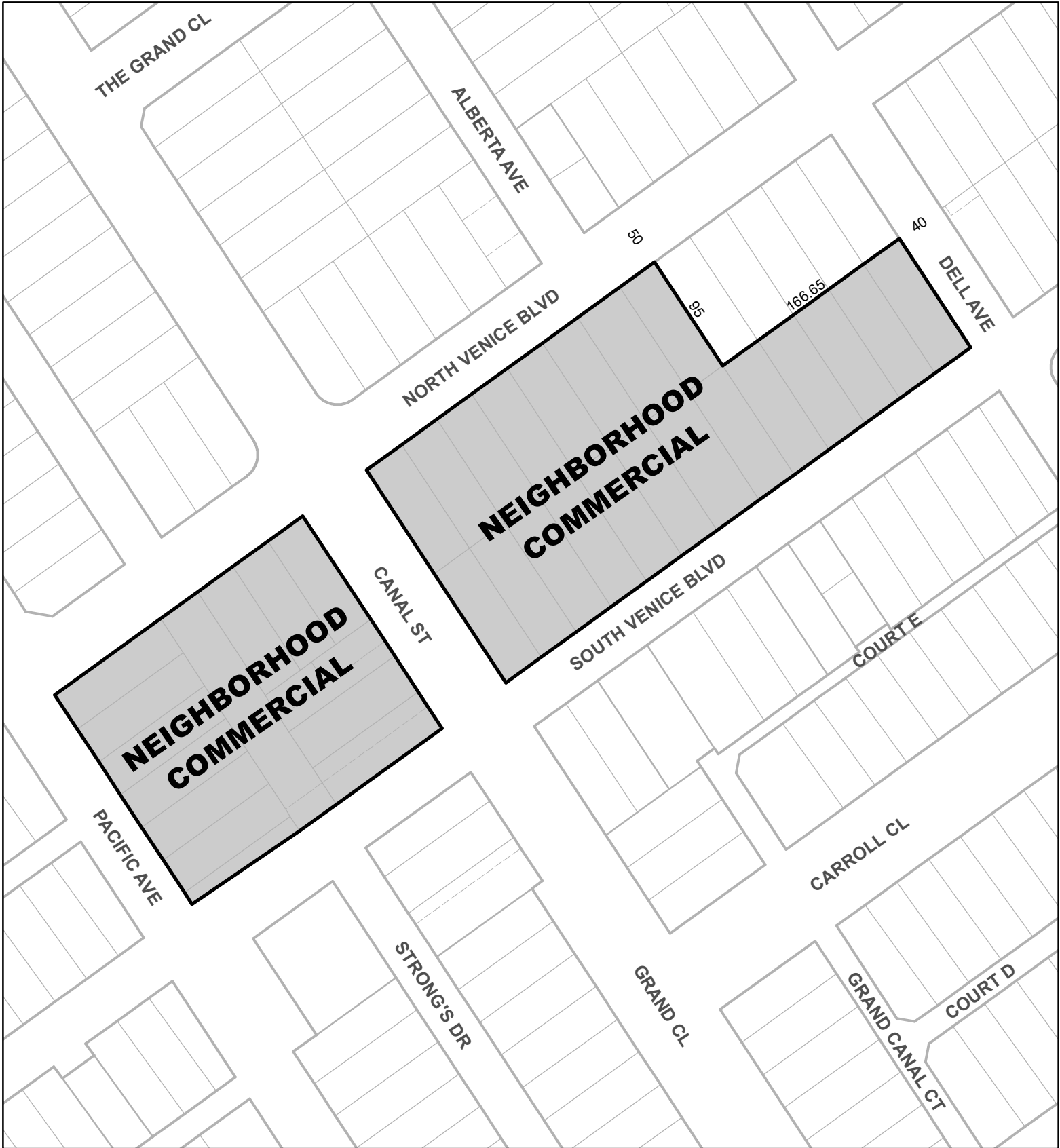
WHEREAS, the requested General Plan Amendment is consistent with the intent and purpose of the adopted Venice Community Plan to designate land use in an orderly and unified manner; and

WHEREAS, the Zoning Change from OS-1XL-O to (T)(Q)C2-1L-O and Venice Coastal Zone Specific Plan amendment creating Subarea A will provide consistency between the General Plan Land Use Designation and the Zoning and Specific Plan; and

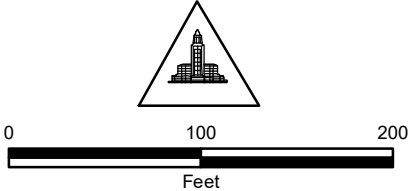
WHEREAS, the subject proposal qualifies for a Statutory Exemption as provided in ENV-2018-6667-SE in furtherance of creating supportive housing in accordance with Assembly Bill 1197 for implementation of the California Environmental Quality Act (CEQA).

NOW, THEREFORE, BE IT RESOLVED that the Venice Community Plan be amended as shown on the attached General Plan Amendment map and certified Venice Land Use Plan map and text amendments.

NOW, THEREFORE, BE IT RESOLVED, that pursuant to California Public Resources Code Section 30510(b) and to Section 00071 of the Local Coastal Program Regulations of the California Coastal Commission, the City Council hereby directs the Director of City Planning to submit to the California Coastal Commission for its consideration and certification an amendment to the certified Land Use Plan of the Venice Local Coastal Program.



THE INTENT OF THIS ORDINANCE IS FOR THE BOUNDARIES OF THIS GENERAL PLAN LAND USE CHANGE TO COINCIDE WITH THOSE OF RECORDED TR 82288.



CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP

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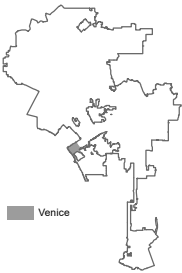


EXHIBIT A:
Venice Land Use Plan Text Amendments

The City Council adopts the following amendments to the Venice Coastal Zone Land Use Plan. Additions shown in underline and deletions shown in ~~strikeout~~.

Add the following subarea to the Venice Coastal Zone and modify the number of subareas, page I-7 of the LUP

To facilitate discussion of issues, policies and development standards, the Venice Coastal Zone has been divided into ~~eight (8)~~ nine (9) subareas, as follows:

Subarea A: generally bounded by Dell Avenue, North Venice Boulevard, South Venice Boulevard and Pacific Avenue, as shown on Exhibit 5b.

These ~~eight~~ nine specific plan subareas roughly follow the boundaries of the older neighborhoods previously used by the City Council and neighborhood groups for public participation in neighborhood issues.

Add the following Definitions, pages I-13 to I-17 of the LUP

Qualified Permanent Supportive Housing Project. The construction of, addition to, or remodeling of a building or buildings offering Supportive Housing; and where all of the total combined Dwelling Units or Guest Rooms, exclusive of any manager's units, are affordable. For the purposes of this subdivision, affordable means that rents or housing costs to the occupying residents do not exceed 30 percent of the maximum gross income of Extremely Low, Very Low or Low-Income households, as those income ranges are defined by the United States Department of Housing and Urban Development (HUD) or any successor agency, as verified by the Housing & Community Investment Department (HCIDLA). A minimum of 50 percent of the total combined Dwelling Units or Guest Rooms is occupied by the Target Population.

Supportive Housing. Housing with no limit on length of stay for persons with low incomes who have one or more disabilities and may include, among other populations, adults, emancipated minors, families with children, elderly persons, young adults aging out of the foster care system, individuals exiting from institutional settings, veterans, and homeless people. The housing is linked to onsite or offsite Supportive Services, and any Floor Area used for Supportive Services shall be considered accessory to the residential use.

Supportive Services. Services that are provided on a voluntary basis to residents of Supportive Housing and Transitional Housing, including, but not limited to, a combination of subsidized, permanent housing, intensive case management, medical and mental health care, substance abuse treatment, employment services, benefits advocacy, and other services or service referrals necessary to obtain and maintain housing.

Target Population. Persons with qualifying lower incomes who (i) have one or more disabilities, including mental illness, HIV or AIDS, substance abuse, or other chronic health condition, and are homeless as defined by any Los Angeles City, Los Angeles County, State of California, or Federal guidelines; or (ii) are chronically homeless, as defined by any Los Angeles City, Los Angeles County, State of California, or Federal guidelines.

Modify section heading of page II-15 as follows:

~~Replacement of Affordable Housing~~

Add new policies for Permanent Supportive Housing Projects to page II-18 of the LUP:

Policy I.A.18 Permanent Supportive Housing Projects that meet the definition of Qualified Permanent Supportive Housing Project and comply with the following requirements:

- a. Supportive Services. Applicants shall provide documentation describing the Supportive Services that will be provided onsite and offsite. Prior to any approval of a Qualified Permanent Supportive Housing Project, the applicant shall submit information demonstrating that Supportive Services will be provided to residents of the project. The applicant shall indicate the name of the entity or entities that will provide the Supportive Services, the Local Public Agency funding source(s) for those services, and proposed staffing levels. If a preliminary funding commitment is needed, the applicant shall also submit a signed letter of intent from the Local Public Agency verifying that it is providing a preliminary funding commitment for the Supportive Services. If no funding commitment is needed, the applicant shall demonstrate that the entity or entities that will provide the Supportive Services are service providers prequalified by a Local Public Agency.
- b. Affordable Housing Covenant. Projects shall record a covenant acceptable to HCIDLA that reserves and maintains the total combined number of Dwelling Units and Guest Rooms designated as restricted affordable for at least 55 years from the issuance of the Certificate of Occupancy.
- c. Housing Replacement. Projects shall meet any applicable dwelling unit replacement requirements of California Government Code Section 65915(c)(3), or as thereafter amended, as verified by HCIDLA, and all applicable covenant and monitoring fees in Section 19.14 of this Code shall be paid by the applicant prior to the issuance of any building permit.

Policy I.A.19 Parking Requirements for Qualified Permanent Supportive Housing Projects and Supportive Housing. Reduced parking is permitted, as follows:

- a. Supportive Housing as defined in Health and Safety Code 50675.14(b)(2). Projects providing Supportive Housing may provide reduced parking consistent with Government Code Section 65915.

Modify page II-20 of the LUP to add Neighborhood Commercial Area of Special Interest as follows:

Neighborhood Commercial Areas

Policy I. B. 5. Neighborhood Commercial Land Use. The Neighborhood Commercial designation is intended to accommodate local neighborhood commercial facilities and services which provide daily convenience goods and services to persons living in nearby residential areas. Small scale neighborhood stores and community services shall be preserved and encouraged. Neighborhood retail goods and services include, but are not limited to the following: art galleries; barber shops or beauty parlors; dry cleaners; laundry services; shoe repair; tailors; florists; hardware stores; drug stores; food/grocery stores; newsstands; medical facilities; and job service centers. Drive-thru facilities and billboards shall be prohibited on properties designated as neighborhood commercial. Community services include day-care, community-meeting rooms, recreational, religious or cultural facilities and similar uses. The clustering of uses minimizes multiple vehicle trips and encourages walking to and from adjacent residential neighborhoods. Areas designated for Neighborhood Commercial Land Use are shown in Exhibits 9 through 12.

Physically, Neighborhood Commercial areas are generally characterized by one and two story low-rise structures. Pedestrian activities shall be encouraged by the emphasis on local serving uses, design of buildings, and the incorporation of streetscape amenities.

Neighborhood Commercial Area of Special Interest

- a. Subarea A (Exhibit 10b). The lots within Subarea A shall be developed with a Qualified Permanent Supportive Housing Project that meets the requirements of Policy I.A.18 and the following development standards. Qualified Permanent Supportive Housing Projects are not subject to the standards outlined in Policy I.B.7.

1. **Density.** No project shall exceed the density permitted in the R3 zone.

2. **Use.** Uses allowed in the C2 zone or as outlined in Policy I.B.5.

3. **Height.**

i. All projects shall be limited to a maximum height of 35 feet.

ii. One (1) campanile structure may exceed the maximum height of 35 feet. A maximum height of 67 feet is permitted, measured to the top of the Roof Access Structure.

4. **Canal Setback**

i. An average setback of 15 feet, but not less than ten feet shall be maintained in the front yard adjacent to the property line which faces the canal.

ii. An open, permeable yard with an area of at least 15 times the lot width and a minimum area of 450 square feet shall be maintained between the property line that faces the canal and the front of any structure. No fill nor building extensions, including stairs and balconies, shall be placed in or over the required permeable front yard area except fences up to 42 inches in height or permeable decks at grade level not more than 18 inches high.

5. **Access.**

i. Driveways and vehicular access to Venice Coastal Development Projects shall be provided from North Venice and South Venice Boulevards, unless the Department of Transportation determines that it is not Feasible. New and existing curb cuts shall be minimized to protect and maximize public on-street parking opportunities.

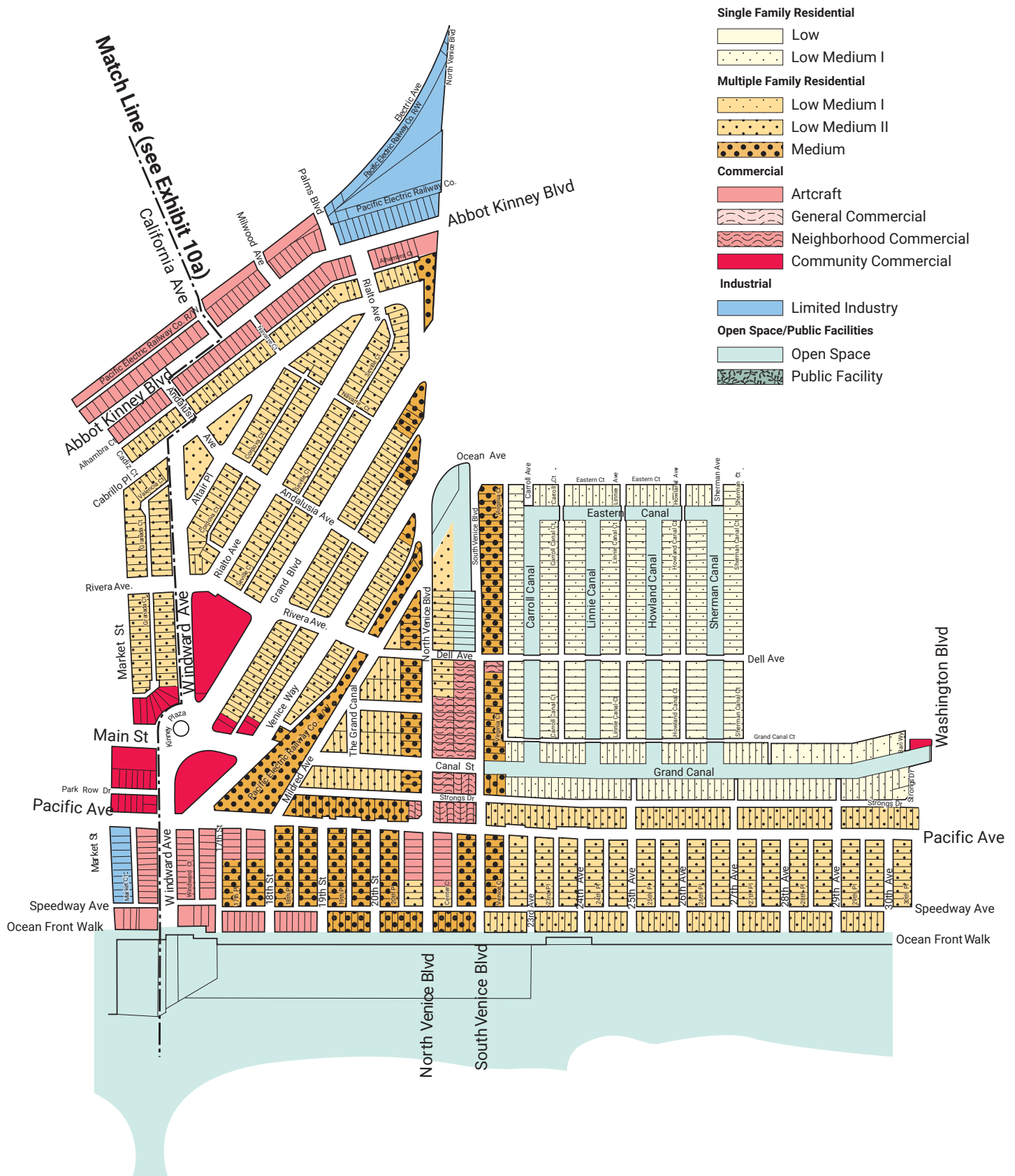
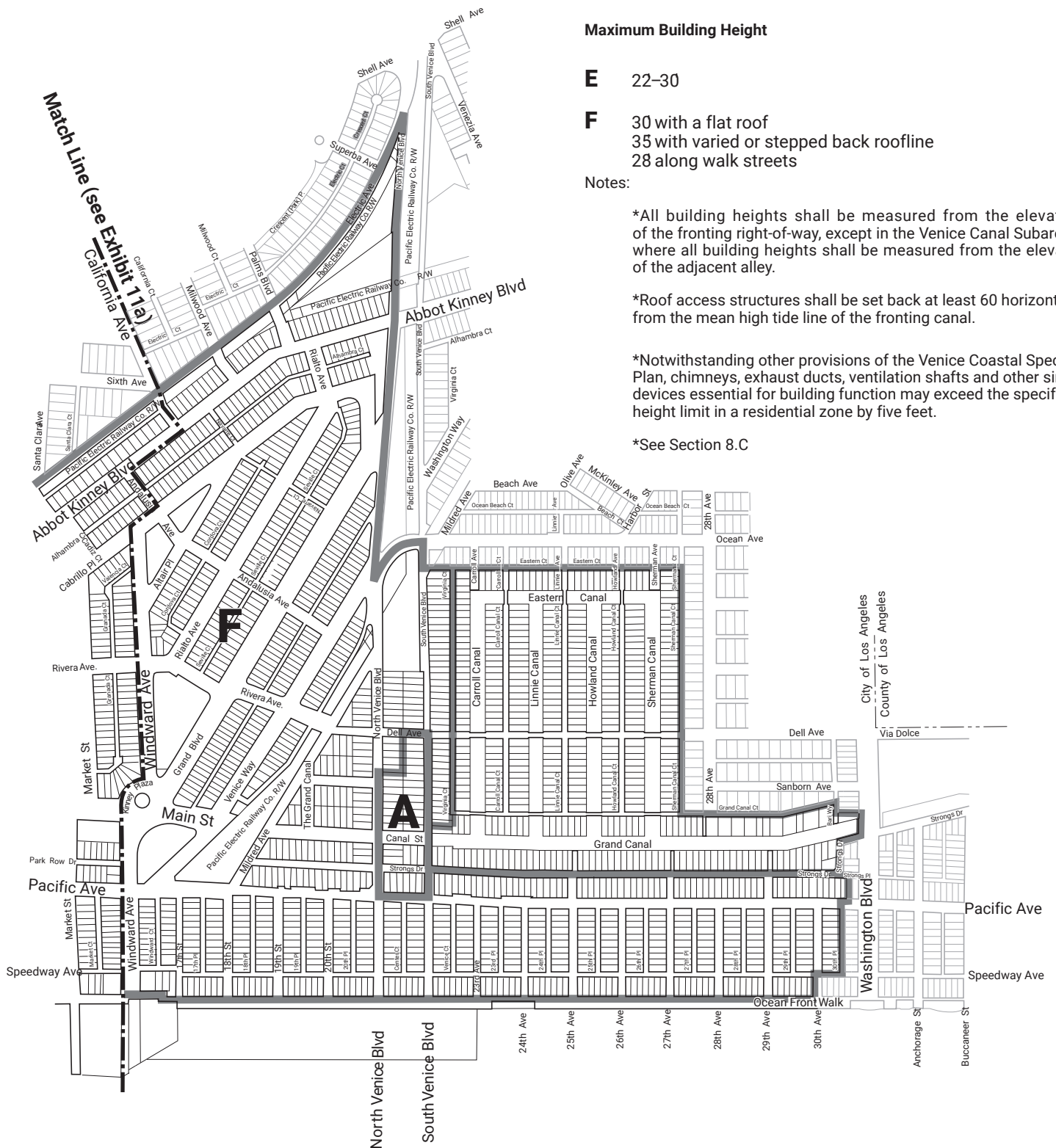


Exhibit 10b

Land Use Plan (Map): North Venice • Venice Canals





Maximum Building Height

E 22-30

F 30 with a flat roof
35 with varied or stepped back roofline
28 along walk streets

Notes:

*All building heights shall be measured from the elevation of the fronting right-of-way, except in the Venice Canal Subarea (E) where all building heights shall be measured from the elevation of the adjacent alley.

*Roof access structures shall be set back at least 60 horizontal feet from the mean high tide line of the fronting canal.

*Notwithstanding other provisions of the Venice Coastal Specific Plan, chimneys, exhaust ducts, ventilation shafts and other similar devices essential for building function may exceed the specified height limit in a residential zone by five feet.

*See Section 8.C

Exhibit 11b
Height

Subarea: North Venice • Venice Canals





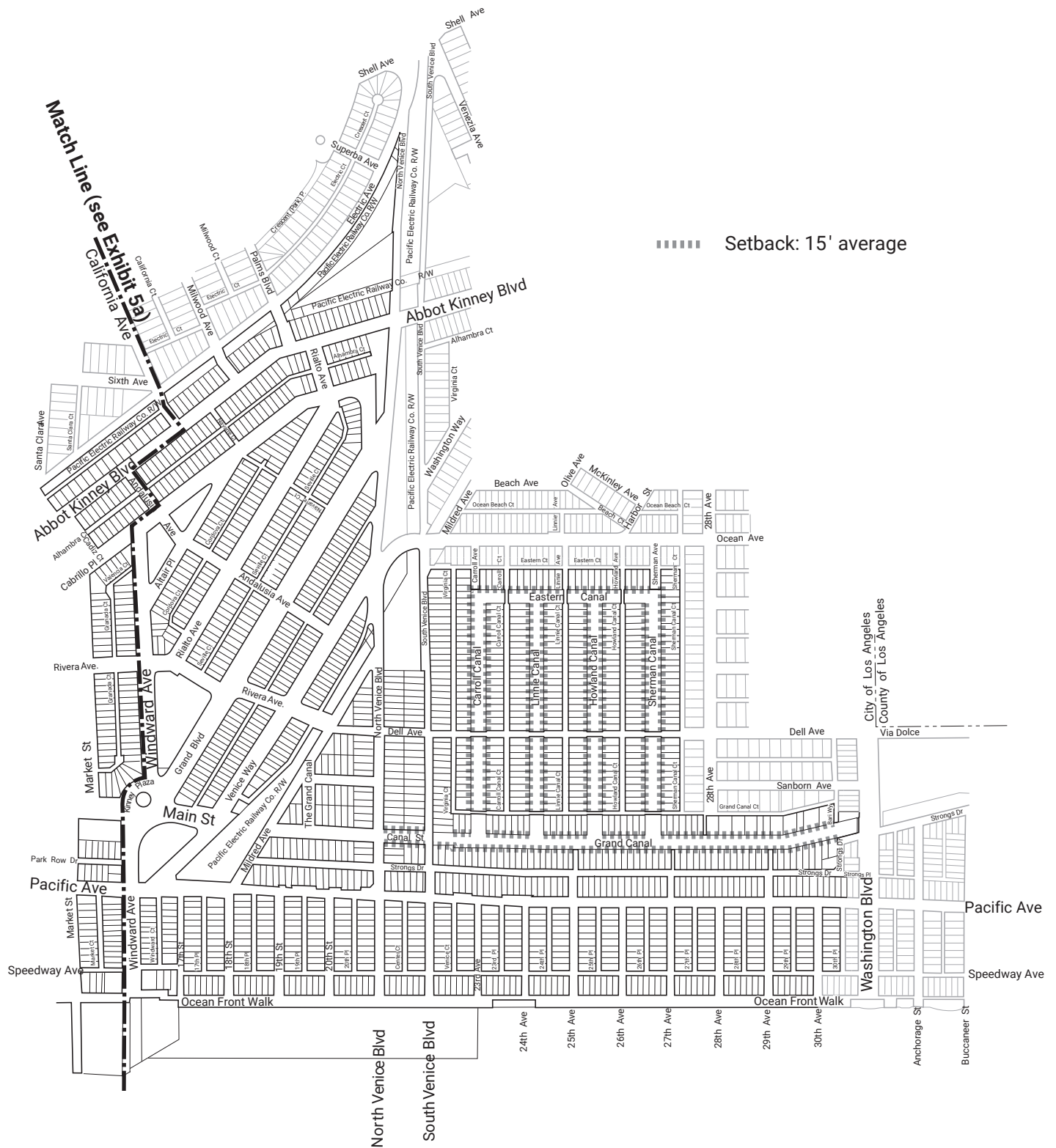
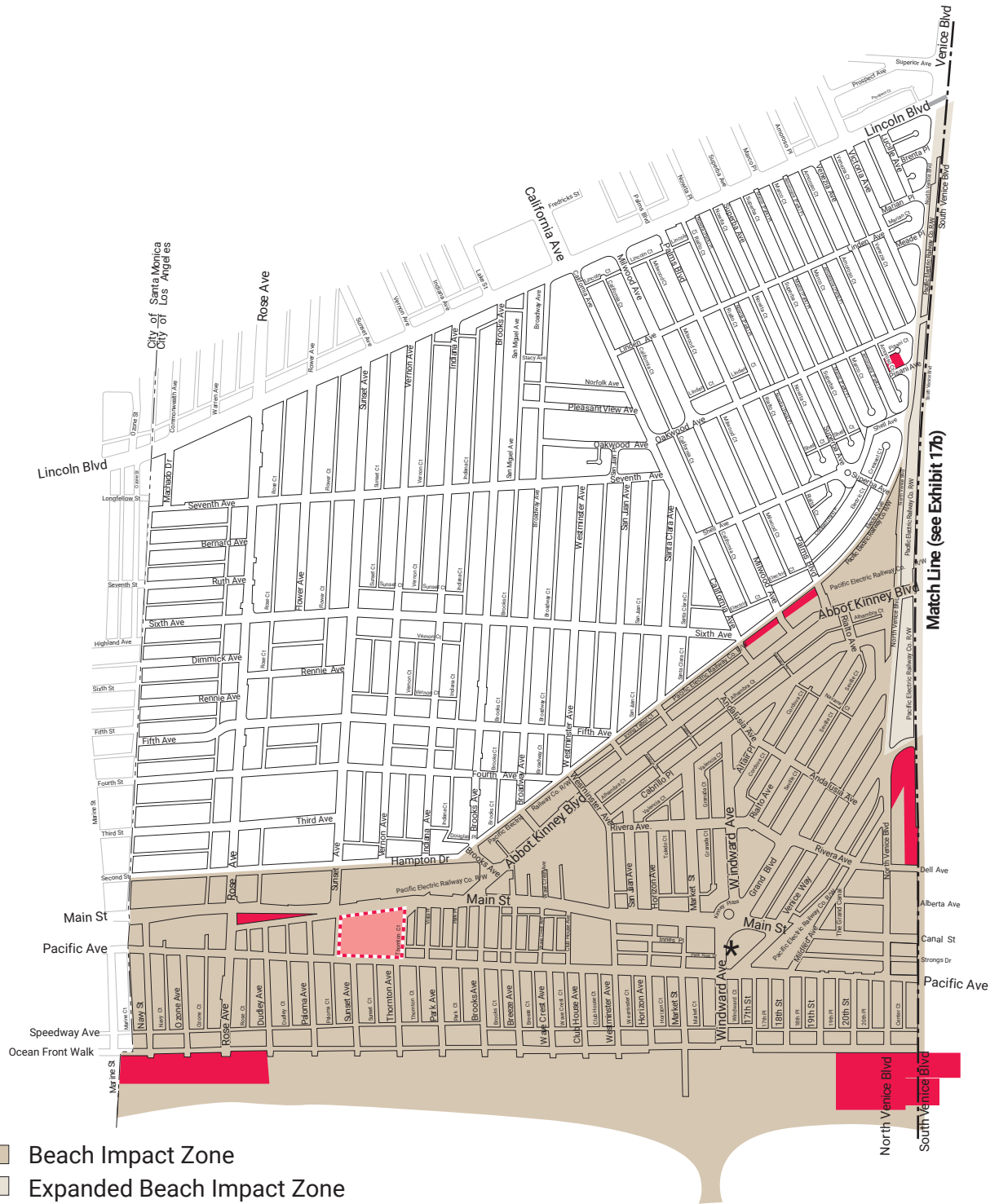


Exhibit 15
Buffer/Setback
Subarea: North Venice • Venice Canals





- Beach Impact Zone
- Expanded Beach Impact Zone
- Existing Public Parking
- Potential New or Expanded Surface Parking Site
- Potential Public Parking Structure Site
- ★ Privately Owned Public Parking

Exhibit 17a
Coastal Access Map
Parking and Beach Impact Zone



Eric Garcetti, Mayor
Ann Sewill, General Manager

DATE: May 17, 2021

TO: Faisal Roble, Principal City Planner
City Planning Department

FROM: Marites Cunanan, Senior Management Analyst II
Los Angeles Housing and Community Investment Department

SUBJECT: **Mello Act Determination for 204 – 208 E. North Venice Blvd., Los Angeles, CA 90291**

Planning Case #s: CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-WDI-SPR-PHP & VTT-82288

Based on information provided by Sarah Letts, Becky Dennison and Chris Murray on behalf of Hollywood Community Housing Corp. and Venice Community Housing Corp. (Applicant), the Los Angeles Housing + Community Investment Department (HCIDLA) has determined four (4) affordable unit exists at 204 – 208 E. North Venice Blvd. (Property).

The City of Los Angeles, a Municipal Corporation (Owner) acquired the property located at 204 – 208 E. North Venice Blvd. (APN 4238-024-903) on March 29, 1974 per Grant Deed. Owner is proposing to demolish the existing four (4) residential units and construct a new one hundred and forty (140) unit apartment building. Owner has not applied for a Building Permit or a Demolition Permit with the Department of Building and Safety.

Section 4.4.3 of the Interim Administrative Procedures for Complying with the Mello Act requires that HCIDLA collect tenant income verification documents if available, or monthly housing cost data as substitute, for at least the previous three (3) years prior to the date of application with the Department of City Planning (DCP). Owner filed an application with DCP on December 12, 2018. HCIDLA must collect data from: December 2015 through December 2018.

On May 4, 2021, HCIDLA mailed a certified letter to the Property. As of May 13, 2021, HCIDLA has not received a response.

Due to Owner's inability to provide sufficient verifiable documentation, HCIDLA was unable to verify the affordability of the four (4) residential units on the Property. Therefore, with insufficient verifiable documents and the Owner's agreement to an affordable determination, it is determined that four (4) affordable unit exists at 204 – 208 E. North Venice Blvd.

If you have any questions regarding this determination, please contact Nicholas Kawazoe at nicholas.kawazoe@lacity.org.

cc: Los Angeles Housing and Community Investment Department File
Hollywood Community Housing Corp. and Venice Community Housing Corp. (Owner)
Richard A. Rothschild, Western Center on Law and Poverty, Inc.
Susanne Browne, Legal Aid Foundation of L.A.
Juliet Oh, Department of City Planning

MAC:nk

COVID-19 UPDATE

Interim Appeal Filing Procedures

Fall 2020



Consistent with Mayor Eric Garcetti's "Safer At Home" directives to help slow the spread of COVID-19, City Planning has implemented new procedures for the filing of appeals for non-applicants that eliminate or minimize in-person interaction.

OPTION 1: Online Appeal Portal

(planning.lacity.org/development-services/appeal-application-online)

Entitlement and CEQA appeals can be submitted online and payment can be made by credit card or e-check. The online appeal portal allows appellants to fill out and submit the appeal application directly to the Development Services Center (DSC). Once the appeal is accepted, the portal allows for appellants to submit a credit card payment, enabling the appeal and payment to be submitted entirely electronically. A 2.7% credit card processing service fee will be charged - there is no charge for paying online by e-check.

Appeals should be filed early to ensure DSC staff has adequate time to review and accept the documents, and to allow Appellants time to submit payment. On the final day to file an appeal, the application must be submitted and paid for by 4:30PM (PT). Should the final day fall on a weekend or legal holiday, the time for filing an appeal shall be extended to 4:30PM (PT) on the next succeeding working day. Building and Safety appeals (LAMC Section 12.26K) can only be filed using Option 2 below.

OPTION 2: Drop off at DSC

An appellant may continue to submit an appeal application and payment at any of the three Development Services Center (DSC) locations. City Planning established drop off areas at the DSCs with physical boxes where appellants can drop.

Metro DSC

(213) 482-7077
201 N. Figueroa Street
Los Angeles, CA 90012

Van Nuys DSC

(818) 374-5050
6262 Van Nuys Boulevard
Van Nuys, CA 91401

West Los Angeles DSC

(310) 231-2901
1828 Sawtelle Boulevard
West Los Angeles, CA 90025

City Planning staff will follow up with the Appellant via email and/or phone to:

- Confirm that the appeal package is complete and meets the applicable LAMC provisions
- Provide a receipt for payment

Applicant Copy
Office: Downtown
Application Invoice No: 74078



City of Los Angeles
Department of City Planning



Scan this QR Code® with a barcode reading app on your Smartphone. Bookmark page for future reference.

City Planning Request

NOTICE: The staff of the Planning Department will analyze your request and accord the same full and impartial consideration to your application, regardless of whether or not you obtain the services of anyone to represent you.

This filing fee is required by Chapter 1, Article 9, L.A.M.C.

If you have questions about this invoice, please contact the planner assigned to this case. To identify the assigned planner, please visit <https://planning.lacity.org/pdiscaseinfo/> and enter the Case Number.

Receipt Number:020821AC0-2D39D8E5-0443-458C-A44E-16743022166B, Amount:\$109.47, Paid Date:08/02/2021

| |
|---|
| Applicant: VISION, VENICE (415-6404291) |
| Representative: |
| Project Address: 116 E NORTH VENICE BLVD, 90291 |

NOTES:

| CPC-2018-7344-GPAJ-VZCJ-HD-SP-SPP-CDP-MEL-SPR-PHP-1A | | | |
|---|---------|------|----------------|
| Item | Fee | % | Charged Fee |
| Appeal by Aggrieved Parties Other than the Original Applicant * | \$89.00 | 100% | \$89.00 |
| Case Total | | | \$89.00 |

| Item | Charged Fee |
|--|-----------------|
| *Fees Subject to Surcharges | \$89.00 |
| Fees Not Subject to Surcharges | \$0.00 |
| | |
| Plan & Land Use Fees Total | \$89.00 |
| Expediting Fee | \$0.00 |
| Development Services Center Surcharge (3%) | \$2.67 |
| City Planning Systems Development Surcharge (6%) | \$5.34 |
| Operating Surcharge (7%) | \$6.23 |
| General Plan Maintenance Surcharge (7%) | \$6.23 |
| Grand Total | \$109.47 |
| Total Invoice | \$109.47 |
| Total Overpayment Amount | \$0.00 |
| Total Paid (this amount must equal the sum of all checks) | \$109.47 |

Council District: 11
Plan Area: Venice
Processed by VIDAL, ANNA on 08/02/2021

Signature: _____



Scan this QR Code® with a barcode reading app on your Smartphone. Bookmark page for future reference.



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