Chapter 4
Analysis of Alternatives

CHAPTER SUMMARY

This chapter presents a comparison of alternatives to the proposed project. Various project alternatives were considered during preparation of this Draft Environmental Impact Report (EIR). The California Environmental Quality Act (CEQA) requires that an EIR present a range of reasonable alternatives to the proposed project. In analyzing the alternatives to the proposed project, a total of eight project alternatives were screened for consistency with the objectives of the proposed project and the ability to avoid one or more significant impacts associated with the proposed project. The following seven project alternatives were carried forward for further review:

- Alternative 1 – No Project – No Build
- Alternative 2 – No Project – Necessary Infrastructure Improvements
- Alternative 3 – Landside Development Only ('No Federal Action Alternative')
- Alternative 4 – No Property Exchange with State
- Alternative 5 – No Pacific Avenue Reconnection
- Alternative 6 – Alternative Construction Phasing
- Alternative 7 – Reduced-Density

In addition to the seven alternatives to the proposed project, an 'alternative' to analyze various small craft boat launch ramp facility locations throughout King Harbor, along with impacts from developing the proposed project, are included in the analysis of Alternative 8

- Alternative 8 – Alternative Small Craft Boat Ramp Facilities Within King Harbor

Chapter 4 Analysis of Alternatives provides the following:

- An overview of the selection criteria for alternatives to the proposed project;
- Summary of alternatives considered but rejected as infeasible;
- Summary of the proposed project and identification of impacts that are significant and unavoidable, less that significant with mitigation, and less than significant for project level impacts;
- Description of the eight alternatives analyzed;
- Analysis of impacts associated with each of the alternatives; and
- Identification of the environmentally superior alternative.

Key Points of Chapter 4:

There are different tradeoffs for each alternative, which are dependent upon the specific resource area. As analyzed in this chapter, the proposed project and Alternatives, 4, 5, 6, 7, and 8 would have significant and unavoidable impacts in the areas of Air Quality, Cultural Resources, Hydrology and Water Quality, and Noise. Alternative 1 would have significant and unavoidable impact in the area of Hydrology and Water Quality and Geology and Soils. Alternative 2 would have significant and unavoidable impacts in the areas of Air Quality, Biological Resources, Cultural Resources, Hydrology and Water Quality, and Noise. Alternative 3 would have significant and unavoidable impacts in the areas of Air Quality, Hydrology and Water Quality, and Noise.

The impacts would be least severe under Alternatives 1 and 2; however, Alternatives 1 and 2 would not implement most or many of the project elements. Alternatives 3 and 7 would have lower impacts than the proposed project; however, they would implement fewer or reduced project elements. Alternative 8 options would have lower impacts than the proposed project and would implement most of the project elements. Of the build alternatives (Alternatives 3 through 8), Alternative 3: Landside Development Only (No Federal Action Alternative) would have the fewest impacts and therefore is considered the environmentally superior alternative. However, Alternative 3 does not include the project benefits associated with improvements to the waterside, including providing a small craft boat launch ramp, improving site connectivity with the bicycle pedestrian bridge, and improving the habitat and recreational function of Seaside Lagoon and eliminating the need for chlorination.

4.1 Introduction

Pursuant to the CEQA Guidelines Section 15126.6, an EIR must consider and discuss a reasonable range of alternatives to a proposed project. An EIR shall include the identification and evaluation of a reasonable range of alternatives to a project (including the location of a project) which would feasibly avoid or substantially lessen any of the significant environmental impacts of a project while still meeting most of the project's basic objectives.

4.2 Project Alternative Selection Criteria

4.2.1 Requirements for Alternatives

An EIR is not required to consider alternatives that are infeasible. There is no standard set forth in the CEQA Guidelines for the number of alternatives that must be addressed. Instead, the CEQA Guidelines require that an EIR describe a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. The range of alternatives is determined on a case-by-case basis depending on the unique characteristics of the project location, the project objectives, the environmental setting, and the potentially significant impacts that are associated with the project.

4.2.2 Project Objectives

As summarized in Section 2.1.1.4 in Chapter 2 Project Description, the waterfront and the surrounding environment have been the subject of numerous land use, master planning and specific planning studies over an extended period of time. The latest planning efforts have been taken into account in the formation of objectives and purpose of the proposed project.[1] The following project objectives have been identified for the proposed project:

1. Optimize the full potential of approximately 36 acres of the Redondo Beach Waterfront (see Figure 2-3 in Chapter 2 Project Description) by providing a distinctive high quality mixed-use environment to support the City's ongoing economic and recreational revitalization of the Waterfront, reducing seasonality, and renewing a source of pride for the community that honors Redondo Beach's rich history and family-friendly beach culture.
2. Reestablish a vibrant Waterfront destination that serves the local community and attracts residents and visitors by providing a viable and cohesive mix of distinctive first class water and landside amenities that support and augment a variety of year-round coastal-oriented recreational opportunities.
3. Increase net financial return to provide for the repair and replacement of aging and obsolete infrastructure (e.g., Pier Parking Structure), improvements to operational on-site

[1] As discussed in greater detail in Section 2.1.1.5.8, the project site has been the subject of numerous planning efforts spanning over a decade. Among these considerations, was the permissible amount of new development in the Harbor Pier Area, which ranged from up to 750,000 new square feet to as little as 324,000 new square feet. The City Council, the Coastal Commission, and the citizens of Redondo Beach (via approval of Measure G), ultimately approved a development cap of 400,000 new square feet for the Harbor Pier Area. Environmental review contained in Initial Environmental Study No. 2007-03-IIES-003 determined that the impacts of these zoning amendments were properly addressed through the Heart of the City Environmental Impact Report (State Clearinghouse No. 2001041082).

water quality, adaptation to address sea level rise, enhancement of public safety, public amenities, and an upgrade of the deteriorated visual character of the Waterfront.

4. Effectuate the goals and objectives of the City's Local Coastal Program, which provide for the development of up to 400,000 net new square feet of commercial development in the Waterfront area.
5. Leverage a public-private partnership that generates sufficient revenues to support a coordinated revitalization of the Waterfront.
6. Create a project with readily accessible and easily identifiable pedestrian connections, transit connections, and conveniently located parking facilities providing access by foot, bike, bus and car to a synergistic mix of commercial and recreational uses.
7. Restore and enrich the community's connection to the Waterfront by providing improved connectivity to and along the Waterfront via enhanced pedestrian, bicycle, and motorized vehicle access, including the completion of a missing link in the California Coastal trail.
8. Continue to preserve the tidelands and submerged lands granted to the City of Redondo Beach for the benefit of all citizens of California for purposes consistent with the Public Trust Doctrine.

4.2.3 Alternatives Considered But Rejected As Infeasible

Alternative Locations

Alternative locations were examined throughout the City of Redondo Beach to identify potential alternative sites for the proposed project. The proposed project is location-specific, as the project is to upgrade and replace the existing waterfront commercial uses, Redondo Beach Marina in Basin 3, and infrastructure (e.g., Pier Parking Structure, Basin 3 bulkhead, storm drain system, etc.) that are more than 35 years old. The project site is unique and no other waterfront area within the City exists that would fulfill the project objectives. CEQA case law expressly notes that lead agencies are not required to reconsider comprehensive planning efforts at the time specific development projects are proposed. As discussed in in Section 2.1.1.5.8, the project site has been the subject numerous planning efforts, which ultimately approved a development cap of 400,000 net new square feet.

During the scoping process, comments were received regarding redistributing the proposed development elsewhere within the City. The main suggested location was the AES Redondo Beach Power Plant site (AES power plant site), which is a 50-acre electrical power plant site located on land zoned Public –Generating Plant (P-GP), just northeast of the project site. The owner of the power plant facility/site proposed in mid-2014, a plan to close the power plant at some point in the future and redevelop the site with a mix of retail, visitor-serving, residential, commercial, and hotel uses. The mixed-use development proposed by the owner of the facility/site, referred to as the proposed “Harbor Village Plan,” proposed up to 600 residential dwelling units of various types, up to 85,000 square feet of new commercial development, of which restaurant uses could not exceed 25,000 square feet, up to 250 hotel rooms and approximately 10 acres total be devoted to public open space. The proposal included the establishment of new land use and development standards at the subject site, including proposed amendments to the City’s General Plan, Coastal Land Use Plan, Harbor Civic/Center Specific Plan, Coastal Zoning, Zoning, and the City Charter (“Planning Documents”). To that end, a voter initiative (Measure B) was placed on the March 2015 ballot for the Harbor Village Plan. On March 3, 2015, the residents of the City voted against Measure B, thereby rejecting the Harbor Village Plan (5,614 NO votes and 5,213 YES votes).

The power plant site is not considered a viable alternative location for several reasons:

1) The proposed project is location-specific, as the project is to upgrade and replace the existing waterfront;

2) Because the project is specific to the waterfront, the power plant site (or any other non-waterfront site) would not fulfill the project objectives, including the objectives aimed at the reestablishment of a vibrant waterfront destination that provides a mix of water and landside amenities, and the replacement of aging and obsolete infrastructure and the deteriorated visual character of the waterfront;

3) Use of the power plant site is dependent upon private initiative (i.e., site is not owned or controlled by the City); and

4) The 400,000 net new square feet of development allowed under the Coastal Zoning Ordinance for areas zoned Coastal Commercial, including the project site, does not include the power plant site; therefore, similar to the Harbor Village Plan, a change in the allowable land use would be subject to City Council approval, voter approval, and Coastal Commission approval. As discussed in Section 2.1.1.5.8 of Chapter 2 Project Description in this Draft EIR, any such proposal is likely to take years to put into place, and consequently, such an alternative could not be accomplished within a reasonable period of time.

The project is specific to the waterfront, and there are no alternative locations; therefore, alternate sites for the proposed project were not considered as feasible alternatives and the Draft EIR will not include analysis regarding alternative locations.

4.2.4 Alternatives To The Proposed Project

This Draft EIR analyzes a *No Project-No Build Alternative* and *No Project-Necessary Infrastructure Improvement Alternative*, as well as six additional alternatives (for a total of seven alternatives) that would reduce at least one of the significant environmental impacts of the proposed project and meet most of the proposed project's objectives. The seven alternatives to the proposed project, described in Section 4.4, are as follows:

- Alternative 1 – No Project – No Build
- Alternative 2 – No Project – Necessary Infrastructure Improvements
- Alternative 3 – Landside Development Only ('No Federal Action Alternative')
- Alternative 4 – No Property Exchange with State
- Alternative 5 – No Pacific Avenue Reconnection
- Alternative 6 – Alternative Construction Phasing
- Alternative 7 – Reduced-Density

In addition to the seven alternatives to the proposed project, an 'alternative' to analyze various small craft boat launch ramp facility locations throughout King Harbor, along with impacts from developing the proposed project, are included in the analysis of Alternative 8:

- Alternative 8 – Alternative Small Craft Boat Ramp Facilities Within King Harbor

4.3 Proposed Project

As detailed in Chapter 2 Project Description, beginning in Section 2.4, the main components of the proposed project are demolition of approximately 207,402 square feet of existing buildings (which includes demolition of all buildings/structures with the exception of Kincaid's and the restroom facility at the Seaside Lagoon, which equals approximately 12,479 square feet), demolition of the existing Pier Parking Structure (approximately 495,000 square feet), and construction of up to 511,460 square feet of new buildings for a total of 523,929 square feet of development (304,058 square feet of net new development) to include retail, restaurant, creative office, specialty cinema, a public market hall, and a boutique hotel, and construction of two new parking structures. As part of the proposed project, the existing utilities within the project site, including water pipelines, wastewater conveyance pipelines, sewage lift stations, storm drain system, and electric and natural gas lines would be upgraded/replaced to ensure adequate capacity is available to serve the project site.

The proposed project also includes proposed enhancements to public recreation and open space, including a new boat launch ramp (for small craft), the opening of Seaside Lagoon to King Harbor as a protected beach and hand launch area (currently the lagoon is not directly connected to the ocean), new and expanded pedestrian and bicycle pathways, as well as new high quality public open spaces. Site connectivity and coastal access would be increased by the establishment of a new pedestrian bridge across the Basin 3 entrance, a new pedestrian promenade along the water's edge from the base of the Horseshoe Pier to Seaside Lagoon, the Pacific Avenue Reconnection, and a new main street flanked by commercial uses and public walkways that would traverse the northern portion of the project site from north to south, approximately parallel to Harbor Drive. Project elements also provide improvements to operational water quality and replacement or upgrades to aging infrastructure.

4.3.1 Summary of Less than Significant Impacts

In Chapter 3 Environmental Analyses of the Draft EIR the proposed project was analyzed for 14 environmental resource areas. The potential for environmental impacts of the proposed project on the environment were analyzed for each of the resource areas for both construction (e.g., short-term impacts throughout the 2.25 to 2.5 years of construction) and operation (e.g., long-term impacts) of the proposed project. The following describes the less than significant, significant impacts that can be mitigated, avoided or substantially lessened with implementation of mitigation measures, and significant and unavoidable impacts associated with implementation of the proposed project:

Aesthetics and Visual Resources AES-1 through AES-3. The proposed project: would not have a substantial adverse effect on a designated local valued view available to the general public; would not substantially degrade the existing visual character or quality of the site and its surroundings; and, would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Air Quality AQ-1 through AQ-3. The proposed project: would not violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation during operation; would not expose sensitive receptors to substantial pollutant concentrations; and, would not create objectionable odors during construction that affects a substantial number of people.

Biological Resources BIO-2 and BIO-5. The proposed project: would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS; and, would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Geology and Soils GEO-1 through GEO--4. The proposed project: would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure, including liquefaction; would not result in substantial soil erosion or the loss of topsoil; would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project; and, would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Greenhouse Gases GHG-1 and GHG-2. The proposed project: would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and it would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Hazards and Hazardous Materials HAZ-1 through HAZ-3. The proposed project: would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction; would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment; and, would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Hydrology and Water Quality HWQ-1 through HWQ-4. The proposed project: would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality; would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site; would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the proposed project; and, would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

Land Use and Planning LUP-1. The proposed project would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

Noise NOI-1. The proposed project would not expose sensitive receptors to a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Public Services PS-1 and PS-2. The proposed project: would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the proposed project, in order to maintain adequate services; and, would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the proposed project , in order to maintain adequate services.

Recreation REC-1 and REC-2. The proposed project: would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and, would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the proposed project.

Traffic and Transportation TRA-2. The proposed project would not conflict with an applicable congestion management program.

Utilities UTL-1 through UTL-4. The proposed project: would not exceed the capacity of local wastewater infrastructure and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project; would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements; would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations; and, would not exceed the capacity of electricity or natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the proposed project.

4.3.2 Summary of Significant Impacts that Can Be Mitigated, Avoided or Substantially Lessened

Chapter 3 Environmental Analyses of the Draft EIR has determined that implementation of the proposed project (separated by whether the impact would be during construction and/or operation) would result in four significant impacts during construction and six (two associated with Impact TRA-1) during operation that can be mitigated to less than significant on:

Construction (short-term):

Biological Resources BIO–1. Related to construction impacts on marine mammals and California grunion, with implementation of mitigation, the proposed project would not have a substantial adverse impact, 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 Wildlife (CDFW) CDFW or U.S. Fish and Wildlife Service USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Biological Resources BIO–4. With implementation of mitigation, the proposed project would not 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, specifically the California grunion.

Cultural Resources CUL–2. With implementation of mitigation, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource.

Cultural Resources CUL-3. With implementation of mitigation, the proposed project would not directly or indirectly destroy a unique paleontological resource.

Operation (long-term):

Biological Resources BIO –1. Related to an increase in surface coverage, with implementation of mitigation, the proposed project would not have a substantial adverse impact, 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 Wildlife (CDFW) CDFW or U.S. Fish and Wildlife Service USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Biological Resources BIO –3. With implementation of mitigation, the proposed project would not have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Hydrology and Water Quality HWQ-5: With implementation of mitigation, the proposed project would not expose people and structures to substantial risk associated with sea level rise.

Traffic and Transportation TRA-1. With implementation of mitigation, the proposed project would not exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness, at the six intersections impacted, and for one unsignalized intersection (Valley Drive/Fransisca Avenue & Herondo Street). Additionally, with implementation of mitigation (i.e., a parking management plan), the proposed project would not exceed parking capacity.

Traffic and Transportation TRA-3. With implementation of mitigation or alternative small craft boat launch facility, the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

4.3.3 Significant and Unavoidable Environmental Impacts of the Proposed Project

As detailed in Chapter 3 Environmental Analyses, many of the impacts associated with the proposed project are below the thresholds of significance or can be reduced to less than significant with implementation of mitigation measures. However, some impacts cannot be reduced to below a level of significance, even with mitigation, and are considered significant and unavoidable impacts The Draft EIR has determined that implementation of the proposed project would result in a total of six significant and unavoidable impacts of which four would occur during construction (short-term throughout the 2.25 to 2.5 years of construction), two would occur specific to the operation of the project, including one impact (i.e., tsunami hazard) that would continue at the project site (although with implementation of mitigation measure the impacts would be reduced) due to natural uncertainties of such an event occurring in the future. The significant and unavoidable impacts are as follows:

Construction (short-term):

Air Quality AQ-1. During construction, the proposed project would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation (NOx and CO).

Cultural Resources CUL-1. Construction of the proposed project would cause a substantial adverse change in the significance of a historical resource.

Noise NOI-2. Construction of the proposed project could expose sensitive receptors to or generation of excessive groundborne vibration or groundborne noise levels.

Noise NOI-4. Construction of the proposed project would cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project and in excess of the City's standards.

Operation (long-term):

Hydrology and Water Quality HWQ-5. Although the project site currently includes a risk associated with inundation by seiche, tsunami, mudflow, or sea level rise, implementation of the proposed project could expose additional people and structures to this risk.

Noise NOI-3. Implementation of the proposed project would cause a substantial permanent increase in ambient noise levels in the project vicinity (i.e., Torrance Circle/Boulevard between Catalina Avenue and the project site) above levels existing without the project and in excess of the City's standards.

4.4 Comparison of Impacts Among Alternatives

This chapter presents a description of the eight alternatives to the proposed project and provides an evaluation, analysis, and comparison with the proposed project. The analysis of alternatives is not required to be as detailed as the analysis for the proposed project, but is at a level that allows the decision-maker to make an informed determination regarding the differences the proposed project and each of alternatives.

Table 4-1 is a brief summary of the proposed project elements and whether or not those elements would be implemented under Alternatives 1 through 7. Elements that would be implemented but to a lesser degree than the proposed project are denoted with a minus sign (-). Full descriptions of each project element are provided in Chapter 2 Project Description beginning in Section 2.4, and full descriptions of each alternative are provided beginning in Section 4.4.1 below. Alternative 8 is not included in the table because generally it is the same as the proposed project with the exception of alternate locations of the proposed small craft boat launch facility (ramp and parking area).

As many of the impacts associated with the alternatives would be the same as the proposed project, this chapter should be read in conjunction with the impact analyses contained in Chapter 3 Environmental Analyses, which provides more detailed information.

Table 4-1: Summary of Project Elements Associated with the Alternatives

Proposed Project Element	Alternative 1 – No Project (No Build)	Alternative 2 – No Project (Necessary Infrastructure Improvements)	Alternative 3 – Landside Development Only (No Federal Action Alternative)	Alternative 4 – No Property Exchange with State	Alternative 5 – No Pacific Avenue Reconnection	Alternative 6 – Alternative Construction Phasing	Alternative 7 – Reduced-Density (~145,000 sf net new development)
Northern Portion of the Project Site							
Development of restaurants, retail, creative office, specialty cinema, and market hall.	No	No	Yes	Yes	Yes	Yes	Yes (–)
Small craft boat launch ramp, including a break wall to protect from wave action, and parking lot	No	No	No	Yes	Yes	Yes	Yes
Replacement of surface parking with new 757-stall parking structure at northeast corner	No	No	Yes	Yes	Yes	Yes	Yes (–)
Modifications to Plaza Parking Structure (relocate stairwell and elevator shaft within the existing parking structure and/or eliminate approximately 32 stalls)	No	No	Yes	Yes	Yes	Yes	Yes
Opening Seaside Lagoon to waters of King Harbor to create a natural beach that is open year-round	No	No	No	Yes	Yes	Yes	Yes
Removal of boat hoists in Basin 3	No	No	Yes	Yes	Yes	Yes	Yes
Demolition and possible replacement of the Sportfishing Pier and buildings	No	Yes	No	Yes	Yes	Yes	Yes
Southern Portion of the Project Site							
Development of retail, restaurant, creative office, and boutique hotel uses	No	Yes (–)	Yes	Yes	Yes	Yes	Yes (–)
Demolition of the Pier Parking Structure and Pier Plaza development, and replacement with a new parking structure	No	Yes	Yes	Yes	Yes	Yes	Yes (–)
Replacement of the timber portion of the Horseshoe Pier, including the existing buildings	No	Yes	No	Yes	Yes	Yes	Yes

Proposed Project Element	Alternative 1 – No Project (No Build)	Alternative 2 – No Project (Necessary Infrastructure Improvements)	Alternative 3 – Landside Development Only (No Federal Action Alternative)	Alternative 4 – No Property Exchange with State	Alternative 5 – No Pacific Avenue Reconnection	Alternative 6 – Alternative Construction Phasing	Alternative 7 – Reduced-Density (~145,000 sf net new development)
Demolition of the International Boardwalk and elevated walkway	No	No	Yes	Yes	No	Yes	Yes
Modifications to the Torrance Circle to facilitate Pacific Avenue Reconnection and access to new parking structure	No	Yes	Yes	Yes	Yes	Yes	Yes
Limited modifications in the vicinity of Monstad Pier, where Monstad Pier connects with the Horseshoe Pier	No	Yes (–)	No	Yes	Yes	Yes	Yes
Basin 3							
Provision of a new pedestrian/bicycle bridge at the mouth of Basin 3	No	No	No	Yes	Yes	Yes	Yes
Replacement of the bulkhead cap and minor repairs to bulkhead	No	Yes	Yes	Yes	Yes	Yes	Yes
Reconstruction/redevelopment of the docks, gangways, and boat slips in Basin 3	No	Yes	No	Yes	Yes	Yes	Yes
Additional Improvements							
Implement the Pacific Avenue Reconnection to connect Harbor Drive/Pacific Avenue and Torrance Circle	No	No	Yes	Yes	No	Yes	Yes
Enhancement and expansion of pedestrian boardwalk along the water's edge	No	Yes (–)	Yes (–)	Yes	Yes	Yes	Yes
Enhancement of bicycle and pedestrian paths throughout project site, including avoidance of navigation through parking structures	No	Yes (–)	Yes	Yes	Yes (-)	Yes	Yes
Updates to aging infrastructure, including stormwater drainage system, sewage lift stations, and other utilities	No	Yes (–)	Yes	Yes	Yes	Yes	Yes

Proposed Project Element	Alternative 1 – No Project (No Build)	Alternative 2 – No Project (Necessary Infrastructure Improvements)	Alternative 3 – Landside Development Only (No Federal Action Alternative)	Alternative 4 – No Property Exchange with State	Alternative 5 – No Pacific Avenue Reconnection	Alternative 6 – Alternative Construction Phasing	Alternative 7 – Reduced-Density (~145,000 sf net new development)
Minor modification (grading) to existing topography	No	No	Yes	Yes	Yes	Yes	Yes
Provide new high-quality public open space throughout the project area	No	Yes (–)	Yes (–)	Yes	Yes	Yes	Yes
Provide security improvements, including through use of lighting, security cameras, and architectural and landscape design that enhances visibility, and provision of on-site security	No	No	Yes	Yes	Yes	Yes	Yes
Relocation of Police Pier Sub-station within the project site	No	No	Yes	Yes	Yes	Yes	Yes
Improvements to adjacent roadways (including reslurry and restriping of roadways adjacent to the project site)	No	Yes (–)	Yes	Yes	Yes (–)	Yes	Yes
Relocation of service and loading areas	No	No	Yes	Yes	Yes	Yes	Yes
Tidelands property exchange of approximately 86,000 square feet of Tidelands on Mole D for Basin 3, which is currently designed as Uplands (exchange is subject to approval by the CSLC)	No	No	Yes	No	Yes	Yes	Yes

Notes:
The minus sign (-) denotes elements that would be partially implemented or implemented to a lesser degree than the proposed project

Tables 4-2 below is a summary of the impacts from Alternative 1 through Alternative 7 as compared to the impacts from proposed project. The impacts of each alternative are discussed in detail below. Details on the impacts of the proposed project are presented in Chapter 3: Sections 3.1 through 3.14.

The seven alternatives are identified as follows:

- Alternative 1 – No Project – No Build
- Alternative 2 – No Project – Necessary Infrastructure Improvements
- Alternative 3 – Landside Development Only ('No Federal Action Alternative')
- Alternative 4 – No Property Exchange with State
- Alternative 5 – No Pacific Avenue Reconnection
- Alternative 6 – Alternative Construction Phasing
- Alternative 7 – Reduced-Density

Table 4-2: Summary of Impacts – Alternatives 1 through 7

Environmental Resource Area*	Proposed Project*	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Aesthetics								
Impact AES-1	L	N	L	L	L	L	L	L
Impact AES-2	L	N	L	L	L	L	L	L
Impact AES-3	L	N	L	L	L	L	L	L
Air Quality								
Impact AQ-1	S	L	S	S	S	S	S	S
Impact AQ-2	L	N	L	L	L	L	L	L
Impact AQ-3	L	N	L	L	L	L	L	L
Biological Resources								
Impact BIO-1	M	N	M	L	M	M	M	M
Impact BIO-2	L	N	L	N	L	L	L	L
Impact BIO-3	M	N	S	N	M	M	M	M
Impact BIO-4	M	N	M	L	M	M	M	M
Impact BIO-5	L	N	L	L	L	L	L	L
Cultural Resources								
Impact CUL-1	S	S	S	M	S	S	S	S
Impact CUL-2	M	N	M	M	M	M	M	M
Impact CUL-3	M	N	M	M	M	M	M	M
Geology and Soils								
Impact GEO-1	L	S	L	L	L	L	L	L
Impact GEO-2	L	N	L	L	L	L	L	L
Impact GEO-3	L	S	L	L	L	L	L	L
Impact GEO-4	L	N	L	L	L	L	L	L

Table 4-2: Summary of Impacts – Alternatives 1 through 7

Environmental Resource Area*	Proposed Project*	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Greenhouse Gases								
Impact GHG-1	L	L	L	L	L	L	L	L
Impact GHG-2	L	L	L	L	L	L	L	L
Hazards and Hazardous Materials								
Impact HAZ-1	L	N	L	L	L	L	L	L
Impact HAZ-2	L	N	L	L	L	L	L	L
Impact HAZ-3	L	N	L	L	L	L	L	L
Hydrology and Water Quality								
Impact HWQ-1	L	L	L	L	L	L	L	L
Impact HWQ-2	L	N	L	L	L	L	L	L
Impact HWQ-3	L	N	L	L	L	L	L	L
Impact HWQ-4	L	N	L	L	L	L	L	L
Impact HWQ-5	S	S	S	S	S	S	S	S
Land Use and Planning								
Impact LUP-1	L	N	L	L	L	L	L	L
Noise								
Impact NOI-1	L	N	L	L	L	L	L	L
Impact NOI-2	S	N	S	M	S	S	S	S
Impact NOI-3	S	N	L	S	S	L	S	S
Impact NOI-4	S	N	S	S	S	S	S	S
Public Services								
Impact PBS-1	L	N	L	L	L	L	L	L
Impact PBS-2	L	N	L	L	L	L	L	L
Recreation								
Impact REC-1	L	N	L	L	L	L	L	L
Impact REC-2	N	N	N	N	N	N	N	N
Traffic								
Impact TRA-1	M	N	L	M	M	M	M	M
Impact TRA-2	L	N	N	L	L	L	L	L
Impact TRA-3	M	N	N	N	M	M	M	M
Utilities								
Impact UTL-1	L	N	L	L	L	L	L	L
Impact UTL-2	L	N	L	L	L	L	L	L
Impact UTL-3	L	N	L	L	L	L	L	L
Impact UTL-4	L	N	L	L	L	L	L	L

Notes:
* The cumulative analysis results are similar to the proposed project-level impacts.
S = Significant and unavoidable impact
M = Significant but mitigable impact
L = Less than significant impact (not significant)
N = No impact

Table 4-3 below is a summary of the impacts from the Alternative 8 boat launch ramp options as compared to the impacts from proposed project. The impacts of each Alternative 8 option are discussed in detail below. Details on the impacts of the proposed project are presented in Chapter 3: Sections 3.1 through 3.14. The Alternative 8 options are as follows:

Alternative 8 – Alternative Small Craft Boat Ramp Facilities Within King Harbor

Mole A

- Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)
- Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)
- Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Mole C

- One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Mole D

- Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)
- Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Table 4-3: Summary of Impacts – Alternative 8 Options

Environmental Resource Area*	Proposed Project*	Mole A - Option 1	Mole A - Option 2	Mole A - Option 3	Mole C	Mole D – Option 1	Mole D – Option 2
Aesthetics							
Impact AES-1	L	L	L	L	L	L	L
Impact AES-2	L	L	L	L	L	L	L
Impact AES-3	L	L	L	L	L	L	L
Air Quality							
Impact AQ-1	S	S	S	S	S	S	S
Impact AQ-2	L	L	L	L	L	L	L
Impact AQ-3	L	L	L	L	L	L	L
Biological Resources							
Impact BIO-1	M	M	M	M	M	M	M
Impact BIO-2	L	L	L	L	L	L	L
Impact BIO-3	M	L	L	L	L	L	L
Impact BIO-4	M	M	M	M	M	M	M
Impact BIO-5	L	L	L	L	L	L	L

Table 4-3: Summary of Impacts – Alternative 8 Options

Environmental Resource Area*	Proposed Project*	Mole A - Option 1	Mole A - Option 2	Mole A - Option 3	Mole C	Mole D – Option 1	Mole D – Option 2
Cultural Resources							
Impact CUL-1	S	S	S	S	S	S	S
Impact CUL-2	M	M	M	M	M	M	M
Impact CUL-3	M	M	M	M	M	M	M
Geology and Soils							
Impact GEO-1	L	L	L	L	L	L	L
Impact GEO-2	L	L	L	L	L	L	L
Impact GEO-3	L	L	L	L	L	L	L
Impact GEO-4	L	L	L	L	L	L	L
Greenhouse Gases							
Impact GHG-1	L	L	L	L	L	L	L
Impact GHG-2	L	L	L	L	L	L	L
Hazards and Hazardous Materials							
Impact HAZ-1	L	L	L	L	L	L	L
Impact HAZ-2	L	L	L	L	L	L	L
Impact HAZ-3	L	L	L	L	L	L	L
Hydrology and Water Quality							
Impact HWQ-1	L	L	L	L	L	L	L
Impact HWQ-2	L	L	L	L	L	L	L
Impact HWQ-3	L	L	L	L	L	L	L
Impact HWQ-4	L	L	L	L	L	L	L
Impact HWQ-5	S	S	S	S	S	S	S
Land Use and Planning							
Impact LUP-1	L	L	L	L	L	L	L
Noise							
Impact NOI-1	L	L	L	L	L	L	L
Impact NOI-2	S	S	S	S	S	S	S
Impact NOI-3	S	S	S	S	S	S	S
Impact NOI-4	S	S	S	S	S	S	S
Public Services							
Impact PBS-1	L	L	L	L	L	L	L
Impact PBS-2	L	L	L	L	L	L	L
Recreation							
Impact REC-1	L	L	L	L	L	L	L
Impact REC-2	N	N	N	N	N	N	N
Traffic							
Impact TRA-1	M	M	M	M	M	M	M
Impact TRA-2	L	L	L	L	L	L	L
Impact TRA-3	M	L	L	L	L	M	M

Table 4-3: Summary of Impacts – Alternative 8 Options

Environmental Resource Area*	Proposed Project*	Mole A - Option 1	Mole A - Option 2	Mole A - Option 3	Mole C	Mole D – Option 1	Mole D – Option 2
Utilities							
Impact UTL-1	L	L	L	L	L	L	L
Impact UTL-2	L	L	L	L	L	L	L
Impact UTL-3	L	L	L	L	L	L	L
Impact UTL-4	L	L	L	L	L	L	L

Notes:
* The cumulative analysis results are similar to the proposed project-level impacts.
S = Significant and unavoidable impact
M = Significant but mitigable impact
L = Less than significant impact (not significant)
N = No impact

4.4.1 Alternative 1- No Project – No Build

4.4.1.1 Description of Alternative 1

Under this alternative, the project site would retain the existing physical conditions with future regional growth occurring, such as changes in area-wide traffic. The project site is currently developed with approximately 219,881 square feet of existing structures (not including the parking structures) which would remain. Further, under Alternative 1, no new infrastructure or other site improvements would occur.

Northern Portion of Project Site

There is approximately 48,399 square feet of existing development in the northern portion of the site (not including the parking structure) that includes restaurants, a marina office and other associated facilities, and accessory buildings at Seaside Lagoon (i.e., office and restrooms), which would be retained under Alternative 1. Other features that would remain in their current condition include the Seaside Lagoon, the Sportfishing Pier, a hand launch (non-motorized/hand carried boats only) and dinghy dock, splashwall on top of the revetment, boat hoists, and large expanses of asphalt parking lots. Other site features such as landscaping, open space, boardwalk and utilities would remain in the current condition. Additionally, the Plaza Parking Structure would not be modified.

As no improvements would occur, the stand-alone restaurants located throughout the northern portion of the site would remain in their current fair condition but likely these facilities do not meet the current building code requirements due to their age. Under this alternative, the Sportfishing Pier and its buildings, which are in poor to very poor condition, would continue to operate until they are deemed unsafe, at which point this area would need to be closed to the public. Seaside Lagoon under Alternative 1 would continue as under existing conditions (e.g., open to the general public during the summer for a fee and as long as water quality goals can be met). However, should the National Pollution Discharge Elimination System (NPDES) permit associated with discharge of water from the lagoon not be renewed, or the City not be able to meet water quality requirements of the permit, the lagoon would cease operation. Under Alternative 1, the boat hoists would continue to operate for a fee and as long as the hoists remain operable, as under current conditions.

Southern Portion of Project Site

There is approximately 185,422 square feet of existing development within the southern portion of the project site (not including the parking structure), including primarily restaurant, retail, and office uses. Because no improvements would be implemented in the southern portion of the project site under this alternative, the northern portion of the Pier Parking Structure, which is the portion of the parking structure in most need of repair, would be closed if the necessary substantial repairs cannot be made. Likewise, the timber portion of the Horseshoe Pier is in very poor condition and that portion of the pier, as well as the buildings, would be closed to the public in the future if the necessary structural repairs cannot be made. The buildings on the timber portion of the pier were built in the 1950s and 1960s and appear run down and in need of substantial rehabilitation; likely these facilities do not meet the current building code requirements due to their age. The International Boardwalk also does not likely meet current building code requirements. Additionally, the International Boardwalk is subject to inundation associated with wave overtopping of the bulkhead that occurs during extreme high tides. Under Alternative 1, the International Boardwalk would remain, but it may be closed in the future to address the increased risk of inundation that could occur with predicted future sea level rise.

Basin 3

Basin 3 is a water area occupied by the Redondo Beach Marina. Under Alternative 1, no improvements to the slips or gangways, and no repair of the bulkhead would occur. Additionally, no pedestrian/bicycle bridge would be constructed.

Additional Improvements

No additional improvements would occur under this project alternative. There would be no improvements to existing aging infrastructure, landscaping, or lighting. No pedestrian or bicycle path improvements and no site connectivity improvements (no Pacific Avenue Reconnection or completion of a missing portion of the California Coastal Trail) would be implemented. The existing police sub-station would remain on-site, and no private security or other new security would be established. Service and loading areas would remain the same as under current conditions. Additionally, no measures to address wave overtopping along the boardwalk east of Horseshoe Pier and Basin 3 would occur.

4.4.1.2 Alternative 1 Environmental Analysis

Aesthetics and Visual Resources

Impact AES-1: Alternative 1 would not have a substantial adverse effect on a designated local valued view.

Alternative 1 would not result in any change to the existing on-site conditions. There would be no construction activities or change in the existing view from designated local valued views. In addition, no change in existing conditions would result in the continued deteriorated visual character of the waterfront, which affects local valued views. While the proposed project's construction impacts were determined to be less than significant, this alternative would further reduce these impacts as there would be no construction equipment on-site. While the proposed project's operational impacts were determined to be less than significant, under this alternative, views from the Key Observation Views

would not change. For example, there would be no views of new project features (including market hall and the new pedestrian/bicycle bridge) from Key Observation View 3. However, the visual improvements that would occur under the proposed project, such as modifications to Seaside Lagoon (removal of the fencing and opening of the lagoon to the harbor) that enhance views at Key Observation View 6, creation of view corridors that provide a focused views of the water at Key Observation Views 4 and 5, and new views of the water available to motorists along the Pacific Avenue Reconnection and new main street would not occur. Alternative 1 would not have a substantial adverse effect on a designated local valued view for construction or operations. No impact would occur. This is reduced in comparison to the proposed project; however, visual enhancements that would occur under the proposed project would not occur under Alternative 1.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact AES-2: Alternative 1 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Alternative 1 would not result in significant changes to the existing on-site conditions. However, the International Boardwalk, buildings on the timber portion of the Horseshoe Pier, and buildings on the Sportfishing Pier would be closed in the future for public safety reasons. It is anticipated that the buildings would remain, but would be closed off with a wall or other barrier. The barrier would be given a design treatment, such as a mural or decorative coating pursuant to the City's Design review procedures, so that the visual quality of the site would not significantly deteriorate. However, as discussed in Section 3.1.2.1.4 of Section 3.1 Aesthetics and Visual Resources in the Draft EIR, the project site currently is a visual patchwork of architectural styles and a number of the structures are suffering from physical deterioration. Alternative 1 would not result in the visual quality benefits of the proposed project (including establishing of a high quality architectural design and creating a more visually harmonious style across the northern and southern portions of the site) as described under Impact AES-2 in Section 3.1.4.5 of Section 3.1 Aesthetics and Visual Resources in the Draft EIR.

Under Alternative 1 there would be no construction activities or a significant change in the visual quality of the site. However, no change in existing conditions would result in the continued deteriorated visual character of the waterfront. While the proposed project would result in some visual character degradation during construction, these impacts were determined to be less than significant. Alternative 1 would avoid this temporary construction related visual character degradation. No impact would occur. This is reduced in comparison to the proposed project; however, visual enhancements that would occur under the proposed project would not occur under Alternative 1.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact AES-3: Alternative 1 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Alternative 1 would avoid the proposed project's construction activities, and the light/glare sources associated with those activities described in Section 3.1.4 of Section 3.1 Aesthetics and Visual Resources in the Draft EIR, which were determined to be less than significant. While the proposed project's operational impacts under Impact AES -3 were determined to be less than significant, under Alternative 1 the amount of new lighting and glare sources would remain the same and there would be no additional lighting associated with the proposed Pacific Avenue Reconnection or Pedestrian Bridge. Alternative 1 would also reduce the total amount of new lighting on the site as compared to the proposed project; however, this alternative would not have the benefit of replacing existing unshielded light fixtures, which includes lighting along the elevated walkway (which is in the area of the Pacific Avenue Reconnection proposed under the project). No impact would occur. This is reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Air Quality

Impact AQ-1: Alternative 1 would not violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Alternative 1 would not result in any change to the existing on-site conditions. There would be no construction activities or change in the existing operational activities. Therefore, there would be no construction emissions and no change to the existing operational emissions. Alternative 1, would, therefore, avoid the proposed project's significant project level and cumulative impacts during construction associated with ROG, NOx, and CO, notwithstanding that the project's construction-related ROG emissions can be mitigated to a level that is less than significant. While the proposed project's operational impacts under Impact AQ-1 were determined to be less than significant, under Alternative 1 even with no change to the existing on-site condition, there would be changes in traffic based on the expected future growth of the surrounding area and City residents could travel further (longer vehicle miles traveled [VMT]) to seek retail, dining, and entertainment offerings in the South Bay, which could result in an increase in regional air quality emissions. This increase would not be the direct result of the implementation of Alternative 1, but could be considered a secondary or indirect impact of Alternative 1. That secondary/indirect impact would likely be less than significant with respect to violating or contributing to existing air quality violations. This is similar but reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant

Impact AQ-2: Alternative 1 would not expose sensitive receptors to substantial pollutant concentrations.

Alternative 1 would not result in any change to the existing on-site conditions. There would be no construction activities or change in the existing operational activities. Therefore, there would be no exposure of sensitive receptors to substantial pollutant concentrations. Although the local trip generation would not increase under Alternative 1 and there would be no construction and operational emissions directly attributable to Alternative 1, there would be changes in traffic based on the expected future growth of the surrounding area and City residents may travel further (i.e., increase in VMT) to seek retail, dining, and entertainment offerings in the South Bay. This could result in an increase in regional air quality emissions that could expose sensitive receptors to air pollutants. This increase would not be the result of the implementation of Alternative 1 and, therefore, would not have an impact with respect to the air quality assessment for Alternative 1. As there is no change in existing pollutant emissions, under Alternative 1 there would be no impact with respect to the exposure of, or contributing to the expose of, sensitive receptors to substantial pollutant concentrations. This is reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact AQ-3: Alternative 1 would not create objectionable odors affecting a substantial number of people.

Alternative 1 would not result in any change to the existing on-site conditions. There would be no construction activities or change in the existing operational activities. Therefore, there would be no change to the any existing odor sources, either temporary or permanent. Although the creation of objectionable odors would be less under Alternative 1 than that of the proposed project, as there would be no construction or additional operational emissions, the proposed project's impacts under Impact AQ-3 were determined to be less than significant. Therefore, implementation of Alternative 1 would result in no impact with respect to odors affecting a substantial number of people. This is reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Biological Resources

Impact BIO-1: Alternative 1 would not have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Under Alternative 1 there would be no construction or change to the existing on-site conditions. The proposed project's construction activities would affect the least tern, (from interference in foraging during in-water construction activities). Although these effects were determined to be less than significant, Alternative 1 would result in no in-water construction activity thereby further reducing these temporary effects.

Similarly, the proposed project's construction activities would affect the broomtail grouper, although these effects were determined to be less than significant. Because Alternative 1 does not involve any in-water construction activities, it would further reduce these impacts in comparison to the proposed project.

The proposed project's construction activities were determined to have significant impacts to the California Grunion; however, after mitigation the impacts were determined to be less than significant. Alternative 1 would eliminate these impacts because it would not involve construction activity near the sandy beach of the Horseshoe Pier (i.e., Horseshoe Beach).

In-water construction (i.e., pile driving activities) associated with the proposed project could result in a Level B harassment of pinnipeds; however, with mitigation the impacts were determined to be less than significant. Alternative 1 would eliminate these impacts because it would not involve in-water construction.

The proposed project was determined to result in a net increase in surface coverage, which would reduce the amount of available open water foraging habitat for waterbirds. However, with mitigation the impacts were determined to be less than significant. Alternative 1 would eliminate these impacts because it would not involve removal of existing in-water structures or placement of new or replacement structures. However, Alternative 1 would not include the biological benefit the opening of Seaside Lagoon, which would provide new open water foraging habitat for waterbirds.

It is expected that sea lion numbers in the harbor will continue to rise. The proposed project was includes features that could provide new haul out locations (beach at Seaside Lagoon and the boat launch ramp and breakwater). While the proposed project's potential to impact pinnipeds was determined to be less than significant, Alternative 1 would result in no construction of new in-water structures or other activities that could increase potential for the public to come into greater contact with pinnipeds as compared to existing conditions. However, the proposed project includes a condition of approval to establish a marine mammal protection program to reduce the potential of undesirable

human-pinniped interactions; no program would be established under Alternative 1, and therefore, the benefits of establishing such a program would not occur.

Therefore, Alternative 1 would have no impacts, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380. Impacts would be reduced compared to the proposed project. However, benefits of establishing a marine mammal protection program to reduce the potential of undesirable human-pinniped interactions and the provision of new open water foraging habitat for waterbirds by opening Seaside Lagoon would not occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact BIO-2: Alternative 1 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Under Alternative 1 there would be no construction or change to the existing on-site conditions. The proposed project's construction activities would affect the benthic community, although these effects were determined to be less than significant. Because Alternative 1 does not involve any in-water construction activities, it would further reduce these impacts in comparison to the proposed project.

Similarly, Alternative 1 would avoid impacts to Essential Fish Habitat (EFH). While the proposed project's construction and operation impacts to either coastal pelagic or groundfish species (associated with EFH) are expected to be less than significant, Alternative 1 would result in no in-water construction activity or increase in surface coverage thereby reducing these effects compared to the project. However, Alternative 1 would not have the benefits of the proposed project, which includes the creation of rocky subtidal habitat that would benefit groundfish species and could enhance ecological function within King Harbor.

Therefore, Alternative 1 would have no impacts on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS. Impacts would be reduced compared to the proposed project. However, no new rocky subtidal habitat would be created.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact BIO-3: Alternative 1 would not have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Under Alternative 1 there would be no construction or change to the existing on-site conditions. This alternative would avoid construction-related (temporary) impacts to federally protected waters. Temporary impacts avoided under Alternative 1 would include effects on aquatic vegetation and benthic communities through direct removal/covering or indirect loss or disturbance due to increased turbidity during construction activities. The proposed project's operational activities were determined to have significant impacts relative to fills in jurisdictional waters if the USACE determines that Seaside Lagoon is jurisdictional; however, after mitigation the impacts were determined to be less than significant. Alternative 1 would eliminate this impact as Alternative 1 would not involve the proposed project elements (e.g., modifications to Seaside Lagoon and the small craft boat launch ramp and breakwater) that result in the filling of jurisdictional harbor waters and permanent alteration of habitat. Therefore, no substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means would occur under Alternative 1. Impacts would be less than the proposed project; however, the benefits of new marine habitat that would established by the opening of Seaside Lagoon would not occur under Alternative 1.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact BIO-4: Alternative 1 would not 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.

Under Alternative 1 there would be no construction or change to the existing on-site conditions. Due to the lack of eelgrass (which can act as nursery habitat) or other nursery habitat in the project area, there would be no impact to nursery sites. In regards to fish migration, there are only a few species in Southern California with true migrations. At the project site, there is the potential for California grunion spawning. The proposed project's construction activities were determined to have significant impacts to the California Grunion; however, after mitigation the impacts were determined to be less than significant. Alternative 1 would eliminate these impacts because it would not involve construction activity near the sandy beach of the Horseshoe Pier (i.e., Horseshoe Beach).

Although the operation of in-water project elements (e.g., small craft boat launch ramp and breakwater, opening of Seaside Lagoon to the harbor, piles for pedestrian bridge) associated with the proposed project would not interfere substantially with the movement

of migratory birds, fish, mammals, or other species, and not impede the use of a native wildlife nursery, under Alternative 1 the impacts would be even less than that of the proposed project, as there would be no in-water alterations.

Therefore, Alternative 1 would have no impacts or interfere substantially with the movement of migratory birds, fish, mammals, or other species, and not impede the use of a native wildlife nursery. Impacts would be less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact BIO-5: Alternative 1 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Under Alternative 1 there would be no construction or change in the existing on-site conditions. The proposed project's construction activities and operation were determined to have no conflict with any local policies or ordinances protecting biological resources; therefore, impacts are less than significant. Because Alternative 1 does not involve any construction and no changes to operation, it would further reduce these impacts in comparison to the proposed project. Therefore, Alternative 1 would have no impacts related to conflicts with local policies or ordinances protecting biological resources. Impacts would be less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Cultural Resources

Impact CUL-1: Alternative 1 would cause a substantial adverse change in the significance of a historical resource.

Under Alternative 1, there would be no construction or change in the existing on-site conditions. Although this alternative would not result in the demolition of historic structures (i.e., Sportfishing Pier, Tony's On The Pier and companion building, and the Redondo Beach Pier Complex), these structures would continue to deteriorate. Further, the Sportfishing Pier and timber portion of the Horseshoe Pier may be closed in the future due to safety concerns, which would also result in closure of the buildings located on top. This continued deterioration and possible closure would be the result of the implementation of Alternative 1 and therefore, similar to under the proposed project, would be an adverse change in the significance of a historical resource.

Mitigation Measures

No mitigation is applied under Alternative 1 because no new development under this scenario is proposed.

Residual Impacts

A significant and unavoidable impact could occur.

Impact CUL-2: Alternative 1 would not cause a substantial adverse change in the significance of an unknown archaeological resource.

Under Alternative 1, there would be no construction or change in the existing on-site conditions. This alternative would avoid significant construction-related impacts (e.g., grading and excavation) to unknown archaeological resources. While the proposed project's construction impacts to unknown archaeological resources were determined to be less than significant with mitigation, Alternative 1 would result in no construction activity thereby reducing these effects. Therefore, Alternative 1 would reduce the proposed project's impact associated with disturbing unknown archaeological resources and no impact under this alternative would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact CUL-3: Alternative 1 would not directly or indirectly destroy an unknown paleontological resource.

Under Alternative 1, there would be no construction or change in the existing on-site conditions. This alternative would avoid significant construction-related impacts (e.g., grading and excavation) to unknown paleontological resources. While the proposed project's construction impacts to unknown paleontological resources were determined to be less than significant with mitigation, Alternative 1 would result in no construction activity thereby reducing these effects. Therefore, Alternative 1 would reduce the proposed project's significant impact associated with encountering unknown paleontological resources and no direct or indirect impacts under this alternative would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Geology and Soils

Impact GEO-1: Alternative 1 would expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

The project site, as is most of Southern California, is a seismically active region. Given that all of Southern California is subject to seismic events and associated hazards, the risk to populations at the project site is not considered to be more than the rest of the surrounding area.

The existing buildings on the project site were primarily built between the 1950s and 1980s. Although various building improvements have occurred over the years, these buildings were not constructed to the current and stricter California Building Code (CBC) standards. Alternative 1 would not have the benefit of new construction that complies with the current building code, as would occur under the proposed project, which would offer an improvement in safety related to seismic hazards in comparison to the existing conditions. Instead, under this alternative the older non-compliant buildings/structures throughout the project site would remain. In addition, the timber portion of the Horseshoe Pier was built in 1928 and is in need of constant repair to continue its use, including the use of the buildings on that portion of the pier deck. The Sportfishing Pier and its buildings are also in poor condition and would continue in their existing conditions until they must be closed due to safety. Therefore, although there would be no construction or change in the existing on-site conditions under Alternative 1, the risks associated with the adverse effects involving rupture of a known earthquake fault would continue while the existing site conditions deteriorate. This would expose the existing people and structures associated with the project site to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure, and the impact is significant. This impact is greater than the proposed project.

Mitigation Measures

No mitigation is applied under Alternative 1 because no new development under this scenario is proposed.

Residual Impacts

Although no changes in construction and operation of new development would occur under Alternative 1, the older non-compliant buildings/structures throughout the project site would not be replaced with new facilities that comply with current applicable buildings codes as would occur under the proposed project. A significant and unavoidable condition exists and would continue.

Impact GEO-2: Alternative 1 would not result in substantial soil erosion or the loss of topsoil.

Although ground-disturbing activities associated with the proposed project could expose surficial soils to wind and water erosion and sedimentation, the project's construction activities would be required to comply with existing regulatory requirements (such as the implementation of best management practices (BMPs) and other erosion and sedimentation control measures) that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Alternative 1 would result in no construction activity (no ground-disturbing activities, such as demolition, excavation, trenching, grading, and landscaping) thereby reducing these effects. Therefore, Alternative 1 would not result in an impact to soil erosion or loss of topsoil.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact GEO-3: Alternative 1 would result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project

As the majority of the project site is located in an area mapped with liquefiable soil, there is potential for seismic-related (earthquake-induced) liquefaction at the project site, which could lead to ground settlement and lateral spreading. Because the majority of the project site is located in an area mapped with liquefiable soil, there is potential for seismic-related (earthquake-induced) liquefaction at the project site, which could lead to ground settlement and lateral spreading. The seismic settlement in unsaturated dry soil is considered minimal and settlement negligible since the groundwater level at the project site is high. The project site has previously been developed and existing on-site soils consist of artificial fill and corrosive soils could occur. Existing buildings/structures at the project site are already subject to risk of liquefaction/ground settlement/lateral spreading, subsidence, corrosiveness and unstable soils. The proposed project would replace these older non-compliant buildings/structures with new facilities, which comply with applicable design standards and current applicable building codes and would provide safety improvements in comparison to the existing conditions. Under the proposed project, impacts related to risk of liquefaction/ground settlement/lateral spreading, subsidence, corrosiveness and unstable soils would, therefore, be less than significant.

As discussed under Impact GEO-1, Alternative 1 would maintain the existing buildings/structures in their current state, and this alternative would not have the proposed project's benefit of replacing the non-compliant buildings/structures with those in compliance with the most up-to-date building code requirements of the CBC applicable at the time of development, which would provide safety improvements in comparison to the existing conditions; therefore, Alternative 1 would have a significant impact. This impact is greater than the proposed project.

Mitigation Measures

No mitigation is applied under Alternative 1 because no new development under this scenario is proposed.

Residual Impacts

Although no changes in construction and operation of new development would occur under Alternative 1, the older non-compliant buildings/structures throughout the project site would not be replaced with new facilities that comply with current applicable buildings codes as would occur under the proposed project. A significant and unavoidable condition exists and would continue.

Impact GEO-4: Alternative 1 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

The existing on-site geologic deposits and artificial fill consists mostly of sand/silty sand; therefore, the soils at the project site would not likely be expansive. With subsurface soil sampling, laboratory analysis of samples collected, an evaluation of the laboratory testing results by a geotechnical engineer, and resulting recommendations would be incorporated into the project's final design plans, the mass grading associated with the proposed project is expected to have a less than significant impact. Under Alternative 1, no mass grading or construction would occur throughout the project site; thereby reducing the effects associated with the project. Therefore, Alternative 1 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC would remain the same when compared to the existing conditions, and no impact would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 1 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Alternative 1 would not result in any change to the existing on-site conditions. Therefore, there would be no construction emissions and no change to the existing operational emissions, so GHG emissions would not change. As described in greater detail in Section 3.13 Traffic and Transportation in the Draft EIR, while there would be changes in traffic based on the expected future growth of the surrounding area, this increase would not be the result of Alternative 1. As such, Alternative 1 would have no direct impact related to GHG emissions. However, Alternative 1 would not have the proposed project's benefit of replacing older non-compliant structures with those in compliance with the most up-to-date energy efficiency and water conservation requirements. Further, the benefit of the proposed project to provide enhanced

recreational and retail, restaurant and entertainment opportunities in closer proximity to the local residents would not be realized, and the increase in VMT associated with those residents having to go elsewhere for these services could result in greater VMT and an increase in GHG emissions. Such potential secondary/indirect impacts associated with Alternative 1 are anticipated to be less than significant. This is similar but reduced in comparison to the proposed project. Although, benefits of the proposed project to reduce VMT and comply with current energy efficiency and water conservation requirements would not occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 1 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The proposed project would be designed to comply with the California Green Building Standards Code (CALGreen Code) to ensure that the new on-site developments would use resources (energy, water, etc.) efficiently and reduce pollution and waste. Therefore, the proposed project would be consistent with the Climate Change Scoping Plan (Scoping Plan) measures through incorporation of stricter building and appliance standards, which would further the goals of the Scoping Plan. The proposed project would also be consistent with Title 24 for energy and water conservation practices, and the design and construction practices of the proposed project would further the City's overall sustainability goals. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant. Alternative 1 would not result in any change to the existing on-site conditions. There would be no construction emissions and no change to the existing operational emissions. Therefore, as there would be no changes to the construction or operational activities, there are no activities to compare to the applicable plans, policies or regulations for reducing GHG emissions. However, the project site is in a transit priority area within the City and while there would be no changes to the existing conditions under Alternative 1, the alternative would not support the goals in the CARB Scoping Plan, SB 375 and the Redondo Beach Sustainable Development Strategy to provide localized retail services for the nearby residences, which reduces regional traffic. Alternative 1 also would not provide for new energy efficient buildings that would reduce pollution and waste, as with the proposed project. In summary, there would be no change in activities at the project site and while Alternative 1 would not conflict with existing policies, it would not as supportive of the plans and policies as the proposed project relative to reducing GHG emissions; however, the impacts of Alternative 1 are considered to be less than significant. This is similar but reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 1 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

While the construction and operation of the proposed project would not create a significant hazard to the public (including construction workers) or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, Alternative 1 would not include construction activities or new development. Therefore, Alternative 1 would reduce the effects associated with the proposed project and there would be no exposure to contaminated soils during construction. No impact would occur. This is less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact HAZ-2: Alternative 1 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

The project site includes a location that was identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Leaking Underground Storage Tank [LUST] site at the Redondo Beach Marina); however, the proposed project's impacts were determined to be less than significant. Alternative 1 would not change the existing on-site conditions or involve construction or changes in operation at the project site. Therefore, Alternative 1 would reduce the effects associated with the proposed project and no impact would occur. This is less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact HAZ-3: Alternative 1 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Construction of the proposed project would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Under Alternative 1, no construction would occur and operation would continue as under existing conditions; therefore, no changes relative to emergency responses or evacuation plans would occur, and there would be no impact. This is less than the proposed project.

However, the benefit of the proposed project to provide improved circulation at the project site with the Pacific Avenue Reconnection would not occur under Alternative 1. Instead, the existing constraints and limitations for emergency vehicle access along the service road in front of the International Boardwalk (behind Basin 3) would remain.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Hydrology and Water Quality

Impact HWQ-1: Alternative 1 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

As described in detail in Section 3.8 Hydrology and Water Quality in the Draft EIR, the proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality of groundwater, surface water and harbor water during construction and operation, and impacts are less than significant. Under Alternative 1, no construction activities would occur, including the proposed project's infrastructure improvements necessary to improve on-site water quality. In addition, under Alternative 1, the water quality in the Seaside Lagoon would not benefit from being modified as a small embayment directly connected to King Harbor as would occur under the proposed project, instead the lagoon would continue to be an enclosed non-tidal saltwater, sand-bottom swimming facility that uses chemically treated (chlorinated) water that must be discharged after being dechlorinated under an NPDES permit issued by the Los Angeles Regional Water Quality Control Board (LARWQCB) (Permit No. CA00064297 and Order No. R4-2010-0185). As detailed in Section 3.8 Hydrology and Water Quality in this Draft EIR, compliance with LARWQCB discharge regulations for the lagoon over than last 10 years has been difficult. Since the implementation of the lagoon's first NPDES Permit in 1999, the City has been fined $195,000 for water discharge violations. The vast majority of these violations were for the discharge of total suspended solids (TSS). After extensive examination by water quality experts and City Engineering staff, it was determined that there would be no cost effective way to treat or filter TSS in the high volume of water discharged by the lagoon. Over the years the City has been put in the position of either (1) closing the facility; (2) spending significant capital resources to rehabilitate the facility and implement a contemporary water delivery and filtration system to eliminate discharge into the Harbor;

or (3) working with the LARWQCB to modify the lagoon's NPDES Permit to allow for increased water discharge limits. In 2007, the City pursued the last option and successfully collaborated with the LARWQCB in the adoption of a Time Schedule Order (TSO) that significantly increased the lagoon's TSS limits in exchange for the completion of an extensive water quality study. The study concluded that all but one of the lagoon's problematic effluent categories could be managed through changes to operating procedures and testing methods, but that there was no cost effective way, given the facility's rudimentary water delivery system, to treat or filter the lagoon's TSS. It also concluded that, on average, 94 percent of the TSS in the lagoon's water discharge was in the ocean water before it entered the facility and the quality of the lagoon's water discharge was effectively at the mercy of the ocean's natural conditions. Over the years the LARWQCB agreed to extend the lagoon's TSO providing a continued relief of the TSS permit limits. In recent years, the City has been successful in protecting itself from increasingly restrictive NPDES Permit limitations and reducing the lagoon's water discharge liability. Part of this success is attributed to the City's active evaluation of the facility's water quality monitoring results and, in collaboration with LARWQCB staff, implementing modifications to water testing methodologies that have improved testing accuracy. The lagoon's water quality data for the 2011, 2012, and 2013 operating seasons has improved significantly in these areas and last March, the City Council directed staff to continue to operate the lagoon for the 2014 and 2015 season. To operate the lagoon beyond the 2015 season, a renewal application was filed with the LARWQCB in March 2015, and is currently under review. Given tightening water quality restrictions, it is unknown based on the renewal application filed by the City whether another permit will be granted. Submitting a renewal application gives the City maximum flexibility as it decides whether to operate the lagoon beyond the 2015 swim season. Should the NPDES permit not be renewed, or the City not be able to meet water quality requirements of the permit, the lagoon would cease operation. Therefore, no violation of water quality standards would occur.

As no construction or change in operation would occur under Alternative 1, there would be no change in existing conditions relative to hydrology and water quality, and the impacts would be less than significant. Impacts associated with the proposed project are also less than significant. However, under Alternative 1, no improvements to the stormwater drainage system would occur and no elimination of the use of chlorination associated with Seaside Lagoon would occur.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 1 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

There are no streams or rivers located on the project site; hence, that aspect of the threshold of significance would be unaffected. With adherence to regulations, including

implementation of BMPs, the proposed project would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site; therefore, impacts during construction-related activities are considered less than significant. With implementation of the proposed project, approximately 64 percent of the site would be impervious, which would represent a decrease in imperviousness over existing conditions. In addition, to reducing runoff from the site, the proposed drainage systems would be designed to include BMPs in accordance with a Low Impact Development (LID) implementation plan prepared in compliance with the City's LID Ordinance, which sets forth standards to treat both the quantity and quality of flow. As Alternative 1 would not involve any changes to the existing site, drainage and surface runoff would remain the same as under existing conditions. Therefore, Alternative 1 would not alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. No impact would occur, which is less than the proposed project. However, Alternative 1 would not result in the on-site drainage improvements associated with the proposed project's implementation of BMPs including on-site stormwater capture and the benefit from the decrease in imperviousness (increase in pervious) surfaces.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact HWQ-3: Alternative 1 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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.

As described in Impact HWQ-2 above, with adherence to regulations, including implementation of BMPs, the proposed project would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site; therefore, impacts during construction-related activities are considered less than significant. Implementation of the proposed project would result in a decrease in imperviousness over existing conditions and runoff from the site would be reduced with a new drainage systems designed to include BMPs in accordance with LID implementation plan. Therefore, the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 and impacts would be less than significant. As Alternative 1 would not involve any changes to the existing site, runoff would remain the same as under existing conditions. Therefore, Alternative 1 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of

polluted runoff that would 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. No impact would occur. This impact is less than the proposed project. However, Alternative 1 would not result in the on-site stormwater drainage improvements associated with the proposed project's implementation of BMPs including on-site stormwater capture and increase of pervious surfaces.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact HWQ-4: Alternative 1 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMs) maps for the project site, the waterside portion of the project site is within Zones AE, VE, and X. The proposed project includes building a new restaurant located on Pad 2 of the Horseshoe Pier and possibly a replacement building on the Sportfishing Pier, if the pier is rebuilt, within a flood zone. Other structures that would be constructed within the 100-year flood zone consist of the pedestrian bridge and small craft boat launch ramp and associated breakwater, and the wooden portion of the Horseshoe Pier would be replaced, and the Sportfishing Pier would be demolished and possibly replaced. None of the structures would impede or redirect flood flows. Therefore, impacts associated with the proposed project would be less than significant. Under Alternative 1, no new structures would be constructed under Alternative 1 and therefore, no impact would occur. This impact is less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact HWQ-5: Alternative 1 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

Alternative 1, as with the proposed project, is an existing site that is an on- or near-shore development in Southern California, which involves some measure of risk of impacts from a tsunami or seiche. Although rare, should a large tsunami or seiche occur, it would be expected to cause some amount of damage, possibly injure, and pose a risk of life to most on or near-shore locations. As a result, this is considered a normal condition for most on- and near-shore locations in Southern California, which includes the project site. The existing service and access road along the International Boardwalk becomes inundated by wave overtopping during extreme high tides under existing conditions,

which could increase under future sea level rise conditions. Alternative 1 would not involve any changes to the existing site that would increase potential exposure of people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise because no changes would occur. However, under Alternative 1, there would be no benefit as with the proposed project to eliminate the structures within the area that is subject to inundation during extreme high tides (International Boardwalk), nor would there be a raising of the site elevation, implementation of a recurved splash wall, or establishment of a sea level rise adaptation plan to address the increased risk of inundation that could occur with predicted future sea level rise, or a tsunami/seiche awareness notification program. Therefore, the project site would continue to be subject to the potential exposure of buildings and people due to risk and damage associated with a tsunami or seiche, as well as potential impacts from sea level rise. The risk would be significant and unavoidable.

Mitigation Measures

No mitigation is applied under Alternative 1 because no new development under this scenario is proposed.

Residual Impacts

Although no changes in construction and operation of new development would occur under Alternative 1, inundation and future increase in inundation that would occur under predicted future sea level rise conditions exists. Further, risks associated with tsunami/seiche exist and would continue. A significant and unavoidable condition exists and would continue.

Land Use and Planning

Impact LUP-1: Alternative 1 would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

The proposed project is consistent with the land use designations and zoning classifications for the project site; therefore, the impact would be less than significant. Under Alternative 1, the existing physical conditions of the site, including existing buildings and land uses, would remain. Therefore, Alternative 1 would not conflict with any applicable land use plan, policy, or regulation and no impact would occur. This impact is less than the proposed project. However, some goals and objectives included in applicable plans that the proposed project would meet would not be implemented under Alternative 1, such as improving vehicular and non-vehicular access, allowing for development in accordance with prescribed intensity limitations, providing a boat launch ramp, and encouraging a reconfiguration of development to create a unified seaside "village."

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Noise

Impact NOI-1: Alternative 1 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

The construction activities for the proposed project are not anticipated to violate the Redondo Beach Municipal Code (RBMC). Noise levels from the proposed commercial and recreational uses would be typical of commercial developments and proposed noise source are expected to not differ substantially from existing noise sources. In particular, the nature, location and orientation of uses proposed in the central and southern portions of the site would be comparable to those of existing conditions, with marina uses continuing within Basin 3, a parking structure occupying the southeastern portion of the site, and commercial/office uses occurring in the southeastern portion of the site. However, the proposed service and loading areas within the project site have been located throughout the site and are removed from noise sensitive receptors, shielded by intervening buildings and/or partially enclosed. Based on the above, operational noise from the proposed project would not expose sensitive receptors to a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; therefore, impacts would be less than significant impact. Under Alternative 1, no construction would occur, and the existing physical conditions of the site, including existing buildings, would remain. Operational noise associated with Alternative 1 would be the same as existing conditions, and subject to the existing requirements of the Noise Ordinance. Existing service and loading would continue unshielded at Torrance Circle and along the International Boardwalk; therefore, Alternative 1 would not have the benefit of the shielded service and loading areas as proposed under the project. Noise levels in excess of standards established in the local general plan or noise ordinance would not be expected under Alternative 1. As there would be no change in the existing activities at the project site, no impact would occur. This impact is less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact NOI-2 Alternative 1 would not expose persons to or the generation of excessive groundborne vibration or groundborne noise levels.

Construction equipment associated with the proposed project, such as dozers and plate compactors, would generate vibrations that could result in groundborne noise or vibration that may affect nearby structures and sensitive receptors. Vibration from construction activities associated with the proposed project would result in significant impacts relative to potential structural damage when pile drivers (impact type) operate within 55 feet of non-engineered timber and masonry buildings or within 30 feet of structures or buildings constructed of reinforced-concrete, steel, or timber. Additionally, short-term significant

impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors. With pile-driving mitigation, impacts associated with the construction of the proposed project would be less than significant. Operation of the proposed project would not perceptibly increase groundborne vibration or groundborne noise due to the proposed nature of the project and impacts would be less than significant. As no construction activity would occur under this alternative, no excessive groundborne vibration or groundborne noise impacts would occur. There would be no impact. This impact is less than the proposed project. Alternative 1 would reduce the proposed project's significant construction impacts associated with excessive groundborne vibration.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact NOI-3: Alternative 1 would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing.

Construction impacts on ambient noise levels would be short-term and would not result in permanent increases in ambient noise levels. As described in the analysis of Impact NOI-1 above, implementation of the project would not result in a notable change in ambient noise levels because the noise levels at existing conditions would be similar to the proposed project. However, with the Pacific Avenue Reconnection, there is the potential for increased roadway noise level to result from project-related operational traffic through the project site. The project-related increases in daily traffic at Torrance Circle/Boulevard between project site and Catalina Avenue would exceed the significance threshold and would, therefore, be a significant noise impact. No mitigation is available to reduce this impact. Under Alternative 1 the existing physical conditions of the site, including existing buildings, would remain. The existing types of land uses within the project site would continue into the future, consequently, no notable change in existing ambient noise levels in the project vicinity would occur under Alternative 1, and there would be no impact. Although roadway noise levels in the project vicinity due to changes in traffic based on the expected future growth of the surrounding area, which is independent of the project, a doubling of traffic volumes would be needed to effect a perceptible change (i.e., a 3 dB increase) in roadway noise levels. Such an increase in traffic volumes is not projected to occur. Alternative 1 would reduce the project's significant impacts associated with operational roadway noise.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact NOI-4: Alternative 1 would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels.

Although construction activities associated with the proposed project would normally occur during the week in daytime hours, construction (temporary and periodic) noise impacts to sensitive receptors, even with mitigation, would be significant and unavoidable. No construction activities would occur under Alternative 1, consequently there would not be a temporary or periodic increase in ambient noise levels in the project vicinity and no impact would occur. Alternative 1 would reduce the proposed project's significant construction impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Public Services

Impact PBS-1: Alternative 1 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services

The proposed project would eliminate non-compliant buildings/structures with those that meet all applicable current state and local codes and ordinances related to fire protection, including the inclusion of fire suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers) and includes site access enhancements (including the Pacific Avenue Reconnection) that would improve emergency access and protection services. Although the proposed project includes an increase in square footage, based on existing staffing and facilities that would service the project site, no additional firefighting personnel or equipment to respond to fire or health emergencies at the project site than is currently being provided would be required (in other words, the Redondo Beach Fire Department would be able to accommodate proposed project without the provision of additional staffing and facilities), as such, the impact would be less than significant. Under Alternative 1, no construction activities or change in operations would occur. The older non-compliant buildings/structures throughout the project site would continue to remain on-site, and would not result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services. Therefore, when compared to the existing conditions, no impact would occur. This is reduced in comparison to the proposed project.

The existing fire hydrants and hose stations (permanent on-site hoses that are connected by pipe to a water source) that provide water access for firefighting throughout the existing site, including the Horseshoe Pier and other areas not accessible by vehicle, would continue. Due to their age, only some of the existing buildings and newer portions of the pier structure in the project area have sprinkler systems. As no new construction

would occur under Alternative 1, while no impact would occur, the benefit of the proposed project to eliminate non-compliant buildings/structures with those that meet all applicable current state and local codes and ordinances related to fire protection, including the inclusion of fire suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers) would not occur. Further, the site access enhancements (including the Pacific Avenue Reconnection) that would improve emergency access and protection services under the proposed project would not occur under Alternative 1.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact PBS-2: Alternative 1 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services

A goal of the proposed project is to revitalize the project site, which would likely result in increased visitors to the harbor area, which, in turn, would generate the need for police patrol, traffic control, and other associated services. To deter crime, the proposed project incorporates strategies for Crime Prevention Through Environmental Design (CPTED) aimed at deterring criminal behavior by designing the physical environment in ways that reduce identifiable crime risks. In addition, the proposed project includes the replacement of the police sub-station on-site and the addition of private security that would serve the commercial development and hotel and would contribute to on-site safety on an around-the-clock basis. The proposed project also includes replacement of the service road in front of the International Boardwalk with a two lane (one lane in each direction) through street, the Pacific Avenue Reconnection, which would greatly improve emergency access and protection service throughout the project site. Therefore, the proposed project would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant. Under Alternative 1, no construction or change in operations would occur. The Pier Police Sub-Station would continue at its current location within the project site, with police officers expected to provide a similar on-site coverage as the present and there would be no need to construct new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement) in order to maintain adequate services and, as such, no impact would occur. However, the site access enhancements (including the Pacific Avenue Reconnection) that would improve emergency access and protection services under the proposed project would not occur under Alternative 1.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Recreation

Impact REC-1: Alternative 1 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

During the approximately 27 to 30 months (2.25 to 2.5 years) construction period for the proposed project, access to existing recreational facilities within the project site would not be available as the entire project site would be closed to the public, with the exception of some limited access to facilities on, and near, the Horseshoe Pier (i.e., access to Kincaid's restaurant at the northern segment of the Horseshoe Pier and the Monstad Pier). As a result there could be a temporary increase in the use of other existing recreational facilities during proposed project construction, to the extent users seek alternative facilities/locations for such recreation. However, the recreational users would not all visit the same alternate location, as the project site is within a region that has a wide variety of recreational opportunities available, both within a short distance of the project site and throughout Los Angeles County and the whole Southern California region. Therefore, substantial physical deterioration of recreational facility would not occur or be accelerated and impacts from construction of the project would be less than significant.

Implementation of the proposed project would include various new or enhanced recreational amenities such as modified Seaside Lagoon, new small craft boat launch ramp, improved site connectivity with new pedestrian and bicycle paths, and high quality open space (e.g., waterfront promenade, public seating, landscaped areas, gathering spaces, and pathways). This would result in enhanced recreational facilities available to the community and visitors. The proposed project would not result in any residential development or generate any additional population; therefore, no increased demand for recreational facilities associated with population growth would occur. It is anticipated that the proposed project could increase the number of local and regional visitors to project site, and therefore, the use of recreational facilities within and near the project site could increase. However, the enhanced and expanded recreational features, including pedestrian and bicycle pathways, would provide a variety of enhanced recreational opportunities, with newly constructed or renovated facilities throughout the project site, which, in turn, would help disperse visitors. In addition, such new activity at the project site would provide long-term funding for enhanced operation and maintenance of the recreational facilities at the project site. Operation of the proposed project would help with the local and regional demand for recreation and park services by improving and expanding existing recreational resources; thereby providing a benefit to the local community and region as a whole. Therefore, the proposed project would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As such, impacts would be less than significant.

Under Alternative 1, no construction or change in operations would occur and existing recreational facilities within the project site would continue to be available. Therefore, baseline conditions would not change and no impact would occur. However, facilities such as the Seaside Lagoon (e.g., not open year-round) and boat hoist (e.g., use by fee

and as long as operational) would continue to have limited use. Further, should the NPDES permit not be renewed, or the City not be able to meet water quality requirements of the permit, the Seaside Lagoon would close and no longer be available for public recreational purposes. This could increase use of other recreational facilities, such as pools and beaches; however, it would not be expected to the degree that substantial physical deterioration of other facilities would occur. Other improvements, such as enhancements to bike paths and pedestrian paths and public open space and implementation of a boat launch ramp and pedestrian/bicycle bridge would not occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact REC-2: Alternative 1 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the project.

The proposed project would not include construction of any parks or recreational facilities beyond those already described under the proposed project (i.e., modified Seaside Lagoon, new boat launch ramp, new pedestrian and bicycle paths, and enhanced high-quality public open space). The construction-related impacts associated with these recreational facilities has been evaluated in context with other physical effects on the environment in applicable sections of this Draft EIR, including Section 3.1 Aesthetics and Visual Resources, Section 3.2 Air Quality; Section 3.4 Cultural Resources; Section 3.7 Hazards and Hazardous Materials; Section 3.8 Hydrology and Water Quality; Section 3.10 Noise; and, Section 3.13 Traffic and Transportation. No construction or expansion of recreational facilities not already addressed as part of the proposed project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary would occur as part of, or because of, the proposed project) and thus no impacts would occur. In addition, the proposed project would not involve the operation of recreational facilities not already addressed as part of the proposed project (e.g., no construction or expansion of recreational facilities outside the project boundary would occur because of the proposed project that would involve operation of those facilities) and thus no impacts would occur. Under Alternative 1, existing recreational facilities within the project site would continue to be available and no new recreational facilities would be required to be constructed or expanded that might have an adverse physical effect on the environment. As such, no impact would occur as with the proposed project. However, as described under Impact REC-2 above, the benefits of the proposed project to enhance active and passive quality public open space and recreation would also not occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Traffic and Transportation

Impact TRA-1: Alternative 1 would not exceed the applicable significance thresholds.

Under Alternative 1, there would be no new development and existing uses would remain. As such, there would be no construction traffic and no change in existing traffic generation at the project site. Future changes, if any, in local traffic and transportation would be attributable to regional growth. No impact would occur. This impact is reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact TRA-2: Alternative 1 would not conflict with an applicable congestion management program.

Under Alternative 1, there would be no new development and existing uses would remain. As such, there would be no construction traffic and no change in existing traffic generation at the project site. Future changes, if any, in local traffic and transportation would be attributable to regional growth. No impact would occur. This impact is reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact TRA-3: Alternative 1 would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Under Alternative 1, there would be no new development and existing uses would remain. As such, there would be no changes to the existing circulation system, both on land and within the marina, and the alternative would not substantially increase traffic hazards. No impact would occur. This impact is reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Utilities

Impact UTL-1: Alternative 1 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

The proposed project would result in an increase in wastewater generation; however, the project includes the use of water conserving plumbing fixtures and fittings, as well as upgrades to the sewer infrastructure (including sewer lines and sewer lift stations). With the on-site improvements and lift station upgrades, and the capacity at the JWPCP, adequate capacity exists under the proposed project. Therefore, the wastewater generated by the proposed project would not exceed the wastewater conveyance and treatment at the project site and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. The impact is less than significant. Under Alternative 1, no construction activities or change in operations would occur at the project site; therefore, the generation of wastewater would remain the same as baseline. Under Alternative 1, the International Boardwalk, the buildings on the timber portion of the Horseshoe Pier, and building on the Sportfishing Pier would remain, but they may be closed for public safety reasons in the future under Alternative 1. Closure of the International Boardwalk and pier buildings would result in a slight reduction in wastewater generation as compared to existing conditions. No impact would occur. This is reduced in comparison to the proposed project. However, Alternative 1 would not have the proposed project's benefit of replacing the non-compliant buildings/structures with those in compliance with the most up-to-date building code requirements, including installation of water conserving plumbing fixtures and fittings (e.g., low flow water fixtures and high-efficiency toilets and urinals).

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact UTL-2: Alternative 1 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

The water supply assessment prepared for the proposed project determined that the increase in water demand would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. As such, the proposed project would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements, and impacts would be less than significant. Under Alternative 1, no construction activities or change in operations would occur at the project site; therefore, the water demand would remain the same as baseline. Under Alternative 1, the International Boardwalk, the buildings on the timber portion of the Horseshoe Pier, and building on the Sportfishing Pier would remain, but they may be closed for public safety reasons in the future under Alternative 1.

Closure of the International Boardwalk and pier buildings would result in a slight reduction in water demand as compared to existing conditions. No impact would occur. This is reduced in comparison to the proposed project. However, Alternative 1 would not have the proposed project's benefit of replacing the non-compliant buildings/structures with those in compliance with the most up-to-date building code requirements, including installation of water conserving plumbing fixtures and fittings (e.g., low flow water fixtures and high-efficiency toilets and urinals) and use of drought tolerant landscaping.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact UTL-3: Alternative 1 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

Construction and operation of the proposed project would not exceed existing capacity of local landfills and the project would generate the amount of solid waste that would create a need for additional solid waste disposal facilities to adequately handle solid waste generated during construction or operations. Therefore, there would be no significant impact on the landfills within the region because of the proposed project. In addition, operation of the proposed project would comply with the existing waste diversion programs of the City, County, and Athens Services (the City's current contract provider for solid waste disposal). Therefore, the proposed project would comply with the established diversion requirements and there would be no conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. Impacts relative to adopted solid waste diversion programs and policies would be less than significant. Under Alternative 1, no construction activities would occur at the project site; therefore, no construction waste would be generated. Alternative 1 would not result in a change in operation beyond existing conditions, and therefore, operation at the existing site is expected to continue and generate the typical range of recyclable and non-recyclable waste that is currently generated on-site. Under Alternative 1, the International Boardwalk, the buildings on the timber portion of the Horseshoe Pier, and building on the Sportfishing Pier would remain, but they may be closed for public safety reasons in the future under Alternative 1. Closure of the International Boardwalk and pier buildings would result in a slight reduction in solid waste generation as compared to existing conditions. No impact would occur. This is reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact UTL-4: Alternative 1 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

There would be adequate electricity and natural gas supplies available to serve the development proposed under the project. Further, with the exception of on-site connections needed for the new buildings and structures, the proposed project would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore, implementation of the project would not exceed the capacity of electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. Under Alternative 1, no construction activities or change in operations would occur at the project site; therefore, the electricity and natural gas demand would remain the same as baseline and no impact would occur. Under Alternative 1, the International Boardwalk, the buildings on the timber portion of the Horseshoe Pier, and building on the Sportfishing Pier would remain, but they may be closed for public safety reasons in the future under Alternative 1. Closure of the International Boardwalk and pier buildings would result in a slight reduction in electricity and natural gas demand as compared to existing conditions. This is reduced in comparison to the proposed project. However, Alternative 1 would not have the proposed project's benefit of replacing the non-compliant buildings/structures with those in compliance with the most up-to-date building code requirements, including energy efficiency requirements.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

4.4.2 Alternative 2 – No Project – Necessary Infrastructure Improvements

4.4.2.1 Description of Alternative 2

Under Alternative 2, project components would include improvements reasonably expected to occur in the foreseeable future if the proposed project was not approved. Such improvements would respond to existing infrastructure and public safety needs. Replacement in kind of some existing development would occur, but the amount of square footage at the project site would remain 219,881 square feet (not including the parking structures) or less if some structures were removed and not replaced.

The following is a breakdown of the project elements by area within the project site that would be implemented under Alternative 2:

Northern Portion of Project Site

The existing landside buildings and surface parking lots would remain under Alternative 2, with the possible exception of buildings located at Seaside Lagoon. Seaside Lagoon

would be closed as a water feature, filled and converted to an upland park that would be open to the public year round and would include features such as an open turf area, play structure, benches, and walkways. The Sportfishing Pier would be retrofitted, if feasible, replaced with a new pier with the same footprint and size, or it would be removed altogether. Similarly, the existing structure on the pier would be either retrofitted, replaced with a building of the same square footage (2,704 square feet), height, and footprint, or removed if the pier is removed and not rebuilt. The site proposed for a small craft boat launch ramp (Joe's Crab Shack) would not be altered and no boat launch would be constructed.

Southern Portion of Project Site

Under Alternative 2, the Pier Parking Structure, which is in poor condition would be demolished and rebuilt at a similar size, height, and configuration. Replacement of the Pier Parking Structure would require removal of the Pier Plaza (approximately 70,000 square feet of building space located on top of the Pier Parking Structure) and other stores and restaurants that are within the structure (such as Quality Seafood and the Fun Factory). Those commercial and office uses would be replaced. The new buildings would have a similar size, height, and configuration. Additionally, with the replacement of the parking structure, the pedestrian and bicycle paths and linkages in that vicinity would be improved; specifically, the bicycle path would be reconfigured so it no longer passes through the parking structure. Additionally, the reconstruction of the Pier Parking Structure would require minor modifications to Torrance Circle to facilitate the new structure's access.

The timber portion of the Horseshoe Pier is also in poor condition and requires replacement. Under Alternative 2, the timber portion of the Horseshoe Pier and the buildings on that portion of the pier would be replaced at a similar size, height, and configuration.

The International Boardwalk and elevated walkway would be retained. Flooding of the access road fronting the International Boardwalk currently occurs during high tides. Under Alternative 2, the shops at the International Boardwalk may be closed in the future if the frequency of flooding increases with a predicted rise in sea levels. Should this occur, the building would be walled off, although the access road and elevated walkway would remain open to the public.

Basin 3

Basin 3 is currently occupied by the Redondo Beach Marina. Under Alternative 2, the existing approximately 61-vessel slips and gangways would be rehabilitated or reconstructed (similar in area and size), the bulkhead cap would be replaced, and any necessary minor repairs would be made to the bulkhead. No pedestrian/bicycle bridge would be constructed.

Additional Improvements

This alternative would implement upgrades to existing aging infrastructure, including construction of a new on-site stormwater drainage system in order to address stormwater quality requirements. Additionally, minor pedestrian boardwalk improvements would be implemented in areas where other infrastructure work occurs. The existing police sub-station would remain on-site, and no private security or other new security measures

would be established. Service and loading areas would remain the same as under current conditions.

4.4.2.2 Alternative 2 Environmental Analysis

Aesthetics and Visual Resources

Impact AES-1: Alternative 2 would not have a substantial adverse effect on a designated local valued view.

Under Alternative 2, although a majority of the existing physical conditions at the project site would remain the same, certain necessary infrastructure improvements would need to be implemented. Such improvements that could result in a change in the visual environment of the project site as seen from designated local valued views include the replacement of the timber portion of the Horseshoe Pier and demolition and reconstruction of the buildings on that portion of the pier; the retrofit, replacement, or removal of the Sportfishing Pier; demolition and replacement of buildings on Pier Plaza and the Pier Parking Structure; and conversion of Seaside Lagoon to an upland park.

Czuleger Park – Key Observation Views 1 through 3: Views from Key Observation Views 1 and 2 would not change during construction or operation. From Key Observation View 3, the majority of the necessary infrastructure improvements would not occur within visual range of Czuleger Park. It is possible that some cohgnstruction activities such as upgrades to the stormwater drainage system and improvements to the boardwalk around the water's edge could be visible in the distance; however, this would be temporary and limited due to distance. Given the distance, the construction activities would visually blend in to other visible features, such as the breakwaters, structures, and parked vehicles, and no adverse effect on views would occur. During operation, no necessary infrastructure improvements would be readily visible from the location, and thus no change in the locally designated valued view would occur. The impact would be less than significant. The impacts would also be less than significant under the proposed project; but Alternative 2 would have reduced impacts.

North Harbor Drive – Key Observation Views 4 and 5: Most of the necessary infrastructure improvements (include demolition and possible replacement of the Sportfishing Pier and replacement of Pier Plaza and Pier Parking Structure) would not be visible from Harbor Drive and thus would not affect views. Some construction equipment activities, including storm drain upgrades and conversion of Seaside Lagoon to an upland park may be visible from Harbor Drive. However, this would be limited and temporary and would not have an adverse effect on a locally designated view. No views of construction are expected from Key Observation View 5. During operation, the distant view available of Seaside Lagoon would be slightly altered as the chain link fence would be removed and additional landscaping would be provided in place of the lagoon area, which would be an improvement from existing conditions (e.g., no chain link fence). However, there would no longer be a narrow glimpse of the lagoon water (available when the lagoon is full). As the view of Seaside Lagoon is distant and fleeting from Harbor Drive, no adverse change in the locally designated valued view would occur. However, the visual improvements that would occur under the proposed project, such as the creation of view corridors that provide a focused views of the water at Key Observation Views 4 and 5 and new views of the water available to motorists along the Pacific Avenue Reconnection and new main street would not occur. Operation would not change

the locally designated valued view from Key Observation Views 4 or 5. The impacts would be less than significant. The impacts would also be less than significant under the proposed project; but Alternative 2 would have reduced impacts.

Proposed/New Main Street – Key Observation View 6: Views of Seaside Lagoon and the North Breakwater are visible from this location, but there are no views of the harbor water. Construction activities associated with conversion of Seaside Lagoon to an upland park, as well as other upgrades such as storm drain improvements, would be visible from Key Observation View 6. These activities would be limited and temporary and would not have an adverse effect on a locally designated valued view. During operation, the view of Seaside Lagoon would change from a view of chain link fence, landscaping, and the lagoon water (available when the lagoon is full) to a view of new landscaped park, which would be an improvement from existing conditions (e.g., no chain link fence). No view of the harbor water is currently available and this condition would not change under Alternative 2. Alternative 2 would not result in an adverse change in the locally designated valued view from Key Observation View 6. The impacts would be less than significant. The impacts would also be less than significant under the proposed project; but Alternative 2 would have reduced impacts.

Views from the Water – Key Observation View 7: Construction activities would be visible from the water. While some activities may be surrounded by construction fencing, taller equipment and activities occurring above the construction fence line such as demolition and reconstruction of Pier Plaza may be visible from the water. Additionally, construction activities on the Horseshoe and Sportfishing Piers would be visible from the water. While these activities would temporarily detract from the scenic quality of the harbor, the primary scenic views towards the open water of the Santa Monica/Pacific Ocean would remain available. King Harbor is a busy harbor that supports a high level of activity with a wide variety of visual elements and the presence of construction equipment and activities would not have a substantially adverse impact on the designated local valued view at Key Observation View 7 and impacts during construction would be less than significant.

Project elements that would be visible from Key Observation View 7 would include distant views of elements that would be removed and replaced (buildings on top of the timber portion and the Plaza Parking Structure and Pier Plaza). The elements to be reconstructed would have a similar footprint, building size and height; and therefore, the views of the project site from Key Observation View 7 would not substantially change. Alternative 2 would not result in an adverse change in the locally designated valued view from Key Observation View 7 and impacts during operation would be less than significant. The impacts would also be less than significant under the proposed project; but Alternative 2 would have reduced impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-2: Alternative 2 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Under Alternative 2, although a majority of the existing physical conditions at the project site would continue, certain necessary infrastructure improvements would need to be implemented. While construction activities and equipment would temporarily change the visual character and reduce the visual quality of the site, it would be temporary and not result in permanent visual degradation that would substantially degrade the existing visual character or quality of the site and its surroundings. Further, the construction activities would be screened from public view consistent with RBMC Section 9-1.16. Therefore, impacts during construction would be less than significant. The impacts would also be less than significant under the proposed project; but Alternative 2 would have reduced impacts.

As described above, operations under Alternative 2 would not substantially alter the existing conditions. However, some buildings would be replaced. These elements would have a similar footprint, building size and height and, therefore, would have similar visual massing. Some of the buildings to be replaced are currently deteriorating (such as the Sportfishing Pier and building located on the pier) and the new construction would result in an improvement in visual quality. However, as not all of the buildings would be replaced, the visual patchwork of architectural styles would remain. Further, in the northern portion of the site, the large paved surface parking lots and stand-alone buildings dispersed haphazardly throughout in the northern portion of the site would remain. Some new landscaping may be installed in locations where other construction was taking place (such as storm drain improvements); however, overall the existing landscaping would remain sparse.

The International Boardwalk may be closed in the future under Alternative 2. The buildings would remain but would be closed off with a wall or other barrier, while the access road would remain open to the public. The closure of the International Boardwalk would be a visual change, but the barrier would be given a design treatment pursuant to the City's Design review procedures, such as a mural or decorative coating, such that the visual quality of the site would not deteriorate. This alternative would not substantially degrade the visual character or quality of the northern portion of the project site and the impact would be less than significant.

The impacts would be less than significant under Alternative 2. The impacts would also be less than significant under the proposed project; but Alternative 2 would have reduced impacts because fewer visual alterations would occur. However, while under Alternative 2 the site would have a similar, but slightly improved visual character over existing conditions, the replacement of all aging buildings with newly designed buildings that have a high quality of architectural design and a visually harmonious style would not occur as it would under the proposed project, nor would new landscape, high quality public open space, or new public art be installed.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

Impact AES-3: Alternative 2 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Under Alternative 2, only certain necessary infrastructure improvements would be implemented, including replacement of the some of the existing structures on-site. Construction associated with the alternative would be less than the proposed project, and as with the proposed project, would primarily be conducted during daylight hours. However, should the use of nighttime construction lighting be required, as with the proposed project, it would be directed inward and downward toward the construction site, and would not be expected to increase the overall ambient glow emanating from the project site as compared to existing conditions. Therefore, similar to the proposed project, impacts related to nighttime construction lighting would be less than significant.

Replacement of existing structures (some existing buildings and the Pier Parking Structure) on-site would include interior and exterior lighting. The replacement lighting would continue to contribute to the overall ambient glow of the area; however, the lighting levels are not expected to change as compared to existing conditions and, as with the proposed project, light spillover from the project site would not be allowed to occur.

Replacement structures would not incorporate reflective building materials or provide a source of auto headlight-related glare in close proximity to glare sensitive uses. Overall, the level of glare at the project site would be similar to what exists currently, and that of adjacent land uses, as well as reduced compared to the proposed project.

Alternative 2 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, impacts would be less than significant. The impacts would also be less than significant under the proposed project; but Alternative 2 would be reduced in comparison.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Air Quality

Impact AQ-1: Alternative 2 would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Violation of Air Quality Standards – Construction

Based on the elements Construction activities associated with Alternative 2 are anticipated to occur over approximately 12 months and would generate pollutant emissions from the following construction activities: (1) demolition, mobilization, grading; (2) construction workers traveling to and from project site; (3) delivery and hauling of construction supplies to, and debris from, the project site; (4) fuel combustion by on-site construction equipment; and (5) building construction; application of architectural coatings; and paving. These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. The

amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring simultaneously.

As with the proposed project, compliance with Rule 403 and Rule 1113, as pre-existing regulatory requirements, were accounted for in the construction emissions modeling. Rule 1113 is included as part of the default modeling scenario.

Table 4.4 summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors associated with the Alternative 2's worst-case construction scenario (utilizing the significance criteria provided in Table 3.2-5 in Section 3.2 Air Quality of this Draft EIR). The peak daily emissions generated during Alternative 2's construction period are identified. As shown, the maximum daily construction emissions generated by Alternative 2's worst-case construction scenario would exceed SCAQMD's daily significance threshold for nitrogen oxides (NOx), which would be a significant impact. Reactive organic gases (ROG), carbon monoxide (CO), sulfur oxides (SOx), respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) would be below the regulatory thresholds and, therefore, construction phase emissions of these pollutants would be less than significant. Potential health effects of exposure to these criteria pollutants are included in the background information Section 3.2.2.2.3 and Table 3.2-1 in Section 3.2 Air Quality of this Draft EIR. The impacts would be significant. The impacts would also be significant under the proposed project; but Alternative 2 would be reduced in comparison.

Table 4.4: Alternative 2 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2017	74.67	206.50	142.15	0.00	12.00	9.69
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	No	**Yes**	No	No	No	No

Source: ESA CalEEMod Modeling, 2015

Violation of Air Quality Standards – Operation

Alternative 2 would not result in any changes to the existing operational conditions. Therefore, there would be no new operational emissions expected with Alternative 2. Alternative 2 would have no impact with respect to operational activities. Retaining the existing nature and amount of existing uses on-site and not redeveloping the project site with new and revitalized uses could result in City residents traveling further (longer vehicle miles traveled [VMT]) to seek retail, dining, and entertainment offerings in the South Bay, which could result in an increase in regional air quality emissions. This increase would not be the direct result of the implementation of Alternative 2, but could be considered a secondary or indirect impact of Alternative 2. Although adverse relative to air quality, this secondary/indirect impact would be less than significant. The impacts would also be less than significant under the proposed project; but Alternative 2 would be reduced in comparison.

Mitigation Measures

As required for the proposed project, construction of Alternative 2 would require the implementation of mitigation measure MM AQ-1: Fleet Modernization for Construction Equipment to reduce NOx emissions. Table 4-5 summarizes the modeled peak daily emissions associated with the Alternative 2 construction scenario after implementation of mitigation measure MM AQ-1.

Table 4-5: Mitigated Alternative 2 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2017	-	191.05	-	-	-	-
Regional Significance Threshold		*100*				
Significant Impact?		**Yes**				

Source: ESA CalEEMod Modeling 2015

Residual Impacts

Implementation of mitigation measure MM AQ-1 would reduce the significant impacts of NOx but not to below the significance thresholds. No other feasible methods to reduce emissions were identified. Therefore, similar to the proposed project although to a less degree, Alternative 2 would remain significant and unavoidable for construction emissions.

Impact AQ-2: Alternative 2 would not expose sensitive receptors to substantial pollutant concentrations.

Exposure of Sensitive Receptors to Pollutant Concentrations

Separate discussions are provided below analyzing the potential for sensitive receptors to be exposed to CO hotspots and localized air quality impacts from criteria pollutants and toxic air contaminants (TACs) from on-site sources during construction and operation of Alternative 2.

CO Hotspots

Alternative 2 is the implementation of necessary infrastructure improvements (like with like). Although there would be minimal changes in traffic based on the expected future growth of the surrounding area, this alternative would not result in any changes to the existing operational conditions, including traffic patterns. Therefore, there would be no new operational emissions expected with Alternative 2. Alternative 2 would have no impact with respect to operational activities. Impacts would be reduced in comparison to the proposed project.

Localized Construction Air Quality Impacts – Criteria Air Pollutants

The daily on-site construction emissions generated by Alternative 2 were evaluated against SCAQMD's localized significance thresholds (LSTs) for a one-acre construction site as a screening-level analysis to determine whether the emissions would cause or

contribute to adverse localized air quality impacts.[2] Because the construction activities would be scattered throughout the project site, combining them into one and comparing them against the five acre site as was done in the proposed project analysis was not appropriate. Therefore, there were three sites analyzed for LSTs, the area around Basin 3, the Seaside Lagoon and the Sportfishing Pier, and the Horseshoe Pier area. The nearest off-site sensitive receptors are the multi-family residential dwelling units located directly adjacent to the project site on the east. Additionally, there are liveaboards located within the marina to the north. No liveaboards would be located within Redondo Beach Marina/Basin 3 during project construction of Basin 3. Because the mass rate look-up tables provided by SCAQMD only provides LSTs at receptor distances of 82, 164, 328, 656, and 1,640 feet, the LSTs for a receptor distance of 82 feet are used to evaluate the potential localized air quality impacts associated with the proposed project's peak day construction emissions. Table 4-6 identifies the daily-localized on-site emissions that are estimated to occur during the Alternative 2 worst-case construction scenario. As shown, the daily emissions generated on-site by the worst-case construction scenario for Alternative 2 would exceed the applicable SCAQMD LST for NOx, PM_{10}, and $PM_{2.5}$ for a one-acre site in source receptor areas (SRA) 3 for the construction activities in the Basin 3 area, including the parking structure. The emissions for CO for all sites and the emissions for NOx, PM_{10}, and $PM_{2.5}$ for the Seaside Lagoon/Sportfishing Pier, and Horseshoe Pier sites would not exceed the applicable SCAQMD LSTs.

Table 4-6: Alternative 2 Localized Daily Unmitigated Construction Emissions

Construction Area	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	**CO (lbs/day)**	**PM_{10}[a] (lbs/day)**	**$PM_{2.5}$[a] (lbs/day)**
Basin 3	**110.44**	73.06	**5.53**	**4.54**
Seaside Lagoon & Sportfishing Pier	63.96	71.52	2.54	2.19
Horseshoe Pier	34.93	20.05	1.66	1.63
Screening Level[b]	91	674	5	3
Above Screening Level?	**Yes**	No	**Yes**	**Yes**

Source: ESA CalEEMod Modeling, 2015

a. Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.

b. LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 3 and is based on the construction-related disturbance of one acres per day. The one-acre LSTs are used as a screening level criteria as the areas involved are estimated to have one acer per day of disturbance.

Localized Construction Air Quality Impacts – TACs

Alternative 2 construction activities would result in short-term emissions of diesel PM, which is a TAC. Diesel PM poses a carcinogenic health risk that is measured using an exposure period of 70 years. SCAQMD has not adopted a methodology for analyzing such impacts and has not recommended that health risk assessments be completed for construction-related emissions of TACs.

[2] According to SCAQMD's LST methodology, LSTs are only applicable to the on-site construction emissions that are generated by a project and do not apply to emissions generated off-site such as mobile emissions on roadways from worker, vendor, and haul truck trips.

The construction period for Alternative 2 would be 12 months, much less than the 70-year period used for risk determination of the proposed project. Because off-road heavy-duty diesel equipment would be used only for short time periods at each active construction area within the project area over the course of the 12-month construction schedule, Alternative 2 construction is not anticipated to expose any nearby sensitive receptors to substantial emissions of TACs. As detailed under the proposed project, the emissions levels and duration of the proposed project would be greater than those of Alternative 2. A screening level risk analysis was conducted for the proposed project and determined that at the increased duration and emissions levels under the proposed project, the maximum cancer risk for off-site receptors from construction is 0.90 cases per million people and SCAQMD has a threshold of 10 per million people. The chronic hazard risk (non-cancer health risk) related to diesel particulate matter (DPM) for construction would be 0.001 and SCAQMD has a threshold of one. Assumptions and calculations for the screening risk modeling are detailed under Impact AQ-2 of the proposed project analysis (in Section 3.2 Air Quality of this Draft EIR). Because this analysis assumes higher emissions and longer exposure rates than would be seen under Alternative 2, the actual risks to off-site receptors from Alternative 2 would be less than what is reported for the proposed project.

Because the screening risk levels for both cancer and non-cancer risks would not exceed the SCAQMD regulatory thresholds for risk, this impact would be less than significant. Impacts would be reduced in comparison to the proposed project.

Localized Operational Air Quality Impacts – Criteria Air Pollutants

Alternative 2 would not result in any changes to the existing operational conditions. Therefore, there would be no new operational emissions expected with Alternative 2. Alternative 2 would have no impact with respect to operational activities. Impacts would be reduced in comparison to the proposed project.

Localized Operational Air Quality Impacts – TACs

Alternative 2 would not result in any changes to the existing operational conditions and therefore, there would be no new operational emissions expected with Alternative 2. Alternative 2 would have no impact with respect to operational activities. Impacts would be reduced in comparison to the proposed project.

Mitigation Measures

No mitigation measures would be required

Residual Impacts

Impacts would be less than significant.

Impact AQ-3: Alternative 2 would not create objectionable odors affecting a substantial number of people.

During construction, exhaust from equipment and activities associated with the application of architectural coatings and other interior and exterior finishes would produce discernible odors typical of most construction sites. Such odors could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the replacement development would be the same as the existing development, no on-site sources of emissions would

occur as a result of operational activities. Therefore, the impact would be less than significant under Alternative 2 with respect to the creation of objectionable odors affecting a substantial number of people. The impacts would be similar, but reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Biological Resources

Impact BIO-1: Alternative 2 could have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Construction and operation of the landside elements of Alternative 2 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including habitats that support special status species. During construction, tree removal activities would be required to comply with preexisting local tree removal and trimming regulations contained in RBMC Section10-5.1900(h) to avoid disturbance of nesting migratory birds. As with the proposed project, compliance with the RBMC tree trimming and tree removal requirements would result in less than significant impacts to migratory birds. Therefore, impacts on terrestrial biological resources would be less than significant. This is similar to, but reduced, in comparison to the proposed project.

Fewer in-water elements would be constructed under Alternative 2 as compared to the proposed project. However, similar to the proposed project, construction of the in-water elements that would occur under Alternative 2 (removal and/or replacement of the Sportfishing Pier and replacement of the timber portion of Horseshoe Pier), would result in the following impacts to marine special status species:

a) California least tern: If nesting, California least terns could be foraging in the project area during construction, and there could be impacts related to mortality or injury from contact with in-water construction equipment. However, given the distance from the nesting area, and because there is a large area outside of the project site available for foraging, it is unlikely that least terns would be foraging within the active construction site. Further, foraging in the vicinity of the proposed project could continue with no adverse effects to bird species. Impacts would be less than significant.

   Impacts on least tern foraging ability related to turbidity would be short-term and localized, affecting a small amount of foraging habitat compared to available foraging habitat for least terns nearby, and would be reduced with compliance with a Section 401 Water Quality Certification. Therefore, impacts related to turbidity would be less than significant.

Impacts to least terns would be similar to the proposed project, but reduced as less in-water construction would occur.

b) Broomtail grouper: In-water construction activities associated with Alternative 2 would include various types of pile driving, which would create underwater sound. Based on the type and limited amount of in-water pile-driving, the size of piles, period of time needed to install, and use of a vibratory hammer where appropriate, hydroacoustic impacts to fish are not anticipated to be significant. The sound pressure waves from pile-driving could result in temporary avoidance of the construction areas by fish. Further, it is anticipated that fish would return to the area following construction. Therefore, impacts to fish, including broomtail groupers, from pile-driving activities would be less than significant.

   Impacts on broomtail grouper foraging ability related to turbidity would be short-term and localized, affecting a small amount of foraging habitat compared to available foraging habitat nearby, and would be reduced with compliance with a Section 401 Water Quality Certification. Therefore, impacts related to turbidity would be less than significant.

   Under the proposed project, compliance with the Clean Water Act Section 404 and Section 401 Water Quality Certification permits may include BMPs and construction measures to control turbidity in the water column adjacent to in-water work, which would further reduce impacts. Impacts on fish, including broomtail grouper, would be similar to the proposed project, but reduced as less in-water construction would occur.

c) Pinnepeds: During construction, impacts related to mortality or injury from contact with construction equipment could occur. In addition, effects could occur from the noise of pile driving activities if marine mammals are nearby. Vibration from pile-driving could result in disturbance to marine mammals in the vicinity of pile-driving operations. This would be a significant impact. Impacts on pinnipeds would be the same as the proposed project, but reduced as less in-water construction would occur.

d) California grunion: Construction of Horseshoe Pier within sandy beach habitat could result in direct impacts, including mortality or injury, to grunion if they are present in the project area during their spawning season (March to August). In addition, construction within spawning areas would result in physical harm or disturbance of eggs during the 10-day incubation period following spawning. This would be a significant impact. Impacts on grunion would be the same as the proposed project.

Operation of Alternative 2 could result in the following impacts to marine special status species:

a) California least tern, California brown pelican, and double-crested cormorant: Under Alternative 2, no increase in surface cover that could reduce the amount of open water foraging habitat would occur. Under Alternative 2, the Sportfishing Pier would be removed. If the Sportfishing Pier is replaced, there would be no change in surface cover as compared to existing conditions. If the Sportfishing Pier is not replaced, a loss of surface coverage would occur, which is considered a benefit. The proposed project was determined to result in a net increase in surface coverage (which would reduce the amount of available open water foraging habitat for waterbirds).

However, with mitigation the impacts were determined to be less than significant. Alternative 2 would eliminate these impacts because it would not involve the placement of new in-water structures and the amount of surface coverage would remain the same (if the Sportfishing Pier is replaced) or less (if the Sportfishing Pier is not replaced) as compared to existing conditions. However, Alternative 2 would not include the opening of Seaside Lagoon to harbor waters, which would provide new open water foraging habitat for waterbirds.

b) Pinnepeds: While it is expected that sea lion numbers in the harbor will continue to rise, the elements that would be implemented under Alternative 2 (closure of Seaside Lagoon, removal and/or replacement of the Sportfishing Pier, and replacement of the timber portion of the Horseshoe Pier) would not provide new haul-out sites for sea lions and would not increase the potential for human and pinniped interactions as compared to existing conditions. Therefore, impacts on pinnepeds during operation of Alternative 2 would be less than significant. This is similar but reduced in comparison to the proposed project. However, the proposed project includes a condition of approval to establish a marine mammal protection program to reduce the potential of undesirable human-pinniped interactions; no program would be established under Alternative 2, and therefore, the benefits of establishing such a program would not occur.

Mitigation Measures

As with the proposed project, mitigation measures MM BIO-1: Protection of Marine Mammals During Construction, and MM BIO-2: California Grunion, would be implemented to address construction impacts on special status species.

Residual Impacts

Mitigation measure MM BIO-1 would reduce to less than significant the impacts related to noise and vibration from pile-driving associated with the in-water construction of Alternative 2 to negatively affect marine mammals. In addition, although impacts to fish, including broomtail groupers, from pile-driving activities would be less than significant, mitigation measure MM BIO-1 would further reduce the likelihood of impacts to fish (as well as marine mammals) as a result of pile-driving as a soft start would warn mobile aquatic species to leave the area as pile-driving is commenced.

Mitigation measure MM BIO-2 would reduce to less than significant the impacts related to construction associated with the Horseshoe Pier at or near the sandy beach habitat of Horseshoe Beach to result in direct impacts (including mortality or injury) to grunion if they are present in the project area during their spawning season (March to August).

With implementation of mitigation, significant impacts to special-status species during construction would be reduced to less than significant.

Impact BIO-2: Alternative 2 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Construction and operation of the landside elements of Alternative 2 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including riparian habitat, native grassland, wildlife corridors, vernal pool habitat, freshwater marsh, or other sensitive or critical natural community. Therefore, there would be no impacts on terrestrial biological resources.

The Seaside Lagoon is an artificial swimming facility; therefore, conversion of the lagoon to an upland park would not impact riparian habitat or other sensitive natural community.

Construction of Alternative 2, including removal and/or replacement of the Sportfishing Pier, and replacement of Horseshoe Pier, could result in the following impacts to marine habitats:

a) Benthic community: Temporary impacts on the benthic community from increased turbidity during construction would be would be short-term and localized as it is expected that any resuspended sediment would quickly settle to the bottom or be dispersed by water motion. Alternative 2 would result in a smaller footprint than the proposed project with respect to loss of benthic habitat from construction activities. Therefore, impacts to the benthic community from construction of Alternative 2 would be less than significant. This is similar but reduced as compared to the proposed project.

b) Eelgrass: No eelgrass was detected during the baseline survey of the project area. Therefore, as with the proposed project, adverse effects on eelgrass habitat from construction of Alternative 2 are not anticipated to occur. Further, in compliance with the Southern California Eelgrass Mitigation Policy (SCEMP), the City would, prior to any in-water construction, survey the project area per the SCEMP. Impacts to eelgrass, if any, would require mitigation as defined in the SCEMP.

c) Caulerpa taxifolia: Caulerpa taxifolia was not detected during the baseline survey of the project area and therefore, as with the proposed project, an adverse impact associated with spreading of the alga would not occur. Further, the City would, prior to initiation of any permitted in-water construction activity, perform a pre-construction survey of the project area to determine the presence or absence of Caulerpa per the National Marine Fisheries Service's (NMFS) Caulerpa Control Protocol. If detected, NMFS and California Department of Fish and Wildlife (CDFW) will be notified within 24 hours of completion of the survey.

Operation of Alternative 2 may affect designated EFH for several species of Pacific groundfish and coastal pelagic organisms. Compliance with the Magnuson-Stevens Fishery Conservation and Management Act, including evaluation of adverse effects to marine habitats in consultation with NMFS, would be required. Replacement of in-water structures could result in increased shade and alteration of substrate that can affect EFH by affecting aquatic vegetation, benthic communities, and other important aspects of nearshore food webs that support the key ecological functions of fish spawning, rearing and refugia. However, given the developed nature of the project area and because

reconstructed in-water structures would have the same footprint as the existing structures, no significant impacts to EFH would occur. Impacts would therefore be less than significant. This is similar, but reduced, in comparison with the proposed project. Further, the City would comply with NMFS guidelines for overwater structures EFH. Consultation with NMFS regarding impacts to EFH would be conducted prior to implementation of Alternative 2.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-3: Alternative 2 would have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Construction and operation of the landside elements of Alternative 2 would occur in previously developed areas that do not have any federally protected waters or wetlands. Therefore, there would be no impacts on terrestrial biological resources.

During construction in the marine portion of the project area, there would be temporary impacts to federally protected waters that would require a Clean Water Act Section 404 permit, including effects on aquatic vegetation and benthic communities through direct removal/covering or indirect loss or disturbance due to increased turbidity during construction activities. As with the proposed project, these impacts would be short-term and localized and rapid recovery of existing marine species composition and diversity is expected within two years or less. Therefore, impacts are anticipated to be less than significant. This is similar but reduced as compared to the proposed project.

Further, as presented under Impact BIO-1, in compliance with the SCEMP, and similar to the proposed project, the City would comply with requirements of the Section 401 WQC and Section 404 permit, which may include BMPs and construction measures to control turbidity in the water column adjacent to in-water work.

Removal and/or replacement of the Sportfishing Pier and replacement of Horseshoe Pier would not result in new fill because pilings would be installed in the same place as existing pilings. However, if the USACE determines that Seaside Lagoon is jurisdictional, the filling in of the lagoon would result in a significant impact. As with the proposed project, if the lagoon is jurisdictional, the modification would require a Section 404 and Section 10 permit, including compliance with compensatory mitigation and/or other mitigation set forth in the permits. As with the proposed project, MM BIO-4 would be applied, which would reduce impacts on jurisdictional waters. However, under the proposed project, marine habitat improvements associated with the opening of Seaside Lagoon may potentially provide compensatory mitigation for the impact; therefore, under the proposed project impacts are considered less than significant with mitigation. Under Alternative 2, there is no readily foreseeable compensatory mitigation available for the filling of Seaside Lagoon, and therefore, while adequate mitigation may

be established in coordination with resource agencies through the permitting process required by MM BIO-4, if Seaside Lagoon is jurisdictional, the impact is considered significant and unavoidable. The impact is greater than the proposed project and the benefits of new marine habitat that would established by the opening of Seaside Lagoon would not occur under Alternative 2.

If Seaside Lagoon is not jurisdictional, impacts would be less than significant. This is similar, but reduced, in comparison with the proposed project. However, the benefits of new marine habitat that would established by the opening of Seaside Lagoon would not occur under Alternative 2.

Mitigation Measures

If Seaside Lagoon is jurisdictional waters, implementation of mitigation measure MM BIO-4, which requires the applicant to demonstrate that any required permits such as Clean Water Act Section 404 permit, Section 401 Water Quality Certification, and/or Rivers and Harbors Act Section 10 permit have been obtained and requires that any mitigation measures established by the permits be implemented.

Should the USACE determine that Seaside Lagoon is not jurisdictional waters, the impacts would be less than significant and no mitigation is required.

Residual Impacts

Implementation of MM BIO-4 would reduce impacts associated with removal, filling, hydrological interruption, of federally protected waters; however, if Seaside Lagoon is determined to be jurisdictional, impacts would be significant and unavoidable.

Impact BIO-4: Alternative 2 could 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.

Construction and operation of the landside elements (including the Seaside Lagoon) would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, impacts would be less than significant on terrestrial biological resources. This is similar but reduced as compared to the proposed project.

Construction in the marine portion of the project area would not impact nursery habitat, as there is no eelgrass (which can act as nursery habitat) or other nursery habitat in the project area. The construction activities associated with the Horseshoe Pier in water near the sandy beach may disturb the California grunion spawning if the grunion are present (spawning is between March to August). As with the proposed project, this impact would be significant.

In-water project elements (e.g., Sportfishing Pier and Horseshoe Pier) would have the same footprint as existing structures; therefore, operation of Alternative 2 would not

interfere substantially with the movement of migratory birds, fish, mammals, or other species, and not impede the use of a native wildlife nursery. Impacts from operation would be less than significant. This is similar, but reduced, in comparison with the proposed project.

Mitigation Measures

Implementation of mitigation measure MM BIO-2 (described under Impact BIO-1), which requires grunion monitoring should Horseshoe Pier construction disturb sandy beach during the grunion spawning season.

Residual Impacts

With implementation of mitigation measure MM BIO-2, impacts related to the movement of migratory birds, fish, mammals, or other species, and the use of a native wildlife nursery would be less than significant.

Impact BIO-5: Alternative 2 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Construction and operation of the landside elements of Alternative 2 would require compliance with local policies and ordinances, including during tree trimming/tree removal activities. Therefore, impacts on terrestrial biological resources would be less than significant.

As detailed in Impact BIO-2 above, no eelgrass or Caulerpa taxifolia have been identified with the project study area and Alternative 2 would not conflict with any local policies or ordinances protecting biological resources. Therefore, as with the proposed project, impacts are less than significant. Further, the City would comply with policies related to eelgrass and Caulerpa taxifolia (see Impact BIO-2 above).

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cultural Resources

Impact CUL-1: Alternative 2 would cause a substantial adverse change in the significance of a historical resource.

Under Alternative 2, although a majority of the existing physical conditions at the project site would continue, necessary infrastructure improvements would include the replacement of the timber portion of the Horseshoe Pier and the buildings on top (Tony's On The Pier and its companion building), and the retrofit, replacement or complete removal of the Sportfishing Pier and its buildings. As with the proposed project, this would result in removal or alteration to these historic resources; therefore, a significant unavoidable impact would occur to Tony's On The Pier and its companion building, the Redondo Beach Pier Complex, and the Sportfishing Pier should the pier not be retrofitted

but replaced or removed. The impacts would be similar, but may be reduced compared to the proposed project if the Sportfishing Pier would be retrofitted instead of removed and possibly replaced.

Mitigation Measures

Mitigation measures MM CUL-1: Recordation, MM CU-2: Interpretive Program and MM CUL-3: Protection of the Monstad Pier During Construction would be implemented.

Residual Impacts

Implementation of Alternative 2 would result in the demolition of Tony's On The Pier and its companion building, the Redondo Beach Pier Complex, and the Sportfishing Pier should the pier not be retrofitted but replaced or removed. While mitigation measures MM CUL-1, MM CUL-2, and MM CUL-3 are proposed, in the case of the full demolition of an historic property, residual impacts to historical resources are considered significant and unavoidable.

Impact CUL-2: Alternative 2 could cause a substantial adverse change in the significance of an unknown archaeological resource.

Based on the observed modifications to the project area and in comparison with the surrounding area, it is likely that the majority of the project area has been mechanically modified (i.e. disturbed soil). The only exceptions are in the northeast and southern edge of the project area where there is a potential for archaeological (prehistoric) deposits or unknown archaeological resources. In addition, the existence of pre-existing structures (e.g. Pier Parking Structure, Village/Seascape apartment and condominium complex, Torrance Circle) makes it difficult to obtain further clarification regarding potential archaeological resources in the southeastern portion of the project site. Therefore, based on the presence of previous structures in the project site and surrounding area, and the prehistoric resource adjacent to the project site, it is possible that unknown archaeological resources (including buried features or possible structural remnants) may be present within the project site. Under Alternative 2, although a majority of the existing conditions at the project site would continue, the grading and excavation required for Alternative 2, in particular the Pier Parking Structure, located in the southeastern portion of the project site, could encounter unknown archaeological resources; therefore, Alternative 2 may have a substantial adverse change in the significance of an unknown archaeological resource. Based upon this potential, impacts are considered significant. The impacts would be similar, but the area that unknown archaeological resources could be found is reduced compared to the proposed project.

Mitigation Measures

Due to the sensitivity for unknown archaeological resources, as with the proposed project, mitigation measure MM CUL-4: Phase I Archaeological Work would be implemented to reduce the impact of excavation on unknown archaeological resources at the project site to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-4, the impact of excavation on unknown archaeological resources at the project site would be less than significant.

Impact CUL-3: Alternative 2 could directly or indirectly destroy an unknown paleontological resource.

As with the proposed project, in areas of Pleistocene marine deposits, earth-moving activities associated with construction of Alternative 2 could have a substantial adverse change in the significance of an unknown paleontological resource, particularly excavation for the Pier Parking Structure. In addition, greater depths for remains old enough to be considered fossilized may be encountered. Therefore, earth-moving activities associated with Alternative 2, particularly excavation for the Pier Parking Structure may have an adverse effect on unknown paleontological resources and impacts are considered significant. The impacts would be similar, but reduced compared to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure MM CUL-5: Potential to Encounter Unknown Paleontological Resources would be implemented in order to preserve a representative sample of any scientifically important fossil remains and associated data that might be exposed by excavation at the project site; thereby, reducing the impact of excavation on unknown paleontological resources at the project site (particularly the area of the Pier Parking Structure) to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-5, impacts of earth-moving activities from implementation of Alternative 2 on the paleontological resources at the project site would be reduced to a less than significant level.

Geology and Soils

Impact GEO-1: Alternative 2 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

The project site, as most of Southern California, is a seismically active region. Given that all of Southern California is subject to seismic events and associated hazards, the risk to populations at the project site is not considered to be unique or excessive and would not change the baseline risk for the average visitor to the project site under Alternative 2.

Under Alternative 2, many of the older non-compliant buildings/structures throughout the project site (such as the Horseshoe Pier and buildings, Sportfishing Pier and buildings, and Pier Parking Structure and Pier Plaza) would be demolished and replaced with new facilities that comply with current applicable buildings codes. Under Alternative 2, the International Boardwalk would not be replaced, but may be closed in the future to address the increased risk of inundation that could occur with predicted future sea level rise.

Therefore, under Alternative 2, many of the existing non-compliant buildings/structures would be reconstructed/replaced in compliance with the most up-to-date building code

requirements of the CBC applicable at the time of development. Consequently, the new buildings would offer an improvement in safety related to seismic hazards in comparison to the existing conditions at the project site and impacts would be less than significant. The impacts would be similar to the proposed project; however, while less development would be located on-site under Alternative 2, some buildings that are non-compliant with current building codes would remain. Unlike the proposed project, Alternative 2 focuses on infrastructure within the project site that is the responsibility of the City to maintain; therefore, there would be no Conditions of Approval as the City would be solely responsible for the completion of Alternative 2.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-2: Alternative 2 would not result in substantial soil erosion or the loss of topsoil.

Under Alternative 2, ground-disturbing activities, such as demolition, excavation, trenching, grading, and landscaping would occur similar to, although to a lesser degree than, the proposed project. One notable difference is that the opening of Seaside Lagoon under the proposed project would be replaced with the closure of the lagoon as a water feature and sand beach and converted to an upland park with landscaping and hardscaping. Therefore, less soil erosion or loss of topsoil associated with the Seaside Lagoon is expected under Alternative 2. As with the proposed project, the project's construction activities would be required to comply with existing regulatory requirements, including implementation of BMPs and other erosion and sedimentation control measures that would enable grading, excavation, and other earth-moving activities to avoid a significant impact during construction. As it relates to operation, the project site would continue to be covered by hardscape (e.g., paving and boardwalks), buildings/structures, or landscaping with no large areas of exposed soil that would be exposed to erosion effects of wind or water. Alternative 2 would not result in substantial soil erosion or loss of topsoil; therefore, impacts would be less than significant. The impacts would be similar, but reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-3: Alternative 2 would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

As the majority of the project site is located in an area mapped with liquefiable soil, there is potential for seismic-related (earthquake-induced) liquefaction at the project site,

which could lead to ground settlement and lateral spreading. Existing buildings/structures at the project site are already subject to the risk of liquefaction/ground settlement/lateral spreading and the exposure of people or structures to adverse effects is not considered unique or excessive. Regardless of the liquefaction/ground settlement/lateral spreading at locations throughout the project site, grading, compaction and individual foundations associated with replacement structures that would be constructed under Alternative 2 would have to adhere to design- and project-specific standards and requirements of the current CBC, which may include a deep foundation system, or alternatively, ground improvement, or other proven geotechnical engineering technologies to alleviate the liquefaction (and lateral spreading) at the project site, as would the proposed project.

Unlike the proposed project, Alternative 2 focuses on infrastructure within the project site that is the responsibility of the City to maintain; therefore, there would be no Conditions of Approval as the City would be solely responsible for the completion of Alternative 2. Determination of the appropriate option, or combination of options, to address liquefaction would be determined through the review of project-specific geotechnical evaluations and supplemental engineering analysis in compliance with CBC requirements and subsequent recommendations based on City design and review. As with liquefaction, ground settlement and lateral spreading, the potential for subsidence, collapse, and corrosive soils would be similar to existing conditions. Consequently, impacts under Alternative 2 would be less than significant. The impacts would be similar to the proposed project; however, while less development would be located on-site under Alternative 2, buildings that are non-compliant with current building codes would remain.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-4: Alternative 2 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Under Alternative 2, mass grading would occur in the southern area of the project site (associated with the replacement of the Pier Parking Structure), with a minor amount of grading associated with the conversion of the Seaside Lagoon from a water feature to a park. Similar to the proposed project, this work is expected to include the placement of new fill and the removal and re-compaction of unsuitable soil and backfill for utility trenches and other excavations. Likewise, the removal, re-compaction, and/or placement of new fill would occur based on a design- and project-specific evaluation of the expansion potential associated with on-site soils. It would include subsurface soil sampling, laboratory analysis of samples collected, and an evaluation of the laboratory testing results by a geotechnical engineer under direction and review by the City. Therefore, Alternative 2 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC. The impacts would be similar to the proposed project; however, less removal, re-compaction, and/or placement of new fill would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 2 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

SCAQMD Threshold Analysis

Construction Emissions

Construction-related GHG emissions for Alternative 2 were estimated using the same assumptions that were applied to the proposed project's air quality analysis. Total estimated construction-related GHG emissions for Alternative 2 are shown in Table 4-7. As shown in Table 4.2-5, total estimated GHG emissions under Alternative 2 during construction would be approximately 1,122.13 metric tons carbon dioxide equivalents ($MTCO_2e$), which is similar to the proposed project. This would be equal to approximately 37.40 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology.

Table 4-7: Estimated Total Construction-Related GHG Emissions

Construction Year	Estimated CO_2e Emissions
2017	1,122.13 (MT)
Total	**1,122.13 (MT)**
Annual Construction (Amortized over 30 years)	**37.40 (MT/Yr)**

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes:
CO_2e= carbon dioxide equivalent; MT =metric tons; MT/yr = metric tons per year.

Operational Emissions

While there would be changes in traffic based on the expected future growth of the surrounding area, this increase would not be the result of the implementation of Alternative 2. Alternative 2 would result in reduced local emissions of GHG emissions than the proposed project because it would generate similar traffic in the project vicinity to existing conditions and demand less energy than the proposed project, which are key contributors to GHG emissions. Alternative 2 would not result in any changes to the existing operational conditions; and thus, there would be no new operational emissions expected with Alternative 2. Therefore, the total emissions under Alternative 2 would be 37.40 MT CO_2e annually. This is less than the GHG efficiency threshold of 25,000 MT CO_2e. When compared to the service population of 1,298, the service population emissions are 0.29 MT CO_2e/employee.

Therefore, implementation of Alternative 2 would be less than significant. The direct GHG impacts associated with Alternative 2 would be similar, but reduced as compared to the proposed project.

It should be noted, however, that the benefit of the proposed project to provide enhanced recreational and retail, restaurant and entertainment opportunities for the local residents would not be realized under Alternative 2 and the increase in vehicle miles traveled associated with those residents having to go elsewhere for these services could result in longer VMT and an increase in GHG emissions. Such potential secondary/indirect impacts associated with Alternative 2 are anticipated to be less than significant. Further, under Alternative 2, while some older non-compliant structures would be replaced with those in compliance with the most up-to-date energy efficiency and water conservation requirements, some older non-energy efficient structures would remain.

BAU Analysis

To determine the project's GHG emissions that would result under the BAU scenario, CalEEMod was used to estimate the emissions that would occur if the proposed project was operational in 2020 without the implementation of plans and policies included in the 2008 Scoping Plan and by the State prior to development of the baseline emissions inventory in the 2008 Scoping Plan. Specifically the BAU scenario does not include the GHG emissions reductions attributed to implementation of the Pavley standards, the LCFS, the 2008 and 2013 Title 24 requirements, and the California RPS. In order to present the emissions based on consistency with the Scoping Plan BAU scenario (i.e., what would occur in 2020 if the Scoping Plan measures were not implemented), the year 2005 was used in CalEEMod. Alternative 2 would not result in any changes to the existing operational conditions. Therefore, there would be no new operational emissions expected with Alternative 2 and there would be no impact with respect to the BAU analysis. It should be noted that the replacement of some of the existing older non-energy efficient buildings (such as the buildings on the Sportfishing Pier, Horseshoe Pier and Pier Plaza) with new construction that complies with current Title 24 and CalGreen requirements would result in reduction of GHG emissions as compared to existing conditions. Although some older non-energy efficient structures would remain.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 2 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Alternative 2 would not result in any change to the existing on-site uses. Therefore, there would only be construction emissions and no change to the existing operational emissions. The site is in a transit priority area within the City. There are no changes to the existing conditions under Alternative 2 and the location of the site would not conflict with goals in the CARB Scoping Plan, SB 375 and the Redondo Beach Sustainable Development Strategy; however Alternative 2 would not provide new or expanded ,localized retail services for the nearby residences, which reduces regional traffic, to the

same extent as the proposed project and would, therefore, not be as supportive of the GHG reduction goals and policies as the proposed project, nor would all of the older non-energy efficient structures be replaced with new development that complies with current energy efficiency and water conservation requirements. In summary, there would be no notable change in activities at the project site and while Alternative 2 would not conflict with existing policies, it would not be as supportive of the plans and policies related to reducing GHG emissions as the proposed project. The impacts of Alternative 2 relative to conflicting with an applicable plan, policy, or regulation would, nevertheless, be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 2 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Construction under Alternative 2 would involve the use of certain hazardous materials. However, the amount of construction would be less than the proposed project. As with the proposed project, releases of hazardous substances during construction would be addressed through compliance with regulations that govern proper containment, spill control, and disposal of hazardous waste generated during construction. Additionally, the use of construction BMPs would minimize the adverse effects to the general public and environment associated with construction of Alternative 2.

No construction is anticipated to occur in the area of the former USTs; therefore, it is unlikely that contaminated soils would be encountered during construction. However, in the unlikely event that contaminated soils or debris are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the Redondo Beach Fire Department (RBFD), Los Angeles County Fire Department (LACFD), LARWQCB, and/or Department of Toxic Substances Control (DTSC).

The project site is located in the Torrance Oil Field. There are no known oil and gas wells on-site. However, should an oil and gas well be unexpectedly encountered, as with the proposed project, the subject well(s) would be properly closed and abandoned in accordance with existing Division of Oil, Gas & Geothermal Resources (DOGGR) requirements. Therefore, no significant impacts related to oil and gas wells are anticipated.

Therefore, Alternative 2 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and impacts

would be less than significant. The impacts would be similar, but reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-2: Alternative 2 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

As with the proposed project, Alternative 2 involves construction and operation at the project site, which includes a location that was identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (LUST site at the Redondo Beach Marina). In addition, as identified in Table 3.7-2 in Section 3.7 Hazards and Hazardous Materials, a review of other regulatory databases identified several known or suspected contamination sites located within approximately 0.25 mile of the project site, as well as within the project site. None of these sites located within approximately 0.25 mile of the project site would be anticipated to significantly affect the project site based on the regulatory status and oversight and distance from the project site.

In the event that contaminated soils are encountered during construction, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Therefore, implementation of Alternative 2 is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant. The impacts would be similar, but reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-3: Alternative 2 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

As with the proposed project, construction of Alternative 2 would occur on-site and would not be expected to interfere with emergency responses or evacuation plans. Although temporary lane and sidewalk closures of immediately adjacent roadways (e.g., Portofino Way and Harbor Drive) may be necessary at times during construction, adequate emergency vehicular access to the project site and adjacent properties would be provided and maintained during construction, as required by the RBFD. As part of Alternative 2's approvals process, the project plans would be reviewed by the City's Fire Department and Police Department for compliance with the regulations and policies.

Therefore, emergency access in and out of the site, including access to the tsunami evacuation routes, would remain during the construction process.

Under Alternative 2, there would be no Pacific Avenue Reconnection; therefore, the proposed project's benefit of improving emergency access at the project site would not occur under Alternative 2. Instead, the existing constraints and limitations for emergency vehicle access along the service and access road in front of the International Boardwalk (behind Basin 3) would remain.

Compliance with existing emergency access requirements would ensure that Alternative 2 would not interfere with an existing emergency response or emergency evacuation plan. As such, Alternative 2 would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant. The impacts would be similar, but reduced as compared to the proposed project. However, no emergency access improvements at the project site would occur under Alternative 2.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hydrology and Water Quality

Impact HWQ-1: Alternative 2 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Construction of Alternative 2 would involve construction activities both on the shore (landside), near the immediate vicinity of the shore, and in the harbor. Construction activities would involve the use of certain hazardous materials associated with use of construction equipment on-site, including vehicle fuels (both gasoline and diesel), oils, solvents, and transmission fluids. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials must comply with the regulations for handling, storage, spill control, and disposal described in Section 3.7 Hazards and Hazardous Materials in this Draft EIR.

Construction impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with marine construction), similar to the proposed project, would be less than significant with the compliance of regulatory requirements, including implementation of BMPs, and would ensure that Alternative 2 would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Therefore, construction impacts to surface water quality are considered less than significant. This is similar, but reduced, in comparison to the proposed project.

Stormwater generated on-site during operation of Alternative 2 may convey contaminants generated on-site to the groundwater, surface water, and harbor. Under Alternative 2, the site would be similar to the existing site conditions (79 percent impervious and 21 percent pervious) and would generally maintain the same drainage areas and discharge points into

King Harbor. Although not to the same extent as the proposed project, Alternative 2 includes an update to the on-site stormwater system in conjunction with the replacement of aging infrastructure. To reduce pollutant runoff from the site, any updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. These BMPs would reduce runoff and pollutants from discharging into the Pacific Ocean.

Under Alternative 2, Seaside Lagoon would be converted to an upland park in response to challenges that the City annually faces in keeping the lagoon operational during the summer season, including treating the water from the lagoon in a manner that meets the current NPDES permits water quality requirements. The City currently chlorinates the lagoon water for swimming and then dechlorinates it prior to discharge to the harbor. Since the implementation of the lagoon's first NPDES Permit in 1999, the City has been fined $195,000 for water discharge violations. The vast majority of these violations were for the discharge of total suspended solids (TSS). After extensive examination by water quality experts and City Engineering staff, it was determined that there would be no cost effective way to treat or filter TSS in the high volume of water discharged by the lagoon. The filtration approach suggested by LARWQCB staff in 2007, as an example, would require the installation of a multi-million dollar treatment plant and the acquisition of several acres of harbor area property. Since 2007, the City has successfully collaborated with the LARWQCB in the adoption and renewal of a Time Schedule Order (TSO) that significantly increased the lagoon's TSS limits in exchange for the completion of an extensive water quality study. The study concluded that all but one of the lagoon's problematic effluent categories could be managed through changes to operating procedures and testing methods, but that there was no cost effective way, given the facility's rudimentary water delivery system, to treat or filter the lagoon's TSS. It also concluded that, on average, 94 percent of the TSS in the lagoon's water discharge was in the ocean water before it entered the facility and the quality of the lagoon's water discharge was effectively at the mercy of the ocean's natural conditions. After determining that there was no cost effective way to eliminate the TSS problems through modification of the existing facility, the City pursued an extension of the TSO to allow for continued operation of the lagoon while developing plans to reconstruct the facility (open the lagoon to the ocean) and ultimately eliminate water discharge into the harbor. Therefore, as Alternative 2 does not include opening of the lagoon to the ocean, in order for water quality and waste discharge standards to be met, the lagoon would need to be closed as a swimming facility, filled, and turned into an upland park. Therefore, operational impacts of Alternative 2 on harbor water quality are considered less than significant. The impacts would be similar to the proposed project, and although under Alternative 2 less construction would occur, the implementation of stormwater improvements and compliance with LID, as well as a decrease in the imperviousness, would be to a lesser degree than would occur under the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 2 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

There are no streams or rivers located on the project site; hence, that aspect of the threshold of significance would be unaffected. Under Alternative 2, BMPs would be implemented during construction as part of a SWPPP as required by the statewide NPDES General Permit for Construction Activities for sites disturbing one acre or more. In addition, construction activities would also be required to comply with SCAQMD Rule 403, which includes measures for the application of water or stabilizing agents, use of tarps to enclose haul trucks, stabilizing sloping surfaces using soil binders until vegetation or ground cover effectively stabilize slopes, and hydroseeding prior to rain. With adherence to regulations, including implementation of BMPs, Alternative 2 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant.

Under Alternative 2, no additional development beyond the replacement of some structures and buildings already at the site would occur and the imperviousness of the site would be similar as under existing conditions. As Alternative 2 does include some updates to the on-site stormwater system, some improvements to existing drainage and surface water runoff would occur. Any drainage system improvements under Alternative 2 would be designed to include BMPs in accordance with the City's LID Ordinance, which sets forth standards to treat both the quantity and quality of flow. These BMPs would reduce runoff from discharging into the Pacific Ocean. However, the site would generally maintain the same drainage areas and discharge points into King Harbor and Basin 3. The conversion of Seaside Lagoon to an upland park would not cause substantial erosion or siltation. The upland park would be primarily pervious and would not substantially increase the rate or amount of surface runoff.

With adherence to regulations, including LID criteria and implementation of BMPs, Alternative 2 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during operational activities are considered less than significant. The impacts would be similar to the proposed project, and although under Alternative 2 less construction would occur, the implementation of stormwater improvements and compliance with LID, as well as a decrease in the imperviousness, would be to a lesser degree than would occur under the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-3: Alternative 2 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project.

As described above, during construction of Alternative 2, all storage, handling, and disposal of hazardous materials used during construction would comply with the regulations described in Section 3.7.4 Hazards and Hazardous Materials in this Draft EIR. Consequently, construction of Alternative 2 would not result in polluted runoff. In addition, construction BMPs would be implemented as part of a SWPPP to ensure that stormwater discharges do not cause or contribute to a violation of any applicable water quality standard. Construction activities would not require the construction of new stormwater drainage facilities or expansion of existing facilities, which could cause significant environmental effects not already addressed as part of this alternative. Impacts would be less than significant.

Updates to the existing drainage and stormwater system under Alternative 2 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow. BMPs would be implemented to address the quantity and quality of flow, that may include, but not be limited to, use of permeable pavers, infiltration, bio-filtration planters, modular wetlands and french drains. Overall, Alternative 2 would generally maintain the same drainage areas and discharge points as that of the existing condition and the imperviousness of the site would be similar to existing conditions.

In comparison to existing conditions, Alternative 2 would not require the construction of new stormwater drainage facilities or expansion of existing facilities, which could cause significant environmental effects not already addressed as part of the project. Impacts would be less than significant. The impacts would be similar to the proposed project, and although under Alternative 2 less construction would occur, the implementation of stormwater improvements and compliance with LID, as well as a decrease in the imperviousness, would be to a lesser degree than would occur under the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-4: Alternative 2 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

Waterside portions of the project site are within Zones AE, VE, and X. Within these zones, Alternative 2 includes the retrofit, removal or replacement of the Sportfishing Pier and its buildings, as well as replacement of the timber portion of the Horseshoe Pier, including the demolition and reconstruction of the buildings on that portion of the pier. Similar to the proposed project, the finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. No other structures would be constructed within the 100-year flood zone under Alternative 2. All the structures to be placed within the waters of King Harbor would not impede or redirect flood flows over existing conditions. Therefore, impacts would be less than significant. The impacts would be similar but reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-5: Alternative 2 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

Alternative 2, as with the proposed project, is on an existing site that is on- or near-shore development in Southern California, which would involve some measure of risk of impacts from a tsunami or seiche. Alternative 2 would include replacement of existing infrastructure, including replacement of some existing structures with new structures; however, the amount of development and operation of the project site would not change. As Alternative 2 is not expected to increase the building area and use of the site and activities (including patronage of the project site), this alternative would be expected to be similar to existing conditions. Therefore, Alternative 2 would not involve any changes to the existing site that would increase potential exposure of people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise because no changes would occur. However, under Alternative 2, there would be no benefit as with the proposed project to eliminate the structures within the area that is subject to inundation during extreme high tides (International Boardwalk), nor would there be a raising of the site elevation or addition of a tsunami/seiche awareness notification program, to address the increased risk of inundation that could occur with predicted future sea level rise and tsunamis. Therefore, the project site would continue to be subject to the potential exposure of buildings and people due to risk and damage associated with a tsunami or seiche, as well as potential impacts from sea level rise. The risk would be significant and unavoidable.

Occasional flooding atop the bulkhead during extreme high tide conditions is to be expected under Alternative 2, as currently occurs. More frequent inundation and

associated nuisance from the flooding events are are expected to occur due to future sea level rise. This may result in the future closure of the International Boardwalk, thereby eliminating the risk of damage and injury to people located within the structures. Therefore, while overtopping along Basin 3 would continue to occur under Alternative 2, it would not result in increased risk of injury or damage to structures. Therefore, impacts associated with inundation at Basin 3 are less than significant.

In addition, under existing conditions, wave splash annually occurs at the northern segment of the protective revetment/wall along Horseshoe Beach. In the southern reach, wave run-ups rarely reach higher that the existing protective revetment. Thus, while the heights and frequency of wave overtopping would not change under the proposed project, given the potential increase for injury and structural damage to occur, wave overtopping along this the boardwalk east of Horseshoe Pier is considered a significant impact.

More frequent inundation and associated nuisance from the flooding events would occur if the projected high sea level rise is materialized. As Alternative 2 is not expected to increase the building area and use of the site and activities (including patronage of the project site) would be expected to be similar to existing conditions, there would not be an increased risk associated with an increase in sea level rise over existing conditions. However, should the projected high sea level rise occur in the future, the impacts could be significant.

Mitigation Measures

As with the proposed project, mitigation measures MM HWQ-2: Wave Uprush Protection would be implemented to reduce impacts associated with possible inundation associated with wave uprush. In addition, mitigation measure MM HWQ-3: Sea Level Rise Adaptation Plan would be implemented to reduce impacts associated with possible inundation associated with wave uprush and future sea level rise.

Residual Impacts

As with the proposed project, MM HWQ-2 requires a four-foot high recurved splash wall anchored at the seaward edge of the boardwalk landward of the northern portion of the Horseshoe Pier. The splash wall would redirect the up-rushed water back toward the ocean, thereby deflecting the water away from the boardwalk and preventing inundation from occurring. Installation of a splash wall along the revetment would be subject to Coastal Commission approval. Alternatively, as stated in MM HWQ-2, the Coastal Commission may recommend an alternative method to reduce potential for inundation to occur. With implementation of mitigation measure MM HWQ-2, impacts associated with possible inundation from wave uprush under current sea levels would be less than significant. As with the proposed project, MM HWQ-3 requires that a plan be developed to address future sea level rise within the project area by instituting a monitoring program to assess sea level changes, and by identifying structural options to be implemented if necessary (subject to approval by the applicable regulatory agencies), that reduce risks to people and structures within the coastal zone. With implementation of mitigation measure MM HWQ-3, impacts associated with possible inundation from wave uprush under future sea level rise conditions would be less than significant. The impacts would be similar, but reduced as compared to the proposed project. Implementation of a recurved splash wall, or establishment of a sea level rise adaptation plan to address the increased risk of

inundation that could occur with predicted future sea level rise. Therefore, the project site would continue to be subject to the potential exposure of buildings and people due to risk and damage associated with a tsunami or seiche, as well as potential impacts from sea level rise. The risk would be significant and unavoidable.

Land Use and Planning

Impact LUP-1: Alternative 2 would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

Alternative 2 includes the infrastructure and public safety improvements at the project site. New structures that would be constructed under Alternative 2 (such as the demolition and reconstruction of the Pier Parking Structure and Pier Plaza and timber portion of the Horseshoe Pier and buildings located on top) would have approximately the same footprint, square footage, and building height as the structures they are replacing and the uses would not change. Therefore, the new structures would not conflict with applicable land use and planning documents, including the Public Trust Doctrine, Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP): 2012-2035/Sustainable Communities Strategy (SCS), General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. However, some goals and objectives included in those plans, would not be implemented under Alternative 2, such as improving vehicular and non-vehicular access, allowing for development in accordance with prescribed intensity limitations, constructing a boat launch ramp, and encouraging a reconfiguration of development to create a unified seaside “village.”

Under Alternative 2, Seaside Lagoon would be filled in and converted to an upland park. The use of the site as an upland park would continue to be consistent with the General Plan Land Use designation (P Public or Institutional), Coastal Land Use Plan designation (P-PRO Parks Recreation and Open Space), Coastal Zoning (P-PRO), and Harbor/Civic Center Specific Plan designation (Harbor/Pier Sub-Area Policy Zone 5), all of which pertain to public open space and recreation uses. Therefore, Alternative 2 would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant. The impacts would be similar to the proposed project; however some goals and objectives included in those plans, would not be implemented under Alternative 2.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Noise

Impact NOI-1: Alternative 2 would not result in exposure of persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

Implementation of Alternative 2 elements would include construction activities throughout much of the project site, albeit substantially more limited and focused than what would otherwise occur in the construction program associated with the proposed project. Similar to the proposed project, however, construction activities occurring under Alternative 2 would be subject to, and are assumed to comply with, the requirements of the City's Noise Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities under Alternative 2 would not exceed applicable standards, and construction noise impacts occurring under this threshold would be less than significant. The types of improvements proposed under Alternative 2 pertain to necessary infrastructure improvements, which would be unlikely to result in a material change to existing operations and activities within the project site. Regardless, land uses within the project site would continue to be subject to, and would comply with, the applicable requirements of the Noise Ordinance. As such, continued operation of the project site under Alternative 2 would not exceed applicable standards, and operational noise impacts occurring under this threshold would be less than significant. The impacts would be similar, but reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-2: Alternative 2 would result in exposure of persons to or generate excessive groundborne vibration or groundborne noise levels.

While the nature and scale of construction activities that would occur under Alternative 2 would be substantially less than those of the proposed project, consequently reducing the extent of heavy construction equipment at the site, there are certain improvements under Alternative 2 that are likely to involve vibration-prone equipment operating in proximity to sensitive receptors. In particular, replacement of the Pier Parking Structure and Pier Plaza buildings would occur equally close to the residential condominiums at the southeast end of the project site as would occur with the proposed project. Also, improvements to Torrance Circle/Boulevard under Alternative 2 would occur in proximity to Veterans Park, replacement of the docks, slips and gangways in Basin 3, which would require removal of the liveaboards within Basin 3, would occur in the general vicinity of residential condominiums and Czuleger Park to the east. The levels of construction-related vibration at those locations would depend on the type of equipment operating nearby; see Table 3.10-9 in Section 3.10 Noise of this Draft EIR for estimates of vibration levels associated with various types of construction equipment. Based on the locations and types of improvements proposed under Alternative 2, it is unlikely that notable construction-related vibration levels would occur in proximity to the residential development near the intersection of Harbor Drive and Pacific Avenue, or the Crowne

Plaza Hotel, or the liveaboards in Basin 2. Although the construction period associated with Alternative 2 would be shorter than under the proposed project, the potential for such human annoyance impacts is considered to be greater under Alternative 2 than under the proposed project because it is likely that many of the types of improvements identified for Alternative 2 would occur while nearby business remain in operation, whereas, under the proposed project, all of the existing uses, except Kincaid's, would be closed during project construction. Similar to the proposed project, for those areas where there is the potential for vibration-related structural damage to occur, impacts would be significant. Relative to potentially significant human annoyance impacts from construction-related vibration, albeit only temporary, the impacts would also be significant.

Mitigation Measures

As with the proposed project, mitigation measure MM NOI-1 Pile Driving Vibration, would be implemented to reduce impacts where vibration-related structural damage may occur.

Residual Impacts

With implementation of MM NOI-1, impacts related to structural damage from construction-related vibration, particularly as related to pile driving, would be less than significant.

There are no feasible mitigation measures available relative to significant impacts to human annoyance from construction-related vibration, albeit only temporary. The impact would be significant and unavoidable.

Impact NOI-3: Alternative 2 would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

The types of improvements proposed under Alternative 2 pertain to necessary infrastructure improvements, which would not result in a material change to existing operations and activities within the project site. As such, a substantial permanent increase in ambient noise levels would not occur under Alternative 2, as would occur under the proposed project. Impacts are less than significant, which would be less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-4: Alternative 2 would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Implementation of Alternative 2 would include construction activities, which, although substantially less in scale, extent, and duration than those of the proposed project, would

still include construction in proximity to noise-sensitive receptors. Similar to Impact NOI-2 above, the most notable construction activities anticipated to occur under Alternative 2 would be in the vicinity of noise sensitive receptors along the central, southeastern, and southern portions of the project site, where construction noise would result in a temporary, but significant, increase in ambient noise levels (i.e., increase of 10 dBA or more).

As discussed under Impact NOI-3 above, no change in noise levels is associated with existing operations and activities would occur within the project site. As such, operational impacts are less than significant.

Mitigation Measures

As with the proposed project, mitigation measures MM NOI-2 through MM NOI- 6 would reduce construction noise impacts.

Residual Impacts

As with the proposed project, mitigation measure MM NOI-2 through MM NOI-6 would reduce construction noise impacts; however, in receptor areas that are very close to construction and/or where receptors are located at higher elevations whereby a noise barrier on the project site would not sufficiently attenuate the construction noise, a significant unavoidable construction noise impact would occur. That would be true for both the proposed project and Alternative 2 in the southeastern portion of the project site.

Such construction noise impacts would differ between the proposed project and Alternative 2 relative to noise-sensitive receptors near the northern and northeastern portions of the site, where construction activities under Alternative 2 in the northern portion of the site would be much less than under the proposed project, and less than significant under Alternative 2. Also, the at-grade or below-grade improvements in the northern portion of the project site under Alternative 2 would allow the placement of temporary noise barriers to fully mitigate construction noise impacts, whereby, construction of the multi-story parking structure in the northern portion of the project site under the proposed project would not allow an at-grade noise barrier to fully mitigate noise impacts at Crowne Plaza Hotel located directly to the east.

In summary, implementation of Alternative 2 would reduce, but not avoid, significant unavoidable construction noise impacts. The impacts would be similar, but reduced as compared to the proposed project.

Public Services

Impact PBS-1: Alternative 2 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Under Alternative 2, many of the older non-compliant buildings/structures throughout the project site (such as the Horseshoe Pier and buildings, Sportfishing Pier and buildings, and Pier Parking Structure and Pier Plaza) would be demolished and replaced with new similar sized facilities that comply with current applicable fire codes, including fire

suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers). Under Alternative 2, the International Boardwalk building would likely be closed in the future, but the service road would not be widened for adequate emergency vehicle access. The Pier Parking Structure would be replaced and include similar site access as under existing conditions, however access for emergency vehicles may be improved.

Therefore, Alternative 2 would offer an improvement related to fire protection by replacement of some older buildings and improvements for emergency access vehicles in the Pier Parking Structure. Further, although not all the existing buildings would be replaced under Alternative 2, as appropriate, water mains and fire hydrants would be modified to conform to current requirements.

As with the proposed project, during construction, precautions and requirements associated with the California Fire Code's Fire Safety During Construction and Demolition (Chapter 33) would be followed.

Under Alternative 2, it is expected that a similar number of visitors would utilize the site, which would not increase harbor use or require additional fire protection staff and equipment or Harbor Patrol services above existing conditions. Therefore, Alternative 2 would not result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. The impacts would be similar, to the proposed project, however, Alternative 2 would not replace all of the non-compliant buildings/structures with new structures compliant with the most up-to-date building code requirements and no improvements in emergency access would be implemented.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact PBS-2: Alternative 2 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Under Alternative 2, the buildings that are replaced would incorporate strategies for Crime Prevention Through Environmental Design (CPTED) aimed at deterring criminal behavior by designing the physical environment in ways that reduce identifiable crime risks.

Under Alternative 2, it is assumed that the Pier Police Sub-station would relocate somewhere within the project site during construction and either remain at the relocated site or be located within the new parking structure. Regardless, it is assumed that the operation of the Pier Police Sub-Station within the project site would be similar as under the existing conditions.

Once operational, Alternative 2 is expected to have a similar number of visitors utilizing the site. This would not be expected to increase or require additional police protection staff and equipment above existing conditions. Therefore, Alternative 2 would not result in the need for the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement) in order to maintain adequate services and, as such, the impact would be less than significant. The impacts would be similar, to the proposed project, however, Alternative 2 would not implement new security measures and no improvements in emergency access would be implemented.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Recreation

Impact REC-1: Alternative 2 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Under Alternative 2, because of the water quality challenges with the Seaside Lagoon as an enclosed swimming facility, recreational uses at the site would change as the Seaside Lagoon would be closed as a water feature, filled and converted to an upland park. This modification to the lagoon would provide high-quality public open space on the north side of the project site that is open year around. This would be an improvement in the availability of existing recreational conditions at the site because Seaside Lagoon has controlled access only during certain times of the year. In addition, under Alternative 2, minor improvements to bicycle/pedestrian circulation would occur with the reconstruction of the Pier Parking Structure. The Redondo Beach Marina in Basin 3 would be rebuilt at the same configuration currently existing. Under Alternative 2, the Sportfishing Pier would be either retrofitted, removed or replaced. If the City chooses to permanently remove the Sportfishing Pier, sportfishing charters are expected to occur elsewhere from the project site (such as the location currently used by the Voyager) and fishing from the pier would continue on the Monstad Pier, which is adjacent to the project site. Other open space and recreational uses at the site would be maintained. Therefore, recreational uses would continue at Alternative 2 and there would not be an increase in 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. As such, impacts would be less than significant. The impacts would be similar to the proposed project; less construction would occur, however, enhancements to recreational amenities would occur to a much lesser degree than under the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact REC-2: Alternative 2 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative.

The modification of Seaside Lagoon from an enclosed swimming facility to a year-round upland park would change the type of recreational activities available at the lagoon (upland uses such as open turf area and play equipment as opposed to swimming and beach activities). Other recreational facilities at the site would be maintained, and in some cases slightly enhanced (i.e., the bicycle path through the Pier Parking Structure would be improved). No other construction or expansion of recreational facilities outside of the project site would occur. Therefore, Alternative 2 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As such, impacts would be less than significant. The impacts would be similar to the proposed project; less construction would occur, however, enhancements to recreational amenities would occur to a much lesser degree than under the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Traffic and Transportation

Impact TRA-1: Alternative 2 would not exceed the applicable significance thresholds.

Alternative 2 includes the replacement of some of the existing development, including the approximately 70,000 square foot Pier Plaza, which would not increase the amount of existing development and would not increase net new trip generation for the proposed project. As such, there would be no notable change in existing operational traffic. There would be some amount of temporary traffic associated with construction activities; however, construction activities would be substantially less than the proposed project. Construction traffic impacts associated with Alternative 2 would be less than significant. This is similar, but reduced, as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRA-2: Alternative 2 would not conflict with an applicable congestion management program.

As noted above, Alternative 2 would not increase the amount of existing development and would not increase net new trip generation for the proposed project. As such, there would be no notable change in existing operational traffic. There would be some amount of temporary traffic associated with construction activities; however, construction activities would be substantially less than the proposed project. Based on the above, Alternative 2 would not conflict with an applicable congestion management program. No impacts would occur. This is reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact TRA-3: Alternative 2 would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Under Alternative 2, there would be limited replacement of some existing development, and existing uses would remain. As such, there would be no changes to the existing circulation system, both on land and within the water, and the alternative would not substantially increase traffic hazards.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Utilities

Impact UTL-1: Alternative 2 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Although not to the extent of the proposed project, under Alternative 2, many of the existing non-compliant buildings/structures would be reconstructed/replaced in compliance with the most up-to-date building code requirements of the CBC applicable at the time of development. Therefore, the buildings replaced on the project site under Alternative 2 would comply with CalGreen and California Plumbing Code requirements, which include mandates for installation of water conserving plumbing fixtures and fittings (e.g., low flow water fixtures and high-efficiency toilets and urinals), which would account for a 20 percent reduction in wastewater generation of those buildings. Given that Alternative 2 would replace some of the older outdated plumbing fixtures and fittings with new efficient plumbing, the estimated amount of wastewater generation would result in no increase in wastewater generation, but is expected to improve existing

conditions. Further, under Alternative 2, the International Boardwalk would remain, but it may be closed in the future to address the increased risk of inundation that could occur with predicted future sea level rise. Closure of the International Boardwalk would also result in a slight reduction in wastewater generation as compared to existing conditions.

Because Alternative 2 focuses on major infrastructure that the City would need to replace in order to continue operating the site effectively, only a minor amount of on-site sewer replacement would be implemented, such as tie-ins to the existing facilities. The existing system would be designed to provide adequate capacity to handle the expected wastewater increase and designed to maintain the same flow conditions as currently exist at the site. Therefore, the wastewater generated by Alternative 2 would not exceed the wastewater conveyance and treatment at the project site and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. The impact is less than significant. Impacts would be similar but reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: Alternative 2 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

Alternative 2 would replace several buildings (e.g., Pier Plaza, and buildings on Horseshoe Pier and Sportfishing Pier, if replaced) constructed from the late 1950s to 1980s with buildings that would fully comply with current city codes including the California Plumbing Code and the California Green Building Code, which mandate installation of water conserving plumbing fixtures and fittings (e.g., water efficient toilets and dishwashing machines). Therefore, it is expected that, at a minimum, the new facilities associated with the proposed project would achieve a reduction in water use rates of 20 percent as compared to the existing water use rates. Further, under Alternative 2, the International Boardwalk would remain, but it may be closed in the future to address the increased risk of inundation that could occur with predicted future sea level rise. Closure of the International Boardwalk would also result in a reduction in water demand as compared to existing conditions.

Projected water demand under Alternative 2 would be much less than the proposed project and less than existing conditions. Therefore, water demand due to Alternative 2 would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. As such, Alternative 2 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements, and impacts would be less than significant. Impacts would be similar but reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: Alternative 2 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

Replacement of existing structures under Alternative 2 would result in solid waste generation during construction. The greatest amount of solid waste associated with construction would be generated during the demolition process. Because Alterative 2 focuses on the demolition and reconstruction of infrastructure at the site, it is unlikely that materials from demolition would be re-used on-site, and would instead be hauled off-site for recycling or disposal in a landfill. As with the proposed project, some buildings may contain asbestos and lead-based paint. Such materials would be abated, removed, and disposed according to applicable regulations as discussed in Section 3.14 Utilities.

Wastes generated during construction activities under Alternative 2 would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities, similar although to a lesser degree than the proposed project. Debris that is not reused on-site would be trucked from the site for disposal at any of the area landfills that accept and/or recycle construction/demolition materials. The inert landfill which takes in most of the construction and demolition debris in Los Angeles County has sufficient capacity available to accommodate construction waste that would be generated under Alternative 2. Therefore, the construction of Alternative 2 would not create a need for additional solid waste disposal facilities.

Operation of Alternative 2 is expected to generate the typical range of recyclable and non-recyclable waste that other similar uses create, and that is currently generated on-site. Since under Alternative 2, operations would remain the same as currently exists on site, it is expected that the amount and type of solid waste generated would be similar to existing conditions. Thus, Alternative 2 would not create a need for additional solid waste disposal facilities to adequately handle solid waste generated during operations. No significant impact on the landfills within the region is anticipated as a result of Alternative 2.

As with the proposed project, operations would comply with the existing waste diversion programs of the City, County, and Athens Services (the City’s current contract provider for solid waste disposal). The City's contractual agreement with Athens Services obligates Athens Services to guarantee that the City will exceed the diversion requirements set forth in AB 939. Therefore, as with the proposed project, Alternative 2 would comply with the established diversion requirements, and Alternative 2 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. Impacts relative to adopted solid waste diversion programs and policies would be less than significant. Impacts would be similar but reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: Alternative 2 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Because implementation of Alternative 2 would replace older and inefficient non-compliant buildings, it is expected that Alternative 2 would result in a decrease in electricity and natural gas demand at the project site based on the latest CalGreen and State Energy Conservation Standards contained in Title 24. With the exception of connections needed for the new/replaced buildings and structures, Alternative 2 would not require modification of existing electrical transmission and natural gas distribution systems on-site to continue to serve the project site. Therefore, implementation of Alternative 2 would not exceed the capacity of electricity transmission facilities and natural gas distribution facilities would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. Impacts would be similar but reduced compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.4.3 Alternative 3 - Landside Development Only ('No Federal Action Alternative')

4.4.3.1 Description of Alternative 3

Under this alternative, no project elements requiring a U.S. Army Corps of Engineers (USACE) permit (i.e., waterside project elements) would be implemented. As with the proposed project, a maximum of 304,058 square feet of net new development would be constructed, that includes retail, restaurant, creative office, an approximately 700-seat specialty cinema, and hotel, however, some of the square footage would be relocated under Alternative 3 as compared to the proposed project. The following is a breakdown of the project elements by area within the project site that would be implemented under this alternative.

Northern Portion of Project Site

Under Alternative 3, approximately 241,898 net new square feet of new development, including retail, restaurant, creative office, and specialty cinema would be constructed in the northern portion of the project site. As opposed to the proposed project, no new

accessory uses would be constructed at Seaside Lagoon and that square footage would instead be constructed elsewhere within the project site. Because the Seaside Lagoon is potentially a historical Section 10 jurisdiction, no modifications to the swimming area and surrounding beach would take place (e.g., no USACE action would occur and the lagoon would remain open to the general public during the summer for a fee and as long as water quality goals can be met). However, should the NPDES permit associated with discharge of water from the lagoon not be renewed, or the City not be able to meet water quality requirements of the permit (due to expense of infeasibility), the lagoon would cease operation and be closed to the public. The upland portion of the lagoon would be modified to provide for the new main street.

No improvements would occur to the Sportfishing Pier under this alternative; however, the buildings on the pier may be rehabilitated provided that all construction occurs from the topside of the pier and all current code requirements can be met. The proposed location of the small craft boat launch ramp facility (landside and waterside), which is currently the location of Joe's Crab Shack, would remain as existing conditions. Because of the development, the boat hoists would be removed from their current location.

Under Alternative 3, a four-level parking structure would be built at the northeast corner of the site. As part of the Pacific Avenue Reconnection (under Additional Improvements below), modifications to the Plaza Parking Structure (e.g., relocation of the stairwell and elevator shaft due to Pacific Avenue Reconnection) would occur.

Southern Portion of Project Site

Under Alternative 3, approximately 62,160 net new square feet of new development, including retail, restaurant, and hotel would be constructed in the southern portion of the project site. Under this alternative, the International Boardwalk would be removed and replaced with the Pacific Avenue Reconnection including separated walkway, roadway, and bicycle path. The existing Pier Parking Structure and Pier Plaza would be demolished and replaced with a new 1,012 stall parking structure. The new structure would require the minor modification of the Torrance Circle to facilitate access to the new parking structure. A hotel and other commercial uses would be constructed in the area of the new Pier Parking Structure. Although no improvements would occur to the timber portion of the Horseshoe Pier under this alternative, the buildings on this southern portion of the pier may be rehabilitated as long as the construction occurs from the topside of the pier and all current code requirements can be met.

Basin 3

As mentioned above, no waterside elements requiring a USACE permit would be implemented. Because the bulkhead cap replacement and minor repairs to the bulkhead can be made from the landside and without an USACE permit, these project elements would occur under Alternative 3. However, no pedestrian/bicycle bridge would be constructed.

Additional Improvements

Alternative 3 would implement updates to existing aging infrastructure, including construction of a new on-site stormwater drainage system to address stormwater quality requirements and upgrades to the existing sewage lift stations. Roadways adjacent to the project site would also be improved (e.g., re-slurried and re-striped). Grading would occur throughout the site similar to as would occur under the proposed project. Under this

alternative, public open space, landscaping, lighting, and pedestrian and bicycle pathways would be enhanced similar to the proposed project. Although, pedestrian boardwalk improvements along the water's edge would occur to a lesser extent than the proposed project, as no pedestrian/bicycle bridge would be constructed linking the northern and southern portions of the site, and no boardwalk improvements would occur at Seaside Lagoon and the current site of Joe's Crab Shack. The existing police sub-station would be relocated on site and private on-site security and other security measures would occur similar to the proposed project. New service and loading areas would be established similar to the proposed project. The proposed Tidelands Exchange would also occur (subject to approval by the California State Lands Commission [CSLC]).

Alternative 3 includes the reconnection of Pacific Avenue as a roadway for vehicles (which requires the demolition of International Boardwalk and elevated walkway). The Pacific Avenue Reconnection would also address sea level rise problems behind Basin 3 by placing the roadway at a higher elevation than the existing service access road and International Boardwalk building behind Basin 3.

4.4.3.2 Alternative 3 Environmental Analysis

Aesthetics and Visual Resources

Impact AES-1: Alternative 3 would not have a substantial adverse effect on a designated local valued view.

Under Alternative 3, the development of the landside would be similar to that of the proposed project, and as such, effects on designated local valued views during construction and operation would be similar. As no construction of waterside elements would occur, the only changes in views of the water would occur as a result of landside construction and operation.

Czuleger Park – Key Observation Views 1 through 3: As with the proposed project if building cranes are used to construct the parking structure in the northeast corner of the project site, the top of the cranes could be visible from Key Observation Views 1 and 2. The visibility of the crane would be dependent on the precise location and angle of crane, as well as the angle of the viewer. Given that views of Santa Monica Bay/Pacific Ocean are already blocked or very limited from Key Observation Views 1 and 2 respectively, and any possible view of the construction crane would be temporary and limited, there would be no construction-related significant visual impact on the designated local valued view at Key Observation Views 1 and 2 under Alternative 3. No changes to views would occur at Key Observation View 1 under operation of the Alternative 3. The only features at the project site that may be visible from Key Observation View 2 are tall trees located on-site. Any changes to the trees (i.e., removal/relocation and/or new plantings) would not adversely affect the limited views available from this location. Therefore, operation of Alternative 3 would not have a substantial adverse effect on a designated local valued view from Key Observation View 2.

As with the proposed project, construction activities and equipment would be visible from Key Observation View 3; however, from this distance, the activities and equipment would be difficult to visually distinguish from other features located at a similar distance. As such, the construction would largely blend into the overall view and not be visually prominent. While some of the larger equipment could potentially encroach into the views

of the water, primarily at the northern edge of the view corridor, this temporary encroachment would occupy only a small portion of the larger viewshed, and the primary views of the water would remain open. Therefore, construction would not have a substantial adverse effect on the designated local valued view at Key Observation View 3 under Alternative 3. Under Alternative 3, no pedestrian bridge would be constructed, therefore, impacts would be similar but reduced.

During operation, the changes to the views from Key Observation View 3 under Alternative 3 would be similar to that of the proposed project, except that no water features, including the pedestrian bridge would be implemented. Features of Alternative 3, including the market hall, would be visible; however, the views of Santa Monica Bay/Pacific Ocean would remain. No change in the locally designated valued view would occur. Similar to the proposed project, impacts at Key Observation Views 1 – 3 are less than significant.

North Harbor Drive – Key Observation Views 4 and 5: The changes to the views from Harbor Drive under Alternative 3 would be similar to that of the proposed project. Construction activities would temporarily disrupt views of the water from Harbor Drive; however, the views that are available are limited and of low to moderate quality. The impact would be temporary and not result in a substantial adverse effect on a designated local valued view, including views from Key Observation Views 4 and 5.

During operation, the changes to the views from Harbor Drive under Alternative 3 would be similar to that of the proposed project. With the increase in development in the northern portion of the project, the locations where background views of the water are visible from Harbor Drive would decrease between Portofino Way and the current terminus with Pacific Avenue; however, as with the proposed project, view corridors to the water would be established at Key Observation Views 4 and 5. Additionally, new views to motorists would available from the new main street and the Pacific Avenue Reconnection. Impacts at Harbor Drive, including Key Observation Views 4 and 5 would be less than significant, similar to the proposed project.

Proposed /New Main Street – Key Observation View 6: Views of Seaside Lagoon and the North Breakwater are visible from this location, but there are no views of the harbor water. As with the proposed project, construction activities would be visible from Key Observation View 6. These activities would be limited and temporary and would not have an adverse effect on a locally designated valued view. During operation, the view of Seaside Lagoon would somewhat change, as the upland option of Seaside Lagoon would be modified to provide for the new main street. The existing chain link fence would be moved, but is it likely the fence, landscaping, and the lagoon water (available when the lagoon is full) would remain. Alternative 3 would not result in an adverse change in the locally designated valued view from Key Observation View 6. Similar to the proposed project, the impact is less than significant. However, the visual improvements associated with upgrading Seaside Lagoon would not occur.

Views from the Water – Key Observation View 7: Construction activities would be visible from the water. While some activities may be surrounded by construction fencing, taller equipment and activities occurring above the construction fence line such as demolition and reconstruction of Pier Plaza may be visible from the water. Additionally, construction activities on the Horseshoe and Sportfishing Piers would be visible from the water. While these activities would temporarily detract from the scenic

quality of the harbor, the primary scenic views towards the open water of the Santa Monica/Pacific Ocean would remain available. King Harbor is a busy harbor that supports a high level of activity and variety of vessel types and the presence of construction equipment and activities would not have a substantial adverse impact on the designated local valued view at Key Observation View 7 and similar to the proposed project, impacts during construction would be less than significant.

As with the proposed project, project elements that would be visible from Key Observation View 7 would new buildings in the northern and southern portion of the site. While more buildings would be visible, they would have a similar profile as the existing buildings and would be blend into the overall view of the shoreline. As with the proposed project, the views of the project site from Key Observation View 7 would not substantially change, however, there would no pedestrian bridge under Alternative 3. Alternative 3 would not result in an adverse change in the locally designated valued view from Key Observation View 7 and impacts during operation would be less than significant. The impacts would be similar, but reduced, as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-2: Alternative 3 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Under Alternative 3, the development of the landside would be similar to that of the proposed project, and as such, changes in visual character and quality would be similar. During project construction, the visual character and quality of the site would be degraded as a result of site demolition and construction activities and the on-site presence of construction equipment; however, this impact would be temporary. The construction site would also be screened from public view during construction activities, consistent with RBMC Section 9-1.16. While this would temporarily change the visual character and reduce the visual quality of the site, construction activities and equipment would be temporary and not result in permanent visual degradation that would substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, impacts during construction would be less than significant.

As with the proposed project, the landside portion of the project site would be redeveloped a maximum of 304,058 square feet of net new development. While the site would be visually altered by the presence of new buildings, the new development would be at a similar elevation to the existing development, continuing to be at a lower profile than surrounding development on the bluffs above. Further, the existing character of the site as a coastal commercial and recreation center would be retained if not enhanced, and Alternative 3 would not result in the removal of any substantial visual resources, such as the harbor or ocean.

As with the proposed project, Alternative 3 would establish a new design for the project site, subject to Harbor Commission design review process, that creates a more

visually harmonious style across the northern and southern portions of the site that incorporates some similar style and design elements. Other visual changes would include new landscaping, enhanced high-quality public open space, and new public art. Although the changes to the visual quality of the site would be noticeable, the addition of new design elements and improved public spaces will enhance the visual quality of the site. The coordination of design elements would result in an organized aesthetic that is generally considered beneficial. Seaside Lagoon, with the exception of the upland area, and the proposed boat launch site (Joe's Crab Shack) would not be modified, therefore, the visual character and quality would not change.

Alternative 3 would not substantially degrade the visual character or quality of the project site and the impact would be less than significant. The impacts would be similar to the proposed project. However, the visual enhancements at Seaside Lagoon, such as removing the chain link fence, slides and fountains, would not occur. Additionally the aging Sportfishing Pier would remain and no removal of or visual upgrades to that structure would occur, although the building on top of the pier may be rehabilitated.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-3: Alternative 3 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Under Alternative 3, the development of the landside would be similar to that of the proposed project, and as such, sources of light and glare during construction and operation would be similar. As with the proposed project, construction would primarily be conducted during daylight hours. However, should the use of nighttime construction lighting be required, as with the proposed project, it would be directed inward and downward toward the construction site, and would not be expected to increase the overall ambient glow emanating from the project site as compared to existing conditions. Therefore, similar to the proposed project, impacts related to nighttime construction lighting would be less than significant.

Although the operational sources of light would be slightly reduced because of the proposed pedestrian/bicycle bridge, a new source of nighttime lighting under the proposed project would not be implemented under Alternative 3. As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Alternative 3 would not incorporate substantial amounts of reflective building materials in areas that are highly visible to off-site glare-sensitive uses.

Alternative 3 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, impacts would be less than

significant. The impacts would be similar, but slightly reduced, as compared to the proposed project.

Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Air Quality

Impact AQ-1: Alternative 3 would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Violation of Air Quality Standards – Construction

Construction emissions under Alternative 3 would be less than that of the proposed project. This is because Alternative 3 would not institute any of the waterside development, beyond the Basin 3 upgrades to address climate change impacts. As was analyzed under the proposed project, compliance with Rule 403 and Rule 1113, as pre-existing regulatory requirements, were accounted for in the construction emissions modeling. Rule 1113 is included as part of the default modeling scenario.

Table 4-8 summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors associated with the worst-case construction scenario under Alternative 3 (utilizing the significance criteria provided in Table 3.2-5 in Section 3.2 Air Quality in this Draft EIR). The peak daily emissions generated during each year of Alternative 3's construction period are identified. As shown, the maximum daily construction emissions generated by the worst-case construction scenario would exceed SCAQMD's daily significance threshold for ROG, NOx and CO, which would be a significant impact. Sox, PM_{10}, and $PM_{2.5}$ would be below the regulatory thresholds and, therefore, construction phase emissions of these pollutants would be less than significant. Health effects of exposure to these criteria pollutants are included in the background information Section 3.2.2.2.3 and Table 3.2-1 in Section 3.2 Air Quality in this Draft EIR.

Table 4-8: Alternative 3 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2017	42.05	**455.94**	**558.33**	1.03	31.87	19.19
2018	**198.93**	**173.22**	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Violation of Air Quality Standards – Operation

Operational activities under Alternative 3 would be similar to those of the proposed project. As shown in Table 4-9, net emissions under Alternative 3 would not result in long-term regional emissions of ROG, NOx, CO, Sox, PM_{10} or $PM_{2.5}$. Therefore, net operational emissions under the Alternative 3 would not result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Table 4-9: Alternative 3 Unmitigated Operational Emissions

Emissions Source	Estimated Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing						
Area Sources[a]	5.75	0.00	0.02	0.00	0.00	0.00
Energy Sources[b]	0.83	7.51	6.31	0.05	0.57	0.57
Mobile Sources	63.64	121.56	537.69	0.84	55.75	16.04
Total Existing Emissions	70.22	129.08	544.03	0.88	56.32	16.62
Alternative 3						
Area Sources[a]	10.50	0.00	0.12	0.00	0.00	0.00
Energy Sources[b]	1.41	12.86	10.80	0.08	0.98	0.98
Mobile Sources	79.00	124.64	588.84	1.13	71.97	20.34
Total Project Emissions	90.91	137.50	599.76	1.21	72.95	21.31
Net Project Increase						
Area Sources[a]	4.75	0.00	0.10	0.00	0.00	0.00
Energy Sources[b]	0.59	5.35	4.49	0.03	0.41	0.41
Mobile Sources	15.35	3.08	51.15	0.29	16.22	4.29
Total Net Project Emissions	20.69	8.42	55.74	0.32	16.63	4.70
Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Notes:
Area sources include emissions from consumer product use, architectural coating and landscape equipment.
Energy source include natural gas use for heating/cooling as well as electrical consumption.

Mitigation Measures

As with the proposed project, implementation of mitigation measures MM AQ-1: Fleet Modernization for Construction Equipment and MM AQ-2: Use of Low-VOC Coatings and Paints would reduce criteria pollutant emissions associated with project construction. Table 4-10 shows the modeled peak daily emissions associated with worst-case construction scenario under Alternative 3 after mitigation measures MM AQ-1 and MM AQ-2 are applied. Implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the impacts of ROG and CO to less than significant; however, NOx would remain significant and unavoidable for construction.

Table 4-10 Mitigated Alternative 3 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2017	-	275.76	532.96	-	-	-
2018	68.23	129.68	-	-	-	-
Regional Significance Threshold	*75*	*100*	*550*			
Significant Impact?	No	**Yes**	No			

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Residual Impacts

After mitigation, construction emissions of NOx would be lower, but would remain significant and unavoidable as shown in Table 4-10. No other feasible methods to reduce emissions were identified. The impacts under Alternative 3 would be similar for NOx, but reduced (and fully mitigatable) for CO, as compared to the proposed project.

Impact AQ-2: Alternative 3 would not expose sensitive receptors to substantial pollutant concentrations.

Exposure of Sensitive Receptors to Pollutant Concentrations

Separate discussions are provided below analyzing the potential for sensitive receptors to be exposed to CO hotspots and localized air quality impacts from criteria pollutants and TACs from on-site sources during construction and operation of Alternative 3. Because the same level of operational activities would occur under Alternative 3 and the proposed project, operational impacts under Alternative 3 would be identical to that of the proposed project. Construction impacts under Alternative 3 would be reduced from that of the proposed project as the only waterside construction that would occur would be from the modifications to eliminate current flooding and to accommodate sea level rise.

CO Hotspots

A total of 41 local intersections were analyzed as part of the proposed project's traffic analysis (Section 3.13 Traffic and Transportation and Appendix L1 in this Draft EIR). Because operation of Alternative 3 would be similar to the proposed project, the intersection analysis for the proposed project would be similar for Alternative 3. As shown in Table 4-11, the maximum hourly traffic is generated at the intersection of

Pacific Coast Highway/Catalina Avenue & Herondo Street/Anita Street under all scenarios. The maximum peak traffic at this intersection for the existing plus project scenario is 4,942 and 5,798 vehicles per hour, for the AM and PM peak hours, respectively. Under the cumulative plus project scenario, the maximum hourly traffic is 5,083 and 6,009 vehicles per hour, for the AM and PM peak hours, respectively. As none of the peak hour traffic at all of the intersections would come close to 24,000 vehicles per hour, CO emissions from these vehicle volumes would be less than significant.

Table 4-11: Peak Hourly Traffic Volumes

	Existing Plus Alternative 3		Cumulative Plus Alternative 3	
Intersection	**AM**	**PM**	**AM**	**PM**
Hermosa Ave & 2nd St	166	319	169	324
Monterey Blvd & 2nd St	1,190	1,623	1,212	1,655
Valley Dr & 2nd St	1,228	1,618	1,252	1,647
Harbor Dr/Hermosa Ave & Herondo St	1,205	1,562	1,228	1,593
Monterey Blvd & Herondo St	2,778	3,121	2,873	3,256
Valley Dr/Francisca Ave & Herondo St	1,682	2,513	1,716	2,564
Pacific Coast Hwy/Catalina Ave & Herondo St/Anita St	3,554	4,415	3,691	4,631
Prospect Ave & Anita St	1,681	1,957	1,731	2,028
Harbor Dr & Yacht Club Way	3,432	3,540	3,504	3,615
Pacific Coast Hwy & Catalina Ave	1,213	1,516	1,238	1,549
Harbor Dr & Marina Way	602	630	615	642
Catalina Ave & Gertruda Ave	2,523	2,873	2,634	3,047
Catalina Ave & Francisca Ave	431	630	442	658
Catalina Ave & Broadway	934	1,149	970	1,197
Harbor Dr & Portofino Way/Beryl St	2,669	3,153	2,794	3,347
Catalina Ave & Beryl St	420	752	429	767
Broadway & Beryl St	3,615	4,128	3,791	4,392
Francisca Ave & Beryl St	3,693	4,120	3,788	4,262
Pacific Coast Hwy & Beryl St	4,177	4,802	4,265	4,902
Pacific Avenue & Harbor Dr	3,188	3,991	3,255	4,073
Catalina Ave & Carnelian St	2,989	3,713	3,053	3,789
Catalina Ave & Diamond St	2,417	3,021	2,513	3,131
Catalina Ave & Emerald St	**4,942**	**5,798**	**5,083**	**6,009**
Pacific Coast Hwy & Garnet St	166	319	169	324
Catalina Ave & Torrance Blvd	1,190	1,623	1,212	1,655
Pacific Coast Hwy & Torrance Blvd	1,228	1,618	1,252	1,647
Helberta Ave/Camino Real & Torrance Blvd	1,205	1,562	1,228	1,593
Prospect Ave & Torrance Blvd	2,778	3,121	2,873	3,256
Catalina Ave & Pearl St	1,682	2,513	1,716	2,564
Camino Real & Pearl St	3,554	4,415	3,691	4,631
Pacific Coast Hwy & Sapphire St/Francisca Ave	1,681	1,957	1,731	2,028

Table 4-11: Peak Hourly Traffic Volumes

	Existing Plus Alternative 3		Cumulative Plus Alternative 3	
Intersection	**AM**	**PM**	**AM**	**PM**
Esplanade & Knob Hill Ave	3,432	3,540	3,504	3,615
Catalina Ave & Knob Hill Ave	1,213	1,516	1,238	1,549
Pacific Coast Hwy & Knob Hill Ave	602	630	615	642
Harbor Dr & Pacific Avenue	2,523	2,873	2,634	3,047
Pacific Coast Hwy & Palos Verdes Blvd	431	630	442	658
Pacific Coast Hwy & 2nd St	934	1,149	970	1,197
Pacific Coast Hwy & 10th/Aviation	2,669	3,153	2,794	3,347
Pacific Coast Hwy & Pier/14th St	420	752	429	767
Pacific Coast Hwy & 16th St	3,615	4,128	3,791	4,392
Pacific Coast Hwy & Prospect Ave	3,693	4,120	3,788	4,262
Maximum	4,177	4,802	4,265	4,902
Screening Threshold	24,000	24,000	24,000	24,000
Significant?	No	No	No	No

Source: Fehr & Peers, 2015

The Los Angeles County CMP requires that new developments analyze the proposed project's impacts on the regional freeway system, the regional roadway network and the regional traffic system. The traffic analysis under Alternative 3 would be the same as that of the proposed project and is identified in the traffic analysis (Section 3.13 Traffic and Transportation and Appendix L1 in this Draft EIR). The traffic study analyzed impacts on these systems and determined that the project, and subsequently Alternative 3, would not conflict with the CMP for arterial roadways, freeways, or transit use.

As with the proposed project, given that Alternative 3 would not exceed the screening level intersection volumes, nor would it conflict with the local CMP, impacts related to CO hotspots would be less than significant.

Localized Construction Air Quality Impacts – Criteria Air Pollutants

Because construction emissions from Alternative 3 would be less than that of the proposed project, the localized impacts from construction would also be lower. The daily on-site construction emissions generated by Alternative 3 were evaluated against SCAQMD's LSTs for a five-acre site as a screening-level analysis to determine whether the emissions would cause or contribute to adverse localized air quality impacts.[3] Table 4-12 identifies the daily-localized on-site emissions that are estimated to occur during Alternative 3's worst-case construction scenario prior to the implementation of mitigation measure MM AQ-1. As shown, the daily emissions generated on-site by Alternative 3's

[3] According to SCAQMD's LST methodology, LSTs are only applicable to the on-site construction emissions that are generated by a project and do not apply to emissions generated off-site such as mobile emissions on roadways from worker, vendor, and haul truck trips.

worst-case construction scenario would exceed the applicable SCAQMD LST for NOx, PM_{10}, and $PM_{2.5}$ for a five-acre site in SRA 3 in 2017 for the combined scenario as well as both the north and south site independently. The emissions for CO for the northern and southern portions would not exceed the applicable SCAQMD LSTs. In 2018, NOx, PM_{10}, and $PM_{2.5}$ for both sites combined exceeds the LSTs. For 2019 construction years, no emissions would exceed the screening-level LSTs for a five-acre site.

Table 4-12: Alternative 3 Project Localized Daily Unmitigated Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	**CO (lbs/day)**	**PM_{10}[a] (lbs/day)**	**$PM_{2.5}$[a] (lbs/day)**
Northern Portion Screening Analysis				
2017	321.65	329.01	18.72	12.00
2018	85.07	120.83	7.59	4.19
2019	1.94	2.91	0.38	0.20
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**
Southern Portion Screening Analysis				
2017	302.24	338.01	19.18	12.42
2018	107.50	169.87	11.27	5.47
2019	59.86	76.85	4.40	2.85
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**
Combined Screening Analysis				
2017	623.89	667.01	37.90	24.42
2018	192.58	290.70	18.86	9.66
2019	61.80	79.76	4.78	3.05
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

a. Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.

b. LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 3 and is based on the construction-related disturbance of five acres per day. The five-acre LSTs are used as a screening level criteria as daily disturbance would be greater than five acres across on both the North plus Basin 3 and South plus Basin 3 development areas.

With implementation of mitigation measure MM AQ-1, emissions from NOx, and PM_{10}, would still exceed the SCAQMD's LST screening levels for 2017 under the combined scenario, although under the individual North and South Scenarios NOx, PM_{10}, and $PM_{2.5}$ would all be reduced to below the significance thresholds. All pollutants would be below their respective screening levels for 2018 under all scenarios. Therefore, a refined analysis has been provided for the NOx and PM_{10} emissions in 2017. Mitigated emissions are shown in Table 4-13. A summary of the assumptions for the refined analysis is provided in the methodology section, Section 3.2.4.1 in Section 3.2 Air Quality, and the detailed assumptions and modeling output files are included in Appendix C1 and C8 (the proposed project) in this Draft EIR.

The results of the refined analysis are also included in Table 4-13. The dispersion modeling shows that while emissions exceed the LST screening levels, the emissions from project construction would not result in a localized significant impact. Therefore, localized air quality impacts associated with construction of Alternative 3 would be less than significant, and no additional mitigation (beyond MM AQ-1 discussed previously) would be required.

Table 4-13: Alternative 3 Localized Daily Mitigated & Refined Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	**CO (lbs/day)**	**PM_{10}[a] (lbs/day)**	**$PM_{2.5}$[a] (lbs/day)**
Northern Portion Screening Analysis				
2017	165.31	303.04	4.99	2.57
2018	53.09	103.71	0.54	0.41
2019	1.85	2.00	0.14	0.13
Screening Level[b]	197	1,823	15	8
Above Screening Level?	No	No	No	No
Southern Portion Screening Analysis				
2017	172.54	314.92	10.65	4.52
2018	76.40	159.33	4.51	1.61
2019	57.54	71.47	2.92	2.42
Screening Level[b]	197	1,823	15	8
Above Screening Level?	No	No	No	No
Combined Screening Analysis				
2017	337.85	617.96	15.63	7.08
2018	129.49	263.04	5.06	2.02
2019	59.38	73.47	3.06	2.56
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	No
	NO_X (ppm)	**CO (ppm)**	**PM_{10}[a] ($\mu g/m^3$)**	**$PM_{2.5}$[a] ($\mu g/m^3$)**
Northern Portion Refined Modeling				
2017	0.10	-	3.23e-4	-
Localized Significance Thresholds	0.25	-	10.4	-
Significant Impact?	No	-	No	-
Southern Portion Refined Modeling				
2017	0.10	-	1.05e-3	-
Localized Significance Threshold	0.25	-	10.4	-
Significant Impact?	**No**	-	**No**	-
Combined Refined Modeling				
2017	0.20	-	1.37e-3	1.66E-03
Localized Significance Threshold	0.25	-	10.4	10.4
Significant Impact?	**No**	**-**	**No**	**No**

Table 4-13: Alternative 3 Localized Daily Mitigated & Refined Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	CO (lbs/day)	PM_{10}[a] (lbs/day)	$PM_{2.5}$[a] (lbs/day)

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

Notes:

a. Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.

b. LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 3 and is based on the construction-related disturbance of five acres per day. The five-acre LSTs are used as a screening level criteria as daily disturbance would be greater than five acres across on both the North plus Basin 3 and South plus Basin 3 development areas.

Localized Construction Air Quality Impacts – TACs

As Alternative 3 construction is similar to the proposed project, the impacts from TACs would also be similar to those reported under the proposed project. Because off-road heavy-duty diesel equipment would be used only for short time periods at each active construction area within the approximate 36-acre project site over the course of the 30-month project construction schedule, project construction is not anticipated to expose any nearby sensitive receptors to substantial emissions of TACs. The combined PM_{10} concentration from the refined analysis is $2.98e^{-3}$ $\mu g/m^3$ for construction year 2017 (when emissions are highest). This concentration was used in the risk analysis as it represents the greatest PM_{10} emissions of all construction years. The maximum cancer risk for off-site receptors from construction is 0.9 cases per million people and SCAQMD has a threshold of 10 per million people. The chronic hazard risk (non-cancer health risk) related to DPM for construction would be 0.001 and SCAQMD has a threshold of one. Assumptions and calculations for the screening risk modeling is included in Appendix C2 (for the proposed project) of this Draft EIR. These screening level risks are very conservative and, because Alternative 3 would result in less PM_{10} emissions, represent a greater risk than would be seen under Alternative 3. Therefore, actual risks to off-site receptors from Alternative 3 would be less than what is reported for the proposed project.

Because the screening risk levels for both cancer and non-cancer risks for the proposed project would not exceed the SCAQMD regulatory thresholds for risk, and the cancer and non-cancer risks for Alternative 3 would be less than reported for the proposed project, this impact would be less than significant.

Localized Operational Air Quality Impacts – Criteria Air Pollutants

Operational impacts for Alternative 3 would be identical to that of the proposed project. During operations, the daily amount of localized pollutant emissions generated on-site by Alternative 3 would not be substantial, and are shown in Table 4-14. As shown, the project's total net operational-related emissions generated on-site would not exceed SCAQMD's screening operational LSTs. Thus, no dispersion modeling is required and localized air quality impacts during project operations would be less than significant.

Table 4-14: Alternative 3 Localized Operational Emissions

Development Phases	Estimated Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Existing	13.88	34.48	3.49	1.41
Project	19.52	42.37	4.82	2.06
Net Project Increase	5.64	7.89	1.33	0.65
Localized Significance Threshold	197	1,823	4	2
Significant Impact?	No	No	No	No

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

Localized Operational Air Quality Impacts – TACs

Typical land uses that are sources of acutely and chronically hazardous TACs include industrial manufacturing processes, automotive repair facilities, and dry cleaning facilities using perchloroethylene (which has been banned for use in new dry cleaning facilities). Alternative 3, as with the proposed project, would not include any of these potential sources, although minimal emissions may result from the use of consumer products (similar to existing conditions). Additionally, it is not anticipated that emergency back-up generators would be required for the new land uses associated with Alternative 3. However, if a generator was implemented for a new land use, it would typically only be used during emergencies and may be turned on periodically for maintenance and inspection purposes. Further, emergency back-up generators are subject to SCAQMD regulatory requirements, which limit the allowable TAC emissions to a level that would not result in a significant impact. As such, the periodic operation of the backup generator at the project site, should it be necessary, would not expose surrounding sensitive receptors to substantial pollutant or TAC emissions and the impact would be less than significant. The impacts would be similar, but slightly reduced, as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AQ-3: Alternative 3 would not create objectionable odors affecting a substantial number of people.

Alternative 3 would be similar to the proposed project; however no waterside construction would occur. While some construction activities, including dredging, would not occur, there would be emissions of odors during construction. The exhaust from equipment and activities associated with the application of architectural coatings and other interior and exterior finishes may produce discernible odors typical of most construction sites. Such odors could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Alternative 3 as with the proposed project, no on-site sources of emissions would occur as a result of operational

activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). The impacts would be similar, but slightly reduced, as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Biological Resources

Impact BIO-1: Alternative 3 would not have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Construction and operation of the landside elements of Alternative 3 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including habitats that support special status species. During construction, tree removal activities would be required to comply with preexisting local tree removal and trimming regulations contained in RBMC Section10-5.1900(h) to avoid disturbance of nesting migratory birds. As with the proposed project, compliance with the RBMC tree trimming and tree removal requirements would result in less than significant impacts to migratory birds.

Operational impacts would be less than significant because the proposed land uses and intensities in the project area would replace the existing urban habitat, in which birds have demonstrated tolerance to high levels of human activity, and because sensitive species or habitats are absent from the terrestrial portion of the project area. Furthermore, any subsequent operational tree trimming activities would be required to comply with RBMC Section 10-5.1900(h). Therefore, impacts on terrestrial biological resources would be less than significant.

Under Alternative 3, Seaside Lagoon would remain as is; however, should the NPDES permit not be renewed, or the City not be able to meet water quality requirements of the permit, the lagoon would cease operation. Seaside Lagoon is a chlorinated swimming facility and the possible closure would not impact terrestrial or marine biological resources.

Alternative 3 would not include any in-water construction or features. There would be no impacts on impacts on special status marine species from construction or operation of Alternative 3. Therefore, Alternative 3 would avoid less than significant impacts to the least tern, and impacts on grunion and pinnipeds that are less than significant with mitigation that would occur during construction under the proposed project. Additionally, operation of Alternative 3 would avoid reducing the amount of available open water foraging habitat for waterbirds by increasing surface cover, which would occur under the proposed project if the Sportfishing Pier is replaced. No impact would occur under Alternative 3 and the impacts would be less than the proposed project. However, benefits of establishing a marine mammal protection program to reduce the

potential of undesirable human-pinniped interactions and the provision of new open water foraging habitat for waterbirds by opening Seaside Lagoon would not occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-2: Alternative 3 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Construction and operation of the landside elements of Alternative 3 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including riparian habitat, native grassland, wildlife corridors, vernal pool habitat, freshwater marsh, or other sensitive or critical natural community. Therefore, there would be no impacts on terrestrial sensitive resources.

Seaside Lagoon would remain as is; however, should the NPDES permit not be renewed, or the City not be able to meet water quality requirements of the permit, the lagoon would cease operation. Seaside Lagoon is a chlorinated swimming facility and the possible closure would not impact marine or terrestrial biological resources.

Alternative 3 would not include any in-water construction or features. There would be no impacts on riparian habitat or other sensitive natural community from construction or operation of Alternative 3. Therefore, Alternative 3 would avoid impacts to the benthic community and EFH, which are less than significant impacts that would occur under the proposed project. No impact would occur under Alternative 3 and the impacts would be less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact BIO-3: Alternative 3 would not have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Construction and operation of the landside elements of Alternative 3 would occur in previously developed areas that do not have any federally protected waters or wetlands. Therefore, there would be no impacts on terrestrial biological resources.

In addition, Seaside Lagoon, which may be jurisdictional waters, would remain as is. Therefore, the proposed project's significant impacts on federally protected waters, if the

USACE determines that Seaside Lagoon is jurisdictional, would not occur. However, the benefits of new marine habitat that would established by the opening of Seaside Lagoon would not occur under Alternative 3.

Alternative 3 would not include any in-water construction or features. Therefore, there would be no construction or operational impacts on federally protected waters or wetlands from construction or operation of Alternative 3. Temporary impacts avoided under Alternative 3 would include effects on aquatic vegetation and benthic communities through direct removal/covering or indirect loss or disturbance due to increased turbidity during construction activities.

Impacts would be less than the proposed project; however, the benefits of new marine habitat that would established by the opening of Seaside Lagoon would not occur under Alternative 3.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact BIO-4: Alternative 3 would not 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.

Construction and operation of the landside elements of Alternative 3 would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, impacts would be less than significant on terrestrial biological resources. This is similar but reduced as compared to the proposed project.

Under Alternative 3, Seaside Lagoon would remain as is; however, should the NPDES permit not be renewed, or the City not be able to meet water quality requirements of the permit, the lagoon would cease operation. Seaside Lagoon is chlorinated swimming facility and the possible closure would not impact marine or terrestrial biological resources.

Alternative 3 would not include any in-water construction or features. Therefore, there would be no construction or operational impacts on special status marine species from construction or operation of Alternative 3. Alternative 3 would eliminate the proposed project's impacts on the grunion that are less than significant with mitigation.

Although the operation of in-water project elements (e.g., small craft boat launch ramp and breakwater, opening of Seaside Lagoon to the harbor, piles for pedestrian bridge) associated with the proposed project would not interfere substantially with the movement of migratory birds, fish, mammals, or other species, and not impede the use of a native wildlife nursery, under Alternative 3 the impacts would be even less than that of the

proposed project, as there would be no in-water construction. Impacts are less than significant, which is similar but reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-5: Alternative 3 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Construction and operation of the landside elements of Alternative 3 would require compliance with local policies and ordinances, including during tree trimming/tree removal activities. Therefore, impacts on terrestrial biological resources would be less than significant.

Alternative 3 would not include any in-water construction or features. Therefore, there would be no impacts on special status marine species from construction or operation of Alternative 3. The impacts would be less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cultural Resources

Impact CUL-1: Alternative 3 could cause a substantial adverse change in the significance of a historical resource.

Under this alternative, there would be a minor reduction in the overall amount of development on the site because only the landside construction would occur. Although this alternative does not include the demolition of potential historic structures such as the Sportfishing Pier or the timber portion of the Horseshoe Pier, this alternative would include rehabilitation/restoration of the existing buildings on both piers. The buildings on the Sportfishing Pier (as well as the pier) were determined to be eligible for designation as a Redondo Beach local landmark under Criterion C (although there is no official designation) as still being occupied by its original tenants, thereby retaining integrity of design and function, and continuing to evoke the era of its initial construction. Tony's On The Pier and its companion building (on the Horseshoe Pier) are both eligible for designation as Redondo Beach local landmark under Criterion C (although there is no official designation) as possessing excellent integrity of location, setting, feeling, association, materials and workmanship, and eligible for local landmark listing under Criterion B (although there is no official designation), for its association with its developer, Tony Trutanich, who as the master leaseholder for the entire Monstad Pier

influenced the course and appearance of its development during the important 1960s and 1970s era of harbor expansion and redevelopment.

Therefore, under this alternative, these potentially historic structures would not be demolished; however, as these buildings are in deteriorated condition, any alteration, rehabilitation, or restoration of these buildings would result in a significant impact. This is similar, but reduced, compared to the proposed project.

Mitigation Measures

A new mitigation measure, MM CUL-ALT3: Architectural Treatment Plan would be implemented to reduce impacts to the potential historic structures. The mitigation measure is as follows:

MM CUL-ALT3: Architectural Treatment Plan

> With the alteration, rehabilitation, or restoration of the historic buildings on the Sportfishing Pier and/or Tony's On The Pier and its companion building, a comprehensive Architectural Treatment Plan (ATP) shall be developed for each resource. The ATP shall be developed after review and confirmation by the City's Historical Commission. The ATP shall ensure compliance with the *Secretary of the Interior's Standards and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of Interior, 1990). Each ATP shall also be submitted to, and reviewed by, the City's Historical Commission, pursuant to Redondo Beach Municipal Code Section 10-4.501.

Residual Impacts

Implementation of mitigation MM CUL-ALT3 would reduce impacts to potential historical resources to less than significant. Impacts would be less than the proposed project.

Impact CUL-2: Alternative 3 could cause a substantial adverse change in the significance of an unknown archaeological resource.

Based on the documented presence of previous structures in the project site and surrounding area, and the prehistoric resource adjacent to the project site, it is possible that unknown archaeological resources (including buried features or possible structural remnants) may be present within the project site. Construction of landside elements of the proposed project (such as the proposed parking structure in the northern portion of the project site and the demolition and replacement of the parking structure in the southern portion of the site) would be similar under Alternative 3. Therefore, as with the proposed project, Alternative 3 has the potential to have a substantial adverse change in the significance of an unknown archaeological resource in the northeastern and southeastern portions of the project site. Based upon this potential, similar to the proposed project, impacts are considered significant.

Mitigation Measures

Due to the sensitivity for unknown archaeological resources, as with the proposed project, mitigation measure MM CUL-4: Phase I Archaeological Work, would be implemented to reduce the impact of excavation on unknown archaeological resources at the project site to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-4, theimpact of excavation on unknown archaeological resources at the project site would be less than significant. Impacts would be similar to the proposed project.

Impact CUL-3: Alternative 3 could directly or indirectly destroy an unknown paleontological resource.

Construction of landside elements of the proposed project would be the same under Alternative 3. At the project site, in areas of Pleistocene marine deposits, earth-moving activities associated with construction of Alternative 3 could have a substantial adverse change in the significance of an unknown paleontological resource, particularly excavation for the Pier Parking Structure. In addition, there would be a potential at greater depths for remains old enough to be considered fossilized to be encountered or lost to those activities. In the northern portion of the project site particularly excavation for the northern parking structure, earth-moving activities associated with construction of Alternative 3 could have a substantial adverse change in the significance of an unknown paleontological resource in areas of lagoon deposits. Therefore, similar to the proposed project, earth-moving activities, particularly excavation for the proposed parking structures, would have the potential to have an adverse effect on unknown paleontological resources and impacts are considered significant.

Mitigation Measures

As with the proposed project, mitigation measure MM CUL-5: Potential to Encounter Unknown Paleontological Resources, would be implemented in order to preserve a representative sample of any scientifically important fossil remains and associated data that might be exposed by excavation at the project site; thereby, reducing the impact of excavation on unknown paleontological resources at the project site to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-5, the impact of earth-moving activities from implementation of Alternative 3 on the paleontological resources at the project site would be reduced to a less than significant level. Impacts would be similar to the proposed project.

Geology and Soils

Impact GEO-1: Alternative 3 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

Given that all of Southern California is subject to seismic events and associated hazards, the risk to populations at the project site is not considered to be unique or excessive and would not change the baseline risk for the average visitor to the project site under Alternative 3.

Under Alternative 3, with the exception of the Horseshoe Pier and Sportfishing Pier, most of the older non-compliant buildings/structures throughout the project site would be demolished and replaced with new facilities that comply with current applicable buildings codes. Rehabilitation/restoration of the existing buildings on both piers would occur as feasible. Although these buildings would not be completely rebuilt, the standards used to rehabilitate and restore these structures would make these currently non-compliant buildings in compliance with the most up-to-date building code requirements of the CBC applicable at the time of development. Consequently, the new buildings would offer an improvement in safety related to seismic hazards in comparison to the existing conditions at the project site and impacts would be less than significant. Impacts would be similar to the proposed project.

Similar to the proposed project, the implementation of Alternative 3 would be required to comply with the recommendations detailed in the approved site-specific geotechnical evaluation(s) and engineering analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria and specified seismic parameters. As part of the Conditional Use Permit process, similar to the proposed project, the City would include Conditions of Approval to require, prior to the issuance of building permits, the City's Building and Safety Division to incorporate the recommendation and conditions from the design and project-specific geotechnical evaluation(s), engineering analysis, and any additional recommendations that come out of this review. The Conditions of Approval would be applied to the implementation of the project through the project plans and the building permit process.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-2: Alternative 3 would not result in substantial soil erosion or the loss of topsoil.

Under Alternative 3, ground-disturbing activities, such as demolition, excavation, trenching, grading, and landscaping would occur similar to the proposed project; however, Seaside Lagoon would not be modified. As with the proposed project, construction activities would be required to comply with existing regulatory requirements including implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, Alternative 3 would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust); therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and operation, impacts related to soil erosion or the loss of topsoil would be less than significant. Impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-3: Alternative 3 would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

As a majority of the project site is located in an area mapped with liquefiable soil, there is potential for seismic-related (earthquake-induced) liquefaction at the project site, which could lead to ground settlement and lateral spreading. Regardless of the liquefaction/ground settlement/lateral spreading potential at locations throughout the project site, grading, compaction and individual foundations associated with Alternative 3 (as with the proposed project) would have to adhere to design- and project-specific standards and requirements of the current CBC, which may include a deep foundation system, or alternatively, ground improvement, or other proven geotechnical engineering technologies to alleviate the liquefaction (and lateral spreading) potential at the project site. Determination of the appropriate option, or combination of options, to address liquefaction would be determined through the review of project-specific geotechnical evaluations and supplemental engineering analysis in compliance with CBC requirements and subsequent recommendations based on City design and review.

As with the proposed project, Alternative 3 would comply with applicable CBC requirements and site-specific geotechnical recommendations, and therefore, would not result in on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project. Consequently, impacts under Alternative 3 would be less than significant. Impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-4: Alternative 3 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Under Alternative 3, similar to the proposed project, mass grading would occur throughout the project site. This work is expected to include the placement of new fill and the removal and re-compaction of unsuitable soil and backfill for utility trenches and other excavations. Likewise, the removal, re-compaction, and/or placement of new fill would occur based on a design- and project-specific evaluation of the expansion potential associated with on-site soils. It would include subsurface soil sampling, laboratory analysis of samples collected, and an evaluation of the laboratory testing results by a geotechnical engineer under direction and review by the City. Therefore, Alternative 3 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC. Impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 3 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

SCAQMD Threshold Analysis

Construction Emissions

Total estimated construction-related GHG emissions for Alternative 3 would be similar, but slightly less than that of the proposed project. Emissions for Alternative 3 are shown in Table 4-15. As shown, the total estimated GHG emissions during construction would be approximately 10,823.98 $MTCO_2e$. This would be equal to approximately 361 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology.

Table 4-15: Estimated Total Construction-Related GHG Emissions

Construction Year	Estimated CO_2e Emissions
2017	5,345.08 (MT)
2018	3,879.27 (MT)
2019	1,559.63 (MT)
Total	**10,823.98 (MT)**
Annual Construction (Amortized over 30 years)	**360.80 (MT/Yr)**

Notes:
CO_2e= carbon dioxide equivalent; MT =metric tons; MT/yr = metric tons per year.
Source: ESA CalEEMod Modeling 2015 (Appendix N)

Operational Emissions

The estimated operational GHG emissions resulting from implementation of Alternative 3 are shown in Table 4-16. Additionally, in accordance with SCAQMD's recommendation, the amortized construction-related GHG emissions from Table 4-14 are added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown in Table 4-16, the total operational emissions would result in a net emission increase of 6,278.72 $MTCO_2e$ per year, which would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions. Alternative 3 would have a net increase of 1,438 employees. Therefore, the per service population emissions would equal 4.07 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 $MTCO_2e$ per year per project level service population.

Therefore, the net increase in GHG emissions resulting from implementation of Alternative 3 (construction and operation) is considered to be less than significant. This is similar to the proposed project.

Table 4-16: Estimated Construction- and Operations-Related GHG Emissions

Emission Source	Estimated Emissions CO_2e (MT/yr)
Construction	
Annual Construction (Amortized over 30 years)	360.80
Existing	
Area Sources	0.01
Energy Consumption	3,212.87
Mobile Sources	10,898.59
Solid Waste	165.33
Water Consumption	220.26
Total Existing Emissions	14,497.06
Alternative 3	
Area Sources	0.03
Energy Consumption[a]	5,436.42
Mobile Sources	13,136.19
Solid Waste	258.54
Water Consumption[b]	327.56
Total Project Emissions	19,158.75
Net Emissions Increase[c]	
Area Sources	0.03
Energy Consumption[a]	2,223.55
Mobile Sources	2,237.60
Solid Waste	93.21
Water Consumption[b]	107.30
Total Net Emissions Increase	4,661.69
Total Project Emissions	**5,022.49**
Exceed 25,000 MT CO_2e/Year	No
Service Population (SP) (Net)[c]	1,438
Emissions per SP ($MTCO_2e$/yr/SP)	3.49
Threshold ($MTCO_2e$/yr/SP)	4.60
Exceed Threshold	No
Significant?	No

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes: CO_2e= carbon dioxide equivalent; MT/yr = metric tons per year; %=percent.

a. The energy-related GHG emissions, as estimated by CalEEMod, use 2008 Title 24 energy usage rates. However, according to the CEC, buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards would be 15 percent more energy efficient than the 2008 Standards. As such, this additional reduction in energy consumption was accounted for in the proposed project's estimated GHG emissions associated with energy consumption.

b. GHG emissions reductions associated with water use resulting from compliance with CALGreen requirements, which requires a minimum 20 percent reduction in indoor water use and the provision of irrigation controllers for outdoor water use, were accounted for in CalEEMod model run.

c. Net emissions equal the total project emissions minus the emissions from the existing operations. Because the emissions are compared to the threshold using a net increase, the service population represents the net increase in service population.

BAU Analysis

GHG emissions for the BAU scenario would total 32,371.27 $MMTCO_2e$. This includes amortized construction emissions. Alternative 3-related GHG emissions that accounted for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 24,536.53 $MMTCO_2e$.

Table 4-17 summarizes the GHG emissions for both the BAU scenario and Alternative 3 emissions. As shown, the emissions results in a 24.20 percent reduction from BAU. Therefore, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions.

Therefore, Alternative 3 would result in less than significant GHG emissions. The impacts would be similar, but slightly reduced in comparison to the proposed project.

Table 4-17: Unmitigated BAU Emissions Comparison

Emission Source	Estimated Emissions CO_2e (MT/yr)
BAU Scenario	
Area Sources	0.03
Energy Consumption	5,887.90
Mobile Sources	25,179.24
Solid Waste	514.32
Water Consumption	428.97
Amortized Construction	360.80
Total BAU Emissions	32,371.27
2020 Buildout Scenario	
Area Sources	0.03
Energy Consumption[a]	4,771.87
Mobile Sources	18,859.87
Solid Waste	258.54
Water Consumption[b]	285.41
Amortized Construction	360.80
Total Emissions	24,536.53
Reduction from BAU	**24.20 percent**
Reduction Threshold (municipal)	15.00 percent
Significant?	**No**

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes: CO_2e= carbon dioxide equivalent; MT/yr = metric tons per year; %=percent.

a. The energy-related GHG emissions, as estimated by CalEEMod, use 2008 Title 24 energy usage rates. However, according to the CEC, buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards would be 15 percent more energy efficient than the 2008 Standards. As such, this additional reduction in energy consumption was accounted for in the proposed project's estimated GHG emissions associated with energy consumption.

b. GHG emissions reductions associated with water use resulting from compliance with CALGreen requirements, which requires a minimum 20 percent reduction in indoor water use and the provision of irrigation controllers for outdoor water use, were accounted for in CalEEMod model run.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 3 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Consistency with CARB Scoping Plan

Out of the Recommended Actions contained in CARB's Scoping Plan, the actions that are most applicable to the Alternative 3 would be Actions E-1 (increased Utility Energy efficiency programs including more stringent building and appliance standards), GB-1 (Green Building), and W-1 (Increased Water Use Efficiency). CARB Scoping Plan Action E-1, together with Action GB-1 (Green Building), aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards, while Action W-1 aims to promote water use efficiency. Alternative 3 would be designed to comply with the CALGreen Code to ensure that the new on-site developments would use resources (energy, water, etc.) efficiently and reduce pollution and waste. Therefore, Alternative 3 would be consistent with the Scoping Plan measures through incorporation of stricter building and appliance standards.

As a result of the incorporation of stricter building and appliance standards in addition to the implementation of State regulations for the reduction of GHG emissions, Alternative 3's GHG reduction would exceed the AB 32 reduction target of 15 percent below the BAU scenario for municipal emissions as demonstrated under Impact GHG-1 above.

Consistency with SB 375

The key goal of the SCS is to achieve GHG emission reduction targets through integrated land use and transportation strategies. The focus of these reductions is on transportation and land use strategies that influence vehicle travel. Alternative 3 is a redevelopment project that would be located within walking distance to public transportation as well as existing residential uses within the City. Because the nature of the redevelopment is designed to service the local community and is not designed to draw region-wide traffic, the location of the project in close proximity to both transit and existing residences would reduce transportation emissions within the City. Therefore, Alternative 3 would be consistent with the key goal of SB 375.

Consistency with Redondo Beach Sustainable Development Strategic Plan

The Sustainable Development Strategic Plan sets forth goals, specific objectives, and methods of implementing sustainable (green) development policies and programs. The plan sets overall City goals but does not provide goals that are appropriate at the project level. However, some of the Plan's objectives are designed to increase public and private water, energy resource, and recycling conservation practices. Alternative 3 would be consistent with Title 24 for energy and water conservation practices, therefore, meeting a future objective of the Plan. Alternative 3 would be recycling building material on-site where applicable and transferring to a sorting facility for recycling when the material cannot be used on-site, therefore, increasing recycling conservation. Additionally, as discussed in detail under consistency with SB 375 above, Alternative 3 would reduce region wide vehicle miles traveled by implementing infill development within walking

distance to public transportation and by placing retail adjacent to existing residential uses. While the goals of the Sustainable Development Strategic Plan are generally not applicable to a project-level development such as Alternative 3, the design and construction practices of the project would nonetheless further the City's overall sustainability goals. Therefore, Alternative 3 would be consistent with the Sustainable Development Strategic Plan to the extent feasible.

As discussed above, Alternative 3 along with the proposed project would be consistent with the CARB Scoping plan, SB 375 and with the City's Sustainable Development Strategic Plan. Therefore, Alternative 3 would have a less than significant impact. Impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 3 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Construction of Alternative 3 would involve grading, excavation, but no dredging activities. As with the proposed project, construction activities associated with Alternative 3 would involve the use of certain hazardous materials associated with use of construction equipment on-site, including vehicle fuels (both gasoline and diesel), oils, solvents, and transmission fluids. As with the proposed project, releases of hazardous substances during construction would be addressed through compliance with regulations that govern proper containment, spill control, and disposal of hazardous waste generated during construction. Additionally, the use of construction BMPs would minimize the adverse effects to the general public and environment associated with construction of Alternative 3.

Construction would occur in the area of the former USTs. As with the proposed project, in the unlikely event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include RBFD, LACFD, LARWQCB, and/or DTSC. While Alternative 3 would not create a significant hazard to the public (including construction workers) or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

The project site is located in the Torrance Oil Field. There are no known oil and gas wells on-site. However, should an oil and gas well be unexpectedly encountered, as with the proposed project, the subject well(s) would be properly closed and abandoned in

accordance with existing DOGGR requirements. Therefore, no significant impacts related to oil and gas wells are anticipated.

Alternative 3 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and impacts would be less than significant. The impacts would be similar to the proposed project, but slightly reduce as no waterside construction would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-2: Alternative 3 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

As with the proposed project, Alternative 3 involves construction and operation at the project site, which includes a location that was identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (LUST site at the Redondo Beach Marina). In addition, as identified in Table 3.7-2 in Section 3.7 Hazards and Hazardous Materials, a review of other regulatory databases identified several sites of known or suspected contamination located approximately 0.25 mile of the project site, as well as within the project site. None of these sites are anticipated to significantly affect the project site based on the regulatory status and oversight and distance from the project site.

In the event that contaminated soils are encountered during construction, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, during construction of Alternative 3, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

Therefore, implementation of Alternative 3 is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-3: Alternative 3 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

As with the proposed project, construction of Alternative 3 would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Although temporary lane and sidewalk closures of immediately adjacent roadways (e.g., Portofino Way and Harbor Drive) may be necessary at times during construction, adequate emergency vehicular access to the project site and adjacent properties would be provided and maintained during construction, as required by the RBFD. As detailed in Section 3.11 Public Services of this Draft EIR, all construction projects within the City must follow the California Fire Code (Chapter 33, Fire Safety During Construction and Demolition), which includes requirements to provide adequate access for firefighting (Chapter 33, Section 3310) and approved temporary means of egress (Chapter 33, Section 3311). Therefore, emergency access in and out of the site, including evacuation routes for construction workers, would remain the same as existing conditions during the construction process.

The City's tsunami evacuation route includes roadways immediately to the north and south of the project site (Beryl Street and Torrance Boulevard respectively). As described above, adequate emergency vehicular access would be provided and maintained during construction, as required by the RBFD. Therefore, Alternative 3 would not conflict with the City's evacuation route during construction.

As with the proposed project, Alternative 3 includes a new main street that transects through the center of the northern portion of the site (approximately parallel to Harbor Drive), which would help circulation and emergency access through the northern portion of the project site. In addition, Alternative 3 (as with the proposed project) includes the Pacific Avenue Reconnection. By replacing the area in front of the International Boardwalk with a two lane (one lane in each direction) through street that meets fire apparatus access requirements, the Pacific Avenue Reconnection would greatly improve emergency access throughout the project site.

As such, Alternative 3 would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hydrology and Water Quality

Impact HWQ-1: Alternative 3 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Construction activities under Alternative 3 would occur both on the shore and near the immediate vicinity of the shore; no construction would occur within the harbor. Construction activities would involve the use of certain hazardous materials associated with use of construction equipment on-site, including vehicle fuels (both gasoline and diesel), oils, solvents, and transmission fluids. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials must comply with the regulations for handling, storage, spill control, and disposal described in Section 3.7 Hazards and Hazardous Materials in this Draft EIR.

Construction impacts on groundwater, surface water, and harbor water (associated with runoff from landside construction), similar to the proposed project, would be less than significant with the compliance of regulatory requirements, including implementation of BMPs, and would ensure that Alternative 3 would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Therefore, construction impacts to surface water quality are considered less than significant. Impacts would be similar to the proposed project, but slightly reduced as no in-water construction would occur.

Stormwater generated on-site during operation of Alternative 3 may convey contaminants generated on-site to the groundwater, surface water, and the harbor. Construction activities associated with Alternative 3 would include the demolition of existing structures, hardscape and landscape, removal of debris, excavation, fill replacement and grading of the project site for foundation and utilities, and construction of proposed structures and installation of new hardscape and landscaping. Similar to the proposed project, temporary construction dewatering may be necessary. This would occur in compliance with the General Dewatering Permit, and as with the proposed project, construction impacts to groundwater quality are considered less than significant.

Construction of Alternative 3 would include implementation of construction BMPs as part of a SWPPP as required by the statewide NPDES General Permit for Construction Activities for sites disturbing one acre or more. The SWPPP includes measures to eliminate or reduce pollutant discharges and describes the implementation of BMPs to control stormwater and other runoff during construction. The General Permit for Construction Activities contains receiving water limitations that require stormwater discharges to not cause or contribute to a violation of any applicable water quality standard. Inspections of BMPs are required throughout construction. Required construction BMPs are designed to reduce potential adverse effects to the general public and the environment. Construction contract specifications would include strict on-site handling rules to keep construction and maintenance materials from entering groundwater, surface waters, and harbor. Therefore, as with the proposed project, construction impacts to surface water quality are considered less than significant.

Under Alternative 3, the imperviousness of the site would be similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). Under

Alternative 3, runoff would be directed away from impervious surfaces and into landscaped areas, landscape features (e.g. planter boxes), or other pervious areas, which would prevent erosion and siltation from entering the storm drain system. Alternative 3 would generally maintain the same drainage areas and discharge points into both King Harbor and Basin 3. To reduce pollutant runoff from the site, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. These BMPs would reduce runoff and pollutants from discharging into the Pacific Ocean.

Under Alternative 3, Seaside Lagoon would not be modified; thus, the challenges that the City annually faces in keeping the lagoon operational during the summer season would continue. The costs associated with the chemicals needed to treat the lagoon, as well as any fines for violations would be expected to continue. Should the costs to operate the lagoon continue to rise, and/or the NPDES Permit to discharge water be onerous or denied in the future, the City could be forced to limit further the use of the Seaside Lagoon as a swimming facility. If the NPDES Permit is renewed and the lagoon continues to be operational, compliance with the NPDES Permit would address water quality in the harbor and the operational impacts of the Seaside Lagoon on water quality standards would be considered less than significant. With the exception of not realizing the benefits in water quality from opening the Seaside Lagoon to tidal influences, the impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 3 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

There are no streams or rivers located on the project site; hence, that aspect of the threshold of significance would be unaffected.

Under Alternative 3, BMPs would be implemented during construction as part of a SWPPP as required by the statewide NPDES General Permit for Construction Activities for sites disturbing one acre or more. In addition, construction activities would also be required to comply with SCAQMD Rule 403, which includes measures for the application of water or stabilizing agents, use of tarps to enclose haul trucks, stabilizing sloping surfaces using soil binders until vegetation or ground cover effectively stabilize slopes, and hydroseeding prior to rain. With adherence to regulations, including implementation of BMPs, Alternative 3 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant. This is similar to the proposed project, but slightly reduced as no in-water construction would occur.

Under Alternative 3, the imperviousness of the site would be similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). Runoff would be directed away from impervious surfaces and into landscaped areas, landscape features (e.g. planter boxes), or other pervious areas, which would prevent erosion and siltation from entering the storm drain system. To reduce runoff from the site, drainage system improvements under Alternative 3 would be designed to include BMPs in accordance with the City's LID Ordinance, which sets forth standards to treat both the quantity and quality of flow. These BMPs would reduce runoff from discharging into the Pacific Ocean. However, the site would generally maintain the same drainage areas and discharge points into King Harbor and Basin 3.

With adherence to regulations, including LID criteria and implementation of BMPs, Alternative 3 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during operational activities are considered less than significant. The impacts would be similar to the proposed project, but slightly reduced as no in-water construction would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-3: Alternative 3 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project.

As described above, during construction of Alternative 3, all storage, handling, and disposal of hazardous materials used during construction would comply with the regulations described in Section 3.7.4 Hazards and Hazardous Materials in this Draft EIR. Consequently, construction of Alternative 3 would not result in polluted runoff. In addition, construction BMPs would be implemented as part of a SWPPP to ensure that stormwater discharges do not cause or contribute to a violation of any applicable water quality standard. Construction activities would not require the construction of new stormwater drainage facilities or expansion of existing facilities, which could cause significant environmental effects not already addressed as part of this alternative. Impacts would be less than significant.

Updates to the existing drainage and stormwater system under Alternative 3 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow. BMPs would be implemented to address the quantity and quality of flow, including, but not be limited to, use of permeable pavers, infiltration, bio-filtration planters, modular wetlands and 121rench drains. Any re-routed storm drains would maintain existing capacity and would not affect off-site storm drainage. Overall, Alternative 3 would generally maintain the

same drainage areas and discharge points as that of the existing condition and the imperviousness of the site would be reduced as compared to existing conditions.

The new main street and Pacific Avenue Reconnection that would be implemented under Alternative 3 would be required to comply with the City's Green Street Policy and incorporate infiltration, biofiltration, and/or storage and use BMPs to collect, retain, or detain stormwater runoff. These BMPs would reduce runoff from discharging into the Pacific Ocean.

Similar to the proposed project, under Alternative 3, the amount of pervious surface area within the project site would increase and LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. Similar to the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-4: Alternative 3 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

Waterside portions of the project site are within Zones AE, VE, and X. Within the flood zone, Alternative 3 includes the possible rehabilitation of buildings on the Sportfishing Pier and Horseshoe Pier. As with existing conditions, the buildings located on the piers would not impede or redirect flows, nor would the rehabilitated buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. No other structures would be constructed within the 100-year flood zone under Alternative 3. Therefore, impacts would be less than significant. The impacts would be reduce as compared to proposed project, because no new structures would be constructed within the flood zone.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-5: Alternative 3 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

As with the proposed project, while no tsunami is known to have ever significantly affected the Los Angeles Coast in the past, the likelihood of such a future event is rare, Alternative 3 would increase the number of structures and the potential for more people

to be located at the site; therefore, the exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact.

Occasional flooding atop the bulkhead during extreme high tide conditions is to be expected under Alternative 3, as currently occurs. As with the proposed project, under Alternative 3, no structures would be located along Basin 3 as the International Boardwalk behind Basin 3 and the elevated walkway would be replaced with a raised roadway (the Pacific Avenue Reconnection) and pedestrian/bicycle paths, which would be at an elevation so no overtopping would occur (e.g., raised above existing conditions). Therefore, while overtopping along Basin 3 would continue to occur under Alternative 3, it would not result in increased risk of injury or damage to structures. Therefore, impacts associated with inundation at Basin 3 are less than significant.

In addition, under existing conditions, wave splash annually occurs at the northern segment of the protective revetment/wall along Horseshoe Beach. In the southern reach, wave run-ups rarely reach higher that the existing protective revetment. As with the proposed project, the wave splash at this location would not increase under Alternative 3; however, given that the number of structures and number of people who may be present at this location would increase, wave overtopping at this location is considered a significant impact.

As with the proposed project, wave uprush to overtop the promenade at the western edge of Seaside Lagoon may occur. No modifications would occur at this portion of the project site under Alternative 3, and as such no increased risk of damage or injury is anticipated and impacts would be less than significant.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is materialized. Similar to the proposed project, sea level rise would not be affected by Alternative 3, and similar to the proposed project, the raising of some portions of the project site in the northern portion would reduce hazards and damage associated with future sea level rise as compared to existing conditions. However, with revitalization of the project site, including the net increase in building area and the desired increase in activities at, and patronage of, the project site, there is also the potential for more people to be present at the project site that could be subject to increased risks associated with an increase in sea level rise. Therefore, should the projected high sea level rise occur in the future, the impacts are significant. The impacts would be similar to the proposed project.

Mitigation Measures

Similar to the proposed project, mitigation measure MM HWQ-1: Tsunami/Seiche Awareness Notification Program would be implemented to reduce impacts associated with people being exposed to hazards associated with a future tsunami or seiche. In addition, mitigation measures MM HWQ-2: Wave Uprush Protection, and MM HWQ-3: Sea Level Rise Adaptation Plan, would be implemented to reduce impacts associated with possible inundation associated with wave uprush and future sea level rise.

Residual Impacts

As with the proposed project, with implementation of mitigation measure MM HWQ-1, impacts associated with people being exposed to a tsunami or seiche at the

project site would be reduced; however, due to natural uncertainties of such an event occurring in the future, it is not possible to conclude that the associated risks would be fully mitigated. As such, the residual impact associated with tsunami or seiche exposure is considered to be significant and unavoidable.

MM HWQ-2 requires a four-foot high recurved splash wall anchored at the seaward edge of the promenade landward of the northern portion of the Horseshoe Pier. The splash wall would redirect the up-rushed water back toward the ocean, thereby deflecting the water away from the promenade and preventing inundation from occurring. Installation of a splash wall along the revetment would be subject to Coastal Commission approval. Alternatively, as stated in MM HWQ-2, the Coastal Commission may recommend an alternative method to reduce potential for inundation to occur. With implementation of mitigation measure MM HWQ-2, impacts associated with possible inundation from wave uprush under current sea levels would be less than significant.

MM HWQ-3 requires that a plan be developed to address future sea level rise within the project area by instituting a monitoring program to assess sea level changes, and by identifying structural options to be implemented if necessary (subject to approval by the applicable regulatory agencies), that reduce risks to people and structures within the coastal zone. With implementation of mitigation measure MM HWQ-3, impacts associated with possible inundation from wave uprush under future sea level rise conditions would be less than significant.

Land Use and Planning

Impact LUP-1: Alternative 3 would conflict with an applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

Under Alternative 3, the landside development would be similar to that of the proposed project and the proposed uses would be the same. As with the proposed project, the development that would occur under Alternative 3 would be consistent with applicable land use and planning documents, including allowable uses, and limits on development intensity, building heights, maximum floor area ratio (FAR), and other applicable development standards.

Under Alternative 3, no modifications would occur at Seaside Lagoon. While there are currently no conflicts with the existing land use designations and zoning for public park uses at the site, should the facility cease operation and be forced to close, public recreation uses would no longer be available at Seaside Lagoon. Thus, in the future, the intent of the land use designations and zoning may not be met.

Similar to the proposed project, Alternative 3 would not conflict with most relevant policies in land use and planning documents, including the Public Trust Doctrine, SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. However, the degree to which the Alternative 3 achieves policies calling for improved pedestrian and bicycle circulation would be reduced as compared to the proposed project, as no pedestrian bridge would be constructed under Alternative 3.

Additionally, Alternative 3 would not implement Policy 1 of the Coastal Land Use Plan, which calls for construction of a public boat launch ramp in association with future development projects within the harbor area. Additionally, the boat hoists would be removed; therefore, as well as not meeting the policy calling for a boat launch ramp to be installed with new development , boater access would be further reduced compared to existing conditions by the elimination of the boat hoist. Under Alternative 3, the proposed location of the small craft boat launch ramp facility (landside and waterside), which is currently the location of Joe's Crab Shack, would remain as existing conditions.

As described above, under Alternative 3, there may be future inconsistencies with the land use designations and zoning for Seaside Lagoon, and Coastal Land Use Policy 1 would not be fully implemented; however, no secondary environmental impacts would result by lack of full implementation of the goals and objectives, and Alternative 3 would not preclude the attainment of the primary intent of the applicable land use plans and would not result in a significant impact. The impacts would be similar to the proposed project; however, some goals and objectives included in those plans, including implementation of a boat launch ramp, would not be implemented under Alternative 3.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Noise

Impact NOI-1: Alternative 3 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

Under Alternative 3, construction would occur throughout the landside portion of the project site, all of which would be subject to, and is assumed to comply with, the requirements of the City's Noise Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities under Alternative 3 would not exceed applicable standards, and construction noise impacts occurring under this threshold would be less than significant, as with the proposed project. The uses proposed under Alternative 3 would be similar to those of the proposed project, which are, in general, of a type comparable to those that currently exist at the project site, and all of which would be subject to, would comply with, the applicable requirements of the Noise Ordinance. As such, continued operation of the project site under Alternative 3 would not exceed applicable standards, and operational noise impacts occurring under this threshold would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-2: Alternative 3 could expose persons to or generate excessive groundborne vibration or groundborne noise levels.

The construction-related vibration impacts associated with Alternative 3 would be similar, but reduced as compared to those of the proposed project as no pile driving associated with the in-water project elements would occur. The greatest potential for vibration-related impacts would be in the southeastern and southern portions of the project under both Alternative 3 (as with the proposed project). Structural damage associated with construction-related vibration is a significant impact. This is similar to the proposed project, but slightly reduced because no construction of the water elements would occur.

Mitigation Measures

Mitigation measure NOI-1 Pile Driving Vibration, would be implemented to reduce impacts where vibration-related structural damage may occur.

Residual Impacts

With implementation of MM NOI-1, impacts related to potential structural damage from construction-related vibration, particularly as related to pile driving, would be less than significant.

Impact NOI-3: Alternative 3 would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

The landside development uses under Alternative 3 would be the same as those of the proposed project and the waterside uses at the project site would generally remain the same as they currently exist. The types of uses proposed by the project and under Alternative 3 for the landside areas are comparable to those that currently exist and operate at the project site. As such, noise levels associated with on-site operational sources under Alternative 3 would, for the most part, be similar to existing conditions, as is also the case for the proposed project. Because of the Pacific Avenue Reconnection, as with the proposed project, under Alternative 3 increased traffic on Torrance Circle/Boulevard between the project site and Catalina Avenue would result in a significant increase in roadway noise levels along that segment, compared to existing conditions.

Mitigation Measures

No mitigation is available for the significant increase in the roadway noise level on Torrance Circle/Boulevard between project site and Catalina Avenue.

Residual Impacts

Similar to the proposed project, the impact would be significant and unavoidable.

Impact NOI-4: Alternative 3 would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Although the overall construction associated with Alternative 3 would be less than that of the proposed project, based on elimination of waterside elements requiring federal

approvals, the temporary or periodic increase in ambient noise levels at nearby noise-sensitive receptors would be similar between Alternative 3 and the proposed project. That is because the noise-sensitive receptors near the project site are located primarily along the landside portions of the project site where construction would occur under Alternative 3. Therefore, as with the proposed project, construction of Alternative 3 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use); a significant noise impact would occur. Impacts would be similar to the proposed project, but slightly reduced because no construction of the water elements would occur.

Mitigation Measures

Similar to the proposed project, mitigation measures MM NOI-2 through MM NOI-6 would be implemented to help reduce construction noise impacts.

Residual Impacts

As with the proposed project, implementation of mitigation measures MM NOI-2 through MM NOI-5 would help reduce construction noise impacts, and mitigation measure MM NOI-6 could provide for a substantial reduction in construction noise impacts. With a 20 dBA of noise reduction associated with such noise barriers, the attenuated construction noise levels at most of the noise sensitive receptors around the project site would be generally comparable to, if not less than, existing ambient noise levels. The exceptions would be: (1) the western edge of Czulegar Park; (2) the northern edge of Veterans Park; (3) the western portions of the condominium complexes located immediately east of the project site; and (4) the Crowne Plaza Hotel during construction of the upper levels of multi-story structures within the project site. At Czulegar Park, the 20 dBA noise reduction offered by MM NOI-5 would largely, but not fully, reduce the noise exposure impact to a level that is less than significant. Similarly, a 20 dBA noise reduction offered by placement of a noise barrier along the northern edge of Veterans Park would largely, but not fully, address the construction noise impact. Relative to the condominiums east of the site, the combination of their close proximity to the project site and their elevated and multi-story nature would render any noise barrier as being unable to achieve a construction noise level reduction that would make the impact less than significant. A noise barrier located along the edge of the project site, which is approximately 20+/- feet lower than the base elevation of the condominiums, could not effectively shield/attenuate construction noise from reaching the westernmost portions of those condominium complexes, and even if it did, a 20 dBA noise reduction would not be sufficient. With regard to differences in elevation, construction of the upper levels of multi-story structures within the eastern portions of the project site, such as Buildings A and D and the parking structures at the north and south ends of the site, may expose adjacent noise sensitive receptors, such as the Crowne Plaza Hotel and the condominiums east of the site, to temporary periods of construction noise that cannot be shielded/attenuated by construction noise barriers.

Based on the above, similar to the proposed project, implementation of the Alternative 3 would result in a significant and unavoidable construction noise impact; however, the residual impacts would be reduced compared to the proposed project.

Public Services

Impact PBS-1: Alternative 3 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Under Alternative 3, most of the older non-compliant buildings/structures throughout the project site would be demolished and replaced with new facilities that comply with current applicable building and fire codes. Although this alternative does not include the demolition of the Sportfishing Pier or the timber portion of the Horseshoe Pier, this alternative would include rehabilitation/restoration of the existing buildings on both piers. Therefore, under Alternative 3, many of the existing non-compliant buildings/structures would be reconstructed/replaced in compliance with the most up-to-date building code requirements of the CBC applicable at the time of development. Consequently, the new buildings would offer an improvement related to fire protection, including the inclusion of fire suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers). In addition, Alternative 3 includes the modification of on-site water mains and fire hydrants to conform to current requirements.

Alternative 3 includes a new main street that transects through the center of the northern portion of the site (approximately parallel to Harbor Drive), which would help circulation and emergency access through the northern portion of the project site. In addition, the proposed project includes the Pacific Avenue Reconnection in the area of the existing International Boardwalk. By replacing the area in front of the International Boardwalk with a two lane (one lane in each direction) through street that meets fire apparatus access requirements, the Pacific Avenue Reconnection would greatly improve emergency access and protection service throughout the project site.

As with the proposed project, during construction, precautions and requirements associated with the California Fire Code's Fire Safety During Construction and Demolition (Chapter 33) would be followed.

The proposed revitalization of the project site under Alternative 3 could result in an increase in the number of visitors to the site compared to existing conditions. However, the potential increase in landside use of the site is not expected to translate to increase in the need for fire protection staff or equipment as the new facilities and the new access would be a benefit to fire protection at the site. Therefore, the existing fire protection staff and equipment can adequately support development under Alternative 3, and Alternative 3 is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact PBS-2: Alternative 3 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Under Alternative 3, as with the proposed project, the Pier Police Sub-Station would be relocated within the project site, with additional staff and extended hours as needed. In addition to City police services, as with the proposed project, Alternative 3 includes private security that would serve the commercial development and hotel and would contribute to on-site safety on an around-the-clock basis. This would include foot patrols of building perimeters, parking structures, walkways, and surface parking lots and monitoring of on-site security cameras via closed circuit television. Working together, the private security would augment police surveillance and sub-station operations. As with the new/replacement police sub-station described above, the new development proposed under Alternative 3 would accommodate on-site private security, and no construction or expansion of facilities not already addressed as part of the proposed project would be required. Therefore, it is not anticipated that continued police staffing at the sub-station would result in diminished service elsewhere in the City.

As with the proposed project, other security measures inherent in the design of Alternative 3 increase site safety by incorporating CPTED strategies aimed at deterring criminal behavior by designing the physical environment in ways that reduce identifiable crime risks and provide an atmosphere of safety. This includes use of nighttime security lighting, security cameras, and providing lighted landscaping that allow for clear sight lines by security personnel and security devices to monitor the site as feasible, as well as architectural design features to enhance visibility throughout the site.

In addition, as with the proposed project, under Alternative 3 a new main street would be created that transects through the center of the northern portion of the site (approximately parallel to Harbor Drive), which would help circulation and emergency access through the northern portion of the project site. Alternative 3, as with the proposed project, includes the Pacific Avenue Reconnection in the area of the existing International Boardwalk. By replacing the area in front of the International Boardwalk with a two lane (one lane in each direction) through street, the Pacific Avenue Reconnection would greatly improve emergency access and protection service throughout the project site. However, without the pedestrian/bicycle bridge, non-vehicular emergency access (i.e., foot patrol) between the northern and southern portion of the site would be reduced.

Therefore, with replacement of the on-site police sub-station Alternative 3 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain

adequate services, hence, the impact would be less than significant. Impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Recreation

Impact REC-1: Alternative 3 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Under Alternative 3, Seaside Lagoon would not be modified and would continue as current operations (e.g., open to the general public during the summer for a fee and as long as water quality goals can be met). Further, should the NPDES permit not be renewed, or the City not be able to meet water quality requirements of the permit, the Seaside Lagoon would close and no longer be available for public recreational purposes. This could increase use of other recreational facilities, such as pools and beaches; however, it would not be expected to the degree that substantial physical deterioration of other facilities would occur.

In addition, no boat ramp would be constructed and the boat hoists would cease operation within the project site and therefore, boat launching opportunities would decrease. Boaters may use alternative boat launching facilities, such as in San Pedro. However, this is not expected to result in the use of other boat launch facilities such that substantial physical deterioration of the facility would occur. All landside development under the proposed project would occur under Alternative 3, including enhancement of high-quality open space within the project site, pedestrian and bicycle connectivity; however, to a lesser degree than the proposed project because the pedestrian/bicycle bridge would not be constructed and no enhancements to the pedestrian path adjacent to Seaside Lagoon and Joe's Crab Shack would occur.

Because the small craft boat launch ramp facility and opening of Seaside Lagoon would not be built under Alternative 3, an increase in the number of water users, including motorized and non-motorized vessel traffic, and swimmers is not anticipated. Further, although recreation would be enhanced to a lesser degree than the proposed project, because existing recreation associated with the exiting project site would be maintained, Alternative 3 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. As such, impacts would be less than significant. Although the impacts would be similar to the proposed project, the benefits of the waterside recreational enhancements proposed as part of the project, including construction of a small craft boat launch ramp and modification of Seaside Lagoon, would not be implemented under Alternative 3, and the boat hoists would cease to operate within the project site.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact REC-2: Alternative 3 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative.

As described above under Impact REC-1, Alternative 3 would not include construction of any landside parks or recreational facilities beyond those already described under the proposed project, and it would not modify Seaside Lagoon or implement any other waterside recreational improvements (i.e., new boat launch ramp or pedestrian/bicycle bridge). Alternative 3 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As such, similar to the proposed project, no impact is anticipated.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Traffic and Transportation

Impact TRA-1: Alternative 3 could exceed the applicable significance thresholds.

Alternative 3 would include the construction of the same level of development as the proposed project, as well as the parking structures and surface parking, so is not expected to materially, deviate from the project in terms of its transportation impacts. As such, construction-related traffic impacts would be less than significant. Operational traffic and parking impacts would be significant at the same locations (i.e., six intersections and onsite parking) and to the same extent as those of the proposed project. As with the proposed project, impacts to freeway facilities would be less than significant.

Mitigation Measures

Mitigation measures MM TRA-1 through MM TRA-6 presented in Section 3.13.4.2 would be implemented under Alternative 3 to address impacted intersections. MM TRA-7 would be implemented to address significant impacts related to parking.

Residual Impacts

With implementation of MM TRA-1 through MM TRA-6, impacts would be less than significant at all impacted. With implementation of MM TRA-7, impacts related to parking would be less than significant.

Impact TRA-2: Alternative 3 would not conflict with an applicable congestion management program.

As noted above, Alternative 3 would have traffic generation and impacts similar to those of the proposed project. As such, similar to the proposed project, Alternative 3 would not conflict with an applicable congestion management program. As with the proposed project, impacts are less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRA-3: Alternative 3 would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Under Alternative 3, development of the new small boat launch ramp and associated breakwater would not occur. As such, the significant potential safety hazard associated with the interface of paddle boarders and small boats near the launch ramp that could occur with implementation of the proposed project would be avoided under Alternative 3. No impact would occur under Alternative 3, which is reduced from the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Utilities

Impact UTL-1: Alternative 3 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Under Alternative 3, the same landside improvements as the proposed project would be implemented. This includes new development and replacement of most of the older non-compliant buildings/structures throughout the project site with new facilities that comply with the most up-to-date building code requirements, including installation of water conserving plumbing fixtures and fittings (e.g., low flow water fixtures and high-efficiency toilets and urinals). As with the proposed project, the wastewater generation would increase under Alternative 3, but the new on-site system would be designed to provide adequate capacity to handle the wastewater increase and maintain the same flow conditions as currently exist on-site.

As with the proposed project, an 8-inch new trunk sewer line and local tie-ins would be installed. Additionally, the existing sewer lift stations would be replaced and upgraded. With the on-site improvements and lift station upgrades, there would be adequate

capacity. Therefore, the wastewater generated by Alternative 3 would not exceed the wastewater conveyance and treatment at the project site and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. Similar to the proposed project, the impact is less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: Alternative 3 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

Under Alternative 3, the same landside improvements as the proposed project would be implemented. This includes new development and the replacement of most of the older non-compliant buildings/structures throughout the project site with new facilities that comply with the most up-to-date building code requirements, including installation of water conserving plumbing fixtures and fittings (e.g., low flow water fixtures and high-efficiency toilets and urinals).

The water demand associated with Alternative 3 would be similar to that of the proposed project. The water supply assessment prepared for the proposed project determined that the increase in water demand would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. As such, Alternative 3 would not exceed existing potable water supplies, entitlements and resources, or require and result in new or expanded entitlements, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: Alternative 3 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

Construction of Alternative 3 would generate a similar amount of construction waste as compared to the proposed project. As with the proposed project, wastes, including concrete, would be reused on site as feasible. Other materials would be hauled off-site for recycling or disposal in a landfill. As with the proposed project, some buildings may

contain asbestos and lead-based paint. Such materials would be abated, removed, and disposed of in according to applicable regulations as discussed in Section 3.14 Utilities.

Wastes generated during construction activities under Alternative 3 would result in an incremental and temporary increase in solid waste disposal at landfills and other waste disposal facilities, similar although to a lesser degree than the proposed project (as no in-water elements would be demolished/constructed). Debris that is not reused on-site would be trucked from the site for disposal at any of the area landfills that accept and/or recycle construction/demolition materials. The inert landfill which takes in most of the construction and demolition debris in Los Angeles County has sufficient capacity available to accommodate construction waste that would be generated under Alternative 3. Therefore, the construction of Alternative 3 would not create a need for additional solid waste disposal facilities.

Operation of Alternative 3 would generate the typical range of recyclable and non-recyclable waste that other similar uses create, and that is currently generated on-site in a similar amount as the proposed project. As with the proposed project, Alternative 3 would be expected to comply with a minimum 70 percent diversion rate. As described for the proposed project, Los Angeles County has solid waste capacity that exceeds 15 years, and Alternative 3 would not exceed existing capacity. Thus, Alternative 3 would not create a need for additional solid waste disposal facilities to adequately handle solid waste generated during operations. No significant impact on the landfills within the region is anticipated as a result of Alternative 3.

As with the proposed project, operations under Alternative 3 would comply with the existing waste diversion programs of the City, County, and Athens Services (the City's current contract provider for solid waste disposal). The City's contractual agreement with Athens Services obligates Athens Services to guarantee that the City will exceed the diversion requirements set forth in AB 939. Therefore, as with the proposed project, Alternative 3 would comply with the established diversion requirements and Alternative 3 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. Impacts relative to adopted solid waste diversion programs and policies would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: Alternative 3 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Under Alternative 3, the same landside improvements as the proposed project would be implemented. This includes new development and the replacement of most of the older non-compliant buildings/structures throughout the project site with new facilities that

comply with the latest CalGreen and State Energy Conservation Standards contained in Title 24, including installation of energy efficient fixtures and appliances.

Electricity demand and natural gas demand would be similar to that of the proposed project. As described for the proposed project, there is adequate electricity and natural gas supplies available to serve the development that would be implemented under Alternative 3. Further, with the exception of on-site connections needed for the new buildings and structures, Alternative 3 would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore, implementation of Alternative 3 would not exceed the capacity of electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.4.4 Alternative 4 – No Property Exchange with State

4.4.4.1 Description of Alternative 4

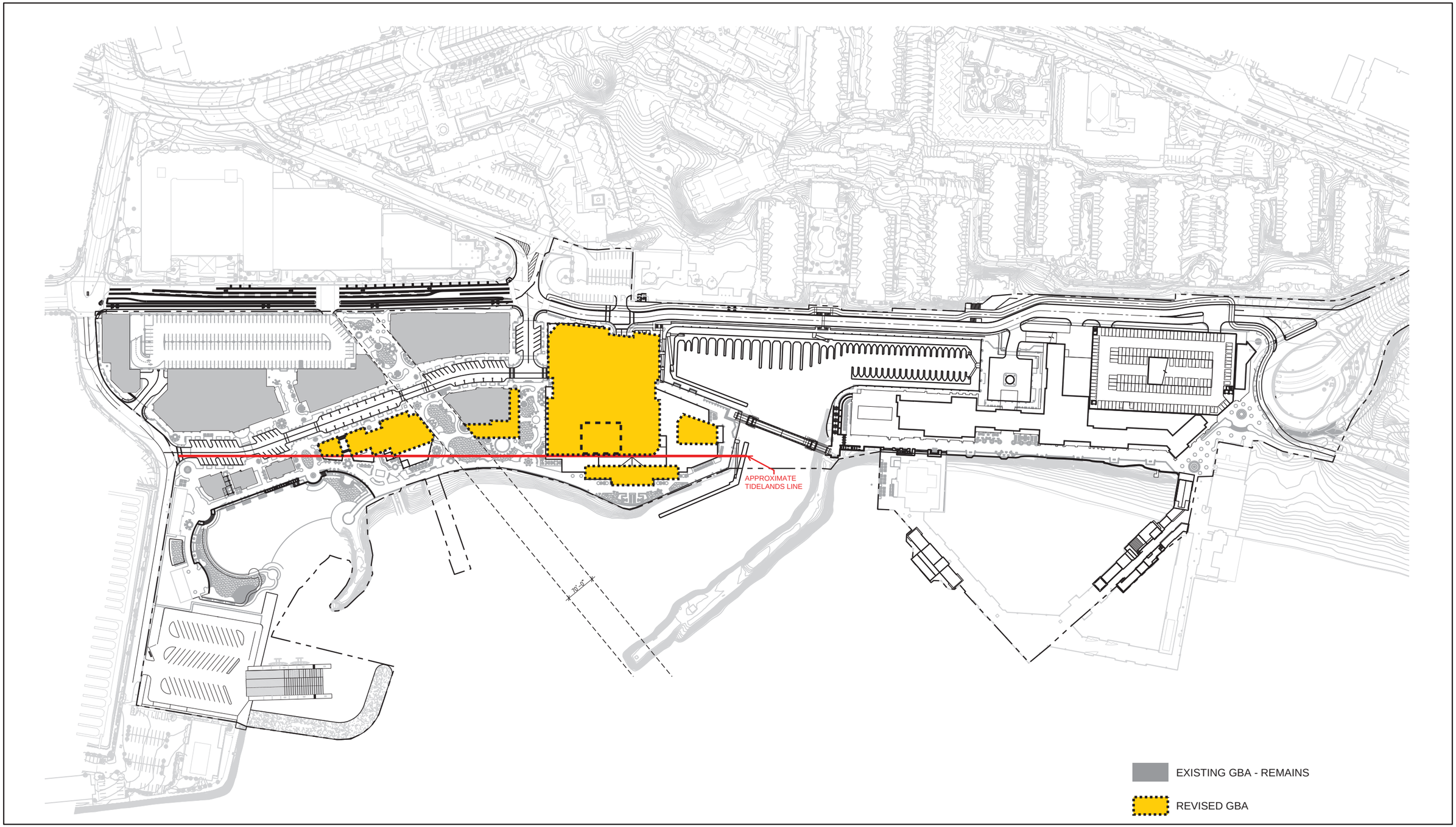
Alternative 4 would not include any property exchange that would require State Lands Commission approval. Therefore, under Alternative 4, the proposed change in designation of approximately 86,000 square feet of Tidelands on Mole D to Uplands, and in exchange for Basin 3 becoming subject to the Public Trust would not occur [see Figure 4-1]). All uses on the Tidelands need to be consistent with Public Trust Doctrine and meet certain criteria including allowable uses and time restrictions on leases in tidelands. As described in Section 2.2.1, Chapter 2 Project Description in this Draft EIR, the Tidelands held in trust by the City are based on the MHTL designated in 1935, prior to the construction of King Harbor in its current configuration, including Basin 3. As such, Basin 3 is classified as Uplands.

As described below, Alternative 4 would be identical to the proposed project with the exception of a reconfiguration of the conceptual site plan at Mole D. The following is a breakdown of the project elements that would be implemented under this alternative.

Northern Portion of Project Site

Under Alternative 4, as with the proposed project, a maximum of 288,184 square feet of new development would be constructed in the northern portion of the project site (not including the parking structure). As with the proposed project, the proposed uses that would be established include retail, restaurants, creative office, public market hall, approximately 700 seat specialty cinema, and accessory/recreational uses (such as recreational sales/rentals, beach club, maintenance, public safety, concessions, etc.). As shown on Figure 4-2, the Alternative 4 conceptual site plan would be similar to that of the proposed project; however the structures in the southern area and west of the new

Source: City of Redondo Beach, 2008; Psomas, 2014; Noble Consultants, Inc., 2015



Source: Callison, 2015

Figure 4-2

Alternative 4 – No Property Exchange with State Conceptual Site Plan

main street would be redesigned so that each structure is either fully within the existing Tidelands or fully outside of the existing Tidelands (within the Uplands). As described above, the overall square footage would not differ from the proposed project. The market hall would be relocated adjacent to the Pacific Avenue Reconnection. Under Alternative 4, the new main street would not extend as far south as compared to the proposed project, and a surface parking lot would be eliminated, resulting in a reduction of approximately 38 on-street and surface parking lot stalls as compared to the proposed project. There would be a small increase in public open space south and west of the market hall.

The other elements on the northern portion of the project site would be the same as the proposed project, including demolition and possible replacement of the Sportfishing Pier. Seaside Lagoon would be opened to the waters of King Harbor, creating a tidally-influenced lagoon with direct access to the harbor. A small craft boat launch ramp facility would be located at the Joe's Crab Shack location. A new four-level parking garage would be located at the northeast corner of the project site, and the Plaza Parking Structure would be modified to accommodate the Pacific Avenue Reconnection.

Southern Portion of Project Site

Under Alternative 4, development of the southern portion of the project site would be the same as would occur under the proposed project, including demolition of existing buildings and construction of new retail, restaurant and hotel uses. The International Boardwalk and elevated walkway would be removed and replaced with the Pacific Avenue Reconnection.

The existing Pier Parking Structure and Pier Plaza would be demolished and replaced with a new 1,012 stall parking structure. A new 120-room boutique hotel would be constructed adjacent to Basin 3. In addition, this alternative would include replacement of the timber portion of the Horseshoe Pier and the buildings on that segment of the pier. A new building would be constructed on Pad 2 on the Horseshoe Pier. Limited modifications may occur in the vicinity of Monstad Pier, where Monstad Pier connects with the Horseshoe Pier. Additionally, modifications of Torrance Circle would be implemented to facilitate the Pacific Avenue Reconnection and access to the parking structure.

Basin 3

Under Alternative 4, the modifications to Basin 3 would be the same as under the proposed project, including replacement of the bulkhead cap and minor repairs to the bulkhead. The reconstruction/redevelopment of the Redondo Beach Marina existing docks, gangways, and boat slips. In addition, as with the proposed project, a pedestrian/bicycle bridge would be constructed to span the Basin 3 entrance.

Additional Improvements

Additional improvements under Alternative 4 would be the same as the proposed project with the exception of the Tidelands exchange. Additional improvements would include upgrades to existing aging infrastructure, relocation of service and loading zones, relocation of the police substation, and landscaping, lighting, and security improvements. Substantial improvements in site connectivity, enhanced public open space, and public access to and along the waterfront would also be implemented.

4.4.4.2 Aesthetics and Visual Resources

Impact AES-1: Alternative 4 would not have a substantial adverse effect on a designated local valued view.

Under Alternative 4, the effects on a designated local valued view would be similar to the proposed project. As described below, the only difference would be associated with changes in the conceptual site plan in the southern area of the northern portion of the proposed project site.

Czuleger Park – Key Observation Views 1 through 3: as with the proposed project, building cranes are expected to be used to construct the parking structure in the northeast corner of the project site, the top of the cranes could be visible from Key Observation Views 1 and 2. The visibility of the crane would be dependent on the precise location and angle of crane, as well as the angle of the viewer. Given that views of Santa Monica Bay/Pacific Ocean are already blocked or very limited from Key Observation Views 1 and 2 respectively, and any possible view of the construction crane would be temporary and limited, there would be no construction-related significant visual impact on the designated local valued view at Key Observation Views 1 and 2 under Alternative 4. No changes to views would occur at Key Observation View 1 under operation of the Alternative 4. The only features at the project site that may be visible from Key Observation View 2 are tall trees located on-site. Any changes to the trees (i.e., removal/relocation and/or new plantings) would not adversely affect the limited views available from this location. Therefore, operation of Alternative 4 would not have a substantial adverse effect on a designated local valued view from Key Observation View 2.

Construction activities and equipment would be visible from Key Observation View 3; however, from this distance, the activities and equipment would be difficult to visually distinguish from other features located at a similar distance. As such, the construction would largely blend into the overall view and not be visually prominent. While some of the larger equipment could encroach into the views of the water, primarily at the northern edge of the view corridor, this temporary encroachment would occupy only a small portion of the larger viewshed, and the primary views of the water would remain open. Therefore, similar to the proposed project, construction would not have a substantial adverse effect on the designated local valued view at Key Observation View 3 under Alternative 4.

During operation, the changes to the views from Key Observation View 3 under Alternative 4 would be similar to that of the proposed project. Features of Alternative 4, including the pedestrian bridge and market hall, would be visible; however, the views of Santa Monica Bay/Pacific Ocean would remain. Additionally, due to the re-positioning of the market hall, less of this building would be visible at the edge of view corridor as compared to the proposed project. Similar to the proposed project, no change in the locally designated valued view would occur and impacts would be less than significant.

North Harbor Drive – Key Observation Views 4 and 5: the changes to the views from Harbor Drive under Alternative 4 would be similar to that of the proposed project. Construction activities would temporarily disrupt views of the water from Harbor Drive; however, the views that are available are limited and of low to moderate quality. The

impact would be temporary and not result in a substantial adverse effect on a designated local valued view, including views from Key Observation Views 4 and 5.

During operation, the changes to the views from Harbor Drive under Alternative 4 would be similar to that of the proposed project. With the increase in development in the northern portion of the project, the locations where background views of the water are visible from Harbor Drive would decrease between Portofino Way and current terminus with Pacific Avenue. Under Alternative 4, this change in views would be slightly different as compared to the proposed project due to the position of the market hall. For some fleeting moments (i.e., northbound along the Pacific Avenue Reconnection along Basin 3), the view of the water, including Basin 3, would be slightly better under Alternative 4, while at other locations it would be slightly worse (i.e., southbound along the Pacific Avenue Reconnection north of Basin 3).

As with the proposed project, under Alternative 4, view corridors at Key Observation Views 4 and 5 would provide views of the water from Harbor Drive. Additionally, the Pacific Avenue Reconnection would provide a largely unobstructed view of the Redondo Beach Marina and open waters beyond, thereby creating a new segment of roadway with water views. Further, this segment of the roadway would be located at a slightly higher elevation than Harbor Drive, which would increase the amount of water within view. Within the northern portion of the project site, the new main street would establish a new roadway that has views of the water at a closer range than Harbor Drive, thereby enhancing the value of views available to motorists. Impacts along Harbor Drive and Key Observation Views 4 and 5 would be less than significant, similar to the proposed project.

Proposed/New Main Street – Key Observation View 6: Views of Seaside Lagoon and the North Breakwater are visible from this location, but there are no views of the harbor water. As with the proposed project, during construction would be visible from Key Observation View 6. These activities would be limited and temporary and would not have an adverse effect on a locally designated valued view. During operation, the view of Seaside Lagoon would change from a view of chain link fence, landscaping, and the lagoon water (available when the lagoon is full) to a new view of the lagoon open to harbor waters. Alternative 4 would not result in an adverse change in the locally designated valued view from Key Observation View 6 and impacts would be less than significant, similar to the proposed project.

Views from the Water – Key Observation View 7: Construction activities would be visible from the water. While some activities may be surrounded by construction fencing, taller equipment and activities occurring above the construction fence line such as demolition and reconstruction of Pier Plaza may be visible from the water. Additionally, construction activities on the Horseshoe and Sportfishing Piers would be visible from the water. While these activities would temporarily detract from the scenic quality of the harbor, the primary scenic views towards the open water of the Santa Monica/Pacific Ocean would remain available. King Harbor is a busy harbor that supports a high level of activity and variety of vessel types and the presence of construction equipment and activities would not have a substantial adverse impact on the designated local valued view at Key Observation View 7 and impacts during construction would be less than significant, similar to the proposed project.

Project elements that would be visible from Key Observation View 7 would include the pedestrian bridge and new buildings in the northern and southern portion of the site. While more buildings would be visible, they would have a similar profile as the existing buildings and would be blend into the overall view of the shoreline. The design of the building in the north would be slightly altered from that of the proposed project, but the visual changes would be similar. As with the proposed project, Alternative 4 would not result in an adverse change in the locally designated valued view from Key Observation View 7 and impacts during operation would be less than significant.

The impacts would be similar to the proposed project; however, the view of the water from Harbor Drive, would be slightly better under Alternative 4 at some locations, while at other locations it would be slightly worse.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-2: Alternative 4 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Under this alternative, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project, and as such, changes in visual character and quality would be similar. Project construction, would temporarily change the visual character and reduce the visual quality of the site, construction activities and equipment would be temporary and not result in permanent visual degradation that would substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, impacts during construction would be less than significant.

As with the proposed project, the landside portion of the project site would be redeveloped a maximum of 304,058 square feet of net new development, and, as described for the proposed project, although the changes to the visual quality of the site would be noticeable, the addition of new design elements and improved public spaces will enhance the visual quality of the site.

Alternative 4 would not substantially degrade the visual character or quality of the project site and the impact would be less than significant. The impacts would be similar to the proposed project; however, the reconfigured site plan under Alternative 4 would reduce views available of Basin 3 from the new main street (should it be built) and other portions of the northern portion of the project site as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-3: Alternative 4 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Under this alternative, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. As with the proposed project, construction would primarily be conducted during daylight hours. However, should the use of nighttime construction lighting be required, as with the proposed project, it would be directed inward and downward toward the construction site, and would not be expected to increase the overall ambient glow emanating from the project site as compared to existing conditions. Therefore, similar to the proposed project, impacts related to nighttime construction lighting would be less than significant.

As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Alternative 4 would not incorporate substantial amounts of reflective building materials in areas that are highly visible to off-site glare-sensitive uses.

Alternative 4 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Air Quality

Impact AQ-1: Alternative 4 would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. Construction and operational emissions from Alternative 4 would be identical to that of the proposed project. Therefore, the construction and operation emissions calculations for the proposed project would be the same for Alternative 4. As such, construction emissions from Alternative 4 would not exceed SCAQMD's regional thresholds for Sox, PM_{10}, and $PM_{2.5}$. However, the emissions would exceed SCAQMD's regional thresholds for ROG, NOx, and CO. Therefore, the impact is significant.

Alternative 4 would not exceed the regional thresholds established for the operational emissions of criteria air pollutants within the air district.

Mitigation Measures

As with the proposed project, mitigation measures MM AQ-1: Fleet Modernization for Construction Equipment and MM AQ-2: Use of Los-VOC Coatings and Paints, would reduce criteria pollutant emissions associated with project construction.

Residual Impacts

Similar to the proposed project, implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the impacts of ROG to less than significant; however, as with the proposed project NOx and CO would remain significant and unavoidable for construction. No other feasible methods to reduce emissions were identified.

Impact AQ-2: Alternative 4 would not expose sensitive receptors to substantial pollutant concentrations.

Because the same level of construction and operational activities would occur under Alternative 4 and the proposed project, Alternative 4's impacts would be identical to that of the proposed project.

As such, Alternative 4 would not expose sensitive receptors to significant localized concentrations of NOx, CO, PM_{10}, and $PM_{2.5}$ during construction and operation. Additionally, Alternative 4 is also not anticipated to expose sensitive receptors to localized significant pollutant concentrations with respect to mobile CO emissions and toxic air contaminants during operations. Further, the operation of the commercial retail, office, hotel, and specialty uses associated with Alternative 4 is not anticipated to result in the emissions of TACs; therefore, the operation of Alternative 4 would have no impact on localized sensitive receptors. Therefore, Alternative 4 would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact AQ-3: Alternative 4 would not create objectionable odors affecting a substantial number of people.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, construction odors, including odors associated with dredging activities, could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Alternative 4 as with the proposed project, no on-site sources of emissions would occur as a result of operational activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). Therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Biological Resources

Impact BIO-1: Alternative 4 could have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities both landside and waterside. Impacts on terrestrial and marine biological resources would be identical to that of the proposed project. As with the proposed project, construction and operation of the landside elements of Alternative 4 would occur in previously developed areas that do not have any sensitive terrestrial biological resources and impacts on terrestrial biological resources would be less than significant. Impacts are the same as the proposed project.

As with the proposed project, the waterside elements would result in temporary significant impacts on marine mammals during pile driving and on grunion if replacement of the timber portion of the Horseshoe Pier occurs during spawning season (March to August). Other construction impacts, including relative to least terns and broomtail grouper, would be less than significant and further reduced with implementation of COA BIO-1 that requires least tern monitoring during construction and COA BIO-2 that requires implementation of BMPs to control turbidity. Impacts are the same as the proposed project.

During operation, as with the proposed project, if the Sportfishing Pier is reconstructed, a net increase in surface coverage would occur. This would reduce open water foraging habitat for waterbirds and is a significant impact. As with the proposed project, the opening of Seaside Lagoon and construction of the small craft boat launch ramp and associated breakwater would not result in a substantially adverse impact on pinnipeds as a result of increased human-pinniped interactions in comparison to existing conditions; therefore, impacts would be less than significant. While impacts are less than significant without mitigation, as with the proposed project, the City is proposing Condition of Approval COA BIO-2: Marine Mammal Management Program, as part of its Conditional Use Permit procedures. Impacts are the same as the proposed project.

Mitigation Measures

Mitigation measures MM BIO-1: Protection of Marine Mammals During Construction, and MM BIO-2: California Grunion would be implemented to address construction impacts on special status species. Mitigation measure MM BIO-3: Mitigation for Increase in Surface Coverage would be implemented to address an increase in surface coverage if the Sportfishing Pier is replaced. If the Sportfishing

Pier is not replaced the operational impacts would be less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-1 would reduce to less than significant impacts caused by noise and vibration from pile-driving associated with the in-water construction of Alternative 4 to negatively affect marine mammals. In addition, although impacts to fish, including broomtail groupers, from pile-driving activities would be less than significant, mitigation measure MM BIO-1 would further reduce the likelihood of impacts to fish (as well as marine mammals) as a result of pile-driving as a soft start would warn mobile aquatic species to leave the area as pile-driving is commenced.

Mitigation measure MM BIO-2 would reduce to less than significant the construction associated with the Horseshoe Pier at or near the sandy beach habitat of Horseshoe Beach to result in direct impacts (including mortality or injury) to grunion if they are present in the project area during their spawning season (March to August).

Mitigation measure MM BIO-3 would reduce to less than significant the net increase in surface coverage that would occur if the Sportfishing Pier is rebuilt. If the Sportfishing Pier is not replaced, impacts would be less than significant without mitigation.

With implementation of mitigation, significant impacts to special-status species during construction and operation would be reduced to less than significant.

Impact BIO-2: Alternative 4 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Impacts on terrestrial and marine biological resources would be identical to that of the proposed project. As with the proposed project, construction and operation of the landside elements of Alternative 4 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including riparian habitat, native grassland, wildlife corridors, vernal pool habitat, freshwater marsh, or other sensitive or critical natural community. Therefore, as with the proposed project, there would be no impacts on terrestrial biological resources.

Construction of Alternative 4 would disturb the same amount of marine benthic habitat as the proposed project. As with the proposed project, no significant impacts on marine and riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS would occur. Further, the City is proposing, as with the proposed project, the following Conditions of Approval as part of its Conditional Use Permit procedures: COA BIO-4: Eelgrass; COA BIO-5: Caulerpa; and COA BIO-6: Compliance with NMFS Guidelines for Overwater Structures.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-3: Alternative 4 could have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Impacts on terrestrial and marine biological resources would be identical to that of the proposed project. As with the proposed project, construction and operation of the landside elements of Alternative 4 would occur in previously developed areas that do not have any federally protected waters or wetlands. Therefore, there would be no impacts on terrestrial biological resources.

The waterside elements of Alternative 4 would be the same as the proposed project. Therefore, as with the proposed project, temporary construction impacts on aquatic vegetation and benthic communities through direct removal or indirect loss or disturbance as a result of turbidity would be less than significant. Further, as with the proposed project, COA BIO-2 would require Alternative 4 to comply with BMPs to control turbidity in the water column adjacent to in-water work.

As with the proposed project, operation of Alternative 4 would result in a substantial adverse effect on federally projected waters and associated habitat if the USACE determines that the Seaside Lagoon is jurisdictional waters. This is a significant impact. However, as with the proposed project, the ecological function of the lagoon would be improved whether or not the lagoon is determined to be jurisdictional. No adverse impacts to EFH would occur under Alternative 4.

Impacts on federally protected waters or wetlands would be the same as the proposed project during construction and operation.

Mitigation Measures

Mitigation measure MM BIO-4: Fill in Waters of the U.S. would be implemented to address adverse effects on federally protected waters if Seaside Lagoon is determined to be jurisdictional. If Seaside Lagoon is determined to not be jurisdictional waters, impacts are less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-4 would reduce to less than significant the adverse impacts on federally protected waters that would occur if Seaside Lagoon is jurisdictional. If Seaside Lagoon is not jurisdictional, impacts would be less than significant without mitigation.

Impact BIO-4: Alternative 4 could 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.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. Impacts on terrestrial and marine biological resources would be identical to that of the proposed project. Construction and operation of the landside elements of Alternative 4 would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 4 would be the same as the proposed project. Therefore, as with the proposed project, construction of Alternative 4 could result in a significant impact to established native resident or migratory wildlife corridors or native wildlife nursery site if replacement of the timber portion of the Horseshoe Pier occurs during grunion spawning season (March to August).

As with the proposed project, during operation, no substantial changes in harbor configuration or barriers would occur in a manner to affect fish and wildlife movement patterns or water circulation. As with the proposed project, operational impacts would be less than significant.

Construction and operation impacts would be the same as the proposed project.

Mitigation Measures

Mitigation measure MM BIO-2: California Grunion would be implemented to address construction impacts on wildlife nursery sites should Horseshoe Pier construction that could disturb sandy beach occur during the grunion spawning season.

Residual Impacts

With implementation of mitigation measure MM BIO-2, impacts related to the movement of migratory birds, fish, mammals, or other species, and the use of a native wildlife nursery would be less than significant.

Impact BIO-5: Alternative 4 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. Impacts on terrestrial and marine biological resources would be identical to that of the proposed project. Construction and operation of the landside elements of Alternative 4 would require compliance with local policies and ordinances, including during tree

trimming/tree removal activities. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 4 would be the same as the proposed project. Therefore, as with the proposed project, construction and operation of Alternative 4 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the City is proposing COA BIO-4 and COA BIO-5, which require compliance with policies related to eelgrass and Caulerpa taxifolia as part of the Conditional Use Permit process.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cultural Resources

Impact CUL-1: Alternative 4 would cause a substantial adverse change in the significance of a historical resource.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. Therefore, under this alternative, the potentially historic structures identified under the proposed project would be demolished and this would result in a significant impact. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measures MM CUL-1: Recordation, MM CU-2: Interpretive Program and MM CUL-3: Protection of the Monstad Pier During Construction would be implemented.

Residual Impacts

Similar to the proposed project, implementation of Alternative 4 would result in the demolition of potentially historic structures. While mitigation measures MM CUL-1, MM CUL-2, and MM CUL-3 are proposed, in the case of the full demolition of an historic property, residual impacts to historical resources are considered significant and unavoidable, which is similar to the proposed project.

Impact CUL-2: Alternative 4 could cause a substantial adverse change in the significance of an unknown archaeological resource.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of grading and excavation on the site would be similar to the proposed project. Therefore, as with the proposed project, Alternative 4 may have a substantial adverse change in the significance of an unknown archaeological resource in the northeastern and southeastern portions of the project site. Based upon this, impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

Due to the sensitivity for unknown archaeological resources, as with the proposed project, mitigation measure MM CUL-4: Phase I Archaeological Work, would be implemented to reduce the impact of excavation on unknown archaeological resources at the project site to a less than significant level.

Residual Impacts

As with the proposed project, with application of mitigation measure MM CUL-4, the impact of excavation on unknown archaeological resources at the project site would be less than significant, which is similar to the proposed project.

Impact CUL-3: Alternative 4 could directly or indirectly destroy an unknown paleontological resource.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of grading and excavation on the site would be similar to the proposed project. Therefore, earth-moving activities may have an adverse effect on unknown paleontological resources, and impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

Mitigation measure MM CUL-5: Potential to Encounter Unknown Paleontological Resources, would be implemented in order to preserve a representative sample of any scientifically important fossil remains and associated data that might be exposed by excavation at the project site; thereby, reducing the impact of excavation on unknown paleontological resources at the project site to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-5, the impact of earth-moving activities from implementation of Alternative 4 on the paleontological resources at the project site would be reduced to a less than significant level.

Geology and Soils

Impact GEO-1: Alternative 4 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. As with the proposed project, implementation of Alternative 4 would include the replacement of older non-compliant buildings/structures throughout the project site with new facilities that comply with current buildings codes (including seismic requirements). As with the proposed project, Alternative 4 would be required to comply with the recommendations detailed in the approved project-specific geotechnical evaluation(s) and engineering

analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria and specified seismic parameters. The impacts would be less than significant, which is similar to the proposed project.

As part of the Conditional Use Permit process, similar to the proposed project, the City would include Conditions of Approval to require, prior to the issuance of building permits, the City's Building and Safety Division to incorporate the recommendation and conditions from the design and project-specific geotechnical evaluation(s), engineering analysis, and any additional recommendations that come out of this review. The Conditions of Approval would be applied to the implementation of the project through the project plans and the building permit process.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-2: Alternative 4 would not result in substantial soil erosion or the loss of topsoil.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project, as would the ground-disturbing activities, such as demolition, excavation, trenching, grading, and landscaping. As with the proposed project, implementation of Alternative 4 would include compliance with existing regulatory requirements, such as implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, Alternative 4 would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust); therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and operation, impacts related to soil erosion or the loss of topsoil would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-3: Alternative 4 would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. Similar to the proposed project, Alternative 4 would replace the older non-compliant

buildings/structures with new facilities, which comply with applicable design standards and current applicable building codes and would provide safety improvements in comparison to the existing conditions. As with the proposed project, Alternative 4 would comply with applicable CBC requirements and site-specific geotechnical recommendations, and therefore, would not result in on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project. Consequently, impacts under Alternative 3 would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-4: Alternative 4 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. Under Alternative 4, similar to the proposed project, mass grading would occur throughout the project site. This work is expected to include the placement of new fill and the removal and re-compaction of unsuitable soil and backfill for utility trenches and other excavations. Likewise, the removal, re-compaction, and/or placement of new fill would occur based on a design- and project-specific evaluation of the expansion potential associated with on-site soils. It would include subsurface soil sampling, laboratory analysis of samples collected, and an evaluation of the laboratory testing results by a geotechnical engineer under direction and review by the City. Therefore, Alternative 4 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC. Similar to the proposed project, the impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 4 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. Construction and operational emissions from Alternative 4 would be identical to that of

the proposed project. Therefore, the GHG emissions calculations and significance findings for the proposed project would be the same for Alternative 4. As such, Alternative 4 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and no significant impacts would occur. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 4 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, Alternative 4 would be consistent with the CARB Scoping Plan, SB 375, and the Redondo Beach Sustainable Development Strategic Plan. Therefore, Alternative 4 would have a less than significant impact. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 4 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, compliance with regulatory requirements, including the use of construction BMPs and handling of contaminated soils in the unlikely event they are encountered, would minimize the adverse effects to the general public and environment associated with construction of Alternative 4. Alternative 4 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and impacts would be less than significant. The impacts would be similar to the proposed project.

Further, as with the proposed project, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination

Contingency Plan, should unknown contaminated soils be encountered during construction.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-2: Alternative 4 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, although Alternative 4 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In the event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, during construction of Alternative 4, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction. As with the proposed project, implementation of Alternative 4 is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-3: Alternative 4 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, construction of Alternative 4 would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Emergency access in and out of the site, including tsunami evacuation routes for construction workers, would remain during the construction process. As with the proposed project, Alternative 4 includes the new main street and Pacific Avenue Reconnection, which would greatly improve emergency access throughout the project site. As such, Alternative 4 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency

evacuation plan and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hydrology and Water Quality

Impact HWQ-1: Alternative 4 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Construction impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with marine construction), similar to the proposed project, would be less than significant with the compliance of regulatory requirements, including implementation of BMPs, and would ensure that Alternative 4 would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

As with the proposed project, temporary and localized increases in turbidity would occur during in-water construction activities of Alternative 4. This would not be expected to result in violations of water quality standards, and as such, construction-related impacts to harbor water quality would be less than significant.

Alternative 4 includes the redevelopment of the project site in a manner similar to what is proposed under the proposed project. Therefore, the imperviousness of the site would be similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. Runoff from the project site would reduce contamination associated with roadways, parking lots, landscaping, and accumulated atmospheric deposition on impervious surfaces in comparison to existing conditions, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 4 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

There are no streams or rivers located on the project site; hence, that aspect of the threshold of significance would be unaffected.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. During construction, BMPs would be implemented to eliminate or reduce pollutant discharges, including sediment, and control stormwater, erosion, and siltation during construction. With adherence to regulations, including implementation of BMPs, Alternative 4 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant.

Under Alternative 4, the imperviousness of the site would be similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, the proposed drainage system would be designed to include BMPs in accordance with the City's LID Ordinance, which sets forth standards to treat both the quantity and quality of flow. With adherence to regulations, including LID criteria and implementation of BMPs, Alternative 4 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during operational activities are considered less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-3: Alternative 4 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project.

Under this alternative, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. As described for the proposed project, construction of Alternative 4 would not result in polluted runoff. Further, construction BMPs would be implemented to eliminate or reduce pollutant discharges and control stormwater and other runoff during construction.

Therefore, no significant construction impacts would occur. The impacts would be similar to the proposed project.

Updates to the existing drainage and stormwater system under Alternative 4 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow. As with the proposed project, the amount of pervious surface area within the project site would increase under Alternative 4 and LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. Impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-4: Alternative 4 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

As with the proposed project, under Alternative 4, several new structures would be built in Zones AE, VE, and X. The finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. The pedestrian bridge and boat launch ramp and associated breakwater would be placed within the waters of King Harbor, but would impede or redirect flood flows. Therefore, Alternative 4 impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-5: Alternative 4 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

Under this alternative, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project, as the risk associated with inundation by seiche, tsunami, mudflow, or sea level rise would be the same.

The exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact. Further, as with the

proposed project, the existing potential for wave splash at the northern segment of the protective revetment/wall along Horseshoe Beach would not increase under Alternative 4; however, given that the number of structures and number of people who may be present at this location would increase, wave overtopping at this location is considered a significant impact. The impacts would be similar to the proposed project.

There is the potential for wave uprush to overtop the promenade at the western edge of Seaside Lagoon. However, under the proposed project, the elevation would increase by approximately four feet, which would reduce the incidences and height of wave uprush that would occur and no increased risk of injury or structure damage would occur. The impacts would be similar to the proposed project.

Alternative 4 includes the demolition of the International Boardwalk and creation of the Pacific Avenue Reconnection. Therefore, while overtopping along Basin 3 would continue to occur along the bulkhead at Basin 3 under Alternative 4, it would not result in increased risk of injury or damage to structures. Therefore, impacts associated with inundation at Basin 3 are less than significant. The impacts would be similar to the proposed project.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is materialized. As with the proposed project, sea level rise would not be affected by Alternative 4, and the raising of the promenade and some portions of the site in the northern portion would reduce hazards and damage associated with future sea level rise as compared to existing conditions. However, there would be more structures and more people being present at the project site that could be subject to increased risks associated with an increase in sea level rise. Therefore, should the projected high sea level rise occur in the future, the impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure MM HWQ-1: Tsunami/Seiche Awareness Notification Program would be implemented to reduce impacts associated with people being exposed to hazards associated with a future tsunami or seiche. In addition, similar to the proposed project, mitigation measures MM HWQ-2: Wave Uprush Protection, and MM HWQ-3: Sea Level Rise Adaptation Plan, would be implemented to reduce impacts associated with possible inundation associated with wave uprush and future sea level rise.

Residual Impacts

As with the proposed project, with implementation of mitigation measure MM HWQ-1, impacts associated with people being exposed to a tsunami or seiche at the project site would be reduced; however, due to natural uncertainties of such an event occurring in the future, it is not possible to conclude that the associated risks would be fully mitigated. As such, the residual impact associated with tsunami or seiche exposure is considered to be significant and unavoidable, which is similar to the proposed project.

MM HWQ-2 requires a four-foot high recurved splash wall anchored at the seaward edge of the promenade landward of the northern portion of the Horseshoe Pier. The splash wall would redirect the up-rushed water back toward the ocean, thereby deflecting the water away from the promenade and preventing inundation from

occurring. Installation of a splash wall along the revetment would be subject to Coastal Commission approval. Alternatively, as stated in MM HWQ-2, the Coastal Commission may recommend an alternative method to reduce potential for inundation to occur. As with the proposed project, with implementation of mitigation measure MM HWQ-2, impacts associated with possible inundation from wave uprush under current sea levels would be less than significant.

MM HWQ-3 requires that a plan be developed to address future sea level rise within the project area by instituting a monitoring program to assess sea level changes, and by identifying structural options to be implemented if necessary (subject to approval by the applicable regulatory agencies), that reduce risks to people and structures within the coastal zone. As with the proposed project, with implementation of mitigation measure MM HWQ-3, impacts associated with possible inundation from wave uprush under future sea level rise conditions would be less than significant.

Land Use and Planning

Impact LUP-1: Alternative 4 would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

Under Alternative 4, the proposed development and land uses would be the same as the proposed project. No Tidelands Exchange would occur and the conceptual site plan in the northern portion of the site would be altered to correspond to the existing Tidelands boundary at Mole D, so that each structure is either fully within the existing Tidelands or fully outside of the existing Tidelands (within the Uplands). The uses of the Mole D structures within the Tidelands would be restaurant and retail, which is consistent with uses allowed in the Tidelands under the Public Trust Doctrine.

As with the proposed project, Alternative 4 would be consistent with the Public Trust Doctrine. However, the enhancement of the physical configuration of the trust land ownership by designating a navigable waterway (Basin 3) as Tidelands in place of a non-tidal area (Mole D), would not occur under Alternative 4.

As with the proposed project, the development that would occur under Alternative 4 would be consistent with applicable land use and planning documents, including allowable uses, and limits on development intensity, building heights, maximum floor area ratio (FAR), and other applicable development standards.

Similar to the proposed project, Alternative 4 would not conflict with relevant policies in land use and planning documents, including the Public Trust Doctrine (as discussed above), SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. Similar to the proposed project, the impacts would be less than significant; however impacts would be slightly reduced because the enhancement of the physical configuration of the trust land ownership would not occur.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Noise

Impact NOI-1: Alternative 4 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As such, construction activities under Alternative 4 would not exceed applicable standards, and construction noise impacts occurring under this threshold would be less than significant. Likewise, the uses proposed under Alternative 4 would be the same as those of the proposed project, which are, in general, of a type comparable to those that currently exist at the project site, and all of which would be subject to, and would comply with, the applicable requirements of the Noise Ordinance. As such, continued operation of the project site under Alternative 4 would not exceed applicable standards, and operational noise impacts occurring under this threshold would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-2: Alternative 4 would expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Alternative 4 would be the same as the proposed project with respect to the level of construction activities. As such, the construction-related vibration impacts associated with Alternative 4 would be the same as the proposed project. Therefore, vibration from construction activities associated with the proposed project would result in significant impacts relative to structural damage if pile drivers operate within 55 feet of non-engineered timber and masonry buildings or within 30 feet of structures or buildings constructed of reinforced-concrete, steel, or timber. Additionally, short-term significant impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors, specifically patrons within businesses on Monstad Pier. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure NOI-1 Pile Driving Vibration, would be implemented to reduce impacts where there is the potential for vibration-related structural damage to occur.

Residual Impacts

Similar to the proposed project, with implementation of MM NOI-1, impacts related to structural damage from construction-related vibration, particularly as related to

pile driving, would be less than significant.

As with the proposed project, no feasible mitigation measures are available relative to human annoyance from construction-related vibration, although such impacts would only be short-term and periodic. Nevertheless, the impact would be significant and unavoidable.

Impact NOI-3: Alternative 4 would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Alternative 4 would be the same as the proposed project with respect to the level of operational activities. Implementation of the Alternative 4 would not result in a notable change in ambient noise levels at the project site because the Alternative 4 would have similar noise levels as existing conditions. However, as with the proposed project, Alternative 4's operations-related increase in traffic and associated roadway noise on Torrance Circle/Boulevard between the project site and Catalina Avenue would be a significant noise impact.

Mitigation Measures

As with the proposed project, no mitigation is available for the significant increase in the roadway noise level on Torrance Circle/Boulevard between project site and Catalina Avenue.

Residual Impacts

Impacts would be significant and unavoidable.

Impact NOI-4: Alternative 4 would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, as with the proposed project, construction of Alternative 4 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use); a significant noise impact would occur. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measures MM NOI-2 through MM NOI-6 would help reduce construction noise impacts.

Residual Impacts

Similar to the proposed project, implementation of mitigation measures MM NOI-2 through MM NOI-5 would help reduce construction noise impacts, and mitigation measure MM NOI-6 could provide for a substantial reduction in construction noise impacts. With a 20 dBA of noise reduction associated with such noise barriers, the attenuated construction noise levels at most of the noise sensitive receptors around the project site would be generally comparable to, if not less than, existing ambient noise levels. The exceptions would be: (1) the western edge of Czulegar Park; (2) the northern edge of Veterans Park; (3) the western portions of the condominium complexes located immediately east of the project site; and (4) the Crowne Plaza Hotel during construction of the upper levels of multi-story structures within the project site. At Czulegar Park, the 20 dBA noise reduction offered by MM NOI-5 would largely, but not fully, reduce the noise exposure impact to a level that is less than significant. Similarly, a 20 dBA noise reduction offered by placement of a noise barrier along the northern edge of Veterans Park would largely, but not fully, address the construction noise impact. Relative to the condominiums east of the site, the combination of their close proximity to the project site and their elevated and multi-story nature would render any noise barrier as being unable to achieve a construction noise level reduction that would make the impact less than significant. A noise barrier located along the edge of the project site, which is approximately 20+/- feet lower than the base elevation of the condominiums, could not effectively shield/attenuate construction noise from reaching the westernmost portions of those condominium complexes, and even if it did, a 20 dBA noise reduction would not be sufficient. With regard to differences in elevation, construction of the upper levels of multi-story structures within the eastern portions of the project site, such as Buildings A and D and the parking structures at the north and south ends of the site, may expose adjacent noise sensitive receptors, such as the Crowne Plaza Hotel and the condominiums east of the site, to temporary periods of construction noise that cannot be shielded/attenuated by construction noise barriers.

Based on the above, similar to the proposed project, implementation of Alternative 4 would result in a significant and unavoidable construction noise impact.

Public Services

Impact PBS-1: Alternative 4 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As under the proposed project, the new buildings constructed on-site would offer an improvement related to fire protection, including the inclusion of fire suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers), and on-site water mains and fire hydrants would be modified to conform to current requirements. Further, the new main street and Pacific Avenue Reconnection would be implemented, which would greatly improve emergency access and protection service throughout the project site.

As with the proposed project, current staffing levels and facilities are adequate to meet the anticipated needs of the proposed project, and thus the proposed project is not expected to result in the need for new facilities. Alternative 4 is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact PBS-2: Alternative 4 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Under Alternative 4, as with the proposed project, the Pier Police Sub-Station would be relocated within the project site, with additional staff and extended hours as needed. Alternative 4 also includes private security that would serve the commercial development and hotel and would contribute to on-site safety on an around-the-clock basis. The new development under Alternative 4 would accommodate the new sub-station and on-site private security, and no construction or expansion of facilities not already addressed as part of the project would be required. Therefore, it is not anticipated that continued police staffing at the sub-station would result in diminished service elsewhere in the City.

As with the proposed project, other security measures inherent in the design of Alternative 4 increase site safety by incorporating CPTED strategies aimed at deterring criminal behavior by designing the physical environment in ways that reduce identifiable crime risks and provide an atmosphere of safety and the new main street and the Pacific Avenue Reconnection would greatly improve emergency access and protection service throughout the project site.

Therefore, with replacement of the police sub-station on-site, Alternative 4 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Recreation

Impact REC-1: Alternative 4 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall amount of development on the site would be similar to the proposed project. All of the recreational elements of the proposed project (e.g., opening of Seaside Lagoon, small craft boat launch ramp) and enhancement of high quality open space and pedestrian/bicycle connectivity (including implementation of the pedestrian/bicycle bridge) are proposed under Alternative 4. Implementation options under Alternative 4 for the Sportfishing Pier and the Redondo Beach Marina in Basin 3 would be similar to the proposed project.

As with the proposed project, the recreational users that are temporarily displaced during project construction would not cause a substantial increase in use at any particular recreational facility, but would instead be expected to disperse throughout the area. Therefore, construction of Alternative 4 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and impacts would be less than significant. Furthermore, as with the proposed project, as part of the Conditional Use Permit process, the City would require Conditions of Approval, which would require, prior to construction, the temporary relocation of hand launch and dinghy facilities during the construction associated with opening the Seaside Lagoon to the harbor, as well as slip transition assistance for those vessels currently within the Redondo Beach Marina in Basin 3.

As with the proposed project, Alternative 4 would help with the local and regional demand for recreation and park services by improving and expanding existing recreational resources; thereby providing a benefit to the local community and region as a whole. Further, the reconfiguration of Mole D would result in a small increase in public areas that would be available at the site as compared to the proposed project. Therefore, Alternative 4 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As such, impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact REC-2: Alternative 4 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative.

Under Alternative 4, although the site plan at Mole D would be reconfigured, the overall development on the site would be similar to the proposed project. Alternative 4 would not include construction of any parks or recreational facilities beyond those already described under the proposed project (i.e., modified Seaside Lagoon, new boat launch ramp, new pedestrian and bicycle paths, and enhanced high-quality public open space). In addition, no construction or expansion of recreational facilities not already addressed as part of the project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary would occur as part of, or because of, the project). As with the proposed project, Alternative 4 would not result in population growth that would increase the demand for new or expanded recreational facilities; therefore, Alternative 4 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the project and thus no impacts would occur. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Traffic and Transportation

Impact TRA-1: Alternative 4 could exceed the applicable significance thresholds.

Alternative 4 would include the same level of development as the proposed project, but the development would be located in a slightly different footprint. No material differences in traffic and transportation impacts would occur between this alternative and the project. As such, construction-related traffic impacts would be less than significant. Operational traffic and parking impacts would be significant at the same locations (i.e., six intersections and onsite parking) and to the same extent as those of the proposed project. As with the proposed project, impacts to freeway facilities would be less than significant.

Mitigation Measures

Mitigation measures MM TRA-1 through MM TRA-6 presented in Section 3.13.4.2 of Section 3.13 Traffic and Transportation would be implemented under Alternative 4 to address operational traffic. MM TRA-7 would be implemented to address significant impacts related to parking.

Residual Impacts

Implementation of MM TRA-1 through MM TRA-6 would reduce operational traffic to less than significant at all intersections. MM TRA-7 would reduce impacts related to parking to less than significant.

Impact TRA-2: Alternative 4 would not conflict with an applicable congestion management program.

As noted above, Alternative 4 would have traffic generation and impacts similar to those of the proposed project. As such, similar to the proposed project, Alternative 4 would not conflict with an applicable congestion management program.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRA-3: Alternative 4 could substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Under Alternative 4, development of the new small boat launch ramp and associated breakwater would occur, as would also be the case for the proposed project. As such, implementation of Alternative 4 would pose the same potential for a safety hazard associated with the interface of paddle boarders and small boats near the launch ramp. As with the proposed project, impacts would be significant.

Mitigation Measures

Implementation of MM TRA-8 and the slow speeds in the area of the entrance of the proposed small craft boat launch facility and the open Seaside Lagoon would serve to enhance safety and reduce the potential for interface conflicts between boats and personal recreational watercraft operating in proximity to each other.

Residual Impacts

With implementation of MM TRA-8, impacts would be less than significant..

Utilities

Impact UTL-1: Alternative 4 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated amount of wastewater generation associated with the proposed project would be the same for Alternative 4. As with the proposed project, the wastewater generation would increase under Alternative 4, but the new on-site system would be designed to provide adequate capacity to handle the wastewater increase and maintain the same flow conditions as currently exist on-site, and impacts would be less than significant.

Although the amount of wastewater generated under Alternative 4 would remain similar to existing conditions, as with the proposed project, an 8-inch new trunk sewer line and local tie-ins would be installed. Additionally, the existing sewer lift stations would be replaced and upgraded. With the on-site improvements and lift station upgrades, there would be adequate capacity. Therefore, the wastewater generated by Alternative 4 would not exceed the wastewater conveyance and treatment at the project site and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. Similar to the proposed project, the impact is less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: Alternative 4 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated water demand associated with the proposed project would be the same for Alternative 4. The water supply assessment prepared for the proposed project determined that the increase in water demand would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. As such, Alternative 4 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: Alternative 4 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated amount of solid waste generation during construction and operation associated with the proposed project would be the same for Alternative 4. The inert landfill which takes in most of the construction and demolition debris in Los Angeles County has sufficient capacity available to accommodate

construction waste that would be generated under Alternative 4. Likewise, as described for the proposed project, Los Angeles County has solid waste capacity that exceeds 15 years, and Alternative 4 would not exceed existing capacity. Thus, Alternative 4 would not create a need for additional solid waste disposal facilities to adequately handle solid waste generated during construction or operations. No significant impact on the landfills within the region is anticipated as a result of Alternative 4.

As with the proposed project, operations under Alternative 4 would comply with the existing waste diversion programs of the City, County, and Athens Services (the City's current contract provider for solid waste disposal). The City's contractual agreement with Athens Services obligates Athens Services to guarantee that the City will exceed the diversion requirements set forth in AB 939. Therefore, as with the proposed project, Alternative 4 would comply with the established diversion requirements and Alternative 4 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. Impacts relative to adopted solid waste diversion programs and policies would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: Alternative 4 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Although the site plan at Mole D would be reconfigured, Alternative 4 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated electricity demand and natural gas demand associated with the proposed project would be the same for Alternative 4. As described for the proposed project, there are adequate electricity and natural gas supplies available to serve the development that would be implemented under Alternative 4. Further, with the exception of on-site connections needed for the new buildings and structures, Alternative 4 would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore, implementation of Alternative 4 would not exceed the capacity of electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. The impacts would be less than significant, which is similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.4.5 Alternative 5 – No Pacific Avenue Reconnection

4.4.5.1 Description of Alternative 5

Alternative 5 would include all the proposed project elements except there would be no reconnection of Pacific Avenue as a roadway. The International Boardwalk and elevated walkway would be retained; however, the shops at the International Boardwalk may be closed in the future if the frequency of flooding at that location increases with a predicted rise in sea levels. Should this occur, the building would be walled off, although the access road and elevated walkway would remain open to the public. The following is a breakdown of the project elements that would be implemented under this alternative.

Northern Portion of Project Site

Under Alternative 5, a maximum of 288,184 square feet of new development would be constructed, including retail, restaurants, creative office, an approximately 700 seat specialty cinema, and accessory/recreational uses (such as recreational sales/rentals, beach club, maintenance, public safety, concessions, etc.). As with the proposed project, under Alternative 5, the Sportfishing Pier would be demolished and possibly replaced, including the buildings located on the pier. Like the proposed project, Seaside Lagoon would be opened to the waters of King Harbor, creating a tidally-influenced lagoon with direct access to the Harbor and the existing hand launch ramp and dinghy dock would be removed; however, human-powered watercraft could be launched from the lagoon. The proposed small craft boat launch ramp facility would be constructed at the Joe's Crab Shack location. A new parking structure would be built at the northeast corner of the site. No modifications to the Plaza Parking Structure would be implemented. Approximately 32 parking stalls would be eliminated within the Plaza Parking Structure.

Southern Portion of Project Site

The International Boardwalk and elevated walkway would be retained, although the International Boardwalk shops may be closed in the future based on sea level conditions. The existing Pier Parking Structure and Pier Plaza would be demolished and the parking structure replaced with a new 1,012 stall parking structure. Modifications to the southern portion of the International Boardwalk and elevated walkway would be implemented at the connection with the new parking structure. A connection between the elevated walkway would be constructed to provide a connection with Torrance Boulevard east of the parking structure.

Alternative 5 would also include replacement of the timber portion of the Horseshoe Pier and the buildings on that segment of the pier. A new building would be constructed on Pad 2 on the Horseshoe Pier. Limited modifications may occur in the vicinity of Monstad Pier, where Monstad Pier connects with the Horseshoe Pier. Additionally, modifications of Torrance Circle would be implemented to facilitate the Pacific Avenue Reconnection and access to the parking structure.

Basin 3

Under Alternative 5, the modifications to Basin 3 would be the same as under the proposed project, including replacement of the bulkhead cap and minor repairs to the bulkhead. The reconstruction/redevelopment of the Redondo Beach Marina existing

docks, gangways, and boat slips. In addition, as with the proposed project, a pedestrian/bicycle bridge would be constructed to span the Basin 3 entrance.

Additional Improvements

Additional improvements under Alternative 5 would generally be the same as the proposed project, including upgrades to existing aging infrastructure, relocation of service and loading zones, relocation of the police substation, and landscaping, lighting, adjacent roadway, and security improvements. Improvements in pedestrian and bicycle site connectivity, enhanced public open space, and public access to and along the waterfront would also be implemented. However, like existing conditions, there would continue to be no public vehicle access between the northern and southern portions of the project site, and only limited emergency vehicle access (e.g., small vehicle access) would be available. The proposed Tidelands Exchange would also occur (subject to approval by the CSLC).

4.4.5.2 Alternative 5 Environmental Analysis

Aesthetics and Visual Resources

Impact AES-1: Alternative 5 would not have a substantial adverse effect on a designated local valued view.

Under Alternative 5, the potential effects on a designated local valued view would be similar to the proposed project. As described below, the only difference would be associated with changes along Basin 3.

Czuleger Park – Key Observation Views 1 through 3: As with the proposed project if building cranes are used to construct the parking structure in the northeast corner of the project site, the top of the cranes could be visible from Key Observation Views 1 and 2. The visibility of the crane would be dependent on the precise location and angle of crane, as well as the angle of the viewer. Given that views of Santa Monica Bay/Pacific Ocean are already blocked or very limited from Key Observation Views 1 and 2 respectively, and any possible view of the construction crane would be temporary and limited, there would be no construction-related significant visual impact on the designated local valued view at Key Observation Views 1 and 2 under Alternative 5. No changes to views would occur at Key Observation View 1 under operation of the Alternative 5. The only features at the project site that may be visible from Key Observation View 2 are tall trees located on-site. Any changes to the trees (i.e., removal/relocation and/or new plantings) would not adversely affect the limited views available from this location. Therefore, similar to the proposed project, operation of Alternative 5 would not have a substantial adverse effect on a designated local valued view from Key Observation View 2.

Construction activities and equipment would be visible from Key Observation View 3; however, from this distance, the activities and equipment would be difficult to visually distinguish from other features located at a similar distance. As such, the construction would largely blend into the overall view and not be visually prominent. While some of the larger equipment could potentially encroach into the views of the water, primarily at the northern edge of the view corridor, this temporary encroachment would occupy only a small portion of the larger viewshed, and the primary views of the water would remain open. Therefore, similar to the proposed project, construction would not have a

substantial adverse effect on the designated local valued view at Key Observation View 3 under Alternative 5.

During operation, the changes to the views from Key Observation View 3 under Alternative 5 would be similar to that of the proposed project. Features of Alternative 5, including the pedestrian bridge and market hall, would be visible; however, the views of Santa Monica Bay/Pacific Ocean would remain. No change in the locally designated valued view would occur. Similar to the proposed project, impacts at Key Observation Views 1 – 3 are less than significant.

North Harbor Drive – Key Observation Views 4 and 5: The changes to the views from Harbor Drive under Alternative 5 would be similar to that of the proposed project. Construction activities would temporarily disrupt views of the water from Harbor Drive; however, the views that are available are limited and of low to moderate quality. The impact would be temporary and not result in a substantial adverse effect on a designated local valued view, including views from Key Observation Views 4 and 5.

During operation, the changes to the views from Harbor Drive under Alternative 5 would be similar to that of the proposed project. With the increase in development in the northern portion of the project, the locations where background views of the water are visible from Harbor Drive would decrease between Portofino Way and the current terminus with Pacific Avenue. However, as no Pacific Avenue Reconnection would occur, the new views of Basin 3 and Santa Monica Bay available to motorists would not occur under Alternative 5. The existing elevated walkway would remain east of Basin 3, the view of the water, including Basin 3, would be slightly better for pedestrians under Alternative 5 than the proposed project. Views in this area would remain available to pedestrians, but at a lower elevation. Under Alternative 5, the views available to motorist behind Basin 3 would be eliminated, but the pedestrian/bicyclist views would remain as under existing conditions. Impacts at Harbor Drive, including Key Observation Views 4 and 5 would be less than significant, similar to the proposed project.

Proposed/New Main Street – Key Observation View 6: Views of Seaside Lagoon and the North Breakwater are visible from this location, but there are no views of the harbor water. As with the proposed project, construction activities would be visible from Key Observation View 6. These activities would be limited and temporary and would not have an adverse effect on a locally designated valued view. During operation, the view of Seaside Lagoon would change from a view of chain link fence, landscaping, and the lagoon water (available when the lagoon is full). to a new view of the lagoon open to harbor waters. Alternative 5 would not result in an adverse change in the locally designated valued view from Key Observation View 6. Similar to the proposed project, the impact is less than significant.

Views from the Water – Key Observation View 7: Construction activities would be visible from the water. While some activities may be surrounded by construction fencing, taller equipment and activities occurring above the construction fence line such as demolition and reconstruction of Pier Plaza may be visible from the water. Additionally, construction activities on the Horseshoe and Sportfishing Piers would be visible from the water. While these activities would temporarily detract from the scenic quality of the harbor, the primary scenic views towards the open water of the Santa Monica/Pacific Ocean would remain available. King Harbor is a busy harbor that supports a high level of activity and variety of vessel types and the presence of

construction equipment and activities would not have a substantial adverse impact on the designated local valued view at Key Observation View 7 and impacts during construction would be less than significant.

As with the proposed project, project elements that would be visible from Key Observation View 7 would include the pedestrian bridge and new buildings in the northern and southern portion of the site. While more buildings would be visible, they would have a similar profile as the existing buildings and would be blend into the overall view of the shoreline. As with the proposed project, Alternative 5 would not result in an adverse change in the locally designated valued view from Key Observation View 7 and impacts during operation would be less than significant.

The impacts would be similar to the proposed project; however, the view of the water from Harbor Drive would be slightly better under Alternative 5 at some locations, while at other locations it would be slightly worse.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-2: Alternative 5 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Under this alternative, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project, and as such, changes in visual character and quality would be similar. Project construction, would temporarily change the visual character and reduce the visual quality of the site, construction activities and equipment would be temporary and not result in permanent visual degradation that would substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, as with the proposed project, impacts during construction would be less than significant.

As with the proposed project, the landside portion of the project site would be redeveloped at a maximum of 304,058 square feet of net new development, and, as described for the proposed project, although the changes to the visual quality of the site would be noticeable, the addition of new design elements and improved public spaces will enhance the visual quality of the site. However, the International Boardwalk would remain, and thus, no visual or design enhancements would occur at this location, and the buildings may eventually be closed.

Alternative 5 would not substantially degrade the visual character or quality of the project site and the impact would be less than significant. The impacts would be similar to the proposed project; however, the overall visual design of the site would be slightly reduced under Alternative 5 as the International Boardwalk would remain.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-3: Alternative 5 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Under this alternative, although the Pacific Avenue Reconnection would not be constructed, the overall amount of development on the site would be similar to the proposed project. As with the proposed project, construction would primarily be conducted during daylight hours. However, should the use of nighttime construction lighting be required, as with the proposed project, it would be directed inward and downward toward the construction site, and would not be expected to increase the overall ambient glow emanating from the project site as compared to existing conditions. Therefore, similar to the proposed project, impacts related to nighttime construction lighting would be less than significant.

As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Alternative 5 would not incorporate substantial amounts of reflective building materials in areas that are highly visible to off-site glare-sensitive uses. Lighting along the International Boardwalk and elevated walkway would remain the same as existing. Therefore, while no new light shielding would be implemented, new roadway lighting that would occur under the proposed project would not be implemented under Alternative 5.

Alternative 5 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, impacts would be less than significant. The impacts would be similar to the proposed project, however slightly reduced because no Pacific Avenue Reconnection and associated lighting would be installed.

Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Air Quality

Impact AQ-1: Alternative 5 would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Under this alternative, although the Pacific Avenue Reconnection would not be constructed, the overall amount of development on the site would be similar to the

proposed project. Construction and operational emissions from Alternative 5 would be identical to that of the proposed project. Therefore, the construction and operation emissions calculations for the proposed project would be the same for Alternative 5. As such, construction emissions from Alternative 5 would not exceed SCAQMD's regional thresholds for SOx, PM_{10}, and $PM_{2.5}$. However, the emissions would exceed SCAQMD's regional thresholds for ROG, NOx, and CO. Therefore, the impact is significant. The impacts would be similar to the proposed project.

Similar to the proposed project, Alternative 5 would not exceed the regional thresholds established for the operational emissions of criteria air pollutants within the air district.

Mitigation Measures

As with the proposed project, mitigation measures MM AQ-1: Fleet Modernization for Construction Equipment and MM AQ-2: Use of Los-VOC Coatings and Paints, would reduce criteria pollutant emissions associated with project construction.

Residual Impacts

Similar to the proposed project, implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the impacts of ROG to less than significant; however, NOx and CO would remain significant and unavoidable for construction. No other feasible methods to reduce emissions were identified.

Impact AQ-2: Alternative 5 would not expose sensitive receptors to substantial pollutant concentrations.

Because the same level of construction (i.e., daily peak) and operational activities (i.e., same overall development) would occur under Alternative 5 and the proposed project, Alternative 5's impacts would be the same as that of the proposed project.

As such, Alternative 5 would not expose sensitive receptors to significant localized concentrations of NOx, CO, PM10, and PM2.5 during construction and operation. Additionally, Alternative 5 is also not anticipated to expose sensitive receptors to localized significant pollutant concentrations with respect to mobile CO emissions and toxic air contaminants during operations. Further, the operation of the commercial retail, office, hotel, and specialty uses associated with Alternative 5 is not anticipated to result in the emissions of TACs; therefore, the operation of Alternative 5 would have no impact on localized sensitive receptors. Therefore, Alternative 5 would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be the same as the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact AQ-3: Alternative 5 would not create objectionable odors affecting a substantial number of people.

Although Alternative 5 would not include the reconnection of Pacific Avenue, Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, construction odors, including odors associated with dredging activities, could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Alternative 5 as with the proposed project, no on-site sources of emissions would occur as a result of operational activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). Therefore, impacts would be less than significant. The impacts would be similar to the proposed project, however, slightly reduced as the amount of construction would be reduced.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Biological Resources

Impact BIO-1: Alternative 5 could have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Although no Pacific Avenue Connection would occur, Alternative 5 would be similar to the proposed project with respect to the level of construction activities and subsequent operational activities both landside and waterside. Impacts on terrestrial and marine biological resources would be similar to that of the proposed project. As with the proposed project, construction and operation of the landside elements of Alternative 5 would occur in previously developed areas that do not have any sensitive terrestrial biological resources and impacts on terrestrial biological resources would be less than significant. Impacts are the same as the proposed project.

As with the proposed project, the waterside elements would result in temporary significant impacts on marine mammals during pile driving and on grunion if replacement of the timber portion of the Horseshoe Pier occurs during spawning season (March to August). Other construction impacts, including relative to least terns and broomtail grouper, would be less than significant and further reduced with implementation of COA BIO-1 that requires least tern monitoring during construction and COA BIO-2 that requires implementation of BMPs to control turbidity. Impacts are the same as the proposed project.

During operation, as with the proposed project, if the Sportfishing Pier is reconstructed, a net increase in surface coverage would occur. This would reduce open water foraging habitat for waterbirds and is a significant impact. As with the proposed project, the

opening of Seaside Lagoon and construction of the small craft boat launch ramp and associated breakwater would not result in a substantially adverse impact on pinnipeds as a result of increased human-pinniped interactions in comparison to existing conditions; therefore, impacts would be less than significant. While impacts are less than significant without mitigation, as with the proposed project, the City is proposing Condition of Approval COA BIO-2: Marine Mammal Management Program, as part of its Conditional Use Permit procedures. Impacts are the same as the proposed project.

Mitigation Measures

Mitigation measures MM BIO-1: Protection of Marine Mammals During Construction, and MM BIO-2: California Grunion would be implemented to address construction impacts on special status species. Mitigation measure MM BIO-3: Mitigation for Increase in Surface Coverage would be implemented to address an increase in surface coverage if the Sportfishing Pier is replaced. If the Sportfishing Pier is not replaced the operational impacts would be less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-1 would reduce to less than significant impacts caused by noise and vibration from pile-driving associated with the in-water construction of Alternative 4 to negatively affect marine mammals. In addition, although impacts to fish, including broomtail groupers, from pile-driving activities would be less than significant, mitigation measure MM BIO-1 would further reduce the likelihood of impacts to fish (as well as marine mammals) as a result of pile-driving as a soft start would warn mobile aquatic species to leave the area as pile-driving is commenced.

Mitigation measure MM BIO-2 would reduce to less than significant the construction associated with the Horseshoe Pier at or near the sandy beach habitat of Horseshoe Beach to result in direct impacts (including mortality or injury) to grunion if they are present in the project area during their spawning season (March to August).

Mitigation measure MM BIO-3 would reduce to less than significant the net increase in surface coverage that would occur if the Sportfishing Pier is rebuilt. If the Sportfishing Pier is not replaced, impacts would be less than significant without mitigation.

With implementation of mitigation, significant impacts to special-status species during construction and operation would be reduced to less than significant.

Impact BIO-2: Alternative 5 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Although no Pacific Avenue Connection would occur, Alternative 5 would be similar to the proposed project with respect to the level of construction activities and subsequent operational activities. Impacts on terrestrial and marine biological resources would be similar to that of the proposed project. As with the proposed project, construction and operation of the landside elements of Alternative 5 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including riparian habitat, native grassland, wildlife corridors, vernal pool habitat, freshwater marsh, or

other sensitive or critical natural community. Therefore, as with the proposed project, there would be no impacts on terrestrial biological resources.

Construction of Alternative 5 would disturb the same amount of marine benthic habitat as the proposed project. As with the proposed project, no significant impacts on marine and riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS would occur. Further, the City is proposing, as with the proposed project, the following Conditions of Approval as part of its Conditional Use Permit procedures: COA BIO-4: Eelgrass; COA BIO-5: Caulerpa; and COA BIO-6: Compliance with NMFS Guidelines for Overwater Structures.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-3: Alternative 5 could have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Although no Pacific Avenue Connection would occur, Alternative 5 would be similar to the proposed project with respect to the level of construction activities and subsequent operational activities. Impacts on terrestrial and marine biological resources would be similar to that of the proposed project. As with the proposed project, construction and operation of the landside elements of Alternative 5 would occur in previously developed areas that do not have any federally protected waters or wetlands. Therefore, there would be no impacts on terrestrial biological resources.

The waterside elements of Alternative 5 would be the same as the proposed project. Therefore, as with the proposed project, temporary construction impacts on aquatic vegetation and benthic communities through direct removal or indirect loss or disturbance as a result of turbidity would be less than significant. Further, as with the proposed project, COA BIO-2 would require Alternative 5 to comply with BMPs to control turbidity in the water column adjacent to in-water work.

As with the proposed project, operation of Alternative 5 would result in a substantial adverse effect on federally projected waters and associated habitat if the USACE determines that the Seaside Lagoon is jurisdictional waters. This is a significant impact. However, as with the proposed project, the ecological function of the lagoon would be improved whether or not the lagoon is determined to be jurisdictional. No adverse impacts to EFH would occur under Alternative 5.

Impacts on federally protected waters or wetlands would be the same as the proposed project during construction and operation.

Mitigation Measures

Mitigation measure MM BIO-4: Fill in Waters of the U.S. would be implemented to address adverse effects on federally protected waters if Seaside Lagoon is determined to be jurisdictional. If Seaside Lagoon is determined to not be jurisdictional waters, impacts are less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-4 would reduce to less than significant the adverse impacts on federally protected waters that would occur if Seaside Lagoon is jurisdictional. If Seaside Lagoon is not jurisdictional, impacts would be less than significant without mitigation.

Impact BIO-4: Alternative 5 could 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.

Although no Pacific Avenue Connection would occur, Alternative 5 would be similar to the proposed project with respect to the level of construction activities and subsequent operational activities. Impacts on terrestrial and marine biological resources would be similar to that of the proposed project. Construction and operation of the landside elements of Alternative 5 would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 5 would be the same as the proposed project. Therefore, as with the proposed project, construction of Alternative 5 could result in a significant impact to established native resident or migratory wildlife corridors or native wildlife nursery site if replacement of the timber portion of the Horseshoe Pier occurs during grunion spawning season (March to August).

As with the proposed project, during operation, no substantial changes in harbor configuration or barriers would occur in a manner to affect fish and wildlife movement patterns or water circulation. As with the proposed project, operational impacts would be less than significant.

Construction and operation impacts would be the same as the proposed project.

Mitigation Measures

Mitigation measure MM BIO-2: California Grunion would be implemented to address construction impacts on wildlife nursery sites should Horseshoe Pier construction that could disturb sandy beach occur during the grunion spawning season.

Residual Impacts

With implementation of mitigation measure MM BIO-2, impacts related to the movement of migratory birds, fish, mammals, or other species, and the use of a native wildlife nursery would be less than significant.

Impact BIO-5: Alternative 5 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Although no Pacific Avenue Connection would occur, Alternative 5 would be similar to the proposed project with respect to the level of construction activities and subsequent operational activities. Impacts on terrestrial and marine biological resources would be similar to that of the proposed project. Construction and operation of the landside elements of Alternative 5 would require compliance with local policies and ordinances, including during tree trimming/tree removal activities. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 5 would be the same as the proposed project. Therefore, as with the proposed project, construction and operation of Alternative 5 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the City is proposing COA BIO-4 and COA BIO-5, which require compliance with policies related to eelgrass and Caulerpa taxifolia as part of the Conditional Use Permit process.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cultural Resources

Impact CUL-1: Alternative 5 would cause a substantial adverse change in the significance of a historical resource.

Under Alternative 5, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project. Therefore, under this alternative, the potentially historic structures identified under the proposed project would be demolished and this would result in a significant impact. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measures MM CUL-1: Recordation, MM CU-2: Interpretive Program and MM CUL-3: Protection of the Monstad Pier During Construction would be implemented.

Residual Impacts

Similar to the proposed project, implementation of Alternative 5 would result in the demolition of potentially historic structures. While mitigation measures MM CUL-1, MM CUL-2, and MM CUL-3 are proposed, in the case of the full demolition of an

historic property, residual impacts to historical resources are considered significant and unavoidable.

Impact CUL-2: Alternative 5 could cause a substantial adverse change in the significance of an unknown archaeological resource.

Under Alternative 5, although the overall amount of grading and excavation on the site would be similar to the proposed project, Alternative 5 grading would be slightly less because no Pacific Avenue Reconnection would occur and the elevated walkway would remain. As with the proposed project, Alternative 5 may have a substantial adverse change in the significance of an unknown archaeological resource in the northeastern and southeastern portions of the project site. Based upon this potential, impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

Due to the sensitivity for unknown archaeological resources, similar to the proposed project, mitigation measure MM CUL-4: Phase I Archaeological Work, would be implemented to reduce the impact of excavation on unknown archaeological resources at the project site to a less than significant level.

Residual Impacts

As with the proposed project, with application of mitigation measure MM CUL-4, the impact of excavation on unknown archaeological resources at the project site would be less than significant.

Impact CUL-3: Alternative 5 could directly or indirectly destroy an unknown paleontological resource.

Under Alternative 5, although the overall amount of grading and excavation on the site would be similar to the proposed project, Alternative 5 grading would be slightly less because no Pacific Avenue Reconnection would occur and the elevated walkway would remain. Earth-moving activities have the potential to have an adverse effect on unknown paleontological resources, and impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure MM CUL-5: Potential to Encounter Unknown Paleontological Resources, would be implemented to preserve a representative sample of any scientifically important fossil remains and associated data that might be exposed by excavation at the project site; thereby, reducing the impact of excavation on unknown paleontological resources to less than significant.

Residual Impacts

As with the proposed project, with application of mitigation measure MM CUL-5, the potential impact of earth-moving activities from implementation of Alternative 5 on the paleontological resources at the project site would be reduced to a less than significant level.

Geology and Soils

Impact GEO-1: Alternative 5 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

Under Alternative 5, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project. As with the proposed project, implementation of Alternative 5 would include the replacement of older non-compliant buildings/structures throughout the project site with new facilities that comply with current buildings codes (including seismic requirements). As with the proposed project, implementation of Alternative 5 would be required to comply with the recommendations detailed in the approved project-specific geotechnical evaluation(s) and engineering analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria and specified seismic parameters. As part of the Conditional Use Permit process, similar to the proposed project, the City would include Conditions of Approval to require, prior to the issuance of building permits, the City's Building and Safety Division to incorporate the recommendation and conditions from the design and project-specific geotechnical evaluation(s), engineering analysis, and any additional recommendations that come out of this review. The Conditions of Approval would be applied to the implementation of the project through the project plans and the building permit process. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-2: Alternative 5 would not result in substantial soil erosion or the loss of topsoil.

Under Alternative 5, although no Pacific Avenue Reconnection would occur and the elevated walkway would remain behind Basin 3, the overall amount of development on the site would be similar to the proposed project, as would the ground-disturbing activities, such as demolition, excavation, trenching, grading, and landscaping. As with the proposed project, implementation of Alternative 5 would include compliance with existing regulatory requirements, such as implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, Alternative 5 would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust); therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and operation, potential impacts related to soil erosion or the loss of

topsoil would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-3: Alternative 5 would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

Under Alternative 5, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project. Similar to the proposed project, Alternative 5 would replace the older non-compliant buildings/structures with new facilities, which comply with applicable design standards and current applicable building codes and would provide safety improvements in comparison to the existing conditions. As with the proposed project, Alternative 5 would comply with applicable CBC requirements and site-specific geotechnical recommendations, and therefore, would not result in on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project. Consequently, impacts under Alternative 3 would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-4: Alternative 5 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Under Alternative 5, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project. Under Alternative 5, similar to the proposed project, mass grading would occur throughout the project site. This work is expected to include the placement of new fill and the removal and re-compaction of unsuitable soil and backfill for utility trenches and other excavations. Likewise, the removal, re-compaction, and/or placement of new fill would occur based on a design- and project-specific evaluation of the expansion potential associated with on-site soils. It would include subsurface soil sampling, laboratory analysis of samples collected, and an evaluation of the laboratory testing results by a geotechnical engineer under direction and review by the City. Therefore, Alternative 5 would not create a substantial risk to life or property due to the presence of expansive

soil, as defined in the CBC. Similar to the proposed project, the impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 5 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Under Alternative 5, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project. Construction and operational emissions from Alternative 5 would be nearly identical to that of the proposed project. Therefore, the GHG emissions calculations and significance findings for the proposed project would be the same for Alternative 5. As such, Alternative 5 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and no significant impacts would occur. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 5 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Although no Pacific Avenue Reconnection would occur, Alternative 5 would be the same as the proposed project with respect to the level of construction activities (i.e., daily peak) and subsequent operational activities (i.e., same overall development). As with the proposed project, Alternative 5 would be consistent with the CARB Scoping Plan, SB 375, and the Redondo Beach Sustainable Development Strategic Plan. Therefore, Alternative 5 would have a less than significant impact. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 5 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Although no Pacific Avenue Reconnection would occur, Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, compliance with regulatory requirements, including the use of construction BMPs and handling of contaminated soils in the unlikely event they are encountered, would minimize the adverse effects to the general public and environment associated with construction of Alternative 5. Alternative 5 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and impacts would be less than significant. The impacts would be similar to the proposed project.

Further, as with the proposed project, as part of the Conditional Use Permit process, the City would require COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-2: Alternative 5 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, although Alternative 5 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In the event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, during construction of Alternative 5, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction. As with the proposed project, implementation of Alternative 5 is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-3: Alternative 5 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, construction of Alternative 5 would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Emergency access in and out of the site, including tsunami evacuation routes for construction workers, would remain during the construction process. Alternative 5 would result in a new main street but no Pacific Avenue Reconnection would occur. Without the Pacific Avenue Reconnection, emergency access throughout the project site would continue to be limited. As such, Alternative 5 would be similar to existing conditions in that emergency response and evacuation is hindered between the northern and southern portions of the project site. Because this is similar to existing conditions, impacts would be less than significant. The impacts would be similar to existing conditions but the benefit to enhancing emergency access and evacuation associated with the proposed project would not be realized.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hydrology and Water Quality

Impact HWQ-1: Alternative 5 would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Although no Pacific Avenue Reconnection would occur, Alternative 5 would be the same as the proposed project with respect to the level of construction activities (i.e., daily peak) and subsequent operational activities (i.e., overall development). Construction impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with marine construction), similar to the proposed project, would be less than significant with the compliance of regulatory requirements, including implementation of BMPs, and would ensure that Alternative 5 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

As with the proposed project, temporary and localized increases in turbidity would occur during in-water construction activities of Alternative 5, this would not be expected to result in violations of water quality standards, and as such, construction-related impacts to harbor water quality would be less than significant.

Alternative 5 includes the redevelopment of the project site in a manner similar to what is proposed under the proposed project. Therefore, the imperviousness of the site would be

similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. Runoff from the project site would reduce contamination associated with roadways, parking lots, landscaping, and accumulated atmospheric deposition on impervious surfaces in comparison to existing conditions, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 5 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

There are no streams or rivers located on the project site; hence, that aspect of the threshold of significance would be unaffected.

Although no Pacific Avenue Reconnection would occur, Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. During construction, BMPs would be implemented to eliminate or reduce pollutant discharges, including sediment, and control stormwater, erosion, and siltation during construction. With adherence to regulations, including implementation of BMPs, Alternative 5 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant.

Under Alternative 5, the imperviousness of the site would be similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, the proposed drainage system would be designed to include BMPs in accordance with the City's LID Ordinance, which sets forth standards to treat both the quantity and quality of flow. With adherence to regulations, including LID criteria and implementation of BMPs, Alternative 5 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during operational activities are considered less than significant. However, under the proposed project, the Pacific Avenue Reconnection would be required to comply with the City's Green Streets Policy that includes incorporation of streetscape design features to reduce runoff (such as infiltration, biofiltration, BMPs to collect or detain runoff). Under Alternative 5, the existing paved accessway along the International Boardwalk

would remain and compliance with the Green Street Policy to reduce runoff would not be required.

Under Alternative 5, with no Pacific Avenue Reconnection and the elevated walkway and International Boardwalk building behind Basin 3 remaining, the existing issues with flooding of the buildings behind Basin 3 would continue. Because this is similar to existing conditions, impacts would be less than significant. The impacts would be similar to the proposed project. Regarding the drainage and flooding behind Basin 3, with no Pacific Avenue Reconnection, the current conditions would remain and the benefit of the proposed project to addressing the flooding and drainage issues behind Basin 3 would not be realized.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-3: Alternative 5 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project.

Under this alternative, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project. As described for the proposed project, construction of Alternative 5 would not result in polluted runoff. Further, construction BMPs would be implemented to eliminate or reduce pollutant discharges and control stormwater and other runoff during construction. Therefore, no significant construction impacts would occur.

Updates to the existing drainage and stormwater system under Alternative 5 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow. As with the proposed project, the amount of pervious surface area within the project site would increase under Alternative 5 and LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. Impacts would be less than significant. The impacts would be similar to the proposed project. However, under the proposed project, the Pacific Avenue Reconnection would be required to comply with the City's Green Streets Policy that includes incorporation of streetscape design features to reduce runoff (such as infiltration, biofiltration, BMPs to collect or detain runoff). Under Alternative 5, the existing paved accessway along the International Boardwalk would remain and compliance with the Green Street Policy to reduce runoff would not be required.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-4: Alternative 5 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

As with the proposed project, under Alternative 5, several new structures would be built in Zones AE, VE, and X. The finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. The pedestrian bridge and boat launch ramp and associated breakwater would be placed within the waters of King Harbor, but and not would impede or redirect flood flows. Therefore, Alternative 5 impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-5: Alternative 5 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

Under this alternative, although no Pacific Avenue Reconnection would occur, the overall amount of development on the site would be similar to the proposed project, as the risk associated with inundation by seiche, tsunami, mudflow, or sea level rise would be the same.

The potential exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact. Further, as with the proposed project, the existing potential for wave splash at the northern segment of the protective revetment/wall along Horseshoe Beach would not increase under Alternative 5; however, given that the number of structures and number of people who may be present at this location would increase, wave overtopping at this location is considered a significant impact. The impacts would be similar to the proposed project.

There is the potential for wave uprush to overtop the promenade at the western edge of Seaside Lagoon. However, under the proposed project, the elevation would increase by approximately four feet, which would reduce the incidences and height of wave uprush that would occur and no increased risk of injury or structure damage would occur. The impacts would be similar to the proposed project.

Alternative 5 would not include the demolition of the International Boardwalk and creation of the Pacific Avenue Reconnection. Therefore, overtopping along Basin 3 would continue to occur along the bulkhead at Basin 3 under Alternative 5 and result in flooding behind Basin 3 similar to under the current conditions, which results in damage

to structures and risk of injury as under existing conditions. The benefit of the proposed project to addressing the flooding and drainage issues behind Basin 3 would not be realized. Because this is similar to existing conditions, impacts would be less than significant.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is materialized. As with the proposed project, sea level rise would not be affected by Alternative 5, and the raising of the promenade and some portions of the site in the northern portion would reduce the potential for hazards and damage associated with future sea level rise as compared to existing conditions. However, there would be more structures and the potential of more people being present at the project site that could be subject to increased risks associated with an increase in sea level rise. Therefore, should the projected high sea level rise occur in the future, the potential impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure MM HWQ-1: Tsunami/Seiche Awareness Notification Program would be implemented to reduce impacts associated with people being exposed to potential hazards associated with a future tsunami or seiche. In addition, mitigation measures MM HWQ-2: Wave Uprush Protection, and MM HWQ-3: Sea Level Rise Adaptation Plan, would be implemented as with the proposed project to reduce impacts associated with possible inundation associated with wave uprush and future sea level rise.

Residual Impacts

Similar to the proposed project, with implementation of mitigation measure MM HWQ-1, impacts associated with people potentially being exposed to a tsunami or seiche at the project site would be reduced; however, due to natural uncertainties of such an event occurring in the future, it is not possible to conclude that the associated risks would be fully mitigated. As such, the residual impact associated with tsunami or seiche exposure is considered to be significant and unavoidable, which is similar to the proposed project.

MM HWQ-2 requires a four-foot high recurved splash wall anchored at the seaward edge of the promenade landward of the northern portion of the Horseshoe Pier. The splash wall would redirect the up-rushed water back toward the ocean, thereby deflecting the water away from the promenade and preventing inundation from occurring. Installation of a splash wall along the revetment would be subject to Coastal Commission approval. Alternatively, as stated in MM HWQ-2, the Coastal Commission may recommend an alternative method to reduce potential for inundation to occur. As with the proposed project, with implementation of mitigation measure MM HWQ-2, impacts associated with possible inundation from wave uprush under current sea levels would be less than significant.

MM HWQ-3 requires that a plan be developed to address future sea level rise within the project area by instituting a monitoring program to assess sea level changes, and by identifying structural options to be implemented if necessary (subject to approval by the applicable regulatory agencies), that reduce risks to people and structures within the coastal zone. As with the proposed project, with implementation of

mitigation measure MM HWQ-3, impacts associated with possible inundation from wave uprush under future sea level rise conditions would be less than significant.

The impacts would be similar to the proposed project; however, flooding behind Basin 3 similar to under the current conditions, which results in damage to structures and risk of injury as under existing conditions, would continue and the benefit of the proposed project to addressing the flooding and drainage issues behind Basin 3 would not be realized.

Land Use and Planning

Impact LUP-1: Alternative 5 would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

As with the proposed project, the development that would occur under Alternative 5 would be consistent with applicable land use and planning documents, including allowable uses, and limits on development intensity, building heights, maximum floor area ratio (FAR), and other applicable development standards.

Similar to the proposed project, Alternative 5 would not conflict with relevant policies in land use and planning documents, including the Public Trust Doctrine (as discussed above), SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. The impacts would be less than significant, which is similar to the proposed project. However, site connectivity would reduced under Alternative 5 as compared to the proposed project, which would lessen full implementation of related goals and objectives.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Noise

Impact NOI-1: Alternative 5 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

Under Alternative 5, construction would occur throughout most of the project site, as would also be the case for the proposed project, with the only notable difference being that construction of the Pacific Avenue Reconnection would not occur under Alternative 5 (i.e., construction would not occur along the central- and south-east edge of the project site). Project construction activities would still; however, be subject to, and is assumed to comply with, the requirements of the City's Noise Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities under Alternative 5 would not exceed applicable standards, and

construction noise impacts occurring under this threshold would be less than significant; same as the proposed project. The operational uses proposed under Alternative 5 would be the same as those of the proposed project, which are, in general, of a type comparable to those that currently exist at the project site, and all of which would be subject to , and would comply with, the applicable requirements of the Noise Ordinance. As such, continued operation of the project site under Alternative 5 would not exceed applicable standards, and operational noise impacts occurring under this threshold would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-2: Alternative 5 would expose persons to or generate excessive groundborne vibration or groundborne noise levels.

As noted above, construction activities under Alternative 5 would occur throughout most of the project site, except along the central- and south-east edge of the site where the existing International Boardwalk would remain in place, but may close due to the sea level rise improvements that would be constructed nearby, instead of being removed and replaced by the Pacific Avenue Reconnection. In the absence of heavy construction activities associated with the removal and replacement of the International Boardwalk with the new roadway and associated walkway, bikeway, and retaining walls, the potential for construction-related vibration impacts to the residential condominiums nearby would be reduced under Alternative 5 compared to the proposed project. However, vibration from construction activities associated with the proposed project would result in significant impacts relative to potential structural damage if pile drivers operate within 55 feet of non-engineered timber and masonry buildings or within 30 feet of structures or buildings constructed of reinforced-concrete, steel, or timber. Additionally, short-term significant impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors, specifically patrons within businesses on Monstad Pier. As with the proposed project, the impacts would be significant.

Mitigation Measures

As with the proposed project, mitigation measure NOI-1 Pile Driving Vibration, would be implemented to reduce impacts where there is the potential for vibration-related structural damage to occur.

Residual Impacts

Similar to the proposed project, with implementation of MM NOI-1, impacts related to potential structural damage from construction-related vibration, particularly as related to pile driving, would be less than significant.

No feasible mitigation measures are available relative to human annoyance from construction-related vibration, although such impacts would only be short-term and periodic. Nevertheless, similar to the proposed project, the impact would be significant and unavoidable.

Impact NOI-3: Alternative 5 would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Alternative 5 would be the same as the proposed project with respect to the level of operational activities. However, Alternative 5 would not result in the reconnection of Pacific Avenue. Without the reconnection of Pacific Avenue, implementation of Alternative 5 would not result in a notable change in ambient noise levels at the project site because Alternative 5 would have similar noise levels as existing conditions. Alternative 5's operations-related increase in traffic and associated roadway noise on Torrance Circle/Boulevard between the project site and Catalina Avenue would be less than significant. Alternative 5 would avoid a significant noise impact created by the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-4: Alternative 5 would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

As described above in Impact NOI-2, construction activities under Alternative 5 would occur throughout most of the project site, as would also occur under the proposed project, with the only notable exception being that construction activity along the central- and south-east edge of the site would be less under Alternative 5 because the Pacific Avenue Reconnection would not occur. The potential reduction in construction noise impacts to the residential condominiums that would occur with the increased distance from the nearest construction activities (i.e., 80 feet and 90 feet, as described in Impact NOI-2) would however not be sufficient to avoid or substantially reduce the significant construction noise impacts in those areas that would otherwise occur with the proposed project. Therefore, as with the proposed project, construction of Alternative 5 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use); a significant noise impact would occur. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measures MM NOI-2 through MM NOI-6 would help reduce construction noise impacts.

Residual Impacts

Similar with the proposed project, implementation of mitigation measures MM NOI-2 through MM NOI-5 would help reduce construction noise impacts, and mitigation measure MM NOI-6 could provide for a substantial reduction in construction noise impacts. With a 20 dBA of noise reduction associated with such noise barriers, the attenuated construction noise levels at most of the noise sensitive receptors around the project site would be generally comparable to, if not less than, existing ambient noise levels. The exceptions would be: (1) the western edge of Czulegar Park; (2) the northern edge of Veterans Park; (3) the western portions of the condominium complexes located immediately east of the project site; and (4) the Crowne Plaza Hotel during construction of the upper levels of multi-story structures within the project site. At Czulegar Park, the 20 dBA noise reduction offered by MM NOI-5 would largely, but not fully, reduce the noise exposure impact to a level that is less than significant. Similarly, a 20 dBA noise reduction offered by placement of a noise barrier along the northern edge of Veterans Park would largely, but not fully, address the construction noise impact. Relative to the condominiums east of the site, the combination of their close proximity to the project site and their elevated and multi-story nature would render any noise barrier as being unable to achieve a construction noise level reduction that would make the impact less than significant. A noise barrier located along the edge of the project site, which is approximately 20+/- feet lower than the base elevation of the condominiums, could not effectively shield/attenuate construction noise from reaching the westernmost portions of those condominium complexes, and even if it did, a 20 dBA noise reduction would not be sufficient. With regard to differences in elevation, construction of the upper levels of multi-story structures within the eastern portions of the project site, such as Buildings A and D and the parking structures at the north and south ends of the site, may expose adjacent noise sensitive receptors, such as the Crowne Plaza Hotel and the condominiums east of the site, to temporary periods of construction noise that cannot be shielded/attenuated by construction noise barriers.

Based on the above, similar to the proposed project, implementation of Alternative 5 would result in a significant and unavoidable construction noise impact.

Public Services

Impact PBS-1: Alternative 5 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As under the proposed project, the new buildings constructed on-site would offer an improvement related to fire protection, including the inclusion of fire suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers), and on-site water mains and fire hydrants would be modified to

conform to current requirements. Although the new main street would be implemented and improve access through the northern portion of the project site, without the Pacific Avenue Reconnection, emergency access and protection service throughout the project site, particularly between the northern and southern portions of the project site would remain limited under Alternative 5 as they are under existing conditions.

As with the proposed project, current staffing levels and facilities are adequate to meet the anticipated needs of the proposed project, and thus the proposed project is not expected to result in the need for new facilities. Alternative 5 is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. With the exception of not enhancing emergency access and protection service throughout the project site due to no Pacific Avenue Reconnection, the impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact PBS-2: Alternative 5 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Under Alternative 5, as with the proposed project, the Pier Police Sub-Station would be relocated within the project site, with additional staff and extended hours as needed. Alternative 5 also includes private security that would serve the commercial development and hotel and would contribute to on-site safety on an around-the-clock basis. The new development under Alternative 5 would accommodate the new sub-station and on-site private security, and no construction or expansion of facilities not already addressed as part of the project would be required. Therefore, it is not anticipated that continued police staffing at the sub-station would result in diminished service elsewhere in the City.

As with the proposed project, other security measures inherent in the design of Alternative 5 increase site safety by incorporating CPTED strategies aimed at deterring criminal behavior by designing the physical environment in ways that reduce identifiable crime risks and provide an atmosphere of safety. Although the new main street would be implemented and improve access through the northern portion of the project site, without the Pacific Avenue Reconnection, emergency access and protection service throughout the project site, particularly between the northern and southern portions of the project site would remain limited under Alternative 5 as they are under existing conditions.

Therefore, with replacement of the police sub-station on-site Alternative 5 would not result in the need for the construction of new or physically altered police protection

facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant. With the exception of not enhancing emergency access and protection service throughout the project site due to no Pacific Avenue Reconnection, the impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Recreation

Impact REC-1: Alternative 5 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Under Alternative 5, the overall amount of development on the site would be similar to the proposed project. With the exception of no Pacific Avenue Reconnection and maintaining the elevated walkway, all other recreational elements of the proposed project (e.g., opening of Seaside Lagoon, small craft boat launch ramp) and enhancement of high quality open space and pedestrian/bicycle connectivity through the implementation of the pedestrian/bicycle bridge and reconstruction of the Pier Parking Structure are proposed under Alternative 5. However, the retention of the International Boardwalk and elevated walkway would reduce the bicycle connectivity enhancements as compared to the proposed project. Implementation options under Alternative 5 for the Sportfishing Pier and the Redondo Beach Marina in Basin 3 would be similar to the proposed project.

As with the proposed project, the recreational users that are temporarily displaced during project construction would not cause a substantial increase in use at any particular recreational facility, but would instead be expected to disperse throughout the area. Therefore, construction of Alternative 5 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and impacts would be less than significant. Furthermore, as with the proposed project, as part of the Conditional Use Permit process, the City would require a Conditions of Approval, which would require, prior to construction, the temporary relocation of hand launch and dinghy facilities during the construction associated with opening the Seaside Lagoon to the harbor, as well as slip transition assistance for those vessels currently within the Redondo Beach Marina in Basin 3.

As with the proposed project, Alternative 5 would help with the local and regional demand for recreation and park services by improving and expanding existing recreational resources; thereby providing a benefit to the local community and region as a whole. Therefore, Alternative 5 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As such, impacts would be less than significant. The impacts would be similar to the proposed project; however, the enhancements to bicycle path connections would be slightly reduced in comparison to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact REC-2: Alternative 5 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative.

Under Alternative 5, the overall development on the site would be similar to the proposed project. Alternative 5 would not include construction of any parks or recreational facilities beyond those already described under the proposed project (i.e., modified Seaside Lagoon, new boat launch ramp, new pedestrian and bicycle paths, and enhanced high-quality public open space). In addition, no construction or expansion of recreational facilities not already addressed as part of the project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary would occur as part of, or because of, the project). As with the proposed project, Alternative 5 would not result in population growth that would increase the demand for new or expanded recreational facilities; therefore, Alternative 5 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the project and thus no impacts would occur. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Traffic and Transportation

Impact TRA-1: Alternative 5 could exceed the applicable significance thresholds.

Alternative 5 includes the full buildout of the project, but without the Pacific Avenue Reconnection. This alternative maintains a similar distribution pattern as the existing site as opposed to the project, which is expected to shift project trips and background trips due to the Pacific Avenue reconnection. Tables 4-18 and 4-19 present the signalized and unsignalized intersection analysis for Existing Plus Alternative 5 (No Pacific Avenue Reconnection) conditions. Tables 4-20 and 4-21 present the signalized and unsignalized intersection analysis for Cumulative Plus Alternative 5 (No Pacific Avenue Reconnection) conditions. Compared with the proposed project scenario (with the Pacific Avenue Reconnection), the V/C ratios on intersections along Catalina Avenue are higher (since there are more project trips and background traffic on Catalina Avenue without the Pacific Avenue reconnection), indicating slightly worse operating conditions on Catalina Avenue if Alternative 5 is selected. Intersection 6 (Valley Drive/Francisca Ave & Herondo Street) is significantly impacted under Existing plus Alternative 5 conditions;

whereas it is not significantly impacted under Existing plus Project conditions. There are no other changes to the number and location of significant traffic impacts with this alternative compared with the proposed project. Parking impacts under Alternative 5 would be similar to those of the proposed project, as would also impacts to freeway facilities. Overall, impacts are similar, but slightly greater, as compared to the proposed project.

Table 4-18: Existing Plus Alternative 5 (No Pacific Avenue Reconnection) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Existing		Existing plus Alt 5		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
4. Harbor Dr/Hermosa Ave & Herondo St	AM	A	0.518	A	0.552	0.034	NO
	PM	A	0.491	A	0.595	0.104	NO
7. Pacific Coast Hwy/Catalina Ave & Herondo St/Anita St	AM	D	0.896	E	**0.914**	0.018	NO
	PM	**E**	**0.989**	**F**	**1.037**	0.048	**YES**
8. Prospect Ave & Anita St	AM	B	0.679	B	0.689	0.010	NO
	PM	B	0.664	B	0.681	0.017	NO
9. Harbor Dr & Yacht Club Way	AM	A	0.352	A	0.378	0.026	NO
	PM	A	0.477	A	0.544	0.067	NO
10. Pacific Coast Hwy & Catalina Ave	AM	D	0.855	D	0.866	0.011	NO
	PM	D	0.883	**E**	**0.906**	0.023	**YES**
11. Harbor Dr & Marina Way	AM	A	0.281	A	0.307	0.026	NO
	PM	A	0.459	A	0.525	0.066	NO
12. Catalina Ave & Gertruda Ave	AM	A	0.371	A	0.391	0.020	NO
	PM	A	0.540	B	0.619	0.079	NO
15. Harbor Dr & Portofino Way/Beryl St	AM	A	0.317	A	0.345	0.028	NO
	PM	A	0.592	B	0.667	0.075	NO
16. Catalina Ave & Beryl St	AM	A	0.374	A	0.414	0.040	NO
	PM	A	0.565	B	0.675	0.110	NO
19. Pacific Coast Hwy & Beryl St	AM	C	0.757	C	0.771	0.014	NO
	PM	**E**	**0.901**	**E**	**0.941**	0.040	**YES**
21. Catalina Ave & Carnelian St	AM	A	0.438	A	0.453	0.015	NO
	PM	A	0.465	A	0.502	0.037	NO
22. Catalina Ave & Diamond St	AM	A	0.430	A	0.450	0.020	NO
	PM	A	0.444	A	0.486	0.042	NO
23. Catalina Ave & Emerald St	AM	A	0.453	A	0.468	0.015	NO
	PM	A	0.457	A	0.495	0.038	NO
	AM	B	0.691	B	0.695	0.004	NO

Table 4-18: Existing Plus Alternative 5 (No Pacific Avenue Reconnection) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Existing		Existing plus Alt 5		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
24. Pacific Coast Hwy & Garnet St	PM	B	0.663	B	0.672	0.009	NO
25. Catalina Ave & Torrance Blvd	AM	A	0.424	A	0.440	0.016	NO
	PM	A	0.475	A	0.516	0.041	NO
26. Pacific Coast Hwy & Torrance Blvd	AM	D	0.818	D	0.829	0.011	NO
	PM	D	0.848	D	0.887	0.039	**YES**
27. Helberta Ave/Camino Real & Torrance Blvd	AM	A	0.476	A	0.482	0.006	NO
	PM	A	0.518	A	0.532	0.014	NO
28. Prospect Ave & Torrance Blvd	AM	D	0.819	D	0.823	0.004	NO
	PM	C	0.742	C	0.751	0.009	NO
29. Catalina Ave & Pearl St	AM	A	0.386	A	0.391	0.005	NO
	PM	A	0.373	A	0.380	0.007	NO
31. Pacific Coast Hwy & Sapphire St/Francisca Ave	AM	B	0.611	B	0.620	0.009	NO
	PM	B	0.650	B	0.664	0.014	NO
34. Pacific Coast Hwy & Knob Hill Ave	AM	B	0.655	B	0.663	0.008	NO
	PM	B	0.698	C	0.712	0.014	NO
36. Pacific Coast Hwy & Palos Verdes Blvd	AM	D	0.850	D	0.860	0.010	NO
	PM	**E**	**0.957**	**E**	**0.978**	0.021	**YES**
37. Pacific Coast Hwy & 2nd St	AM	B	0.695	C	0.702	0.007	NO
	PM	B	0.696	C	0.715	0.019	NO
38. Pacific Coast Hwy & 10th/Aviation	AM	C	0.777	C	0.783	0.006	NO
	PM	C	0.743	C	0.762	0.019	NO
39. Pacific Coast Hwy & Pier/14th St	AM	A	0.565	A	0.571	0.006	NO
	PM	C	0.703	C	0.723	0.020	NO
40. Pacific Coast Hwy & 16th St	AM	A	0.526	A	0.532	0.006	NO
	PM	B	0.636	B	0.655	0.019	NO
41. Pacific Coast Hwy & Prospect Ave	AM	C	0.704	C	0.711	0.007	NO
	PM	C	0.775	C	0.793	0.018	NO

Note: Intersections operating at LOS E or F are noted in **Bold.**

Table 4-19: Existing Plus Alternative 5 (No Pacific Avenue Reconnection) Conditions Level Of Service – Unsignalized Intersections

Intersection	Traffic Control	Peak Period	Existing		Existing plus Alt 5		Change in Delay (sec)	Significant Impact
			LOS	Delay (sec)	LOS	Delay (sec)		
1. Hermosa Ave & 2nd St	AWSC	AM	B	11.2	B	11.6	0.4	NO
		PM	B	10.5	B	11.1	0.6	NO
2. Monterey Blvd & 2nd St	AWSC	AM	A	8.3	A	8.3	0.0	NO
		PM	A	9.7	A	9.7	0.0	NO
3. Valley Dr & 2nd St	AWSC	AM	A	9.3	A	9.6	0.3	NO
		PM	C	19.3	D	27.3	8.0	NO
5. Monterey Blvd & Herondo St	TWSC	AM	C	15.3	C	16.6	1.3	NO
		PM	C	19.3	C	24.6	5.3	NO
6. Valley Dr/Francisca Ave & Herondo St	AWSC	AM	B	12.7	B	13.6	0.9	NO
		PM	C	23.4	**E**	**43.2**	19.8	**YES**
13. Catalina Ave & Francisca Ave	TWSC	AM	C	17.0	C	19.1	2.1	NO
		PM	**E**	**38.0**	**F**	**57.0**	19.0	NO
14. Catalina Ave & Broadway	TWSC	AM	C	18.1	C	20.6	2.5	NO
		PM	C	24.1	D	33.1	9.0	NO
17. Broadway & Beryl St	TWSC	AM	B	11.8	B	12.1	0.3	NO
		PM	B	12.4	B	13.1	0.7	NO
18. Francisca Ave & Beryl St	TWSC	AM	B	12.2	B	12.5	0.3	NO
		PM	C	18.1	C	19.9	1.8	NO
20. Pacific Ave & Harbor Dr	AWSC	AM	A	7.7	A	7.7	0.0	NO
		PM	A	8.7	A	8.8	0.1	NO
30. Camino Real & Pearl St	AWSC	AM	A	8.9	A	9.0	0.1	NO
		PM	A	9.0	A	9.1	0.1	NO
32. Esplanade & Knob Hill Ave	AWSC	AM	A	9.1	A	9.1	0.0	NO
		PM	B	10.4	B	10.4	0.0	NO
33. Catalina Ave & Knob Hill Ave	AWSC	AM	B	11.2	B	11.4	0.2	NO
		PM	B	12.5	B	13.0	0.5	NO

AWSC = All-way stop control TWSC = 2-way stop control

Note: For unsignalized intersections, the worst case approach delay for two-way stop controlled, and average intersection delay for all-way stop controlled is reported.

Intersections operating at LOS E or F are noted in **Bold**.

Table 4-20: Cumulative Plus Alternative 5 (No Pacific Avenue Reconnection) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Cumulative		Cumulative plus Alt 5		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
4. Harbor Dr/Hermosa Ave & Herondo St	AM	A	0.528	A	0.562	0.034	NO
	PM	A	0.504	B	0.607	0.103	NO
7. Pacific Coast Hwy/Catalina Ave & Herondo St/Anita St	AM	E	0.918	E	0.936	0.018	**YES**
	PM	F	1.022	F	1.070	0.048	**YES**
8. Prospect Ave & Anita St	AM	B	0.689	B	0.700	0.011	NO
	PM	B	0.678	B	0.695	0.017	NO
9. Harbor Dr & Yacht Club Way	AM	A	0.358	A	0.384	0.026	NO
	PM	A	0.488	A	0.555	0.067	NO
10. Pacific Coast Hwy & Catalina Ave	AM	D	0.878	D	0.889	0.011	NO
	PM	E	0.912	E	0.934	0.022	**YES**
11. Harbor Dr & Marina Way	AM	A	0.286	A	0.312	0.026	NO
	PM	A	0.471	A	0.537	0.066	NO
12. Catalina Ave & Gertruda Ave	AM	A	0.377	A	0.396	0.019	NO
	PM	A	0.551	B	0.630	0.079	NO
15. Harbor Dr & Portofino Way/Beryl St	AM	A	0.321	A	0.349	0.028	NO
	PM	B	0.602	B	0.677	0.075	NO
16. Catalina Ave & Beryl St	AM	A	0.384	A	0.426	0.042	NO
	PM	A	0.598	C	0.708	0.110	NO
19. Pacific Coast Hwy & Beryl St	AM	C	0.777	C	0.792	0.015	NO
	PM	E	0.932	E	0.973	0.041	**YES**
21. Catalina Ave & Carnelian St	AM	A	0.445	A	0.460	0.015	NO
	PM	A	0.472	A	0.510	0.038	NO
22. Catalina Ave & Diamond St	AM	A	0.438	A	0.457	0.019	NO
	PM	A	0.451	A	0.493	0.042	NO
23. Catalina Ave & Emerald St	AM	A	0.459	A	0.473	0.014	NO
	PM	A	0.465	A	0.503	0.038	NO
24. Pacific Coast Hwy & Garnet St	AM	C	0.711	C	0.714	0.003	NO
	PM	B	0.686	B	0.695	0.009	NO
25. Catalina Ave & Torrance Blvd	AM	A	0.431	A	0.447	0.016	NO
	PM	A	0.483	A	0.525	0.042	NO
26. Pacific Coast Hwy & Torrance Blvd	AM	D	0.848	D	0.860	0.012	NO

Table 4-20: Cumulative Plus Alternative 5 (No Pacific Avenue Reconnection) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Cumulative		Cumulative plus Alt 5		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
	PM	D	0.892	E	0.931	0.039	**YES**
27. Helberta Ave/Camino Real & Torrance Blvd	AM	A	0.487	A	0.493	0.006	NO
	PM	A	0.534	A	0.547	0.013	NO
28. Prospect Ave & Torrance Blvd	AM	D	0.834	D	0.838	0.004	NO
	PM	C	0.755	C	0.764	0.009	NO
29. Catalina Ave & Pearl St	AM	A	0.392	A	0.396	0.004	NO
	PM	A	0.379	A	0.386	0.007	NO
31. Pacific Coast Hwy & Sapphire St/Francisca Ave	AM	B	0.635	B	0.644	0.009	NO
	PM	B	0.678	B	0.692	0.014	NO
34. Pacific Coast Hwy & Knob Hill Ave	AM	B	0.682	B	0.691	0.009	NO
	PM	C	0.736	C	0.750	0.014	NO
36. Pacific Coast Hwy & Palos Verdes Blvd	AM	D	0.878	D	0.888	0.010	NO
	PM	E	0.997	F	1.019	0.022	**YES**
37. Pacific Coast Hwy & 2nd St	AM	C	0.707	C	0.714	0.007	NO
	PM	C	0.717	C	0.737	0.020	NO
38. Pacific Coast Hwy & 10th/Aviation	AM	C	0.792	C	0.798	0.006	NO
	PM	C	0.757	C	0.776	0.019	NO
39. Pacific Coast Hwy & Pier/14th St	AM	A	0.574	A	0.581	0.007	NO
	PM	C	0.717	C	0.737	0.020	NO
40. Pacific Coast Hwy & 16th St	AM	A	0.536	A	0.543	0.007	NO
	PM	B	0.647	B	0.667	0.020	NO
41. Pacific Coast Hwy & Prospect Ave	AM	C	0.723	C	0.731	0.008	NO
	PM	C	0.793	D	0.810	0.017	NO

Intersections operating at LOS E or F are noted in **Bold**.

Table 4-21: Cumulative Plus Alternative 5 (No Pacific Avenue Reconnection) Conditions Level Of Service – Unsignalized Intersections

Intersection	Traffic Control	Peak Period	Cumulative		Cumulative plus Project		Change in Delay (sec)	Significant Impact
			LOS	Delay (sec)	LOS	Delay (sec)		
1. Hermosa Ave & 2nd St	AWSC	AM	B	11.4	B	11.8	0.4	NO
		PM	B	10.6	B	11.2	0.6	NO
2. Monterey Blvd & 2nd St	AWSC	AM	A	8.3	A	8.4	0.1	NO
		PM	A	9.7	A	9.8	0.1	NO
3. Valley Dr & 2nd St	AWSC	AM	A	9.4	A	9.7	0.3	NO
		PM	C	20.5	D	29.8	9.3	NO
5. Monterey Blvd & Herondo St	TWSC	AM	C	15.6	C	17.0	1.4	NO
		PM	C	20.0	D	26.0	6.0	NO
6. Valley Dr/Francisca Ave & Herondo St	AWSC	AM	C	16.6	C	20.0	3.4	NO
		PM	**E**	**43.3**	**F**	**63.5**	20.2	**YES**
13. Catalina Ave & Francisca Ave	TWSC	AM	C	17.4	C	19.5	2.1	NO
		PM	E	40.3	F	61.9	21.6	NO
14. Catalina Ave & Broadway	TWSC	AM	C	18.7	C	21.2	2.5	NO
		PM	D	25.3	D	34.9	9.6	NO
17. Broadway & Beryl St	TWSC	AM	B	11.9	B	12.2	0.3	NO
		PM	B	12.5	B	13.2	0.7	NO
18. Francisca Ave & Beryl St	TWSC	AM	B	12.3	B	12.6	0.3	NO
		PM	C	18.5	C	20.4	1.9	NO
20. Pacific Ave & Harbor Dr	AWSC	AM	A	7.7	A	7.8	0.1	NO
		PM	A	8.7	A	8.8	0.1	NO
30. Camino Real & Pearl St	AWSC	AM	A	9.0	A	9.0	0.0	NO
		PM	A	9.1	A	9.1	0.0	NO
32. Esplanade & Knob Hill Ave	AWSC	AM	A	9.2	A	9.2	0.0	NO
		PM	B	10.6	B	10.6	0.0	NO
33. Catalina Ave & Knob Hill Ave	AWSC	AM	B	11.5	B	11.7	0.2	NO
		PM	B	13.1	B	13.6	0.5	NO

AWSC = All-way stop control TWSC = 2-way stop control

Note: For unsignalized intersections, the worst case approach delay for two-way stop controlled, and average intersection delay for all-way stop controlled is reported.

Intersections operating at LOS E or F are noted in **Bold**.

Mitigation Measures

MM TRA-1 through MM TRA-6 presented in Section 3.13.4.2 would be implemented to address the significant impacts to operational traffic that would occur under Alternative 5. MM TRA-7 would be implemented to address parking impacts.

Residual Impacts

Implementation of MM TRA-1 through MM TRA-6 would reduce operational traffic to less than significant at all intersections. MM TRA-7 would reduce impacts related to parking to less than significant.

Impact TRA-2: Alternative 5 would not conflict with an applicable congestion management program.

As noted above, Alternative 5 would have traffic generation and impacts similar to those of the proposed project. As such, similar to the proposed project, Alternative 5 would not conflict with an applicable congestion management program. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRA-3: Alternative 5 could substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Under Alternative 5, development of the new small boat launch ramp and associated breakwater would occur, as would also be the case for the proposed project. As such, implementation of Alternative 5 would pose the same potential for a safety hazard associated with the interface of paddle boarders and small boats near the launch ramp. As with the proposed project, impacts would be significant.

Mitigation Measures

MM TRA-8 would be implemented and the slow speeds in the area of the entrance of the proposed small craft boat launch facility and the open Seaside Lagoon would serve to enhance safety and reduce the potential for interface conflicts between boats and personal recreational watercraft operating in proximity to each other.

Residual Impacts

With implementation of MM TRA-8, impacts would be less than significant.

Utilities

Impact UTL-1: Alternative 5 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Although no Pacific Avenue Reconnection would occur and the elevated walkway would remain, Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated amount of wastewater generation associated with the proposed project would be the same for Alternative 5. As with the proposed project, the wastewater generation would increase under Alternative 5, but the new on-site system would be designed to provide adequate capacity to handle the wastewater increase and maintain the same flow conditions as currently exist on-site, and impacts would be less than significant.

The amount of wastewater generated under Alternative 5 would be similar to the proposed project, as would the upgrades to the sewer infrastructure (including sewer lines and sewer lift stations). With the on-site improvements and lift station upgrades, and the capacity at the JWPCP, adequate capacity exists under Alternative 5, as with the proposed project. Therefore, the wastewater generated by Alternative 5 would not exceed the wastewater conveyance and treatment at the project site and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. The impact is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: Alternative 5 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated water demand associated with the proposed project would be the same for Alternative 5. The water supply assessment prepared for the proposed project determined that the increase in water demand would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. As such, Alternative 5 would not exceed existing potable water supplies, entitlements and resources, or require and result in new or expanded entitlements, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: Alternative 5 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated amount of solid waste generation during construction and operation associated with the proposed project would be the same for Alternative 5. The inert landfill which takes in most of the construction and demolition debris in Los Angeles County has sufficient capacity available to accommodate construction waste that would be generated under Alternative 5. Likewise, as described for the proposed project, Los Angeles County has solid waste capacity that exceeds 15 years, and Alternative 5 would not exceed existing capacity. Thus, Alternative 5 would not create a need for additional solid waste disposal facilities to adequately handle solid waste generated during construction or operations. No significant impact on the landfills within the region is anticipated as a result of Alternative 5.

As with the proposed project, operations under Alternative 5 would comply with the existing waste diversion programs of the City, County, and Athens Services (the City's current contract provider for solid waste disposal). The City's contractual agreement with Athens Services obligates Athens Services to guarantee that the City will exceed the diversion requirements set forth in AB 939. Therefore, as with the proposed project, Alternative 5 would comply with the established diversion requirements and Alternative 5 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. Impacts relative to adopted solid waste diversion programs and policies would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: Alternative 5 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Alternative 5 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated electricity demand and natural gas demand associated with the proposed project would be the same for Alternative 5. As described for the proposed project, there are adequate electricity and natural gas supplies available to serve the development that would be implemented under Alternative 5. Further, with the exception of on-site connections

needed for the new buildings and structures, Alternative 5 would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore, implementation of Alternative 5 would not exceed the capacity of electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.4.6 Alternative 6 – Alternative Construction Phasing

4.4.6.1 Description of Alternative 6

Under this alternative, the overall amount and type of development on the site would be similar to the proposed project; however, this alternative would occur in phases. The proposed Tidelands Exchange would also occur (subject to approval by the CSLC). Construction would begin in 2017 with construction commencing in the northern portion of the project site.

Construction of the northern portion of the site is expected to take approximately 24 months (two years), and thus buildout of the northern portion of the site is anticipated in 2019. Initial construction would include the removal or reconstruction of the Sportfishing Pier and the opening of the Seaside Lagoon to the tidal influences of the harbor. Construction staged on-site where feasible. If it is found to be infeasible to stage all construction on-site, the project may need to explore agreements with adjacent businesses for shared use of existing nearby parking areas.

Construction of the southern portion of the site would include the Redondo Beach Marina in Basin 3 (including bulkhead repairs), Pacific Avenue Reconnection with associated pedestrian and bicycle connectivity, and the pedestrian/bicycle bridge. Construction in the southern portion of the project site could begin as early as 2018, but as late as 2028. If construction begins in 2018, there could be up to approximately one year of overlap with construction of the northern portion of the project site. However, if construction in the southern portion of the project site begins after 2019, it is anticipated that the northern portion of the project site would be completed and operational while the southern portion of the site is under construction. Construction of the southern portion of the project site would take approximately 24 months (two years) with construction to be staged on the project site where feasible. If it is found to be infeasible to stage all construction on-site, the project may need to explore agreements with adjacent businesses for shared use of existing nearby parking areas. Under Alternative 6, operation of the southern portion of the project site could occur as early as 2020, or as late as 2030.

Construction of the small craft boat launch ramp facility would be completed soon after development of the northern portion of the site, subject to agreements with California

Coastal Commission and taking into account the land assembly constraints of the selected location. Construction associated with the small craft boat launch ramp facility would take approximately 180 days (approximately six months) with construction staged from the proposed ramp site and from the water. Construction of the other waterside elements could occur independently or at the same time other phases of construction are being implemented.

During the phased the construction period under Alternative 6, portions of the project that are not underdoing construction would be open to the public (i.e., if no construction activities are occurring at the southern portion of the project site, it would remain open while the northern portion of the project site is under construction, and vice versa while the southern portion of the site is under construction).

4.4.6.2 Alternative 6 Environmental Analysis

Aesthetics and Visual Resources

Impact AES-1: Alternative 6 would not have a substantial adverse effect on a designated local valued view.

Under Alternative 6, the potential effects on a designated local valued view would be similar to the proposed project. As described below, the only difference would be associated with the timing of construction throughout the site. The analysis below addresses construction, which would be phased across the site, and operation at full build out.

Czuleger Park – Key Observation Views 1 through 3: As with the proposed project, there is the potential that if building cranes are used to construct the parking structure in the northeast corner of the project site, the top of the cranes could be visible from Key Observation Views 1 and 2. The visibility of the crane would be dependent on the precise location and angle of crane, as well as the angle of the viewer. Given that views of Santa Monica Bay/Pacific Ocean are already blocked or very limited from Key Observation Views 1 and 2 respectively, and any possible view of the construction crane would be temporary and limited, there would be no construction-related significant visual impact on the designated local valued view at Key Observation Views 1 and 2 under Alternative 6. No changes to views would occur at Key Observation View 1 under operation of the Alternative 6. The only features at the project site that may be visible from Key Observation View 2 are tall trees located on-site. Any changes to the trees (i.e., removal/relocation and/or new plantings) would not adversely affect the limited views available from this location. Therefore, operation of Alternative 6 would not have a substantial adverse effect on a designated local valued view from Key Observation View 2.

Construction activities and equipment would be visible from Key Observation View 3; however, from this distance, the activities and equipment would be difficult to visually distinguish from other features located at a similar distance. As such, the construction would largely blend into the overall view and not be visually prominent. While some of the larger equipment could potentially encroach into the views of the water, primarily at the northern edge of the view corridor, this temporary encroachment would occupy only a small portion of the larger viewshed, and the primary views of the water would remain

open. Therefore, construction would not have a substantial adverse effect on the designated local valued view at Key Observation View 3 under Alternative 6.

Although no substantial adverse effect on the designated local valued views from Key Observation Views would occur, because construction of Alternative 6 would occur over a longer period of time, views of construction throughout the project site would be also occur over an extended period.

Although constructed over an extended period of time, Alternative 6 includes all the proposed project elements. During operation, the changes to the views from Key Observation View 3 under Alternative 6 would be similar to that of the proposed project. Features of Alternative 6, including the pedestrian bridge and market hall, would be visible; however, the views of Santa Monica Bay/Pacific Ocean would remain, similar to the proposed project. No change in the locally designated valued view would occur.

North Harbor Drive – Key Observation Views 4 and 5: The changes to the views from Harbor Drive under Alternative 6 would be similar to that of the proposed project. Construction activities would temporarily disrupt views of the water from Harbor Drive; however, the views that are available are limited and of low to moderate quality. The impact would be temporary and not result in a substantial adverse effect on a designated local valued view, including views from Key Observation Views 4 and 5.

During operation, the changes to the views from Harbor Drive under Alternative 6 would be similar to that of the proposed project. With the increase in development in the northern portion of the project, the locations where background views of the water are visible from Harbor Drive would decrease between Portofino Way and current terminus with Pacific Avenue.

As with the proposed project, under Alternative 6, view corridors at Key Observation Views 4 and 5 would provide views of the water from Harbor Drive. Additionally, the Pacific Avenue Reconnection would provide a largely unobstructed view of the Redondo Beach Marina and open waters beyond, thereby creating a new segment of roadway with water views. Further, this segment of the roadway would be located at a slightly higher elevation than Harbor Drive, which would increase the amount of water within view. Within the northern portion of the project site, the new main street would establish a new roadway that has views of the water at a closer range than Harbor Drive, thereby enhancing the value of views available to motorists.

Proposed/New Main Street – Key Observation View 6: Views of Seaside Lagoon and the North Breakwater are visible from this location, but there are no views of the harbor water. As with the proposed project, construction activities would be visible from Key Observation View 6. These activities would be limited and temporary and would not have an adverse effect on a locally designated valued view. During operation, the view of Seaside Lagoon would change from a view of chain link fence, landscaping, and the lagoon water (available when the lagoon is full) to a view that includes the open water of the lagoon. Alternative 6 would not result in an adverse change in the locally designated valued view from Key Observation View 6.

Views from the Water – Key Observation View 7: Construction activities would be visible from the water. While some activities may be surrounded by construction fencing, taller equipment and activities occurring above the construction fence line such

as demolition and reconstruction of Pier Plaza may be visible from the water. Additionally, construction activities on the Horseshoe and Sportfishing Piers would be visible from the water. While these activities would temporarily detract from the scenic quality of the harbor, the primary scenic views towards the open water of the Santa Monica/Pacific Ocean would remain available. King Harbor is a busy harbor that supports a high level of activity and variety of vessel types and the presence of construction equipment and activities would not have a substantial adverse impact on the designated local valued view at Key Observation View 7 and impacts during construction would be less than significant.

As with the proposed project, project elements that would be visible from Key Observation View 7 would include the pedestrian bridge and new buildings in the northern and southern portion of the site. While more buildings would be visible, they would have a similar profile as the existing buildings and would be blend into the overall view of the shoreline. As with the proposed project, Alternative 6 would not result in an adverse change in the locally designated valued view from Key Observation View 7 and impacts during operation would be less than significant. The impacts would be similar to the proposed project.

The impacts would be similar to the proposed project, but slightly greater as although the construction areas would be smaller in size, construction activities within the harbor area would extend for a longer period of time.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-2: Alternative 6 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Under this alternative, the overall amount of development on the site would be similar to the proposed project, and as such, changes in visual character and quality would be similar. Project construction, would temporarily change the visual character and reduce the visual quality of the site, construction activities and equipment would be temporary and not result in permanent visual degradation that would substantially degrade the existing visual character or quality of the site and its surroundings. Because construction of Alternative 6 would occur over a longer period of time, the temporary visual degradation during construction would vary throughout the site and occur over a longer period than under the proposed project; however, a smaller area would be affected at a time. However, impacts during construction would still be less than significant as the effects would be temporary, obscured from view by construction fencing, and views of the water would continue to be available from surrounding locations.

As with the proposed project, the landside portion of the project site would be redeveloped a maximum of 304,058 square feet of net new development, and, as described for the proposed project, although the changes to the visual quality of the site would be noticeable, the addition of new design elements and improved public spaces will enhance the visual quality of the site.

Alternative 6 would not substantially degrade the visual character or quality of the project site and the impact would be less than significant. The impacts would be similar to the proposed project, but slightly greater as although the construction areas would be smaller, construction activities within the harbor area would extend for a longer period of time.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-3: Alternative 6 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Under this alternative the overall amount of development on the site would be similar to the proposed project. As with the proposed project, construction would primarily be conducted during daylight hours. However, should the use of nighttime construction lighting be required, as with the proposed project, it would be directed inward and downward toward the construction site, and would not be expected to increase the overall ambient glow emanating from the project site as compared to existing conditions. Therefore, similar to the proposed project, impacts related to nighttime construction lighting would be less than significant.

As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Alternative 6 would not incorporate substantial amounts of reflective building materials in areas that are highly visible to off-site glare-sensitive uses.

Alternative 6 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Air Quality

Impact AQ-1: Alternative 6 would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Alternative 6 would result in the same net growth in land use as the proposed project; however, construction would occur in a minimum of two phases. The first phase would include development of the northern portion of the project site and is anticipated to be completed in 2019. Construction of this phase would include the removal and reconstruction of the Sportfishing Pier and the opening of the Seaside Lagoon to the tidal influences of the harbor. Construction of this phase is anticipated to take approximately 24 months.[4]

The second phase would include at a minimum the construction of the small craft boat launch, which is subject to agreements with the California Coastal Commissions, and at a maximum the construction of the boat launch, southern portion of the project site, Redondo Beach Marina in Basin 3, Pacific Avenue Reconnection with associated pedestrian and bicycle connectivity, pedestrian/bicycle bridge. Construction could begin as early as 2018, but as late as 2028. Construction would take approximately 6 months for the small craft boat launch and other waterside development and up to 24 months for construction of the southern portion of the site.

For the purposes of this analysis, four scenarios are discussed; (1) The construction of the first phase (northern portion of the site) independent of any other phases, (2) the construction of the waterside development phases independent of any other phases (will only report the maximum emissions of all the remaining sites, small craft boat launch ramp facility, Redondo Beach Marina in Basin 3, and pedestrian/bicycle bridge; (3) the construction of the southern portion of the site independent of any other phases, (4) the construction of the southern portion of the site overlapping with construction of the northern portion of the site beginning in 2018, including all other waterside development, and construction of the small boat launch in 2019. These four scenarios represent the worst case and best case scenarios for construction activities (e.g., the most construction that could occur simultaneously, as well as the least amount occurring simultaneously).

Violation of Air Quality Standards – Construction

Construction emissions under Alternative 6 would be similar to that of the proposed project with the exception of delayed development that would change the timing of construction activities for the project. The revised timing was modeled for Alternative 6. Four scenarios were analyzed for construction of Alternative 6. Scenario 1 is the construction of the northern portion of the site independent of any other construction phase. Scenario 2 is the construction of only one of the waterside development projects. Scenario 3 is the construction of only the southern portion of the site. Scenario 4a is the construction the northern portion of the site, the southern portion of the site, and all of the waterside development associated with the southern portion of the site occurring in 2018. Scenario 4b is the construction of the southern portion of the site and the small craft boat launch ramp overlapping in 2019. While a more efficient construction fleet is possible as

[6] For the purpose of conducting a conservative analysis, the more conservative BAAQMD screening threshold for CO hotspots is used for Alternative 7 as well as the proposed project.

the construction schedule is delayed, as a conservative analysis the same fleet mix assumed for the proposed project was also assumed for Alternative 6. As was analyzed under the proposed project compliance with Rule 403 and Rule 1113, as pre-existing regulatory requirements, were accounted for in the construction emissions modeling.

Table 4-22 summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors associated with Alternative 6's worst-case construction emissions estimates under all five scenarios (utilizing the significance criteria provided in Table 3.2-5). The peak daily emissions generated during each year of Alternative 6's construction period are identified. As shown, the maximum daily construction emissions generated by the worst-case construction scenarios would exceed SCAQMD's daily significance threshold for ROG, NOx and CO, which would be a significant impact. SOx, PM_{10}, and $PM_{2.5}$ would be below the regulatory thresholds and, therefore, construction phase emissions of these pollutants would be less than significant. As shown, emissions from Alternative 6 would be less than the proposed project under the maximum emissions scenarios for each.

Table 4-22: Alternative 6 Regional Construction Emissions

Construction Scenario	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Scenario 1	**102.42**	**489.37**	486.45	0.92	40.20	24.01
Scenario 2	5.41	60.58	42.58	0.10	11.96	3.44
Scenario 3	**100.20**	**298.69**	349.60	0.65	21.00	12.94
Scenario 4a (2018)	**141.27**	**537.37**	**564.20**	1.10	36.81	26.68
Scenario 4b (2019)	**104.29**	**136.48**	187.92	0.38	21.41	7.40
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	**Yes**	**Yes**	Yes	No	No	No
Alternative 6 Net Emissions	141.27	537.37	564.20	1.10	40.20	24.01
Proposed Project Net Emissions	198.93	718.75	736.14	1.36	64.27	35.36
Change from Proposed	*-57.67*	*-181.37*	*-171.95*	*-0.25*	*-24.07*	*-11.35*

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Violation of Air Quality Standards – Operational

Operational activities under Alternative 6 would vary depending on the timing of buildout. Under a worst case scenario, the buildout of the total project would be in 2019. This is identical to the proposed project. As shown in Table 4-23, Alternative 6's net emissions would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. Therefore, Alternative 6's net operational emissions would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant. As shown, Alternative 6's emissions, under the worst case scenario would be identical to the

proposed project. However, if construction does not begin on the South Site until later than 2020, the operational emissions would be anticipated to decrease due to increased vehicle and building efficiencies. However neither would have significant impacts.

The operation of the small craft boat launch ramp facility would not have operational emissions as the emissions would be accounted for in the existing daily traffic to and from the site. By itself, the small craft boat launch facility would not be anticipated to result in a significant increase in traffic over existing conditions. Actually, the small craft boat launch ramp facility would be more likely to reduce traffic as the parking lot would be significantly smaller and the use is replacing the existing Joe's Crab Shack, which as a restaurant would provide result in greater traffic to this land use than would the boat launch ramp. Since the boat launch ramp itself would not increase traffic, its operations were not modeled separately and the increase/change in traffic is accounted for in the north development.

Similar to the proposed project, Alternative 6 would not exceed the regional thresholds established for the operational emissions of criteria air pollutants within the air district.

Mitigation Measures

As with the proposed project, mitigation measures MM AQ-1: Fleet Modernization for Construction Equipment and MM AQ-2: Use of Los-VOC Coatings and Paints, would reduce criteria pollutant emissions associated with project construction.

Table 4-23 summarizes the modeled peak daily emissions associated with Alternative 6's worst-case construction scenario after mitigation measures MM AQ-1 and MM AQ-2 are applied. Implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the impacts of ROG and CO to less than significant; however, while NOx emissions would be less than those in the proposed project, it would still remain significant and unavoidable for construction (similar to the proposed project).

Table 4-23: Mitigated Alternative 6 Regional Construction Emissions

Construction Scenario	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenario 1	35.47	**289.97**	472.42	-	-	-
Scenario 2	4.95	51.05	51.78	-	-	-
Scenario 3	35.42	**196.30**	317.16	-	-	-
Scenario 4a (2018)	57.34	**362.67**	543.25			
Scenario 4b (2019)	38.78	**114.96**	199.08	-	-	-
Regional Significance Threshold	*75*	*100*	550	-	-	-
Significant Impact?	No	**Yes**	No	-	-	-
Max Alternative 6	35.47	362.08	543.25	-	-	-
Max Proposed Project	68.23	383.27	697.03	-	-	-
Difference from Proposed	-32.76	-21.18	-153.78	-	-	-

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Residual Impacts

Similar to the proposed project, implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the impacts of ROG and CO to less than significant; however, NOx would remain significant and unavoidable for construction. As with the proposed project, no other feasible methods to reduce emissions were identified.

Impact AQ-2: Alternative 6 would not expose sensitive receptors to substantial pollutant concentrations.

Exposure of Sensitive Receptors to Pollutant Concentrations

Separate discussions are provided below analyzing the potential for sensitive receptors to be exposed to CO hotspots and localized air quality impacts from criteria pollutants and TACs from on-site sources during construction and operation of Alternative 6. The same level of construction and operational activities would occur under Alternative 6 and the proposed project; however, the schedule for construction and operation under Alternative 6 would be delayed until after 2020, therefore, emissions from operation and construction would vary according to the revised schedule for construction and the delayed opening date for operation.

CO Hotspots

While Alternative 6 staggers the construction of the proposed project, it is estimated that the same traffic patterns would occur. As described in greater detail in Section 3.2.2.3.1, SCAB air quality has been generally improved since the inception of air pollutant monitoring and is expected to continue improving in the future.

A total of 41 local intersections were analyzed as part of the proposed project's traffic analysis (Section 3.13 Traffic and Transportation and Appendix L1). Because ultimate operation of Alternative 6 would be identical to the proposed project, the intersection analysis for the proposed project would be the same for Alternative 6. The maximum hourly traffic is generated at the intersection of Pacific Coast Highway/Catalina Avenue & Herondo Street/Anita Street under all scenarios. The maximum peak traffic at this intersection for the existing plus project scenario is 4,942 and 5,798 vehicles per hour, for the AM and PM peak hours, respectively. Under the cumulative plus project scenario, the maximum hourly traffic is 5,083 and 6,009 vehicles per hour, for the AM and PM peak hours, respectively. As none of the peak hour traffic at all of the intersections would come close to 24,000 vehicles per hour, CO emissions from these vehicle volumes would be less than significant.

The Los Angeles County CMP requires that new developments analyze the proposed project's potential impacts on the regional freeway system, the regional roadway network and the regional traffic system. Alternative 6's traffic analysis would be identical to that of the proposed project and is identified in the traffic analysis (Section 3.13 Traffic and Transportation and Appendix L1). The traffic study analyzed impacts on these systems. As detailed in the traffic analysis, the proposed project would not conflict with the CMP for arterial roadways, freeways, or transit use.

Given that Alternative 6 would not exceed the screening level intersection volumes, nor would it conflict with the local CMP, impacts related to CO hotspots would be less than significant, the same as the proposed project.

Localized Construction Air Quality Impacts – Criteria Air Pollutants

Construction of Alternative 6 will differ from the proposed project due to the delay in schedule. Daily on-site construction emissions generated by each of the five scenarios were evaluated against SCAQMD's LSTs for a five-acre site as a screening-level analysis to determine whether the emissions would cause or contribute to adverse localized air quality impacts.[5] However, because the area of the boat launch redevelopment would be just over one acre, the emissions from the boat launch were compared to the one-acre LST thresholds. Because the mass rate look-up tables provided by SCAQMD only provides LSTs at receptor distances of 82, 164, 328, 656, and 1,640 feet, the LSTs for a receptor distance of 82 feet are used to evaluate the potential localized air quality impacts associated with Alternative 6's peak day construction emissions. Table 4-24 identifies the daily-localized on-site emissions that are estimated to occur during Alternative 6's worst-case construction scenario prior to the implementation of mitigation measure MM AQ-1. As shown, the daily emissions generated on-site by Alternative 6's worst-case construction scenario would exceed the applicable SCAQMD LST for NOx, PM_{10}, and $PM_{2.5}$ for a five-acre site in SRA 3 Scenario 1, and Scenario 4a (2018). For Scenario 3, only NO_X and $PM_{2.5}$ would exceed the screening levels. For Scenarios 2 and 4b (2019) there would be no exceedences in LST thresholds for a five-acre site. As can be seen in Table 4-24, even the combined emissions for North and South development in 2030 under Alternative 6 is less than the maximum combined emissions from the proposed project.

Table 4-24: Alternative 6 Project Localized daily Unmitigated Construction Emissions

Construction Scenario	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	**CO (lbs/day)**	**PM_{10}[a] (lbs/day)**	**$PM_{2.5}$[a] (lbs/day)**
Scenario 1	**419.24**	402.10	**27.99**	**20.75**
Scenario 2	46.07	25.72	10.78	2.98
Scenario 3	**257.38**	284.62	12.97	**10.37**
Scenario 4a (2018)	**480.23**	461.58	**23.52**	**19.53**
Scenario 4b (2019)	107.97	128.32	13.45	4.95
Screening Level[c]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**
Combined Alternative 6	480.23	461.85	27.99	20.75
Proposed Project	1034.18	937.90	78.62	47.20
Difference	-553.95	-476.05	-50.63	-26.45

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

a. Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.
c. LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 3 and is based on the construction-related disturbance of five acres per day. The five-acre LSTs are used as a screening level criteria as daily disturbance would be greater than five acres across on both the North plus Basin 3 and South plus Basin 3 development areas.

6 For the purpose of conducting a conservative analysis, the more conservative BAAQMD screening threshold for CO hotspots is used for Alternative 7 as well as the proposed project.

With implementation of mitigation measure MM AQ-1, emissions from NOx, and $PM_{2.5}$ would still exceed the SCAQMD's LST screening levels for Scenario 4a (2018); however, all other emissions levels would be reduced to below the applicable LST thresholds. A refined analysis has been prepared for emissions in Scenario 4a (2018) for NOx and $PM_{2.5}$ where exceedences occurred after mitigation. Mitigated emissions are shown in Table 4-25. A summary of the assumptions for the refined analysis is provided in Appendix C6 (for the proposed project) with a general summary of the methodology used provided in, Section 3.2.4.1.

The results of the refined analysis are also included in Table 4-25. The dispersion modeling shows that while emissions exceed the LST screening levels, the emissions from project construction would not result in a localized significant impact. Therefore, as with the proposed project, localized air quality impacts associated with construction of Alternative 6 would be less than significant, and no additional mitigation (beyond MM AQ-1 discussed previously) would be required.

Table 4-25: Alternative 6 Localized daily Mitigated & Refined Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	**CO (lbs/day)**	**PM_{10}[a] (lbs/day)**	**$PM_{2.5}$[a] (lbs/day)**
Scenario 1	184.01	-	10.90	6.46
Scenario 2	-	-	-	-
Scenario 3	154.98	-	-	4.52
Scenario 4a (2018)	**304.75**	-	10.81	**8.56**
Scenario 4b (2019)	-	-	-	-
Screening Level[b]	197	-	15	8
Above Screening Level?	**Yes**	-	**Yes**	**Yes**
	NO_X (ppm)	**CO (ppm)**	**PM_{10}[a] ($\mu g/m^3$)**	**$PM_{2.5}$[a] ($\mu g/m^3$)**
Refined Modeling				
Scenario 4a (2018)	0.12	-	-	0.001
Localized Significance Thresholds	0.18	-	-	10.4
Significant Impact?	No	-	-	No

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

Notes:

a. Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.

b. LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 3 and is based on the construction-related disturbance of five acres per day. The five-acre LSTs are used as a screening level criteria as daily disturbance would be greater than five acres across on both the North plus Basin 3 and South plus Basin 3 development areas.

Localized Operational Air Quality Impacts – Criteria Air Pollutants

Operational impacts for Alternative 6, under the 2019 buildout scenario, would be identical to that of the proposed project. During operations, the daily amount of localized pollutant emissions generated on-site by Alternative 6 would not be substantial, and are shown in Table 4-26. As shown, the project's total net operational-related emissions

generated on-site would not exceed SCAQMD's screening operational LSTs. Alternative 6, under the 2019 buildout scenario would result in identical emissions to the proposed project. Thus, as with the proposed project, no dispersion modeling is required and localized air quality impacts during project operations would be less than significant. As the buildout date under Alternative 6 moves further away from 2019, operational emissions may decrease from what is presented here as vehicle and building efficiency requirements will increase. However, this scenario represents a worst case scenario under Alternative 6.

Table 4-26: Alternative 6 Localized Operational Emissions

Development Phases	Estimated Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Existing	13.88	34.48	3.49	1.41
Project	19.52	42.37	4.82	2.06
Net Project Increase	5.64	7.89	1.33	0.65
Localized Significance Threshold	197	1,823	4	2
Significant Impact?	No	No	No	No

Source: ESA CalEEMod Modeling 2015

Localized Construction Air Quality Impacts – TACs

As Alternative 6 construction is similar to the levels to the proposed project, the impacts from TACs would also be similar as those reported under the proposed project. Because off-road heavy-duty diesel equipment would be used only for short time periods at each active construction area within the 36-acre project site over the course of the six year construction schedule, project construction is not anticipated to expose any nearby sensitive receptors to substantial emissions of TACs. However, a screening level risk analysis was conducted for Alternative 6. As DPM is a subset component of PM_{10}, PM_{10} was used as a proxy for determining the screening level risk. The combined PM_{10} concentration from the refined analysis is $8.05e^{-3}$ $\mu g/m^3$ for Scenario 1 was used as it represents the greatest PM_{10} emissions of all construction years. The concentration was converted to a potential risk assuming a worst case scenario of a child being in the third trimester of development at the beginning of construction and remaining adjacent to the site throughout construction. Using these conservative assumptions, the maximum cancer risk for off-site receptors from construction is 0.31 cases per million people and SCAQMD has a threshold of 10 per million people. The chronic hazard risk (non-cancer health risk) related to DPM for construction would be 0.0002 and SCAQMD has a threshold of one. Assumptions and calculations for the screening risk modeling is included in Appendix C (for the proposed project). These screening level risks are very conservative because this emissions level would only occur on peak construction days and would not occur throughout the construction period as the screening analysis assumes. Therefore, actual risks to off-site receptors would be less than what is reported.

Because the screening risk levels for both cancer and non-cancer risks would not exceed the SCAQMD regulatory thresholds for risk, this impact, although greater than the proposed project, would be less than significant.

Localized Operational Air Quality Impacts – TACs

Typical land uses that are sources of acutely and chronically hazardous TACs include industrial manufacturing processes, automotive repair facilities, and dry cleaning facilities using perchloroethylene (which has been banned for use in new dry cleaning facilities). Alternative 6, as with the proposed project, would not include any of these potential sources, although minimal emissions may result from the use of consumer products (similar to existing conditions). Additionally, it is not anticipated that emergency back-up generators would be required for the new land uses associated with Alternative 6. However, if a generator was implemented for a new land use, it would typically only be used during emergencies and may be turned on periodically for maintenance and inspection purposes. Further, emergency back-up generators are subject to SCAQMD regulatory requirements, which limit the allowable TAC emissions to a level that would not result in a significant impact. As such, the periodic operation of the backup generator at the project site, should it be necessary, would not expose surrounding sensitive receptors to substantial pollutant or TAC emissions and the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact AQ-3: Alternative 6 would not create objectionable odors affecting a substantial number of people.

Alternative 6 would be the same as the proposed project with respect to the level of construction activities, but over an extended period, and subsequent operational activities. As with the proposed project, construction odors, including odors associated with dredging activities, could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Alternative 6 as with the proposed project, no on-site sources of emissions would occur as a result of operational activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). Therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Biological Resources

Impact BIO-1: Alternative 6 could have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. While landside and waterside construction activities would occur over a longer time period, the overall activity level and amount of area disturbed would be the same as the proposed project and thus construction impacts on terrestrial and marine biological resources would be similar to that of the proposed project, and operational impacts would be the same. As with the proposed project, construction and operation of the landside elements of Alternative 6 would occur in previously developed areas that do not have any sensitive terrestrial biological resources and impacts on terrestrial biological resources would be less than significant. Impacts are the same as the proposed project.

As with the proposed project, the waterside elements would result in temporary significant impacts on marine mammals during pile driving and on grunion if replacement of the timber portion of the Horseshoe Pier occurs during spawning season (March to August). Other construction impacts, including relative to least terns and broomtail grouper, would be less than significant and further reduced with implementation of COA BIO-1 that requires least tern monitoring during construction and COA BIO-2 that requires implementation of BMPs to control turbidity. Impacts are the same as the proposed project.

During operation, as with the proposed project, if the Sportfishing Pier is reconstructed, a net increase in surface coverage would occur. This would reduce open water foraging habitat for waterbirds and is a significant impact. As with the proposed project, the opening of Seaside Lagoon and construction of the small craft boat launch ramp and associated breakwater would not result in a substantially adverse impact on pinnipeds as a result of increased human-pinniped interactions in comparison to existing conditions; therefore, impacts would be less than significant. While impacts are less than significant without mitigation, as with the proposed project, the City is proposing Condition of Approval COA BIO-2: Marine Mammal Management Program, as part of its Conditional Use Permit procedures. Impacts are the same as the proposed project.

Mitigation Measures

Mitigation measures MM BIO-1: Protection of Marine Mammals During Construction, and MM BIO-2: California Grunion would be implemented to address construction impacts on special status species. Mitigation measure MM BIO-3: Mitigation for Increase in Surface Coverage would be implemented to address an increase in surface coverage if the Sportfishing Pier is replaced. If the Sportfishing Pier is not replaced the operational impacts would be less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-1 would reduce to less than significant impacts caused by noise and vibration from pile-driving associated with the in-water construction of Alternative 4 to negatively affect marine mammals. In addition, although impacts to fish, including broomtail groupers, from pile-driving activities would be less than significant, mitigation measure MM BIO-1 would further reduce the likelihood of impacts to fish (as well as marine mammals) as a result of pile-driving as a soft start would warn mobile aquatic species to leave the area as pile-driving is commenced.

Mitigation measure MM BIO-2 would reduce to less than significant the construction associated with the Horseshoe Pier at or near the sandy beach habitat of Horseshoe Beach to result in direct impacts (including mortality or injury) to grunion if they are present in the project area during their spawning season (March to August).

Mitigation measure MM BIO-3 would reduce to less than significant the net increase in surface coverage that would occur if the Sportfishing Pier is rebuilt. If the Sportfishing Pier is not replaced, impacts would be less than significant without mitigation.

With implementation of mitigation, significant impacts to special-status species during construction and operation would be reduced to less than significant.

Impact BIO-2: Alternative 6 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. While landside and waterside construction activities would occur over a longer time period, the overall activity level and amount of area disturbed would be the same as the proposed project and thus construction impacts on terrestrial and marine biological resources would be similar to that of the proposed project. As with the proposed project, construction and operation of the landside elements of Alternative 6 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including riparian habitat, native grassland, wildlife corridors, vernal pool habitat, freshwater marsh, or other sensitive or critical natural community. Therefore, as with the proposed project, there would be no impacts on terrestrial biological resources.

Construction of Alternative 6 would disturb the same amount of marine benthic habitat as the proposed project. As with the proposed project, no significant impacts on marine and riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS would occur. Further, the City is proposing, as with the proposed project, the following Conditions of Approval as part of its Conditional Use Permit procedures: COA BIO-4: Eelgrass; COA BIO-5: Caulerpa; and COA BIO-6: Compliance with NMFS Guidelines for Overwater Structures.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-3: Alternative 6 could have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. While landside and waterside construction activities would occur over a longer time period, the overall activity level and amount of area disturbed would be the same as the proposed project and thus construction impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

As with the proposed project, construction and operation of the landside elements of Alternative 6 would occur in previously developed areas that do not have any federally protected waters or wetlands. Therefore, there would be no impacts on terrestrial biological resources.

The waterside elements of Alternative 6 would be the same as the proposed project. Therefore, as with the proposed project, temporary construction impacts on aquatic vegetation and benthic communities through direct removal or indirect loss or disturbance as a result of turbidity would be less than significant. Further, as with the proposed project, COA BIO-2 would require Alternative 6 to comply with BMPs to control turbidity in the water column adjacent to in-water work.

As with the proposed project, operation of Alternative 6 would result in a substantial adverse effect on federally projected waters and associated habitat if the USACE determines that the Seaside Lagoon is jurisdictional waters. This is a significant impact. However, as with the proposed project, the ecological function of the lagoon would be improved whether or not the lagoon is determined to be jurisdictional. No adverse impacts to EFH would occur under Alternative 6.

Impacts on federally protected waters or wetlands would be the same as the proposed project during construction and operation.

Mitigation Measures

Mitigation measure MM BIO-4: Fill in Waters of the U.S. would be implemented to address adverse effects on federally protected waters if Seaside Lagoon is determined to be jurisdictional. If Seaside Lagoon is determined to not be jurisdictional waters, impacts are less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-4 would reduce to less than significant the adverse impacts on federally protected waters that would occur if Seaside Lagoon is jurisdictional. If Seaside Lagoon is not jurisdictional, impacts would be less than significant without mitigation.

Impact BIO-4: Alternative 6 could 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.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. While landside and waterside construction activities would occur over a longer time period, the overall activity level and amount of area disturbed would be the same as the proposed project and thus construction impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

Construction and operation of the landside elements of Alternative 6 would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 6 would be the same as the proposed project. Therefore, as with the proposed project, construction of Alternative 6 could result in a significant impact to established native resident or migratory wildlife corridors or native wildlife nursery site if replacement of the timber portion of the Horseshoe Pier occurs during grunion spawning season (March to August).

As with the proposed project, during operation, no substantial changes in harbor configuration or barriers would occur in a manner to affect fish and wildlife movement patterns or water circulation. As with the proposed project, operational impacts would be less than significant.

Construction and operation impacts would be the same as the proposed project.

Mitigation Measures

Mitigation measure MM BIO-2: California Grunion would be implemented to address construction impacts on wildlife nursery sites should Horseshoe Pier construction that could disturb sandy beach occur during the grunion spawning season.

Residual Impacts

With implementation of mitigation measure MM BIO-2, impacts related to the movement of migratory birds, fish, mammals, or other species, and the use of a native wildlife nursery would be less than significant.

Impact BIO-5: Alternative 6 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent

operational activities. While landside and waterside construction activities would occur over a longer time period, the overall activity level and amount of area disturbed would be the same as the proposed project and thus construction impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

Construction and operation of the landside elements of Alternative 6 would require compliance with local policies and ordinances, including during tree trimming/tree removal activities. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 6 would be the same as the proposed project. Therefore, as with the proposed project, construction and operation of Alternative 6 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the City is proposing COA BIO-4 and COA BIO-5, which require compliance with policies related to eelgrass and Caulerpa taxifolia as part of the Conditional Use Permit process.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cultural Resources

Impact CUL-1: Alternative 6 would cause a substantial adverse change in the significance of a historical resource.

Under Alternative 6, with the exception of an extended construction period, the overall amount of development on the site would be similar to the proposed project. Therefore, under this alternative, the potentially historic structures identified under the proposed project would be demolished and this would result in a significant impact. The impact would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measures MM CUL-1: Recordation, MM CU-2: Interpretive Program and MM CUL-3: Protection of the Monstad Pier During Construction would be implemented.

Residual Impacts

Similar to the proposed project, implementation of Alternative 6 would result in the demolition of potentially historic structures. While mitigation measures MM CUL-1, MM CUL-2, and MM CUL-3 are proposed, in the case of the full demolition of an historic property, residual impacts to historical resources are considered significant and unavoidable.

Impact CUL-2: Alternative 6 could cause a substantial adverse change in the significance of an unknown archaeological resource.

Under Alternative 6, with the exception of an extended construction period, the overall amount of grading and excavation on the site would be similar to the proposed project. Therefore, as with the proposed project, Alternative 6 has the potential to have a substantial adverse change in the significance of an unknown archaeological resource in the northeastern and southeastern portions of the project site. Based upon this potential, impacts are considered significant. The impact would be similar to the proposed project.

Mitigation Measures

Due to the sensitivity for unknown archaeological resources, similar to under the proposed project, mitigation measure MM CUL-4: Phase I Archaeological Work would be implemented to reduce the potential impact of excavation on unknown archaeological resources at the project site to a less than significant level.

Residual Impacts

As with the proposed project, with application of mitigation measure MM CUL-4, the potential impact of excavation on unknown archaeological resources at the project site would be less than significant.

Impact CUL-3: Alternative 6 could directly or indirectly destroy an unknown paleontological resource.

Under Alternative 6, with the exception of an extended construction period, the overall amount of grading and excavation on the site would be similar to the proposed project. Therefore, earth-moving activities have the potential to have an adverse effect on unknown paleontological resources, and impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure MM CUL-5: Potential to Encounter Unknown Paleontological Resources, would be implemented in order to preserve a representative sample of any scientifically important fossil remains and associated data that might be exposed by excavation at the project site; thereby, reducing the impact of excavation on unknown paleontological resources at the project site to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-5, the potential impact of earth-moving activities from implementation of Alternative 6 on the paleontological resources at the project site would be reduced to a less than significant level, which is similar to the proposed project.

Geology and Soils

Impact GEO-1: Alternative 6 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

Under Alternative 6, the overall amount of development on the site would be similar to the proposed project, although it would occur over an extended construction period. As with the proposed project, implementation of Alternative 6 would include the replacement of older non-compliant buildings/structures throughout the project site with new facilities that comply with current buildings codes (including seismic requirements). As with the proposed project, implementation of Alternative 6 would be required to comply with the recommendations detailed in the approved project-specific geotechnical evaluation(s) and engineering analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria and specified seismic parameters. As part of the Conditional Use Permit process, similar to the proposed project, the City would include Conditions of Approval to require, prior to the issuance of building permits, the City's Building and Safety Division to incorporate the recommendation and conditions from the design and project-specific geotechnical evaluation(s), engineering analysis, and any additional recommendations that come out of this review. The Conditions of Approval would be applied to the implementation of the project through the project plans and the building permit process. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-2: Alternative 6 would not result in substantial soil erosion or the loss of topsoil.

Under Alternative 6 the overall amount of development on the site would be similar to the proposed project although it would occur over an extended construction period, as would the ground-disturbing activities, such as demolition, excavation, trenching, grading, and landscaping. As with the proposed project, implementation of Alternative 6 would include compliance with existing regulatory requirements, such as implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, Alternative 6 would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust); therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and

operation, potential impacts related to soil erosion or the loss of topsoil would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-3: Alternative 6 would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

Under Alternative 6 the overall amount of development on the site would be similar to the proposed project, although it would occur over an extended construction period. Similar to the proposed project, Alternative 6 would replace the older non-compliant buildings/structures with new facilities, which comply with applicable design standards and current applicable building codes and would provide safety improvements in comparison to the existing conditions. As with the proposed project, Alternative 6 would comply with applicable CBC requirements and site-specific geotechnical recommendations, and therefore, would not result in on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project. Consequently, impacts under Alternative 6 would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-4: Alternative 6 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Under Alternative 6, the overall amount of development on the site would be similar to the proposed project, although it would occur over an extended construction period. Under Alternative 6, similar to the proposed project, mass grading would occur throughout the project site. This work is expected to include the placement of new fill and the removal and re-compaction of unsuitable soil and backfill for utility trenches and other excavations. Likewise, the removal, re-compaction, and/or placement of new fill would occur based on a design- and project-specific evaluation of the expansion potential associated with on-site soils. It would include subsurface soil sampling, laboratory analysis of samples collected, and an evaluation of the laboratory testing results by a geotechnical engineer under direction and review by the City. Therefore, Alternative 6 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 6 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Under Alternative 6 the overall amount of development on the site would be similar to the proposed project, although it would occur over an extended construction period. Construction and operational emissions from Alternative 6 would be identical to that of the proposed project. Therefore, the GHG emissions calculations and significance findings for the proposed project would be the same for Alternative 6. As such, Alternative 6 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and no significant impacts would occur.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 6 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, Alternative 6 would be consistent with the CARB Scoping Plan, SB 375, and the Redondo Beach Sustainable Development Strategic Plan. Therefore, Alternative 6 would have a less than significant impact. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 6 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, compliance with regulatory requirements, including the use of construction BMPs and handling of contaminated soils in the unlikely event they are encountered, would minimize the potential adverse effects to the general public and environment associated with construction of Alternative 6. Alternative 6 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and impacts would be less than significant. The impacts would be similar to the proposed project.

Further, as with the proposed project, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-2: Alternative 6 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

Although Alternative 6 would have an extended construction period, the level of construction activities and subsequent operational activities would be the same as the proposed project. As with the proposed project, although Alternative 6 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In the event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, during construction of Alternative 6, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction. As with the proposed project, implementation of Alternative 6 is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-3: Alternative 6 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities, although it would occur over an extended construction period. As with the proposed project, construction of Alternative 6 would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Emergency access in and out of the site, including tsunami evacuation routes for construction workers, would remain during the construction process. As with the proposed project, Alternative 6 includes the new main street and Pacific Avenue Reconnection, which would greatly improve emergency access throughout the project site. As such, Alternative 6 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hydrology and Water Quality

Impact HWQ-1: Alternative 6 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Potential construction impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with marine construction), similar to the proposed project, would be less than significant with the compliance of regulatory requirements, including implementation of BMPs, and would ensure that Alternative 6 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

As with the proposed project, temporary and localized increases in turbidity would occur during in-water construction activities of Alternative 6, this would not be expected to result in violations of water quality standards, and as such, construction-related impacts to harbor water quality would be less than significant. The impacts would be similar to the proposed project.

Alternative 6 includes the redevelopment of the project site in a manner similar to what is proposed under the proposed project. Therefore, the imperviousness of the site would be similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. Runoff from the project site would reduce contamination associated with roadways, parking lots, landscaping, and accumulated atmospheric deposition on impervious surfaces in comparison to existing conditions, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 6 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

There are no streams or rivers located on the project site; hence, that aspect of the threshold of significance would be unaffected.

With the exception of the extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. During construction, BMPs would be implemented to eliminate or reduce pollutant discharges, including sediment, and control stormwater, erosion, and siltation during construction. With adherence to regulations, including implementation of BMPs, Alternative 6 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant. The impacts would be similar to the proposed project.

Under Alternative 6, the imperviousness of the site would be similar to under the proposed project (approximately 64 percent impervious), which is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, the proposed drainage system would be designed to include BMPs in accordance with the City's LID Ordinance, which sets forth standards to treat both the quantity and quality of flow. With adherence to regulations, including LID criteria and implementation of BMPs, Alternative 6 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during operational activities are considered less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-3: Alternative 6 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project.

Under this alternative, the overall amount of development on the site would be similar to the proposed project. As described for the proposed project, construction of Alternative 6 would not result in polluted runoff. Further, construction BMPs would be implemented to eliminate or reduce pollutant discharges and control stormwater and other runoff during construction. Therefore, no significant construction impacts would occur. The impacts would be similar to the proposed project.

Updates to the existing drainage and stormwater system under Alternative 6 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow. As with the proposed project, the amount of pervious surface area within the project site would increase under Alternative 6 and LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. Impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant. .

Impact HWQ-4: Alternative 6 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

As with the proposed project, under Alternative 6, several new structures would be built in Zones AE, VE, and X. The finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. The pedestrian bridge and boat launch ramp and associated breakwater would be placed within the waters of King Harbor and not would impede or redirect flood flows. Therefore, Alternative 6

impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-5: Alternative 6 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

Under this alternative the overall amount of development on the site would be similar to the proposed project, as the risk associated with inundation by seiche, tsunami, mudflow, or sea level rise would be the same.

The potential exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact. Further, as with the proposed project, the existing potential for wave splash at the northern segment of the protective revetment/wall along Horseshoe Beach would not increase under Alternative 6; however, given that the number of structures and number of people who may be present at this location would increase, wave overtopping at this location is considered a significant impact. The impacts would be similar to the proposed project.

There is the potential for wave uprush to overtop the promenade at the western edge of Seaside Lagoon. However, under the proposed project, the elevation would increase by approximately four feet, which would reduce the incidences and height of wave uprush that would occur and no increased risk of injury or structure damage would occur.

Alternative 6 includes the demolition of the International Boardwalk and creation of the Pacific Avenue Reconnection. Therefore, while overtopping along Basin 3 would continue to occur along the bulkhead at Basin 3 under Alternative 6, it would not result in increased risk of injury or damage to structures. Therefore, potential impacts associated with inundation at Basin 3 are less than significant. The impacts would be similar to the proposed project.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is materialized. As with the proposed project, sea level rise would not be affected by Alternative 6, and the raising of the promenade and some portions of the site in the northern portion would reduce the potential for hazards and damage associated with future sea level rise as compared to existing conditions. However, there would be more structures and the potential of more people being present at the project site that could be subject to increased risks associated with an increase in sea level rise. Therefore, should the projected high sea level rise occur in the future, the potential impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure MM HWQ-1: Tsunami/Seiche Awareness Notification Program would be implemented to reduce impacts associated

with people being exposed to potential hazards associated with a future tsunami or seiche. In addition, similar to the proposed project, mitigation measures MM HWQ-2: Wave Uprush Protection, and MM HWQ-3: Sea Level Rise Adaptation Plan, would be implemented to reduce impacts associated with possible inundation associated with wave uprush and future sea level rise.

Residual Impacts

Similar to the proposed project, with implementation of mitigation measure MM HWQ-1, impacts associated with people potentially being exposed to a tsunami or seiche at the project site would be reduced; however, due to natural uncertainties of such an event occurring in the future, it is not possible to conclude that the associated risks would be fully mitigated. As such, the residual impact associated with tsunami or seiche exposure is considered to be significant and unavoidable.

Similar to the proposed project, MM HWQ-2 requires a four-foot high recurved splash wall anchored at the seaward edge of the promenade landward of the northern portion of the Horseshoe Pier. The splash wall would redirect the up-rushed water back toward the ocean, thereby deflecting the water away from the promenade and preventing inundation from occurring. Installation of a splash wall along the revetment would be subject to Coastal Commission approval. Alternatively, as stated in MM HWQ-2, the Coastal Commission may recommend an alternative method to reduce potential for inundation to occur. As with the proposed project, with implementation of mitigation measure MM HWQ-2, impacts associated with possible inundation from wave uprush under current sea levels would be less than significant.

Similar to the proposed project, MM HWQ-3 requires that a plan be developed to address future sea level rise within the project area by instituting a monitoring program to assess sea level changes, and by identifying structural options to be implemented if necessary (subject to approval by the applicable regulatory agencies), that reduce risks to people and structures within the coastal zone. As with the proposed project, with implementation of mitigation measure MM HWQ-3, impacts associated with possible inundation from wave uprush under future sea level rise conditions would be less than significant.

Land Use and Planning

Impact LUP-1: Alternative 6 would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

Under Alternative 6, the proposed development and land uses would be the same as the proposed project. As with the proposed project, Alternative 6 would be consistent with the Public Trust Doctrine and development would be consistent with applicable land use and planning documents, including allowable uses, and limits on development intensity, building heights, maximum floor area ratio (FAR), and other applicable development standards.

Similar to the proposed project, Alternative 6 would not conflict with relevant policies in land use and planning documents, including the Public Trust Doctrine (as discussed

above), SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. As with the proposed project, the impacts would be less significant.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Noise

Impact NOI-1: Alternative 6 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

Under Alternative 6, the entire development program anticipated under the proposed project would eventually be implemented, but the timing would be delayed and extended. While the overall duration of site development/construction under Alternative 6 would be longer than that of the proposed project, it would not affect the applicability of, and expected compliance with the requirements of the City's Noise Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities under Alternative 6 would not exceed applicable standards, and construction noise impacts occurring under this threshold would be less than significant, which is the same as the proposed project. The uses proposed under Alternative 6 would be the same as those of the proposed project, which are, in general, of a type comparable to those that currently exist at the project site, and all of which would be subject to , and would comply with, the applicable requirements of the Noise Ordinance. As such, continued operation of the project site under Alternative 6 would not exceed applicable standards, and operational noise impacts occurring under this threshold would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-2: Alternative 6 would expose persons to or generate excessive groundborne vibration or groundborne noise levels.

The overall development program under Alternative 6 would be the same as that of the proposed project, and only the temporal aspect of project implementation would be affected. As such, the locations and levels of potential construction-related vibration impacts associated with Alternative 6 would be the same as those of the proposed project, and implementation of Alternative 6 would not avoid or substantially lessen the significant unavoidable vibration impacts of the proposed project, specifically as related to temporary human annoyance impacts. If anything, implementation of Alternative 6

may increase the impact inasmuch as the incremental development of the project site, based on lease expirations, would make it more likely that construction activities and associated vibration occurring on individual development lots would occur in proximity to businesses and other uses that would remain open while that adjacent construction occurs. Given the phased construction that could occur, there is the potential that a greater number of businesses would be operating adjacent to the construction area under Alternative 6 as compared to the proposed project.

Under the proposed project, all of the existing uses, with the exception of Kincaids, would cease operation during project construction, which would effectively reduce the potential for human annoyance associated with nearby construction. As noted above, the overall development program under Alternative 6 would be the same as that of the proposed project, and only the temporal aspect of project implementation would be affected. As such, the locations and levels of potential construction-related vibration impacts (such as short-term significant impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors, specifically patrons within businesses on Monstad Pier) associated with Alternative 6 would be similar to, as possibly greater than, those of the proposed project. Thus, implementation of Alternative 6 would not avoid or substantially lessen the significant unavoidable vibration impacts of the proposed project, specifically as related to temporary human annoyance impacts. If anything, implementation of Alternative 6 may increase the potential for that impact inasmuch as the incremental development of the project site, based on lease expirations, would make it more likely that construction activities and associated vibration occurring on individual development lots would occur in proximity to businesses and other uses that would remain open while that adjacent construction occurs. The impacts would be significant. This is similar but slightly greater as compared to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure NOI-1 Pile Driving Vibration, would be implemented to reduce impacts where there is the potential for vibration-related structural damage to occur.

Residual Impacts

Similar to the proposed project, with implementation of MM NOI-1, impacts related to potential structural damage from construction-related vibration, particularly as related to pile driving, would be less than significant.

As with the proposed project, no feasible mitigation measures are available relative to human annoyance from construction-related vibration, although such impacts would only be short-term and periodic. Nevertheless, the impact under Alternative 6, as with the proposed project, would be significant and unavoidable.

Impact NOI-3: Alternative 6 would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Alternative 6 would be the same as the proposed project with respect to the level of construction activities, but construction would be phased. While construction would generally be occurring in a smaller area at any one time (the northern portion of the site

would be constructed before the southern portion, although some overlap could occur), the construction period would extend for a longer period (up to approximately four years [which may not be consecutive], compared to approximately two years as would occur under the proposed project). As discussed under Impact NOI-4, impacts associated with construction noise would be significant. Further, Alternative 6 may increase the potential for that impact inasmuch as the incremental development of the project site, would make it more likely that construction activities and associated noise would occur in proximity to businesses and other uses that would remain open while that adjacent construction occurs.

Alternative 6 would be the same as the proposed project with respect to the level of operational activities. Implementation of Alternative 6 would not result in a notable change in ambient noise levels at the project site because Alternative 6 would have similar noise levels as existing conditions. However, as with the proposed project, Alternative 6's operations-related increase in traffic and associated roadway noise on Torrance Circle/Boulevard between the project site and Catalina Avenue would be a significant noise impact. Impacts are significant. This is similar, but slightly greater, as compared to the proposed project given that construction activities, while not permanent, would occur over an extended period of time (up to approximately four years).

Mitigation Measures

No mitigation is available for the significant increase in the roadway noise level on Torrance Circle/Boulevard between project site and Catalina Avenue.

Residual Impacts

Impacts would be significant and unavoidable.

Impact NOI-4: Alternative 6 would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The locations and basic levels of construction noise associated with Alternative 6 would, in general, be the same as those of the proposed project, with only the phasing and overall duration of site development being different under Alternative 6. As such, the timing of when construction noise impacts may occur would be different between Alternative 6 and the proposed project, including the possibility that there is likely to be gaps during the overall development program under Alternative 6 where there would be no construction noise impacts; however, the nature, location, and level of construction noise impacts under Alternative 6 would, at some point, be the same as those of the proposed project. Additionally, overall, while construction would generally be occurring in a smaller area at any one time (the northern portion of the site would be constructed before the southern portion, although some overlap could occur), the construction period would extend for a longer period (up to approximately four years [which may not be consecutive], compared to approximately two years as would occur under the proposed project). Further, Alternative 6 may increase the potential for that impact inasmuch as the incremental development of the project site, would make it more likely that construction activities and associated noise would occur in proximity to businesses and other uses that would remain open while that adjacent construction occurs. Additionally, depending on the phasing, liveaboards could be located at the Redondo Beach Marina while construction is occurring nearby. Liveaboards could be located as near as 50 feet to the construction

activities, which would result in a temporary significant noise impact. Therefore, as with the proposed project, construction of Alternative 6 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use); a significant noise impact would occur. The impacts would be similar, but greater, as compared to the proposed project as the construction period would be extended and more occupied businesses and visitors to the open portion of the project site may be located within proximity to the construction, and liveaboards in Basin 3 may be located as near as 50 feet from construction activities.

Mitigation Measures

As with the proposed project, mitigation measures MM NOI-2 through MM NOI-6, and MM NOI-ALT-1 would help reduce construction noise impacts.

MM NOI-ALT-1: Temporary Relocation of Liveaboards

> A temporary moorage location within King Harbor shall be provided to liveaboard vessels located within 150 feet of construction activities as needed during construction phases with high noise levels. The need for relocation should be evaluated on a case-by-case basis considering the type of construction activities occurring, equipment being used, duration, and distance to the noise sensitive receptors.

Residual Impacts

Implementation of mitigation measures MM NOI-2 through MM NOI-5 would help reduce construction noise impacts, and mitigation measure MM NOI-6 could provide for a substantial reduction in construction noise impacts. With a 20 dBA of noise reduction associated with such noise barriers, the attenuated construction noise levels at most of the noise sensitive receptors around the project site would be generally comparable to, if not less than, existing ambient noise levels. The exceptions would be: (1) the western edge of Czulegar Park; (2) the northern edge of Veterans Park; (3) the western portions of the condominium complexes located immediately east of the project site; and (4) the Crowne Plaza Hotel during construction of the upper levels of multi-story structures within the project site. At Czulegar Park, the 20 dBA noise reduction offered by MM NOI-5 would largely, but not fully, reduce the noise exposure impact to a level that is less than significant. Similarly, a 20 dBA noise reduction offered by placement of a noise barrier along the northern edge of Veterans Park would largely, but not fully, address the construction noise impact. Relative to the condominiums east of the site, the combination of their close proximity to the project site and their elevated and multi-story nature would render any noise barrier as being unable to achieve a construction noise level reduction that would make the impact less than significant. A noise barrier located along the edge of the project site, which is approximately 20+/- feet lower than the base elevation of the condominiums, could not effectively shield/attenuate construction noise from reaching the westernmost portions of those condominium complexes, and even if it did, a 20 dBA noise reduction would not be sufficient. With regard to differences in elevation, construction of the upper levels of multi-story structures within the eastern portions of the project site, such as Buildings A and D and the parking structures at the north and south ends of the site, may expose adjacent noise sensitive receptors,

such as the Crowne Plaza Hotel and the condominiums east of the site, to temporary periods of construction noise that cannot be shielded/attenuated by construction noise barriers.

Implementation of Mitigation MM NOI-ALT-1 would reduce noise impacts on liveaboards located within 150 feet of construction activities by providing a temporary moorage location during construction phases with high noise levels. This would reduce impacts on liveaboards to less than significant.

Based on the above, implementation of Alternative 6, as with the proposed project, would result in a significant and unavoidable construction noise impact.

Public Services

Impact PBS-1: Alternative 6 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As under the proposed project, the new buildings constructed on-site would offer an improvement related to fire protection, including the inclusion of fire suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers), and on-site water mains and fire hydrants would be modified to conform to current requirements. Further, the new main street and Pacific Avenue Reconnection would be implemented, which would greatly improve emergency access and protection service throughout the project site.

As with the proposed project, current staffing levels and facilities are adequate to meet the anticipated needs of the proposed project, and thus the proposed project is not expected to result in the need for new facilities. Alternative 6 is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact PBS-2: Alternative 6 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Under Alternative 6, as with the proposed project, the Pier Police Sub-Station would be relocated within the project site, with additional staff and extended hours as needed. Alternative 6 also includes private security that would serve the commercial development and hotel and would contribute to on-site safety on an around-the-clock basis. The new development under Alternative 6 would accommodate the new sub-station and on-site private security, and no construction or expansion of facilities not already addressed as part of the project would be required. Therefore, it is not anticipated that continued police staffing at the sub-station would result in diminished service elsewhere in the City.

As with the proposed project, other security measures inherent in the design of Alternative 6 increase site safety from existing conditions by incorporating CPTED strategies aimed at deterring criminal behavior by designing the physical environment in ways that reduce identifiable crime risks and provide an atmosphere of safety and the new main street and the Pacific Avenue Reconnection would greatly improve emergency access and protection service throughout the project site.

Therefore, with replacement of the police sub-station on-site Alternative 6 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Recreation

Impact REC-1: Alternative 6 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Under Alternative 6 the overall amount of development on the site would be similar to the proposed project. All of the recreational elements of the proposed project (e.g., opening of Seaside Lagoon, small craft boat launch ramp) and enhancement of high quality open space and pedestrian/bicycle connectivity (including implementation of the pedestrian/bicycle bridge) are proposed under Alternative 6. Implementation options under Alternative 6 for the Sportfishing Pier and the Redondo Beach Marina in Basin 3 would be similar to the proposed project.

Under Alternative 6, construction would be phased over a longer period of time (up to approximately four years [which may not be consecutive]. However, unlike the proposed project, the entire project site would not be closed for the full construction period. When portions of the site are not under construction, access to recreational facilities would available (i.e., while only the northern portion of the site is under construction, visitors would be allowed to access the southern portion of the site.)

While there could be a phasing overlap of up to approximately one year, when the entire site is closed (with the exception of Kincaid's), this period would be shorter as compared to the proposed project (approximately 2.25 to 2.5 years.) Therefore, while the recreation opportunities at the project site would be lessened during construction period, limited access to the harbor would remain (expect when/if construction at the northern and southern portions of the site overlap).

As with the proposed project, the recreational users that are temporarily displaced during project construction would not cause a substantial increase in use at any particular recreational facility, but would instead be expected to disperse throughout the area. Therefore, construction of Alternative 6 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and impacts would be less than significant. Furthermore, as with the proposed project, as part of the Conditional Use Permit process, the City would require a Conditions of Approval, which would require, prior to construction, the temporary relocation of hand launch and dinghy facilities during the construction associated with opening the Seaside Lagoon to the harbor, as well as slip transition assistance for those vessels currently within the Redondo Beach Marina in Basin 3.

As with the proposed project, Alternative 6 would help with the local and regional demand for recreation and park services by improving and expanding existing recreational resources; thereby providing a benefit to the local community and region as a whole. Therefore, Alternative 6 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As such, construction and operation impacts would be less than significant. This is similar to the proposed project, however given that the construction period would be longer under Alternative 6 as compared to the proposed project, the impacts would greater.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact REC-2: Alternative 6 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative.

Under Alternative 6 the overall development on the site would be similar to the proposed project. Alternative 6 would not include construction of any parks or recreational

facilities beyond those already described under the proposed project (i.e., modified Seaside Lagoon, new boat launch ramp, new pedestrian and bicycle paths, and enhanced high-quality public open space). In addition, no construction or expansion of recreational facilities not already addressed as part of the project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary would occur as part of, or because of, the project). As with the proposed project, Alternative 6 would not result in population growth that would increase the demand for new or expanded recreational facilities; therefore, the Alternative 6 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the project and thus no impacts would occur. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Traffic and Transportation

Impact TRA-1: Alternative 6 could exceed the applicable significance thresholds.

Under Alternative 6, the overall amount and type of development on the site would be similar to the proposed project, but construction would be delayed at various areas of the project site, potentially not being completed until 2030. As described above in Section 3.13 Traffic and Transportation, forecast traffic volumes for the year 2030 were analyzed for the City of Redondo Beach using the SCAG Model. Based on the SCAG model forecast, average traffic volumes in the City are expected to decline by two percent relative to the base year model volumes. For a conservative analysis, the SCAG population growth rate (not traffic growth) was applied to traffic volumes to reflect near-term development; however, in the long term in Redondo Beach, the transportation investments analyzed in the SCAG RTP/SCS are expected to result in lower traffic volumes citywide. Therefore, though buildout of Alternative 6 would be delayed in its construction, no changes to the resulting significant impacts are expected and the results of this Alternative would be consistent with the analysis results of the proposed project (i.e., impacts of Alternative 6 would be similar to those of the proposed project). As such, construction-related traffic impacts would be less than significant; however, operational traffic and parking impacts would be significant at the same locations (i.e., six intersections and onsite parking) and to the same extent as those of the proposed project. As with the proposed project, impacts to freeway facilities would be less than significant.

Mitigation Measures

MM TRA-1 through MM TRA-6 presented in Section 3.13.4.2 would be implemented to address the significant impacts to operational traffic that would occur under Alternative 6. MM TRA-7 would be implemented to address parking impacts.

Residual Impacts

Implementation of MM TRA-1 through MM TRA-6 would reduce operational traffic to less than significant at all intersections. MM TRA-7 would reduce impacts related to parking to less than significant.

Impact TRA-2: Alternative 6 would not conflict with an applicable congestion management program.

As noted above, Alternative 6 would have traffic generation and impacts similar to those of the proposed project. As such, similar to the proposed project, Alternative 6 would not conflict with an applicable congestion management program. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRA-3: Alternative 6 could substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Under Alternative 6, development of the new small boat launch ramp and associated breakwater would occur, as would also be the case for the proposed project. As such, implementation of Alternative 6 would pose the same potential for a safety hazard associated with the interface of paddle boarders and small boats near the launch ramp as would occur under the proposed project. A significant impact would occur.

Mitigation Measures

Implementation of MM TRA-8 and the slow speeds in the area of the entrance of the proposed small craft boat launch facility and the open Seaside Lagoon would serve to enhance safety and reduce the potential for interface conflicts between boats and personal recreational watercraft operating in proximity to each other.

Residual Impacts

With implementation of MM TRA-8, impacts would be less than significant.

Utilities

Impact UTL-1: Alternative 6 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated amount of wastewater generation associated with the proposed project would be the same for Alternative 6. As with the

proposed project, the wastewater generation would increase under Alternative 6, but the new on-site system would be designed to provide adequate capacity to handle the wastewater increase and maintain the same flow conditions as currently exist on-site, and impacts would be less than significant.

The amount of wastewater generated under Alternative 6 would be similar to the proposed project, as would the upgrades to the sewer infrastructure (including sewer lines and sewer lift stations). With the on-site improvements and lift station upgrades, and the capacity at the JWPCP, adequate capacity exists under Alternative 6, as with the proposed project. Therefore, the wastewater generated by Alternative 6 would not exceed the wastewater conveyance and treatment at the project site and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. The impact is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: Alternative 6 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

With the exception of an extended construction schedule, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated water demand associated with the proposed project would be the same for Alternative 6. The water supply assessment prepared for the proposed project determined that the increase in water demand would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. As such, Alternative 6 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: Alternative 6 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

With the exception of the extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated amount of solid waste generation during construction and operation associated with the proposed project would be the same for Alternative 6. The inert landfill which takes in most of the construction and demolition debris in Los Angeles County has sufficient capacity available to accommodate construction waste that would be generated under Alternative 6. Likewise, as described for the proposed project, Los Angeles County has solid waste capacity that exceeds 15 years, and Alternative 6 would not exceed existing capacity. Thus, Alternative 6 would not create a need for additional solid waste disposal facilities to adequately handle solid waste generated during construction or operations. No significant impact on the landfills within the region is anticipated as a result of Alternative 6.

As with the proposed project, operations under Alternative 6 would comply with the existing waste diversion programs of the City, County, and Athens Services (the City's current contract provider for solid waste disposal). The City's contractual agreement with Athens Services obligates Athens Services to guarantee that the City will exceed the diversion requirements set forth in AB 939. Therefore, as with the proposed project, Alternative 6 would comply with the established diversion requirements and Alternative 6 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. Impacts relative to adopted solid waste diversion programs and policies would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: Alternative 6 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

With the exception of an extended construction period, Alternative 6 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. Therefore, the anticipated electricity demand and natural gas demand associated with the proposed project would be the same for Alternative 6. As described for the proposed project, there are adequate electricity and natural gas supplies available to serve the development that would be implemented under Alternative 6. Further, with the exception of on-site connections needed for the new buildings and structures, Alternative 6 would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore,

implementation of Alternative 6 would not exceed the capacity of electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.4.7 Alternative 7 – Reduced-Density

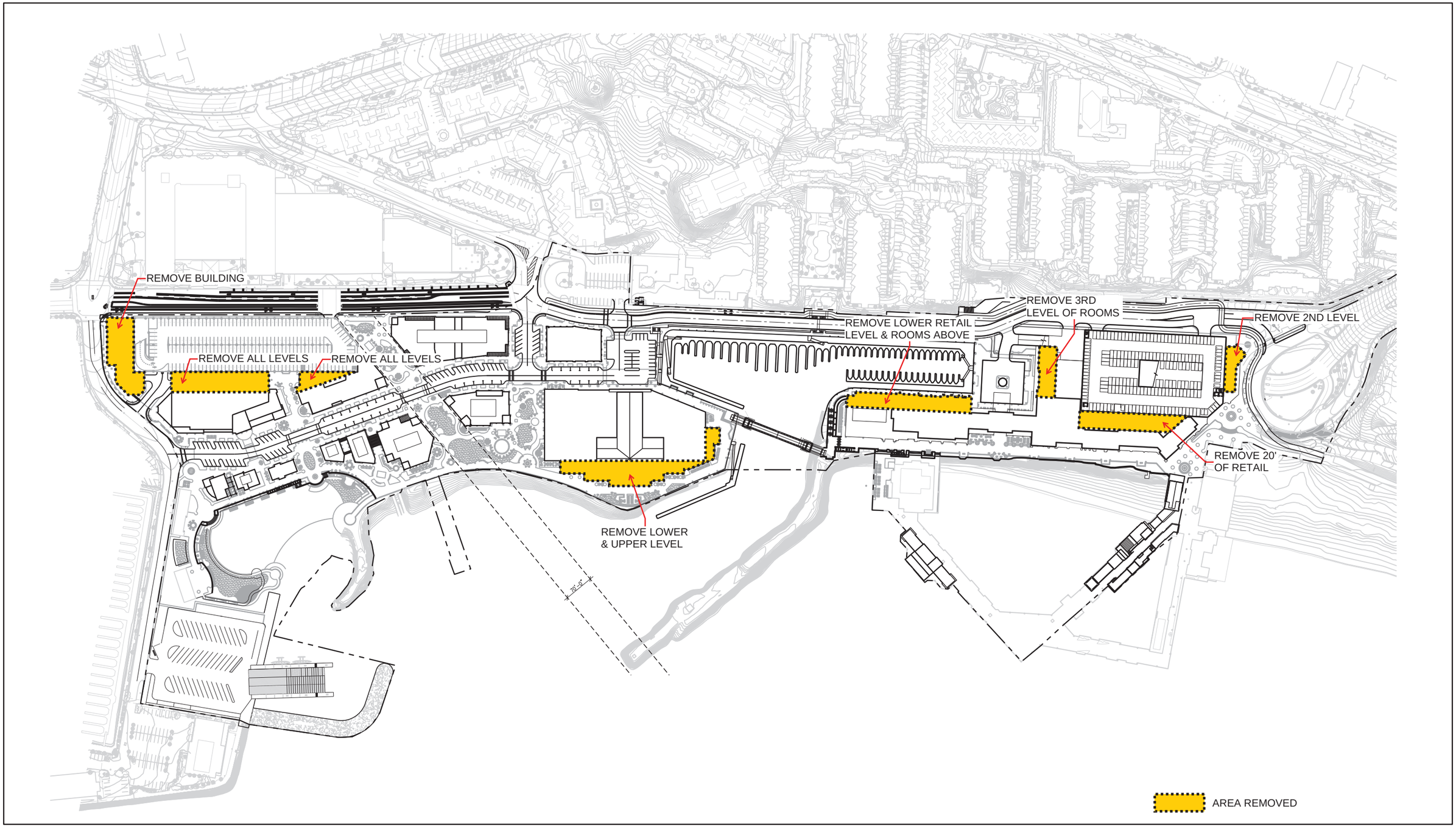
4.4.7.1 Description of Alternative 7

Under this alternative, the amount of net new development on the site would be reduced by 50 percent (152,029 square feet). This would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). The proposed uses of retail, restaurant, creative office, hotel, and specialty cinema would be the same as the proposed project as under Alternative 7, and as shown on Figure 4-3, the conceptual site plan would be similar to the proposed project, but some buildings would be eliminated or reduced in size. The other main elements of the proposed project, including improvements in site connectivity and modification of Seaside Lagoon, would be implemented. The following is a breakdown of the project elements that would be implemented under this alternative.

Northern Portion of Project Site

Under Alternative 7, a maximum of 169,348 square feet of development would be located in the northern portion of the project site (120,949 square feet of net new development). As with the proposed project, the proposed uses that would be established include retail, restaurants, creative office, public market hall, approximately 495 seat specialty cinema, and accessory/recreational uses (such as recreational sales/rentals, beach club, maintenance, public safety, concessions, etc.). The proposed public market hall would be located as proposed under the proposed project

The other elements on the northern portion of the project site would be the same as the proposed project, including demolition and possible replacement of the Sportfishing Pier and buildings on the pier. Seaside Lagoon would be opened to the waters of King Harbor, creating a tidally-influenced lagoon with direct access to the harbor. As part of the Seaside Lagoon modifications, the existing hand launch ramp and dinghy dock would be removed; however, human-powered watercraft could be launched from the lagoon. A small craft boat launch ramp facility would be located at the Joe's Crab Shack location. A new parking garage would be located at the northeast corner of the project site, and the Plaza Parking Structure would be modified to accommodate the Pacific Avenue Reconnection. There would be fewer parking spaces required under Alternative 7 than under the proposed project, and therefore, fewer parking spaces and one less level associated with the northern parking structure would be provided (i.e., new parking structure would be three levels of parking).



Source: Callison, 2015

Figure 4-3

Alternative 7 – Reduced Project Conceptual Site Plan

Southern Portion of Project Site

Under Alternative 7, a maximum of 202,562 square feet of development would be located in the southern portion of the project site (31,080 square feet of net new development). As with the proposed project, the proposed uses that would be established include retail, restaurants, and a boutique hotel. Under this alternative, as with the proposed project, the International Boardwalk would be removed and replaced with the Pacific Avenue Reconnection including separated walkway, roadway, and bicycle path. The existing Pier Parking Structure and Pier Plaza would be demolished and the parking structure replaced with a new 1,012 stall parking structure. A new 90-room boutique hotel would be constructed adjacent to Basin 3. In addition, this alternative would include replacement of the timber portion of the Horseshoe Pier and the buildings on that segment of the pier. A new building would be constructed on Pad 2 on the Horseshoe Pier. Limited modifications may occur in the vicinity of Monstad Pier, where Monstad Pier connects with the Horseshoe Pier. Additionally, modifications of Torrance Circle would be implemented to facilitate the Pacific Avenue Reconnection and access to the parking structure.

Basin 3

Under Alternative 7, the modifications to Basin 3 would be the same as under the proposed project, including replacement of the bulkhead cap and minor repairs to the bulkhead. The reconstruction/redevelopment of the Redondo Beach Marina existing docks, gangways, and boat slips. In addition, as with the proposed project, a pedestrian/bicycle bridge would be constructed to span the Basin 3 entrance.

Additional Improvements

Additional improvements under Alternative 7 would be generally the same as the proposed project, including upgrades to existing aging infrastructure, relocation of service and loading zones, relocation of the police substation, and landscaping, lighting, and security improvements. Substantial improvements in site connectivity, enhanced public open space, and public access to and along the waterfront would also be implemented. Under Alternative 7, the amount of public open space would be greater than under the proposed project. The proposed Tidelands Exchange would also occur (subject to approval by the CSLC).

4.4.7.2 Alternative 7 Environmental Analysis

Aesthetics and Visual Resources

Impact AES-1: Alternative 7 would not have a substantial adverse effect on a designated local valued view.

Under Alternative 7, there would be an approximately 29 percent reduction in total square footage as compared to the proposed project. The site plan configuration would be similar, as well as some building heights. However, some of the proposed buildings would be slightly reduced in size and/or height, or eliminated altogether. Therefore, the potential effects on a designated local valued view would be similar to the proposed project throughout various areas of the site (see Figure 4-3), while others would be somewhat altered.

Czuleger Park – Key Observation Views 1 through 3: As with the proposed project, there is the potential that if building cranes are used to construct the parking structure in the northeast corner of the project site, the top of the cranes could be visible from Key Observation Views 1 and 2. The visibility of the crane would be dependent on the precise location and angle of crane, as well as the angle of the viewer. Given that views of Santa Monica Bay/Pacific Ocean are already blocked or very limited from Key Observation Views 1 and 2 respectively, and any possible view of the construction crane would be temporary and limited, there would be no construction-related significant visual impact on the designated local valued view at Key Observation Views 1 and 2 under Alternative 7. No changes to views would occur at Key Observation View 1 under operation of Alternative 7. The only features at the project site that may be visible from Key Observation View 2 are tall trees located on-site. Any changes to the trees (i.e., removal/relocation and/or new plantings) would not adversely affect the limited views available from this location. Therefore, operation of Alternative 7 would not have a substantial adverse effect on a designated local valued view from Key Observation View 2. The impacts would be similar to the proposed project.

Construction activities and equipment would be visible from Key Observation View 3; however, from this distance, the activities and equipment would be difficult to visually distinguish from other features located at a similar distance. As such, the construction would largely blend into the overall view and not be visually prominent. While some of the larger equipment could potentially encroach into the views of the water, primarily at the northern edge of the view corridor, this temporary encroachment would occupy only a small portion of the larger viewshed, and the primary views of the water would remain open. Therefore, construction would not have a substantial adverse effect on the designated local valued view at Key Observation View 3 under Alternative 7. The impacts would be similar to the proposed project.

During operation, the changes to the views from Key Observation View 3 under Alternative 7 would be similar to that of the proposed project. Features of Alternative 7, including the pedestrian bridge and market hall, would be visible; however, the views of Santa Monica Bay/Pacific Ocean would remain. Additionally, due to the removal of a small portion of the southern edge of the market hall, less of this building would be visible at the edge of view corridor as compared to the proposed project. No change in the locally designated valued view would occur. The impacts would be similar to the proposed project.

North Harbor Drive – Key Observation Views 4 and 5: The changes to the views from Harbor Drive under Alternative 7 would be similar to that of the proposed project. Construction activities would temporarily disrupt views of the water from Harbor Drive; however, the views that are available are limited and of low to moderate quality. The impact would be temporary and not result in a substantial adverse effect on a designated local valued view, including views from Key Observation Views 4 and 5. The impacts would be similar to the proposed project.

During operation, the changes to the views from Harbor Drive under Alternative 7 would be similar to that of the proposed project. With the increase in development in the northern portion of the project, the locations where background views of the water are visible from Harbor Drive would decrease between Portofino Way and current terminus with Pacific Avenue. For some segments of the roadway (fleeting moments for motorists traveling along the roadway) (i.e., northbound along the Pacific Avenue Reconnection

along Basin 3), the view of the water, including Basin 3, would be slightly similar to the proposed project, because although the amount of development would be reduced, the buildings would have similar footprints.

As with the proposed project, under Alternative 7, view corridors at Key Observation Views 4 and 5 would provide views of the water from Harbor Drive. Additionally, the Pacific Avenue Reconnection would provide a largely unobstructed view of the Redondo Beach Marina and open waters beyond, thereby creating a new segment of roadway with water views. Further, this segment of the roadway would be located at a slightly higher elevation than Harbor Drive, which would increase the amount of water within view. Within the northern portion of the project site, the new main street would establish a new roadway that has views of the water at a closer range than Harbor Drive, thereby enhancing the value of views available to motorists. The impacts would be similar, but reduced in comparison to the proposed project.

Proposed/New Main Street – Key Observation View 6: Views of Seaside Lagoon and the North Breakwater are visible from this location, but there are no views of the harbor water. As with the proposed project, construction activities would be visible from Key Observation View 6. These activities would be limited and temporary and would not have an adverse effect on a locally designated valued view. During operation, the view of Seaside Lagoon would change from a view of chain link fence, landscaping, and the lagoon water (available when the lagoon is full) to a view of open lagoon water. Alternative 7 would not result in an adverse change in the locally designated valued view from Key Observation View 6. The impacts would be similar to the proposed project.

Views from the Water – Key Observation View 7: Construction activities would be visible from the water. While some activities may be surrounded by construction fencing, taller equipment and activities occurring above the construction fence line such as demolition and reconstruction of Pier Plaza may be visible from the water. Additionally, construction activities on the Horseshoe and Sportfishing Piers would be visible from the water. While these activities would temporarily detract from the scenic quality of the harbor, the primary scenic views towards the open water of the Santa Monica/Pacific Ocean would remain available. King Harbor is a busy harbor that supports a high level of activity and variety of vessel types and the presence of construction equipment and activities would not have a substantial adverse impact on the designated local valued view at Key Observation View 7 and impacts during construction would be less than significant. The impacts would be similar to the proposed project.

As with the proposed project, project elements that would be visible from Key Observation View 7 would new buildings in the northern and southern portion of the site. While more buildings would be visible, they would have a similar profile as the existing buildings and would be blend into the overall view of the shoreline. As with the proposed project, the views of the project site from Key Observation View 7 would not substantially change. Alternative 7 would not result in an adverse change in the locally designated valued view from Key Observation View 7 and impacts during operation would be less than significant. The impacts would be similar to the proposed project, but reduced as the amount of development would be less.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-2: Alternative 7 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Under this alternative, there would be an approximately 29 percent reduction in total square footage as compared to the proposed project. As shown on Figure 4-3, while some buildings would be modified or reduced in size and/or height, the site configuration would be similar to the proposed project, and as such, changes in visual character and quality would be similar. Project construction, would temporarily change the visual character and reduce the visual quality of the site, construction activities and equipment would be temporary and not result in permanent visual degradation that would substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, impacts during construction would be less than significant.

As with the proposed project, the landside portion of the project site would be redeveloped, and, as described for the proposed project, although the changes to the visual quality of the site would be noticeable, the addition of new design elements and improved public spaces will enhance the visual quality of the site.

Alternative 7 would not substantially degrade the visual character or quality of the project site and the impact would be less than significant. The impacts would be similar to the proposed project, but reduced as the amount of development would be reduced.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-3: Alternative 7 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Under this alternative, the overall amount of development on the site would be similar to the proposed project. As with the proposed project, construction would primarily be conducted during daylight hours. However, should the use of nighttime construction lighting be required, as with the proposed project, it would be directed inward and downward toward the construction site, and would not be expected to increase the overall ambient glow emanating from the project site as compared to existing conditions. Therefore, similar to the proposed project, impacts related to nighttime construction lighting would be less than significant.

As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Alternative 7 would not incorporate substantial amounts of

reflective building materials in areas that are highly visible to off-site glare-sensitive uses.

Alternative 7 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, impacts would be less than significant. The impacts would be similar to the proposed project, but slightly reduced as less development would occur.

Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Air Quality

Impact AQ-1: Alternative 7 would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Violation of Air Quality Standards – Construction

Construction emissions under Alternative 7 would be identical to that of the proposed project. While there is a reduction in actual new construction, emissions are based on peak daily operations, which assume different types of construction activities occurring simultaneously. Given that similar types of construction activities (including site demolition and new construction) would occur under Alternative 7, the peak day emission those would be anticipated to be the same regardless of the reduced square footage built. As was analyzed under the proposed project, compliance with Rule 403 and Rule 1113, as pre-existing regulatory requirements, were accounted for in the construction emissions modeling. Rule 1113 is included as part of the default modeling scenario.

Table 4-27 summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors associated with Alternative 7's worst-case construction scenario, which assumes that construction would be occurring simultaneously on the northern and southern portion of the site, and that up to five of the seven waterside elements at a time would overlap with the landside construction (utilizing the significance criteria provided in Table 3.2-5 in Section 3.2 Air Quality in this Draft EIR). The peak daily emissions generated during each year of Alternative 7's construction period are identified. As shown, the maximum daily construction emissions generated by the worst-case construction scenario would exceed SCAQMD's daily significance threshold for ROG, NOx and CO, which would be a significant impact. SOx, PM_{10}, and $PM_{2.5}$ would be below the regulatory thresholds and, therefore, construction phase emissions of these pollutants would be less than significant. Potential health effects of exposure to these criteria pollutants are included in the background information Section 3.2.2.2.3 and Table 3.2-1 in Section 3.2 Air Quality in this Draft EIR.

Table 4-27: Alternative 7 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2017	66.94	718.75	736.14	1.36	64.27	35.36
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Violation of Air Quality Standards – Operation

Operational activities under Alternative 7 would be reduced compared to the proposed project because of the reduction in land use development. As shown in Table 4-28, Alternative 7's net emissions would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. Therefore, Alternative 7's net operational emissions would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant. Unlike the proposed project, Alternative 7 would result in a net benefit compared to existing conditions for ROG, NOx and CO emissions due to increased efficiencies of the new buildings and vehicles compared to the existing buildings.

Table 4-28: Alternative 7 Unmitigated Operational Emissions

Emissions Source	Estimated Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing						
Area Sources[a]	5.75	0.00	0.02	0.00	0.00	0.00
Energy Sources[b]	0.83	7.51	6.31	0.05	0.57	0.57
Mobile Sources	63.64	121.56	537.69	0.84	55.75	16.04
Total Existing Emissions	70.22	129.08	544.03	0.88	56.32	16.62
Alternative 7						
Area Sources[a]	9.30	0.00	0.08	0.00	0.00	0.00
Energy Sources[b]	1.09	9.92	8.34	0.06	0.75	0.75
Mobile Sources	56.57	111.71	482.52	1.11	72.80	20.51
Total Project Emissions	66.96	121.63	490.94	1.17	73.55	21.27
Net Project Increase						
Area Sources[a]	3.55	0.00	0.06	0.00	0.00	0
Energy Sources[b]	0.27	2.41	2.03	0.01	0.18	0.18
Mobile Sources	-7.07	-9.86	-55.17	0.28	17.05	4.47
Total Net Project Emissions	-3.26	-7.44	-53.09	0.29	17.23	4.65
Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**
Alternative 7	-3.26	-7.44	-53.09	0.29	17.23	4.65

Proposed Project	24.88	13.11	67.05	0.37	18.86	5.44
Change from Proposed	-28.14	-20.55	-120.14	-0.08	-1.63	-0.79

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Notes:
Area sources include emissions from consumer product use, architectural coating and landscape equipment.
Energy source include natural gas use for heating/cooling as well as electrical consumption.

Mitigation Measures

As with the proposed project, implementation of mitigation measures MM AQ-1: Fleet Modernization for Construction Equipment and MM AQ-2: Use of Low-VOC Coatings and Paints would reduce pollutant emissions associated with project construction.

Table 4-29 summarizes the modeled peak daily emissions associated with Alternative 7's worst-case construction scenario after mitigation measures MM AQ-1 and MM AQ-2. Similar to the proposed project, implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the impacts of ROG to less than significant; however, NOx and CO would remain significant and unavoidable for construction.

Table 4-29: Mitigated Alternative 7 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2017	-	383.27	697.03	-	-	-
2018	68.23	129.68	-	-	-	-
Regional Significance Threshold	*75*	*100*	*550*			
Significant Impact?	No	**Yes**	**Yes**			

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

Residual Impacts

Similar to the proposed project, after mitigation, construction emissions of NOx and CO would be lower, but would remain significant and unavoidable as shown in Table 4-29. No other feasible methods to reduce emissions were identified.

Impact AQ-2: Alternative 7 would not expose sensitive receptors to substantial pollutant concentrations.

Exposure of Sensitive Receptors to Pollutant Concentrations

Separate discussions are provided below analyzing the potential for sensitive receptors to be exposed to CO hotspots and localized air quality impacts from criteria pollutants and TACs from on-site sources during construction and operation of the proposed project.

CO Hotspots

A total of 41 local intersections were analyzed as part of Alternative 7's traffic analysis (Appendix L1). The existing plus Alternative 7, cumulative plus Alternative 7 peak hour conditions were evaluated against the screening level threshold of 24,000 vehicles per hour.[6] Peak hourly traffic volumes for each of the study area intersections are shown in Table 4-30. As shown, consistent with the proposed project, the maximum hourly traffic is generated at the intersection of Pacific Coast Highway/Catalina Avenue & Herondo Street/Anita Street under all scenarios. The maximum peak traffic at this intersection for the existing plus Alternative 7 scenario is 4,861 and 5,661 vehicles per hour, for the AM and PM peak hours, respectively. Under the cumulative plus Alternative 7 scenario, the maximum hourly traffic is 5,002 and 5,872 vehicles per hour, for the AM and PM peak hours, respectively. As none of the peak hour traffic at any of the intersections would come close to 24,000 vehicles per hour, CO emissions from these vehicle volumes would be less than significant.

Table 4-30: Peak Hourly Traffic Volumes

	Existing Plus Project		Cumulative Plus Project (SCAG)	
Intersection	**AM**	**PM**	**AM**	**PM**
Hermosa Ave & 2nd St	966	979	987	999
Monterey Blvd & 2nd St	422	645	429	659
Valley Dr & 2nd St	521	979	533	1,000
Harbor Dr/Hermosa Ave & Herondo St	998	1260	1,021	1,291
Monterey Blvd & Herondo St	723	1,045	738	1,072
Valley Dr/Francisca Ave & Herondo St	1,016	1,519	1,039	1,556
Pacific Coast Hwy/Catalina Ave & Herondo St/Anita St	4,861	5,661	5,002	5,872
Prospect Ave & Anita St	2,774	2,886	2,835	2,960
Harbor Dr & Yacht Club Way	647	993	660	1,018
Pacific Coast Hwy & Catalina Ave	3,448	3,825	3,554	3,968
Harbor Dr & Marina Way	659	1,102	674	1,130
Catalina Ave & Gertruda Ave	1,232	1,606	1,259	1,645
Catalina Ave & Francisca Ave	1,181	1,480	1,208	1,517
Catalina Ave & Broadway	1,076	1,326	1,101	1,360
Harbor Dr & Portofino Way/Beryl St	828	1,721	843	1,752
Catalina Ave & Beryl St	1,359	1,967	1,407	2,075
Broadway & Beryl St	434	620	442	630
Francisca Ave & Beryl St	455	848	463	866
Pacific Coast Hwy & Beryl St	3,161	3,892	3,264	4,048
Pacific Avenue & Harbor Dr	163	314	166	319

[6] For the purpose of conducting a conservative analysis, the more conservative BAAQMD screening threshold for CO hotspots is used for Alternative 7 as well as the proposed project.

Table 4-30: Peak Hourly Traffic Volumes

	Existing Plus Project		Cumulative Plus Project (SCAG)	
Intersection	**AM**	**PM**	**AM**	**PM**
Catalina Ave & Carnelian St	1,159	2,568	1,181	1,600
Catalina Ave & Diamond St	1,191	1,553	1,215	1,582
Catalina Ave & Emerald St	1,167	1,497	1,190	1,528
Pacific Coast Hwy & Garnet St	2,733	3,112	2,868	3,247
Catalina Ave & Torrance Blvd	1,597	2,366	1,631	2,417
Pacific Coast Hwy & Torrance Blvd	3,505	4,330	3,642	4,546
Helberta Ave/Camino Real & Torrance Blvd	1,663	1,926	1,713	1,997
Prospect Ave & Torrance Blvd	3,419	3,518	3,491	3,593
Catalina Ave & Pearl St	1,200	1,494	1,225	1,527
Camino Real & Pearl St	597	621	610	633
Pacific Coast Hwy & Sapphire St/Francisca Ave	2,492	2,820	2,603	2,994
Esplanade & Knob Hill Ave	426	633	437	652
Catalina Ave & Knob Hill Ave	921	1,127	957	1,175
Pacific Coast Hwy & Knob Hill Ave	2,638	3,100	2,763	3,294
Harbor Dr & Pacific Avenue	398	715	407	730
Pacific Coast Hwy & Palos Verdes Blvd	3,585	4,075	3,761	4,339
Pacific Coast Hwy & 2nd St	3,651	4,046	3,746	4,188
Pacific Coast Hwy & 10th/Aviation	4,135	4,728	4,223	4,828
Pacific Coast Hwy & Pier/14th St	3,146	3,917	3,213	3,999
Pacific Coast Hwy & 16th St	2,947	3,639	3,011	3,715
Pacific Coast Hwy & Prospect Ave	2,392	2,977	2,488	3,087
Maximum	**4,861**	**5,661**	**5,002**	**5,872**
Screening Threshold	24,000	24,000	24,000	24,000
Significant?	No	No	No	No

Source: Fehr & Peers, 2015

The Los Angeles County CMP requires that new developments analyze potential impacts on the regional freeway system, the regional roadway network and the regional traffic system. The impacts on the CMP roadways under Alternative 7 would be less than the proposed project due to the reduction in development. Therefore, as identified in the traffic study for the proposed project, Alternative 7 would not conflict with the CMP for arterial roadways, freeways, or transit use.

Given that Alternative 7 would not exceed the screening level intersection volumes, nor would it conflict with the local CMP, impacts related to CO hotspots would be less than significant. The impacts would be similar to the proposed project.

Localized Construction Air Quality Impacts – Criteria Air Pollutants

Because construction of Alternative 7 is assumed to result in identical daily peak emissions as the proposed project, the localized impacts from construction would be the same. As discussed previously, the daily on-site construction emissions generated by the proposed project were evaluated against SCAQMD's LSTs for a five-acre site as a screening-level analysis to determine whether the emissions would cause or contribute to adverse localized air quality impacts.[7] Because the mass rate look-up tables provided by SCAQMD only provides LSTs at receptor distances of 82, 164, 328, 656, and 1,640 feet, the LSTs for a receptor distance of 82 feet are used to evaluate the potential localized air quality impacts associated with the proposed project's peak day construction emissions. Table 4-31 identifies the daily-localized on-site emissions that are estimated to occur during Alternative 7's worst-case construction scenario prior to the implementation of mitigation measure MM AQ-1. As shown, the daily emissions generated on-site by Alternative 7's worst-case construction scenario would exceed the applicable SCAQMD LST for NOx, PM_{10}, and $PM_{2.5}$ for a five-acre site in SRA 3 in 2017 for the combined scenario as well as both the north and south site independently. The emissions for CO for the northern portion and CO, PM_{10}, and $PM_{2.5}$ for the southern portion would not exceed the applicable SCAQMD LSTs. In 2018, PM_{10} for both sites combined exceeds the LST. For 2019 construction years, no emissions would exceed the screening-level LSTs for a five-acre site.

Table 4-31: Alternative 7 Project Localized Daily Unmitigated Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	**CO (lbs/day)**	**PM_{10}[a] (lbs/day)**	**$PM_{2.5}$[a] (lbs/day)**
Northern Portion Screening Analysis				
2017	623.04	531.15	53.24	29.99
2018	85.07	120.83	7.59	4.19
2019	1.94	2.91	0.38	0.20
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**
Southern Portion Screening Analysis				
2017	411.14	406.75	25.38	17.21
2018	107.50	169.87	11.27	5.47
2019	59.86	76.85	4.40	2.85
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**
Combined Screening Analysis				
2017	1,034.18	937.90	78.62	47.20
2018	192.58	290.70	18.86	9.66
2019	61.80	79.76	4.78	3.05
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**

Table 4-31: Alternative 7 Project Localized Daily Unmitigated Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	CO (lbs/day)	PM_{10}[a] (lbs/day)	$PM_{2.5}$[a] (lbs/day)

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

a. Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.

b. LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 3 and is based on the construction-related disturbance of five acres per day. The five-acre LSTs are used as a screening level criteria as daily disturbance would be greater than five acres across on both the North plus Basin 3 and South plus Basin 3 development areas.

With implementation of mitigation measure MM AQ-1, emissions from NOx, PM_{10}, and $PM_{2.5}$ would still exceed the SCAQMD's LST screening levels for 2017 although PM10 for 2018 would be below the SCAQMD screening levels. Therefore, a refined analysis has been provided for emissions in 2017. Mitigated emissions are shown in Table 4-32. As Alternative 7's worst-case construction emissions would exceed the screening-level LST for NOx, PM_{10}, and $PM_{2.5}$, a more refined dispersion analysis was conducted for the years and pollutants where exceedances occurred. A summary of the assumptions for the refined analysis is provided in the methodology section, Section 3.2.4.1 in Section 3.2 Air Quality, and the detailed assumptions and modeling output files are included in Appendix C1 and C8 (the proposed project) in this Draft EIR.

The results of the refined analysis are also included in Table 4-32. The dispersion modeling shows that while emissions exceed the LST screening levels, the emissions from project construction would not result in a localized significant impact. Therefore, as with the proposed project, localized air quality impacts associated with construction of Alternative 7 would be less than significant, and no additional mitigation (beyond MM AQ-1 discussed previously) would be required.

Table 4-32: Alternative 7 Localized Daily Mitigated & Refined Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	CO (lbs/day)	PM_{10}[a] (lbs/day)	$PM_{2.5}$[a] (lbs/day)
Northern Portion Screening Analysis				
2017	270.25	486.32	19.40	10.96
2018	53.09	103.71	0.54	0.41
2019	1.85	2.00	0.14	0.13
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**
Southern Portion Screening Analysis				
2017	254.13	379.38	14.19	7.88
2018	76.40	159.33	4.51	1.61
2019	57.54	71.47	2.92	2.42
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	No	No
Combined Screening Analysis				
2017	524.38	865.70	33.59	18.84
2018	129.49	263.04	5.06	2.02

Table 4-32: Alternative 7 Localized Daily Mitigated & Refined Construction Emissions

Construction Year	Estimated Maximum Daily On-Site Emissions			
	NO_X (lbs/day)	**CO (lbs/day)**	**PM_{10}[a] (lbs/day)**	**$PM_{2.5}$[a] (lbs/day)**
2019	59.38	73.47	3.06	2.56
Screening Level[b]	197	1,823	15	8
Above Screening Level?	**Yes**	No	**Yes**	**Yes**
	NO_X (ppm)	**CO (ppm)**	**PM_{10}[a] ($\mu g/m^3$)**	**$PM_{2.5}$[a] ($\mu g/m^3$)**
Northern Portion Refined Modeling				
2017	0.11	-	1.41E-03	7.93E-04
Localized Significance Thresholds	0.25	-	10.4	10.4
Significant Impact?	No	-	No	No
Southern Portion Refined Modeling				
2017	0.03	-	-	-
Localized Significance Threshold	0.25	-	10.4	10.4
Significant Impact?	**No**	**-**	**No**	**No**
Combined Refined Modeling				
2017	0.14	-	2.98E-03	1.66E-03
Localized Significance Threshold	0.25	-	10.4	10.4
Significant Impact?	**No**	**-**	**No**	**No**

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

Notes:

a. Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.

b. LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 3 and is based on the construction-related disturbance of five acres per day. The five-acre LSTs are used as a screening level criteria as daily disturbance would be greater than five acres across on both the North plus Basin 3 and South plus Basin 3 development areas.

Localized Construction Air Quality Impacts – TACs

As Alternative 7 construction is identical in peak daily emission levels to the proposed project, the impacts from TACs would also be the same as those reported under the proposed project. Because off-road heavy-duty diesel equipment would be used only for short time periods at each active construction area within the approximate 36-acre project site over the course of the 30-month project construction schedule, project construction is not anticipated to expose any nearby sensitive receptors to substantial emissions of TACs. However, a screening level risk analysis was conducted for the proposed project (and it would also be the same for Alternative 7). As DPM is a subset component of PM_{10}, PM_{10} was used as a proxy for determining the screening level risk. The combined PM_{10} concentration from the refined analysis is $2.98e^{-3}$ $\mu g/m^3$ for construction year 2017 was used as it represents the greatest PM_{10} emissions of all construction years. The concentration was converted to a potential risk assuming a worst case scenario of a child being in the third trimester of development at the beginning of construction and remaining adjacent to the site throughout construction. Using these conservative assumptions, the maximum cancer risk for off-site receptors from construction is 0.90 cases per million people and SCAQMD has a threshold of 10 per million people. The chronic hazard risk (non-cancer health risk) related to DPM for construction would be

0.001 and SCAQMD has a significance threshold of one. Assumptions and calculations for the screening risk modeling is included in Appendix C2 (for the proposed project). These screening level risks are very conservative because this emissions level would only occur on peak construction days and would not occur throughout the construction period as the screening analysis assumes. Therefore, actual risks to off-site receptors would be less than what is reported.

Because the screening risk levels for both cancer and non-cancer risks would not exceed the SCAQMD regulatory thresholds for risk, this impact would be less than significant. The impacts would be similar to the proposed project.

Localized Construction Air Quality Impacts – TACs

As Alternative 7 construction is identical in peak daily emission levels to the proposed project, the impacts from TACs would also be the same as those reported under the proposed project. Because off-road heavy-duty diesel equipment would be used only for short time periods at each active construction area within the approximate 36-acre project site over the course of the 30-month project construction schedule, project construction is not anticipated to expose any nearby sensitive receptors to substantial emissions of TACs. However, a screening level risk analysis was conducted for the proposed project (and it would also be the same for Alternative 7). As DPM is a subset component of PM_{10}, PM_{10} was used as a proxy for determining the screening level risk. The combined PM_{10} concentration from the refined analysis is $2.98e^{-3}$ $\mu g/m^3$ for construction year 2017 was used as it represents the greatest PM_{10} emissions of all construction years. The concentration was converted to a potential risk assuming a worst case scenario of a child being in the third trimester of development at the beginning of construction and remaining adjacent to the site throughout construction. Using these conservative assumptions, the maximum cancer risk for off-site receptors from construction is 0.90 cases per million people and SCAQMD has a threshold of 10 per million people. The chronic hazard risk (non-cancer health risk) related to DPM for construction would be 0.001 and SCAQMD has a threshold of one. Assumptions and calculations for the screening risk modeling is included in Appendix C2 (for the proposed project). These screening level risks are very conservative because this emissions level would only occur on peak construction days and would not occur throughout the construction period as the screening analysis assumes. Therefore, actual risks to off-site receptors would be less than what is reported.

Because the screening risk levels for both cancer and non-cancer risks would not exceed the SCAQMD regulatory thresholds for risk, this impact would be less than significant. The impacts would be similar to the proposed project.

Localized Operational Air Quality Impacts – Criteria Air Pollutants

Operational impacts for Alternative 7 would be reduced compared to that of the proposed project. During operations, the daily amount of localized pollutant emissions generated on-site by Alternative 7 would not be substantial, and are shown in Table 4-33. As shown, the project's total net operational-related emissions generated on-site would not exceed SCAQMD's screening operational LSTs. Thus, no dispersion modeling is required and localized air quality impacts during project operations would be less than significant. The impacts would be similar to the proposed project.

Table 4-33: Alternative 7 Localized Operational Emissions

Development Phases	Estimated Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Existing	13.87	34.46	3.49	1.41
Project	15.89	34.19	4.64	1.85
Net Project Increase	2.02	-0.27	1.16	0.44
Localized Significance Threshold	197	1,823	4	2
Significant Impact?	No	No	No	No
Alternative 7	2.02	-0.27	1.16	0.44
Proposed Project	19.52	42.37	4.82	2.06
Difference	**-17.50**	**-42.64**	**-3.66**	**-1.62**

Source: ESA CalEEMod Modeling, 2015 (see Appendix N)

Localized Operational Air Quality Impacts – TACs

Typical land uses that are sources of acutely and chronically hazardous TACs include industrial manufacturing processes, automotive repair facilities, and dry cleaning facilities using perchloroethylene (which has been banned for use in new dry cleaning facilities). Alternative 7, as with the proposed project, would not include any of these potential sources, although minimal emissions may result from the use of consumer products (similar to existing conditions). Additionally, it is not anticipated that emergency back-up generators would be required for the new land uses associated with Alternative 7. However, if a generator was implemented for a new land use, it would typically only be used during emergencies and may be turned on periodically for maintenance and inspection purposes. Further, emergency back-up generators are subject to SCAQMD regulatory requirements, which limit the allowable TAC emissions to a level that would not result in a significant impact. As such, the periodic operation of the backup generator at the project site, should it be necessary, would not expose surrounding sensitive receptors to substantial pollutant or TAC emissions and the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact AQ-3: Alternative 7 would not create objectionable odors affecting a substantial number of people.

Alternative 7 would be similar to the proposed project with respect to the level of construction activities and subsequent types of operational activities. The main difference between the two is that Alternative 7 would have 29 percent less new development than the proposed alternative. Alternative 7 would be similar, but slightly reduced, in comparison with the proposed project with respect to the level of construction

activities and subsequent operational activities. As with the proposed project, construction odors, including odors associated with dredging activities, could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Alternative 7 as with the proposed project, no on-site sources of emissions would occur as a result of operational activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). Therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Biological Resources

Impact BIO-1: Alternative 7 could have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Under Alternative 7, the amount of net new development would be reduced by approximately 29 percent; however, the level of demolition/construction activities would be similar to that of the proposed project. The level of operational activities would be similar but slightly reduced as compared to the proposed project. Additionally, all of the major elements of the proposed project, including all of the proposed waterside elements, would be constructed under Alternative 7. Therefore, construction and operation impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

As with the proposed project, construction and operation of the landside elements of Alternative 7 would occur in previously developed areas that do not have any sensitive terrestrial biological resources and impacts on terrestrial biological resources would be less than significant. Impacts are the same as the proposed project.

As with the proposed project, the waterside elements would result in temporary significant impacts on marine mammals during pile driving and on grunion if replacement of the timber portion of the Horseshoe Pier occurs during spawning season (March to August). Other construction impacts, including relative to least terns and broomtail grouper, would be less than significant and further reduced with implementation of COA BIO-1 that requires least tern monitoring during construction and COA BIO-2 that requires implementation of BMPs to control turbidity. Impacts are the same as the proposed project.

During operation, as with the proposed project, if the Sportfishing Pier is reconstructed, a net increase in surface coverage would occur. This would reduce open water foraging habitat for waterbirds and is a significant impact. As with the proposed project, the opening of Seaside Lagoon and construction of the small craft boat launch ramp and

associated breakwater would not result in a substantially adverse impact on pinnipeds as a result of increased human-pinniped interactions in comparison to existing conditions; therefore, impacts would be less than significant. While impacts are less than significant without mitigation, as with the proposed project, the City is proposing Condition of Approval COA BIO-2: Marine Mammal Management Program, as part of its Conditional Use Permit procedures. Impacts are the same as the proposed project.

Mitigation Measures

Mitigation measures MM BIO-1: Protection of Marine Mammals During Construction, and MM BIO-2: California Grunion would be implemented to address construction impacts on special status species. Mitigation measure MM BIO-3: Mitigation for Increase in Surface Coverage would be implemented to address an increase in surface coverage if the Sportfishing Pier is replaced. If the Sportfishing Pier is not replaced the operational impacts would be less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-1 would reduce to less than significant impacts caused by noise and vibration from pile-driving associated with the in-water construction of Alternative 7 to negatively affect marine mammals. In addition, although impacts to fish, including broomtail groupers, from pile-driving activities would be less than significant, mitigation measure MM BIO-1 would further reduce the likelihood of impacts to fish (as well as marine mammals) as a result of pile-driving as a soft start would warn mobile aquatic species to leave the area as pile-driving is commenced.

Mitigation measure MM BIO-2 would reduce to less than significant the construction associated with the Horseshoe Pier at or near the sandy beach habitat of Horseshoe Beach to result in direct impacts (including mortality or injury) to grunion if they are present in the project area during their spawning season (March to August).

Mitigation measure MM BIO-3 would reduce to less than significant the net increase in surface coverage that would occur if the Sportfishing Pier is rebuilt. If the Sportfishing Pier is not replaced, impacts would be less than significant without mitigation.

With implementation of mitigation, significant impacts to special-status species during construction and operation would be reduced to less than significant.

Impact BIO-2: Alternative 7 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Under Alternative 7, the amount of net new development would be reduced by approximately 29 percent; however, the level of demolition/construction activities would be similar to that of the proposed project. The level of operational activities would be similar but slightly reduced as compared to the proposed project. Additionally, all of the major elements of the proposed project, including all of the proposed waterside elements, would be constructed under Alternative 7. Therefore, construction and operation impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

As with the proposed project, construction and operation of the landside elements of Alternative 7 would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including riparian habitat, native grassland, wildlife corridors, vernal pool habitat, freshwater marsh, or other sensitive or critical natural community. Therefore, as with the proposed project, there would be no impacts on terrestrial biological resources.

Construction of Alternative 7 would disturb the same amount of marine benthic habitat as the proposed project. As with the proposed project, no significant impacts on marine and riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS would occur. Further, the City is proposing, as with the proposed project, the following Conditions of Approval as part of its Conditional Use Permit procedures: COA BIO-4: Eelgrass; COA BIO-5: Caulerpa; and COA BIO-6: Compliance with NMFS Guidelines for Overwater Structures.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-3: Alternative 7 could have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Under Alternative 7, the amount of net new development would be reduced by approximately 29 percent; however, the level of demolition/construction activities would be similar to that of the proposed project. The level of operational activities would be similar but slightly reduced as compared to the proposed project. Additionally, all of the major elements of the proposed project, including all of the proposed waterside elements, would be constructed under Alternative 7. Therefore, construction and operation impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

As with the proposed project, construction and operation of the landside elements of Alternative 7 would occur in previously developed areas that do not have any federally protected waters or wetlands. Therefore, there would be no impacts on terrestrial biological resources.

The waterside elements of Alternative 7 would be the same as the proposed project. Therefore, as with the proposed project, temporary construction impacts on aquatic vegetation and benthic communities through direct removal or indirect loss or disturbance as a result of turbidity would be less than significant. Further, as with the proposed project, COA BIO-2 would require Alternative 7 to comply with BMPs to control turbidity in the water column adjacent to in-water work.

As with the proposed project, operation of Alternative 7 would result in a substantial adverse effect on federally projected waters and associated habitat if the USACE determines that the Seaside Lagoon is jurisdictional waters. This is a significant impact.

However, as with the proposed project, the ecological function of the lagoon would be improved whether or not the lagoon is determined to be jurisdictional. No adverse impacts to EFH would occur under Alternative 7.

Impacts on federally protected waters or wetlands would be the same as the proposed project during construction and operation.

Mitigation Measures

Mitigation measure MM BIO-4: Fill in Waters of the U.S. would be implemented to address adverse effects on federally protected waters if Seaside Lagoon is determined to be jurisdictional. If Seaside Lagoon is determined to not be jurisdictional waters, impacts are less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-4 would reduce to less than significant the adverse impacts on federally protected waters that would occur if Seaside Lagoon is jurisdictional. If Seaside Lagoon is not jurisdictional, impacts would be less than significant without mitigation.

Impact BIO-4: Alternative 7 could 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.

Under Alternative 7, the amount of net new development would be reduced by approximately 29 percent; however, the level of demolition/construction activities would be similar to that of the proposed project. The level of operational activities would be similar but slightly reduced as compared to the proposed project. Additionally, all of the major elements of the proposed project, including all of the proposed waterside elements, would be constructed under Alternative 7. Therefore, construction and operation impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

Construction and operation of the landside elements of Alternative 7 would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 7 would be the same as the proposed project. Therefore, as with the proposed project, construction of Alternative 7 could result in a significant impact to established native resident or migratory wildlife corridors or native wildlife nursery site if replacement of the timber portion of the Horseshoe Pier occurs during grunion spawning season (March to August).

As with the proposed project, during operation, no substantial changes in harbor configuration or barriers would occur in a manner to affect fish and wildlife movement

patterns or water circulation. As with the proposed project, operational impacts would be less than significant.

Construction and operation impacts would be the same as the proposed project.

Mitigation Measures

Mitigation measure MM BIO-2: California Grunion would be implemented to address construction impacts on wildlife nursery sites should Horseshoe Pier construction that could disturb sandy beach occur during the grunion spawning season.

Residual Impacts

With implementation of mitigation measure MM BIO-2, impacts related to the movement of migratory birds, fish, mammals, or other species, and the use of a native wildlife nursery would be less than significant.

Impact BIO-5: Alternative 7 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Under Alternative 7, the amount of net new development would be reduced by approximately 29 percent; however, the level of demolition/construction activities would be similar to that of the proposed project. The level of operational activities would be similar but slightly reduced as compared to the proposed project. Additionally, all of the major elements of the proposed project, including all of the proposed waterside elements, would be constructed under Alternative 7. Therefore, construction and operation impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

Construction and operation of the landside elements of Alternative 7 would require compliance with local policies and ordinances, including during tree trimming/tree removal activities. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Alternative 7 would be the same as the proposed project. Therefore, as with the proposed project, construction and operation of Alternative 7 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the City is proposing COA BIO-4 and COA BIO-5, which require compliance with policies related to eelgrass and Caulerpa taxifolia as part of the Conditional Use Permit process.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cultural Resources

Impact CUL-1: Alternative 7 would cause a substantial adverse change in the significance of a historical resource.

Under this alternative, the overall amount of development on the site would be reduced by approximately 29 percent of the net new square footage. All the major elements of the proposed project would be built under Alternative 7. Therefore, under this alternative, the potentially historic structures identified under the proposed project would be demolished and this would result in a significant impact. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measures MM CUL-1: Recordation, MM CU-2: Interpretive Program and MM CUL-3: Protection of the Monstad Pier During Construction would be implemented.

Residual Impacts

Similar to the proposed project, implementation of Alternative 7 would result in the demolition of potentially historic structures. While mitigation measures MM CUL-1, MM CUL-2, and MM CUL-3 are proposed, in the case of the full demolition of an historic property, residual impacts to historical resources are considered significant and unavoidable.

Impact CUL-2: Alternative 7 could cause a substantial adverse change in the significance of an unknown archaeological resource.

Based on the documented presence of previous structures in the project site and surrounding area, and the prehistoric resource adjacent to the project site, it is possible that unknown archaeological resources (including buried features or possible structural remnants) may be present within the project site. Construction of landside elements of the proposed project (such as the proposed parking structure in the northern portion of the project site and the demolition and replacement of the parking structure in the southern portion of the site) would be similar under Alternative 7. Although the size of the new parking in structure in the northern portion of the project site would not be as large as under the proposed project, the amount of site disturbance may be similar as compared to the proposed project. Therefore, as with the proposed project, Alternative 7 has the potential to have a substantial adverse change in the significance of an unknown archaeological resource in the northeastern and southeastern portions of the project site. Based upon this potential, impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

Due to the sensitivity for unknown archaeological resources, similar to the proposed project, mitigation measure MM CUL-4: Phase I Archaeological Work, would be implemented to reduce the potential impact of excavation on unknown archaeological resources at the project site to a less than significant level.

Residual Impacts

As with the proposed project, with application of mitigation measure MM CUL-4, the potential impact of excavation on unknown archaeological resources at the project site would be less than significant.

Impact CUL-3: Alternative 7 could directly or indirectly destroy an unknown paleontological resource.

Based on review of preliminary geologic site conditions, although no known paleontological resources have been recorded at the site, earth-moving activities, particularly excavation for the northern and southern parking structures have the potential to have an adverse effect on unknown paleontological resources. Construction of landside elements of the proposed project (such as the proposed parking structure in the northeastern portion of the project site and the demolition and replacement of the parking structure in the southern portion of the site) would be similar under Alternative 7. Therefore, as with the proposed project, impacts to unknown paleontological resources are considered significant.

Mitigation Measures

As with the proposed project, mitigation measure MM CUL-5: Potential to Encounter Unknown Paleontological Resources, would be implemented in order to preserve a representative sample of any scientifically important fossil remains and associated data that might be exposed by excavation at the project site; thereby, reducing the impact of excavation on unknown paleontological resources at the project site to a less than significant level.

Residual Impacts

Similar to the proposed project, with application of mitigation measure MM CUL-5, the potential impact of earth-moving activities from implementation of Alternative 7 on the paleontological resources at the project site would be reduced to a less than significant level.

Geology and Soils

Impact GEO-1: Alternative 7 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

Under Alternative 7, the overall amount of development on the site would be reduced by approximately 29 percent of the net new square footage. Under this alternative the major elements of the proposed project would be built. As with the proposed project, implementation of Alternative 7 would include replacing older non-compliant buildings/structures throughout the project site with new facilities that comply with current buildings codes (including seismic requirements). Therefore, similar to the proposed project, implementation of Alternative 7 would be required to comply with the recommendations detailed in the approved project-specific geotechnical evaluation(s) and

engineering analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria and specified seismic parameters. The design- and project-specific geotechnical evaluation(s), engineering analysis and plans submitted to the City's Building and Safety Division during the design phase would include recommendations and specific conditions that are project site-specific. As part of the Conditional Use Permit process, similar to the proposed project, the City would include Conditions of Approval to require, prior to the issuance of building permits, the City's Building and Safety Division to incorporate the recommendation and conditions from the design and project-specific geotechnical evaluation(s), engineering analysis, and any additional recommendations that come out of this review. The Conditions of Approval would be applied to the implementation of the project through the project plans and the building permit process. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-2: Alternative 7 would not result in substantial soil erosion or the loss of topsoil.

Under Alternative 7, ground-disturbing activities, such as demolition, excavation, trenching, grading, and landscaping would occur similar to the proposed project. As with the proposed project, implementation of Alternative 7 would include compliance with existing regulatory requirements, such as implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, Alternative 7 would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust); therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and operation, potential impacts related to soil erosion or the loss of topsoil would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-3: Alternative 7 would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

Under Alternative 7, although the site plan would be reduced by approximately 29 percent in total square footage as compared to the proposed project, the overall amount of

development on the site would be similar to the proposed project. Similar to the proposed project, Alternative 7 would replace the older non-compliant buildings/structures with new facilities, which comply with applicable design standards and current applicable building codes and would provide safety improvements in comparison to the existing conditions. As with the proposed project, Alternative 7 would comply with applicable CBC requirements and site-specific geotechnical recommendations, and therefore, would not result in on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project. Consequently, impacts under Alternative 7 would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-4: Alternative 7 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Under Alternative 7, similar to the proposed project, there would be mass grading throughout the project site. Similar to the proposed project, construction of Alternative 7 is expected to include the placement of new fill and the removal and re-compaction of unsuitable soil and backfill for utility trenches and other excavations. Likewise, the removal, re-compaction, and/or placement of new fill would occur based on a design- and project-specific evaluation of the expansion potential associated with on-site soils. It would include subsurface soil sampling, laboratory analysis of samples collected, and an evaluation of the laboratory testing results by a geotechnical engineer under direction and review by the City. Therefore, Alternative 7 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 7 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Construction emissions from Alternative 7 would be identical to that of the proposed project. However operational emissions would be reduced from that of the proposed project due to the reduction in land use development. Therefore, the GHG emissions

calculations and significance findings for the proposed project would be the same for Alternative 7 for construction.

The estimated operational GHG emissions resulting from implementation of Alternative 7 are shown in Table 4-34. In accordance with SCAQMD's recommendation, the amortized construction-related GHG emissions were added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown in Table 4.7-8, the total operational emissions would result in net emission increase of 3,521.14 $MTCO_2e$ per year, which would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions. Alternative 7 would have a net increase of 1,096 employees. Therefore, the per service population emissions would equal 3.21 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 project level service population. Therefore, the net increase in GHG emissions resulting from the operation of Alternative 7 is considered to be less than significant. The impacts would be similar, although reduced, as compared to the proposed project.

Table 4-34: Estimated Construction- and Operations-Related GHG Emissions

Emission Source	Estimated Emissions CO_2e (MT/yr)
Construction	
Annual Construction (Amortized over 30 years)	410.97
Existing	
Area Sources	0.01
Energy Consumption	3,212.87
Mobile Sources	10,898.59
Solid Waste	165.33
Water Consumption	220.26
Total Existing Emissions	14,497.06
Alternative 7	
Area Sources	0.02
Energy Consumption[a]	4,203.54
Mobile Sources	12,980.07
Solid Waste	171.99
Water Consumption[b]	251.61
Total Project Emissions	17,607.23
Net Emissions Increase[c]	
Area Sources	0.02
Energy Consumption[a]	990.67
Mobile Sources	2,081.45
Solid Waste	6.66
Water Consumption[b]	31.35
Total Net Emissions Increase	3,110.17
Total Project Emissions	**3,521.14**
Exceed 25,000 MT CO_2e/Year	No
Service Population (SP) (Net)[c]	1,096
Emissions per SP ($MTCO_2e$/yr/SP)	3.21
Threshold ($MTCO_2e$/yr/SP)	4.60
Exceed Threshold	No
Significant?	No

Alternative 7	3.21
Proposed Project	4.10
Difference	-0.89

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes: CO_2e= carbon dioxide equivalent; MT/yr = metric tons per year; %=percent.

a. The energy-related GHG emissions, as estimated by CalEEMod, use 2008 Title 24 energy usage rates. However, according to the CEC, buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards would be 15 percent more energy efficient than the 2008 Standards. As such, this additional reduction in energy consumption was accounted for in the proposed project's estimated GHG emissions associated with energy consumption.

b. GHG emissions reductions associated with water use resulting from compliance with CALGreen requirements, which requires a minimum 20 percent reduction in indoor water use and the provision of irrigation controllers for outdoor water use, were accounted for in CalEEMod model run.

c. Net emissions equal the total project emissions minus the emissions from the existing operations. Because the emissions are compared to the threshold using a net increase, the service population represents the net increase in service population.

BAU Analysis

GHG emissions for the BAU scenario would total 15,193.32 $MMTCO_2e$. This includes amortized construction emissions. Alternative 7-related GHG emissions that accounted for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 11,536.25 $MMTCO_2e$.

Table 4-35 summarizes the GHG emissions for both the BAU scenario and Alternative 7 emissions. As shown, the emissions results in a 24.07 percent reduction from BAU. Therefore, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions. Therefore, Alternative 7 would result in less than significant emissions. Alternative 7 would have less of a reduction from BAU as compared to the proposed project.

Table 4-35: Unmitigated BAU Emissions Comparison

Emission Source	Estimated Emissions CO_2e (MT/yr)
BAU Scenario	
Area Sources	0.02
Energy Consumption	4,549.60
Mobile Sources	9,587.91
Solid Waste	345.86
Water Consumption	298.96
Amortized Construction	410.97
Total BAU Emissions	15,193.32
2020 Buildout Scenario	
Area Sources	0.02
Energy Consumption[a]	3,583.56

Mobile Sources	7,171.11
Solid Waste	172.93
Water Consumption[b]	197.66
Amortized Construction	410.97
Total Emissions	**11,536.25**
Reduction from BAU	24.07 percent
Reduction Threshold (municipal)	15.00 percent
Significant?	**No**
Alternative 7	24.07 percent
Proposed Project	24.17 percent
Difference	-0.10 percent

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes: CO_2e= carbon dioxide equivalent; MT/yr = metric tons per year; %=percent.

a. The energy-related GHG emissions, as estimated by CalEEMod, use 2008 Title 24 energy usage rates. However, according to the CEC, buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards would be 15 percent more energy efficient than the 2008 Standards. As such, this additional reduction in energy consumption was accounted for in the proposed project's estimated GHG emissions associated with energy consumption.

b. GHG emissions reductions associated with water use resulting from compliance with CALGreen requirements, which requires a minimum 20 percent reduction in indoor water use and the provision of irrigation controllers for outdoor water use, were accounted for in CalEEMod model run.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 7 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Although Alternative 7 would result in a smaller site plan (approximately 29 percent reduction in total square footage as compared to the proposed project), Alternative 7 would be built in a similar manner as the proposed project. As with the proposed project, Alternative 7 would be consistent with the CARB Scoping Plan, SB 375, and the Redondo Beach Sustainable Development Strategic Plan. Therefore, Alternative 7 would have a less than significant impact. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 7 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Under this alternative, the overall amount of development on the site would be reduced by approximately 29 percent in total square footage as compared to the proposed project. Under Alternative 7, all of the major elements of the proposed project would be built.

Although the site plan would be reduced, Alternative 7 would be the same as the proposed project with respect to the general level of construction activities and subsequent operational activities. As with the proposed project, compliance with regulatory requirements, including the use of construction BMPs and handling of contaminated soils in the unlikely event they are encountered, would minimize the potential adverse effects to the general public and environment associated with construction of Alternative 7. Alternative 7 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and impacts would be less than significant. The impacts would be similar to the proposed project.

Further, as with the proposed project, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-2: Alternative 7 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

Alternative 7 would be the same as the proposed project with respect to the general level of construction activities and subsequent operational activities. As with the proposed project, although Alternative 7 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In the event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, during construction of Alternative 7, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction. As with the proposed project, implementation of Alternative 7 is not expected to create a significant hazard to the public (including construction workers) or

the environment during construction and exposure to potentially hazardous materials is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-3: Alternative 7 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Alternative 7 would be the same as the proposed project with respect to the general level of construction activities and subsequent operational activities. As with the proposed project, construction of Alternative 7 would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Emergency access in and out of the site, including tsunami evacuation routes for construction workers, would remain during the construction process. As with the proposed project, Alternative 7 includes the new main street and Pacific Avenue Reconnection, which would greatly improve emergency access throughout the project site. As such, Alternative 7 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hydrology and Water Quality

Impact HWQ-1: Alternative 7 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximate 29 percent reduction in total square footage as compared to the proposed project). Alternative 7 would be similar to, although reduced, as compared to the proposed project with respect to the general level of construction activities and subsequent operational activities. Construction-related impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with marine construction), similar to the proposed project, would be less than significant with the compliance of regulatory requirements, including implementation of BMPs, and would ensure that the Alternative 7 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially

degrade water quality. The impacts would be similar to the proposed project, although slightly reduced as less development would be constructed.

As with the proposed project, temporary and localized increases in turbidity would occur during in-water construction activities of Alternative 7, this would not be expected to result in violations of water quality standards, and as such, construction-related impacts to harbor water quality would be less than significant. The impacts would be similar to the proposed project.

Alternative 7 includes the redevelopment of the project site in a manner similar, although reduced, in comparison to what is proposed under the project. Because the building footprint would be reduced under Alternative 7, the imperviousness of the site may be slightly reduced in comparison to the proposed project. This would be a decrease in imperviousness as compared to existing conditions. As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. Runoff from the project site would reduce contamination associated with roadways, parking lots, landscaping, and accumulated atmospheric deposition on impervious surfaces in comparison to existing conditions, and impacts would be less than significant. The impacts would be similar to the proposed project, and may be reduced if there is a greater amount of pervious areas as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 7 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

There are no streams or rivers located on the project site; hence, that aspect of the threshold of significance would be unaffected.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). Alternative 7 would be similar, although reduced, as compared to the proposed project with respect to the general level of construction activities and subsequent operational activities. During construction, BMPs would be implemented to eliminate or reduce pollutant discharges, including sediment, and control stormwater, erosion, and siltation during construction. With adherence to regulations, including implementation of BMPs, Alternative 7 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

Therefore, impacts during construction related activities are considered less than significant. The impacts would be similar to the proposed project.

Alternative 7 includes the redevelopment of the project site in a manner similar, although reduced, in comparison to what is proposed under the project. Because the building footprint would be reduced under Alternative 7, the imperviousness of the site may be slightly reduced in comparison to the proposed project. This would be a decrease in imperviousness as compared to existing conditions. As with the proposed project, the proposed drainage system would be designed to include BMPs in accordance with the City's LID Ordinance, which sets forth standards to treat both the quantity and quality of flow. With adherence to regulations, including LID criteria and implementation of BMPs, Alternative 7 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during operational activities are considered less than significant. The impacts would be similar to the proposed project, and may be reduced if there is a greater amount of pervious areas as compared to the proposed project..

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-3: Alternative 7 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project.

Under this alternative, although the overall amount of development on the site would be less than the proposed project, impacts would be similar. As described for the proposed project, construction of Alternative 7 would not result in polluted runoff. Further, construction BMPs would be implemented to eliminate or reduce pollutant discharges and control stormwater and other runoff during construction. Therefore, no significant construction impacts would occur. The impacts would be similar to the proposed project.

Updates to the existing drainage and stormwater system under Alternative 7 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow. As with the proposed project, the amount of pervious surface area within the project site would increase under Alternative 7 and LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. Impacts would be less than significant. The impacts would be similar to the proposed project, and may be reduced if there is a greater amount of pervious areas, and areas to implementation LID criteria, as compared to the proposed

project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-4: Alternative 7 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

As with the proposed project, under Alternative 7, several new structures would be built in Zones AE, VE, and X. The finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. The pedestrian bridge and boat launch ramp and associated breakwater would be placed within the waters of King Harbor, but would not would impede or redirect flood flows. Therefore, Alternative 7 impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-5: Alternative 7 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

Under Alternative 7, although the landside development square footage would be reduced, the overall amount of development on the site would be similar to the proposed project. Therefore, construction activities associated with Alternative 7 would be similar to those of the proposed project; thereby, the risk associated with inundation by seiche, tsunami, mudflow, or sea level rise would be the same. The impacts would be similar to the proposed project.

The potential exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact. Further, as with the proposed project, the existing potential for wave splash at the northern segment of the protective revetment/wall along Horseshoe Beach would not increase under Alternative 7; however, given that the number of structures and number of people who may be present at this location would increase, wave overtopping at this location is considered a significant impact. The impacts would be similar to the proposed project.

There is the potential for wave uprush to overtop the promenade at the western edge of Seaside Lagoon. However, under the proposed project, the elevation would increase by approximately four feet, which would reduce the incidences and height of wave uprush

that would occur and no increased risk of injury or structure damage would occur. The impacts would be similar to the proposed project.

Alternative 7 includes the demolition of the International Boardwalk and creation of the Pacific Avenue Reconnection. Therefore, while overtopping along Basin 3 would continue to occur along the bulkhead at Basin 3 under Alternative 7, it would not result in increased risk of injury or damage to structures. Therefore, potential impacts associated with inundation at Basin 3 are less than significant. The impacts would be similar to the proposed project.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is materialized. As with the proposed project, sea level rise would not be affected by Alternative 7, and the raising of the promenade and some portions of the site in the northern portion would reduce the potential for hazards and damage associated with future sea level rise as compared to existing conditions. However, there would be more structures and the potential of more people being present at the project site that could be subject to increased risks associated with an increase in sea level rise. Therefore, should the projected high sea level rise occur in the future, the potential impacts are considered significant. The impacts would be similar to the proposed project.

Mitigation Measures

As with the proposed project, mitigation measure MM HWQ-1: Tsunami/Seiche Awareness Notification Program would be implemented to reduce impacts associated with people being exposed to potential hazards associated with a future tsunami or seiche. In addition, as proposed for the project, mitigation measures MM HWQ-2: Wave Uprush Protection, and MM HWQ-3: Sea Level Rise Adaptation Plan, would be implemented to reduce impacts associated with possible inundation associated with wave uprush and future sea level rise.

Residual Impacts

Similar to the proposed project, with implementation of mitigation measure MM HWQ-1, impacts associated with people potentially being exposed to a tsunami or seiche at the project site would be reduced; however, due to natural uncertainties of such an event occurring in the future, it is not possible to conclude that the associated risks would be fully mitigated. As such, the residual impact associated with tsunami or seiche exposure is considered to be significant and unavoidable.

As with the proposed project, MM HWQ-2 requires a four-foot high recurved splash wall anchored at the seaward edge of the promenade landward of the northern portion of the Horseshoe Pier. The splash wall would redirect the up-rushed water back toward the ocean, thereby deflecting the water away from the promenade and preventing inundation from occurring. Installation of a splash wall along the revetment would be subject to Coastal Commission approval. Alternatively, as stated in MM HWQ-2, the Coastal Commission may recommend an alternative method to reduce potential for inundation to occur. Similar to the proposed project, with implementation of mitigation measure MM HWQ-2, impacts associated with possible inundation from wave uprush under current sea levels would be less than significant.

As with the proposed project, MM HWQ-3 requires that a plan be developed to address future sea level rise within the project area by instituting a monitoring

program to assess sea level changes, and by identifying structural options to be implemented if necessary (subject to approval by the applicable regulatory agencies), that reduce risks to people and structures within the coastal zone. Similar to the proposed project, with implementation of mitigation measure MM HWQ-3, impacts associated with possible inundation from wave uprush under future sea level rise conditions would be less than significant.

Land Use and Planning

Impact LUP-1: Alternative 7 would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

Under Alternative 7, the proposed type of development and land uses would be the same as the proposed project and would be consistent with applicable land use and planning documents, including allowable uses, and limits on development intensity, building heights, maximum floor area ratio (FAR), and other applicable development standards.

Similar to the proposed project, Alternative 7 would not conflict with relevant policies in land use and planning documents, including the Public Trust Doctrine (as discussed above), SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. Impacts under Alternative 7, as with the proposed project, would be less than significant.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Noise

Impact NOI-1: Alternative 7 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

From a noise perspective, the nature and location of development under Alternative 7 (illustrated in Figure 4-3) would be similar to f the proposed project. All construction activity would be subject to, and is assumed to comply with, the requirements of the City's Noise Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities under Alternative 7 would not exceed applicable standards, and construction noise impacts occurring under this threshold would be less than significant, as with the proposed project. The type of uses proposed under Alternative 7 would be comparable to those of the proposed project, which are, in general, comparable to those that currently exist at the project site, and all of which would be subject to, and would comply with, the applicable requirements of the Noise Ordinance. As such, continued operation of the project site under Alternative 7 would not exceed applicable standards, and operational noise impacts

occurring under this threshold would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-2: Alternative 7 would expose persons to or generate excessive groundborne vibration or groundborne noise levels.

As shown in Figure 4-3, the areas where currently proposed development would be eliminated under Alternative 7 are, for the most part, removed from sensitive receptors located near the project site, and, consequently, provide little benefit in terms of avoiding or substantially reducing construction-related vibration impacts that would otherwise occur with the proposed project. While Alternative 7 would eliminate Building A at the northeastern tip of the project site, which is in the general vicinity of the Crowne Plaza Hotel, the potentially significant vibration impacts in that area would still be driven by construction of the nearby parking structure which is proposed under both Alternative 7 and the proposed project. As with the proposed project, impacts are significant.

Mitigation Measures

As with the proposed project, mitigation measure NOI-1 Pile Driving Vibration, would be implemented to reduce impacts where there is the potential for vibration-related structural damage to occur.

Residual Impacts

With implementation of MM NOI-1, impacts related to potential structural damage from construction-related vibration, particularly as related to pile driving, would be less than significant.

No feasible mitigation measures are available relative to human annoyance from construction-related vibration, although such impacts would only be short-term and periodic. Nevertheless, as with the proposed project, the impact would be significant and unavoidable.

Impact NOI-3: Alternative 7 would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Operation of Alternative 7 would provide the same types of uses as those of the proposed project, although the extent and intensity of some of the uses would be reduced in certain areas of the site. The reduction in development intensity is not, however, anticipated to result in a notable reduction in on-site noise sources (i.e., the physical extent of development within the site would not be appreciably different, and the type of on-site noise sources would still be the same). While the reduction in development intensity under Alternative 7 would result in a reduction in traffic volumes on the Pacific Avenue Reconnection, as compared to the proposed project, the reduction in traffic would not be

sufficient to avoid the significant roadway noise impact that would occur with the proposed project on Torrance Circle/Boulevard between the project site and Catalina Avenue. Under Alternative 7, the increase in roadway CNEL at that location would be approximately 3.8 dBA, which is less than the 4.4 dBA increase that would occur with the proposed project, but is still greater than the 2 dB threshold of significance. Overall, the operational noise impacts would be slightly less than those of the proposed project, given consideration of the reduced roadway noise impacts. However, impacts would be significant.

Mitigation Measures

As with the proposed project, no mitigation is available for the significant increase in the roadway noise level on Torrance Circle/Boulevard between the project site and Catalina Avenue.

Residual Impacts

Impacts would be significant and unavoidable.

Impact NOI-4: Alternative 7 would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

As noted above in the discussion of Impact NOI-2, the areas where Alternative 7 would eliminate development anticipated under the proposed project are generally removed from noise-sensitive receptors located near the project site and, therefore, do little to reduce the construction noise impacts of the project. Similar to the proposed project, the aspects of the proposed project that may result in significant unavoidable construction noise impacts are the north and south ends of the multi-story parking structures at the eastern edge of the project site. Those elements, and associated construction noise impacts, would still occur under Alternative 7. As such, implementation of Alternative 7 would not avoid or substantially reduce the significant unavoidable construction noise impacts associated with the proposed project.

Mitigation Measures

As with the proposed project, mitigation measures MM NOI-2 through MM NOI-6 would help reduce construction noise impacts.

Residual Impacts

Similar to the proposed project, implementation of mitigation measures MM NOI-2 through MM NOI-5 would help reduce construction noise impacts, and mitigation measure MM NOI-6 could provide for a substantial reduction in construction noise impacts. With a 20 dBA of noise reduction associated with such noise barriers, the attenuated construction noise levels at most of the noise sensitive receptors around the project site would be generally comparable to, if not less than, existing ambient noise levels. The exceptions would be: (1) the western edge of Czulegar Park; (2) the northern edge of Veterans Park; (3) the western portions of the condominium complexes located immediately east of the project site; and (4) the Crowne Plaza Hotel during construction of the upper levels of multi-story structures within the project site. At Czulegar Park, the 20 dBA noise reduction offered by MM NOI-5 would largely, but not fully, reduce the noise exposure impact to a level that is less than significant. Similarly, a 20 dBA noise reduction offered by placement of a noise

barrier along the northern edge of Veterans Park would largely, but not fully, address the construction noise impact. Any noise barrier installed for the condominiums east of the site would be unable achieve a construction noise level reduction that would make the impact less than significant because of the condominium's close proximity to the project site and their elevated and multi-story nature . A noise barrier located along the edge of the project site, which is approximately 20+/- feet lower than the base elevation of the condominiums, could not effectively shield/attenuate construction noise from reaching the westernmost portions of those condominium complexes, and even if it did, a 20 dBA noise reduction would not be sufficient. With regard to differences in elevation, construction of the upper levels of multi-story structures within the eastern portions of the project site, such as Buildings A and D and the parking structures at the north and south ends of the site, may expose adjacent noise sensitive receptors, such as the Crowne Plaza Hotel and the condominiums east of the site, to temporary periods of construction noise that cannot be shielded/attenuated by construction noise barriers.

Based on the above, similar to the proposed project, implementation of Alternative 7 would result in a significant and unavoidable construction noise impact.

Public Services

Impact PBS-1: Alternative 7 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). As under the proposed project, the new buildings constructed on-site would offer an improvement related to fire protection, including the inclusion of fire suppression systems (e.g., such as use of fire resistant building materials and installation of fire alarms and detection systems and automatic fire sprinklers), and on-site water mains and fire hydrants would be modified to conform to current requirements. Further, the new main street and Pacific Avenue Reconnection would be implemented, which would greatly improve emergency access and protection service throughout the project site.

As with the proposed project, current staffing levels and facilities are adequate to meet the anticipated needs of the proposed project, and thus the proposed project is not expected to result in the need for new facilities. Alternative 7 is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact PBS-2: Alternative 7 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Alternative 7 would be the same as the proposed project with respect to the general level of construction activities and subsequent operational activities. Under Alternative 7, as with the proposed project, the Pier Police Sub-Station would be relocated within the project site, with additional staff and extended hours as needed. Alternative 7 also includes private security that would serve the commercial development and hotel and would contribute to on-site safety on an around-the-clock basis. The new development under Alternative 7 would accommodate the new sub-station and on-site private security, and no construction or expansion of facilities not already addressed as part of the project would be required. Therefore, it is not anticipated that continued police staffing at the sub-station would result in diminished service elsewhere in the City.

As with the proposed project, other security measures inherent in the design of Alternative 7 increase site safety by incorporating CPTED strategies aimed at deterring criminal behavior by designing the physical environment in ways that reduce identifiable crime risks and provide an atmosphere of safety and the new main street and the Pacific Avenue Reconnection would greatly improve emergency access and protection service throughout the project site.

Therefore, with replacement of the police sub-station on-site the Alternative 7 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Recreation

Impact REC-1: Alternative 7 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). As with the proposed project, the recreational users that are temporarily displaced during project construction would not

cause a substantial increase in use at any particular recreational facility, but would instead be expected to disperse throughout the area. Therefore, construction of Alternative 7 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and impacts would be less than significant. Furthermore, as with the proposed project, as part of the Conditional Use Permit process, the City would require a Conditions of Approval, which would require prior to construction temporary relocation of hand launch and dinghy facilities during the construction of opening the Seaside Lagoon to the harbor, as well as slip transition assistance for those vessels currently within the Redondo Beach Marina in Basin 3.

As with the proposed project, Alternative 7 would help with the local and regional demand for recreation and park services by improving and expanding existing recreational resources; thereby providing a benefit to the local community and region as a whole. Therefore, Alternative 7 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As such, impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact REC-2: Alternative 7 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative.

Alternative 7 would not include construction of any parks or recreational facilities beyond those already described under the proposed project (i.e., modified Seaside Lagoon, new boat launch ramp, new pedestrian and bicycle paths, and enhanced high-quality public open space). In addition, no construction or expansion of recreational facilities not already addressed as part of the project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary would occur as part of, or because of, the project). As with the proposed project, Alternative 7 would not result in population growth that would increase the demand for new or expanded recreational facilities; therefore, Alternative 7 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the project and thus no impacts would occur. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Traffic and Transportation

Impact TRA-1: Alternative 7 could exceed the applicable significance thresholds.

Alternative 7 reduces the project density with 50 percent less net new square feet of land use. Table 4-36 details the trip generation estimates for the Reduced Density Alternative. A total of 6,831 daily, 132 AM peak hour, and 412 PM peak hour trips are estimated to occur under Alternative 7, as compared to 12,550 daily, 344 AM peak hour, and 693 PM peak hour trips that would occur under the proposed project. Aside from less net new land uses, and associated reduced trip generation, this alternative would not be otherwise different from the proposed project, and does include the Pacific Avenue Reconnection, so, therefore, uses the same trip distribution pattern as the proposed project.

Table 4-36: Alternative 7 (Reduced Density) Trip Generation Estimates

Designation	Size	Units	Trip Generation Rates			Trip Generation Estimates						
							AM Peak Hour			PM Peak Hour		
			Daily	AM Peak Hour	PM Peak Hour	Daily	In	Out	Total	In	Out	Total
Proposed Uses												
Retail [a]	60	KSF	Equation			4,872	71	43	114	204	221	425
Movie Theater [b]	495	Seats	1.80	0.00	0.07	891	0	0	0	19	16	35
Quality Restaurant[c]	99	KSF	89.95	0.81	7.49	8,905	44	36	80	497	245	742
High Turnover Rest. [d]	32	KSF	127.15	10.81	9.85	4,069	190	156	346	189	126	315
Hotel [e]	90	Rooms	8.17	0.53	0.60	735	28	20	48	28	26	54
Office [f]	43	KSF	11.03	1.56	1.49	474	59	8	67	11	53	64
Total Trips (base ITE rates)						19,946	392	263	655	948	687	1,635
MXD+ Model calibration of base ITE rates reflecting project & site specific characteristics						-3,591	-69	-47	-116	-314	-228	-542
Boat Launch Ramp	40	Stalls				160	8	4	12	4	8	12
Alternative 7 Vehicle Trips						**16,515**	**331**	**220**	**551**	**638**	**467**	**1,105**
Existing Active Uses												
Retail [a]	31.005	KSF	Equation			3,172	47	29	76	131	142	273
Quality Restaurant[c]	45.094	KSF	89.95	0.81	7.49	4,056	20	17	37	226	112	338
High Turnover Rest. [d]	30.083	KSF	127.15	10.81	9.85	3,825	179	146	325	178	118	296
Office [f]	71.174	KSF	11.03	1.56	1.49	785	98	13	111	18	88	106
Total Trips (base ITE rates)						11,838	344	205	549	553	460	1,013
MXD+ Model calibration of base ITE rates reflecting						-2,154	-81	-49	-130	-175	-145	-320

project & site specific characteristics							
Existing Vehicle Trips	**9,684**	**263**	**156**	**419**	**378**	**315**	**693**
NET NEW EXTERNAL TRIPS UNDER ALTERNATIVE 7	***6,831***	***68***	***64***	***132***	***260***	***152***	***412***

Notes:

[a] Trip generation fitted curve equation for Land Use 820 from *Trip Generation*, 9th *Edition*, Institute of Transportation Engineers, 2012. Existing retail includes the arcade.

[b] Trip generation rate for Land Use 444 from *Trip Generation*, 9th *Edition*, Institute of Transportation Engineers, 2012. For a worst-case weekday analysis, ITE Friday trip generation rates for the movie theater use have been used. For the daily trip rate, the weekday daily rate was obtained from SANDAG's Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (SANDAG, April 2002).

[c] Trip generation rate for Land Use 931 from *Trip Generation*, 9th *Edition*, Institute of Transportation Engineers, 2012

[d] Trip generation rate for Land Use 932 from *Trip Generation*, 9th *Edition*, Institute of Transportation Engineers, 2012. Existing restaurant uses at the project site include a variety of types, include quality restaurant (typically closed for breakfast on weekdays), and high-turnover restaurant (typically open for breakfast). Assumed 60% quality restaurant and 40% high turnover restaurant. Quality restaurants generate fewer trips than high-turnover restaurants, so applying this 60/40 split for the existing uses results in a smaller existing trip generation credit applied to future uses.

[e] Trip generation rate for Land Use 310 from *Trip Generation*, 9th *Edition*, Institute of Transportation Engineers, 2012

[f] Trip generation rate for Land Use 710 from *Trip Generation*, 9th *Edition*, Institute of Transportation Engineers, 2012

[g] Gross leasable area that was occupied at the time baseline traffic counts were collectied (Summer 2013, Spring 2014). Because fewer spaces were occupied in Summer 2013, and therefore the trip generation credit for existing uses would be smaller) the summer 2013 GLA data were used.

Tables 4-37 and 4-38 present the signalized and unsignalized intersection analysis for Existing Plus Alternative 7 conditions. Tables 4-39 and 4-40 present the signalized and unsignalized intersection analysis for Cumulative Plus Alternative 7 conditions. Compared with the proposed project, intersection operations at signalized and unsignalized intersections would be improved due to the reduced project trips added to the intersections.

Under the Existing Plus Alternative 7 scenario, the following two intersections would no longer be significantly impacted compared with the proposed project, but all other intersections identified in the analysis of the proposed project would be still be significantly impacted under Alternative 7, although at a lesser level than the proposed project.

- Intersection 10 - PCH & Catalina Avenue
- Intersection 26 - PCH & Torrance Boulevard

Under the Cumulative Plus Alternative 7 conditions, all AM peak hour significant impacts would be avoided, compared to the proposed project, but PM peak hour significant impacts would remain at four of the five intersections impacted by the project. The significant impact at Intersection 26 – Pacific Coast Highway & Torrance Boulevard that would occur with the proposed project would be avoided under Alternative 7.

As with the proposed project, impacts to freeway facilities would be less than significant.

Table 4-37: Existing Plus Alternative 7 (Reduced Density) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Existing		Existing plus Alt 7		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
4. Harbor Dr/Hermosa Ave & Herondo St	AM	A	0.518	A	0.533	0.015	NO
	PM	A	0.491	A	0.552	0.061	NO
7. Pacific Coast Hwy/Catalina Ave & Herondo St/Anita St	AM	D	0.885	D	0.890	0.005	NO
	PM	D	0.896	**E**	**0.903**	0.007	NO
8. Prospect Ave & Anita St	AM	**E**	**0.989**	**F**	**1.013**	0.024	**YES**
	PM	B	0.664	B	0.673	0.009	NO
9. Harbor Dr & Yacht Club Way	AM	A	0.352	A	0.366	0.014	NO
	PM	A	0.477	A	0.527	0.050	NO
10. Pacific Coast Hwy & Catalina Ave	AM	D	0.855	D	0.860	0.005	NO
	PM	D	0.883	D	0.894	0.011	NO
11. Harbor Dr & Marina Way	AM	A	0.281	A	0.295	0.014	NO
	PM	A	0.459	A	0.508	0.049	NO
12. Catalina Ave & Gertruda Ave	AM	A	0.371	A	0.376	0.005	NO
	PM	A	0.540	A	0.567	0.027	NO
15. Harbor Dr & Portofino Way/Beryl St	AM	A	0.317	A	0.342	0.025	NO
	PM	A	0.592	B	0.609	0.017	NO
16. Catalina Ave & Beryl St	AM	A	0.374	A	0.386	0.012	NO
	PM	A	0.565	A	0.565	0.000	NO
19. Pacific Coast Hwy & Beryl St	AM	C	0.757	C	0.761	0.004	NO
	PM	**E**	**0.901**	**E**	**0.916**	0.015	**YES**
21. Catalina Ave & Carnelian St	AM	A	0.438	A	0.406	-0.032	NO
	PM	A	0.465	A	0.396	-0.069	NO
22. Catalina Ave & Diamond St	AM	A	0.430	A	0.398	-0.032	NO
	PM	A	0.444	A	0.366	-0.078	NO
23. Catalina Ave & Emerald St	AM	A	0.453	A	0.421	-0.032	NO
	PM	A	0.457	A	0.381	-0.076	NO
24. Pacific Coast Hwy & Garnet St	AM	B	0.691	B	0.692	0.001	NO
	PM	B	0.663	B	0.665	0.002	NO
25. Catalina Ave & Torrance Blvd	AM	A	0.424	A	0.448	0.024	NO
	PM	A	0.475	A	0.511	0.036	NO
26. Pacific Coast Hwy & Torrance Blvd	AM	D	0.818	D	0.822	0.004	NO
	PM	D	0.848	D	0.860	0.012	NO

Table 4-37: Existing Plus Alternative 7 (Reduced Density) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Existing		Existing plus Alt 7		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
27. Helberta Ave/Camino Real & Torrance Blvd	AM	A	0.476	A	0.479	0.003	NO
	PM	A	0.518	A	0.525	0.007	NO
28. Prospect Ave & Torrance Blvd	AM	D	0.819	D	0.820	0.001	NO
	PM	C	0.742	C	0.747	0.005	NO
29. Catalina Ave & Pearl St	AM	A	0.386	A	0.388	0.002	NO
	PM	A	0.373	A	0.377	0.004	NO
31. Pacific Coast Hwy & Sapphire St/Francisca Ave	AM	B	0.611	B	0.614	0.003	NO
	PM	B	0.650	B	0.656	0.006	NO
34. Pacific Coast Hwy & Knob Hill Ave	AM	B	0.655	B	0.658	0.003	NO
	PM	B	0.698	C	0.705	0.007	NO
35. Harbor Dr & Pacific Ave	AM	A	--	A	0.268	--	--
	PM	A	--	A	0.387	--	--
36. Pacific Coast Hwy & Palos Verdes Blvd	AM	D	0.850	D	0.854	0.004	NO
	PM	**E**	**0.957**	**E**	**0.968**	0.011	**YES**
37. Pacific Coast Hwy & 2nd St	AM	B	0.695	B	0.698	0.003	NO
	PM	B	0.696	C	0.707	0.011	NO
38. Pacific Coast Hwy & 10th/Aviation	AM	C	0.777	C	0.780	0.003	NO
	PM	C	0.743	C	0.753	0.010	NO
39. Pacific Coast Hwy & Pier/14th St	AM	A	0.565	A	0.568	0.003	NO
	PM	C	0.703	C	0.714	0.011	NO
40. Pacific Coast Hwy & 16th St	AM	A	0.526	A	0.529	0.003	NO
	PM	B	0.636	B	0.647	0.011	NO
41. Pacific Coast Hwy & Prospect Ave	AM	C	0.704	C	0.707	0.003	NO
	PM	C	0.775	C	0.785	0.010	NO

Note: Intersections operating at LOS E or F are noted in **Bold.**

Table 4-38: Existing Plus Alternative 7 (Reduced Density) Conditions Level Of Service – Unsignalized Intersections

Intersection	Traffic Control	Peak Period	Existing		Existing plus Alt 7		Change in Delay (sec)	Significant Impact?
			LOS	Delay (sec)	LOS	Delay (sec)		
1. Hermosa Ave & 2nd St	AWSC	AM	B	11.2	B	11.4	0.2	NO
		PM	B	10.5	B	11.0	0.5	NO
2. Monterey Blvd & 2nd St	AWSC	AM	A	8.3	A	8.3	0.0	NO
		PM	A	9.7	A	9.7	0.0	NO
3. Valley Dr & 2nd St	AWSC	AM	A	9.3	A	9.4	0.1	NO
		PM	C	19.3	C	20.8	1.5	NO
5. Monterey Blvd & Herondo St	TWSC	AM	C	15.3	C	15.7	0.4	NO
		PM	C	19.3	C	21.4	2.1	NO
6. Valley Dr/Francisca Ave & Herondo St	AWSC	AM	B	12.7	B	12.9	0.2	NO
		PM	C	23.4	D	26.4	3.0	NO
13. Catalina Ave & Francisca Ave	TWSC	AM	C	17.0	C	17.6	0.6	NO
		PM	**E**	**38.0**	**E**	**44.5**	6.5	NO
14. Catalina Ave & Broadway	TWSC	AM	C	18.1	C	18.8	0.7	NO
		PM	C	24.1	D	27.3	3.2	NO
17. Broadway & Beryl St	TWSC	AM	B	11.8	B	12.0	0.2	NO
		PM	B	12.4	B	12.9	0.5	NO
18. Francisca Ave & Beryl St	TWSC	AM	B	12.2	B	12.4	0.2	NO
		PM	C	18.1	C	19.3	1.2	NO
20. Pacific Ave & Harbor Dr	AWSC	AM	A	7.7	A	7.4	-0.3	NO
		PM	A	8.7	A	8.1	-0.6	NO
30. Camino Real & Pearl St	AWSC	AM	A	8.9	A	8.9	0.0	NO
		PM	A	9.0	A	9.0	0.0	NO
32. Esplanade & Knob Hill Ave	AWSC	AM	A	9.1	A	9.1	0.0	NO
		PM	B	10.4	B	10.4	0.0	NO
33. Catalina Ave & Knob Hill Ave	AWSC	AM	B	11.2	B	11.3	0.1	NO
		PM	B	12.5	B	12.8	0.3	NO

AWSC = All-way stop control TWSC = 2-way stop control

Note: For unsignalized intersections, the worst case approach delay for two-way stop controlled, and average intersection delay for all-way stop controlled is reported.

Intersections operating at LOS E or F are noted in **Bold**.

Table 4-39: Cumulative Plus Alternative 7 (Reduced Density) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Cumulative		Cumulative plus Alt 7		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
4. Harbor Dr/Hermosa Ave & Herondo St	AM	A	0.528	A	0.543	0.015	NO
	PM	A	0.504	A	0.565	0.061	NO
7. Pacific Coast Hwy/Catalina Ave & Herondo St/Anita St	AM	**E**	**0.918**	**E**	**0.925**	0.007	NO
	PM	**F**	**1.022**	**F**	**1.048**	0.026	**YES**
8. Prospect Ave & Anita St	AM	B	0.689	B	0.694	0.005	NO
	PM	B	0.678	B	0.687	0.009	NO
9. Harbor Dr & Yacht Club Way	AM	A	0.358	A	0.372	0.014	NO
	PM	A	0.488	A	0.538	0.050	NO
10. Pacific Coast Hwy & Catalina Ave	AM	D	0.878	D	0.882	0.004	NO
	PM	**E**	**0.912**	**E**	**0.922**	0.010	**YES**
11. Harbor Dr & Marina Way	AM	A	0.286	A	0.300	0.014	NO
	PM	A	0.471	A	0.520	0.049	NO
12. Catalina Ave & Gertruda Ave	AM	A	0.377	A	0.381	0.004	NO
	PM	A	0.551	A	0.578	0.027	NO
15. Harbor Dr & Portofino Way/Beryl St	AM	A	0.321	A	0.348	0.027	NO
	PM	B	0.602	B	0.619	0.017	NO
16. Catalina Ave & Beryl St	AM	A	0.384	A	0.395	0.011	NO
	PM	A	0.598	A	0.597	-0.001	NO
19. Pacific Coast Hwy & Beryl St	AM	C	0.777	C	0.782	0.005	NO
	PM	**E**	**0.932**	**E**	**0.946**	0.014	**YES**
21. Catalina Ave & Carnelian St	AM	A	0.445	A	0.412	-0.033	NO
	PM	A	0.472	A	0.403	-0.069	NO
22. Catalina Ave & Diamond St	AM	A	0.438	A	0.405	-0.033	NO
	PM	A	0.451	A	0.370	-0.081	NO
23. Catalina Ave & Emerald St	AM	A	0.459	A	0.426	-0.033	NO
	PM	A	0.465	A	0.387	-0.078	NO
24. Pacific Coast Hwy & Garnet St	AM	C	0.711	C	0.711	0.000	NO
	PM	B	0.686	B	0.688	0.002	NO
25. Catalina Ave & Torrance Blvd	AM	A	0.431	A	0.455	0.024	NO
	PM	A	0.483	A	0.519	0.036	NO
26. Pacific Coast Hwy & Torrance Blvd	AM	D	0.848	D	0.853	0.005	NO

Table 4-39: Cumulative Plus Alternative 7 (Reduced Density) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Cumulative		Cumulative plus Alt 7		Change in V/C	Significant Impact?
		LOS	V/C	LOS	V/C		
	PM	D	0.892	**E**	**0.904**	0.012	NO
27. Helberta Ave/Camino Real & Torrance Blvd	AM	A	0.487	A	0.490	0.003	NO
	PM	A	0.534	A	0.540	0.006	NO
28. Prospect Ave & Torrance Blvd	AM	D	0.834	D	0.835	0.001	NO
	PM	C	0.755	C	0.760	0.005	NO
29. Catalina Ave & Pearl St	AM	A	0.392	A	0.393	0.001	NO
	PM	A	0.379	A	0.382	0.003	NO
31. Pacific Coast Hwy & Sapphire St/Francisca Ave	AM	B	0.635	B	0.638	0.003	NO
	PM	B	0.678	B	0.685	0.007	NO
34. Pacific Coast Hwy & Knob Hill Ave	AM	B	0.682	B	0.685	0.003	NO
	PM	C	0.736	C	0.743	0.007	NO
35. Harbor Dr & Pacific Ave	AM	--	--	A	0.272	--	--
	PM	--	--	A	0.393	--	--
36. Pacific Coast Hwy & Palos Verdes Blvd	AM	D	0.878	D	0.883	0.005	NO
	PM	**E**	**0.997**	**F**	**1.009**	0.012	**YES**
37. Pacific Coast Hwy & 2nd St	AM	C	0.707	C	0.710	0.003	NO
	PM	C	0.717	C	0.728	0.011	NO
38. Pacific Coast Hwy & 10th/Aviation	AM	C	0.792	C	0.795	0.003	NO
	PM	C	0.757	C	0.767	0.010	NO
39. Pacific Coast Hwy & Pier/14th St	AM	A	0.574	A	0.577	0.003	NO
	PM	C	0.717	C	0.728	0.011	NO
40. Pacific Coast Hwy & 16th St	AM	A	0.536	A	0.539	0.003	NO
	PM	B	0.647	B	0.658	0.011	NO
41. Pacific Coast Hwy & Prospect Ave	AM	C	0.723	C	0.726	0.003	NO
	PM	C	0.793	D	0.803	0.010	NO

Intersections operating at LOS E or F are noted in **Bold**.

Table 4-40: Cumulative Plus Alternative 7 (Reduced Density) Conditions Level Of Service – Unsignalized Intersections

Intersection	Traffic Control	Peak Period	Cumulative		Cumulative plus Alt 7		Change in Delay (sec)	Significant Impact?
			LOS	Delay (sec)	LOS	Delay (sec)		
1. Hermosa Ave & 2nd St	AWSC	AM	B	11.4	B	11.5	0.1	NO
		PM	B	10.6	B	11.1	0.5	NO
2. Monterey Blvd & 2nd St	AWSC	AM	A	8.3	A	8.4	0.1	NO
		PM	A	9.7	A	9.8	0.1	NO
3. Valley Dr & 2nd St	AWSC	AM	A	9.4	A	9.5	0.1	NO
		PM	C	20.5	C	22.2	1.7	NO
5. Monterey Blvd & Herondo St	TWSC	AM	C	15.6	C	16.0	0.4	NO
		PM	C	20.0	C	22.3	2.3	NO
6. Valley Dr/Francisca Ave & Herondo St	AWSC	AM	C	16.6	C	17.5	0.9	NO
		PM	**E**	**43.3**	**E**	**47.7**	4.4	**YES**
13. Catalina Ave & Francisca Ave	TWSC	AM	C	17.4	C	18.0	0.6	NO
		PM	**E**	**40.3**	**E**	**47.3**	7.0	NO
14. Catalina Ave & Broadway	TWSC	AM	C	18.7	C	19.4	0.7	NO
		PM	D	25.3	D	28.6	3.3	NO
17. Broadway & Beryl St	TWSC	AM	B	11.9	B	12.1	0.2	NO
		PM	B	12.5	B	13.0	0.5	NO
18. Francisca Ave & Beryl St	TWSC	AM	B	12.3	B	12.5	0.2	NO
		PM	C	18.5	C	19.7	1.2	NO
20. Pacific Ave & Harbor Dr	AWSC	AM	A	7.7	A	7.4	-0.3	NO
		PM	A	8.7	A	8.3	-0.4	NO
30. Camino Real & Pearl St	AWSC	AM	A	9.0	A	9.0	0.0	NO
		PM	A	9.1	A	9.1	0.0	NO
32. Esplanade & Knob Hill Ave	AWSC	AM	A	9.2	A	9.2	0.0	NO
		PM	B	10.6	B	10.6	0.0	NO
33. Catalina Ave & Knob Hill Ave	AWSC	AM	B	11.5	B	11.6	0.1	NO
		PM	B	13.1	B	13.4	0.3	NO

AWSC = All-way stop control TWSC = 2-way stop control

Note: For unsignalized intersections, the worst case approach delay for two-way stop controlled, and average intersection delay for all-way stop controlled is reported.

Intersections operating at LOS E or F are noted in **Bold**.

Mitigation Measures

MM TRA-1 through MM TRA-4 and MM TRA-6 presented in Section 3.13.4.2 would be implemented to address the significant impacts to operational traffic that would occur under Alternative 7. MM TRA-7 would be implemented to address parking impacts.

Residual Impacts

Implementation of MM TRA-1 through MM TRA-4 and MM TRA-6 would reduce operational traffic to less than significant at all intersections. MM TRA-7 would reduce impacts related to parking to less than significant.

Impact TRA-2: Alternative 7 would not conflict with an applicable congestion management program.

As noted above, Alternative 7 would have less generation and impacts than the proposed project. Similar to the proposed project, Alternative 7 would not conflict with an applicable congestion management program.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRA-3: Alternative 7 could substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Under Alternative 7, development of the new small boat launch ramp and associated breakwater would occur, as would also be the case for the proposed project. As such, implementation of Alternative 7 would pose the same potential for a safety hazard associated with the interface of paddle boarders and small boats near the launch ramp. A significant impact would occur.

Mitigation Measures

MM TRA-8 would be implemented and the slow speeds in the area of the entrance of the proposed small craft boat launch facility and the open Seaside Lagoon would serve to enhance safety and reduce the potential for interface conflicts between boats and personal recreational watercraft operating in proximity to each other.

Residual Impacts

With implementation of MM TRA-8, impacts would be less than significant.

Utilities

Impact UTL-1: Alternative 7 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). The level of construction activities would be similar to the proposed project; however, the subsequent operational activities would be less than the proposed project. As with the proposed project, the wastewater generation would increase under Alternative 7, but the new on-site system would be designed to provide adequate capacity to handle the wastewater increase and maintain the same flow conditions as currently exist on-site, and impacts would be less than significant.

The amount of wastewater generated under Alternative 7 would be less than the proposed project, the upgrades to the sewer infrastructure (including sewer lines and sewer lift stations) would be similar to the proposed project. With the on-site improvements and lift station upgrades, and the capacity at the JWPCP, adequate capacity exists under Alternative 7, as with the proposed project. Therefore, the wastewater generated by Alternative 7 would not exceed the wastewater conveyance and treatment at the project site and would not result in the construction of new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. The impact is less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: Alternative 7 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). The level of construction activities would be similar to the proposed project; however, the subsequent operational activities would be less than the proposed project. Therefore, the anticipated water demand associated with Alternative 7 construction would be similar to the proposed project. The water supply assessment prepared for the proposed project determined that the increase in water demand would not negatively impact future water supply because CalWater would continue to effectively manage its water demand and significantly expand its water conservation programs that focus on reducing urban water use. As such, Alternative 7 would not exceed existing potable water supplies, entitlements and resources, or require

and result in new and expanded entitlements, and impacts would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: Alternative 7 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). The level of construction activities would be similar to the proposed project; however, the subsequent operational activities would be less than the proposed project. Therefore, the anticipated amount of solid waste generation during construction associated with the proposed project would be similar for Alternative 7. The inert landfill which takes in most of the construction and demolition debris in Los Angeles County has sufficient capacity available to accommodate construction waste that would be generated under Alternative 7. Likewise, as described for the proposed project, Los Angeles County has solid waste capacity that exceeds 15 years, and Alternative 7 would not exceed existing capacity. Thus, Alternative 7 would not create a need for additional solid waste disposal facilities to adequately handle solid waste generated during construction or operations. No significant impact on the landfills within the region is anticipated as a result of Alternative 7. The impacts would be similar to the proposed project.

As with the proposed project, operations under Alternative 7 would comply with the existing waste diversion programs of the City, County, and Athens Services (the City's current contract provider for solid waste disposal). The City's contractual agreement with Athens Services obligates Athens Services to guarantee that the City will exceed the diversion requirements set forth in AB 939. Therefore, as with the proposed project, Alternative 7 would comply with the established diversion requirements and Alternative 7 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. Impacts relative to adopted solid waste diversion programs and policies would be less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: Alternative 7 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Under Alternative 7, all of the major elements of the proposed project would be built; however, this alternative would result in a total of 371,910 square feet of development at the project site (which equals an approximately 29 percent reduction in total square footage as compared to the proposed project). The level of construction activities would be similar to the proposed project; however, the subsequent operational activities would be less than the proposed project. Alternative 7 would be similar as the proposed project with respect to the level of construction activities; however, subsequent operational activities would be less than the proposed project. Therefore, the anticipated electricity demand and natural gas demand associated with the proposed project would be the same for Alternative 7. As described for the proposed project, there are adequate electricity and natural gas supplies available to serve the development that would be implemented under Alternative 7. Further, with the exception of on-site connections needed for the new buildings and structures, Alternative 7 would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore, implementation of Alternative 7 would not exceed the capacity of electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.4.8 Alternative 8 – Alternative Small Craft Boat Launch Ramp Facilities Within King Harbor

4.4.8.1 Background

A public boat launch ramp facility has been contemplated for King Harbor for many years, and is required to be implemented under the City's Local Coastal Program. A number of studies have been conducted over the years to identify potential locations for such a ramp. Several potential locations have been identified and studied over the years, but given that the harbor is largely built-out, but the options are limited by land and waterside constraints. Landside constraints include providing adequate vehicle access and parking, including vessel loading and off-loading and trailer turn-around. Waterside constraints include adequate space for the ramp and vessel maneuvering, navigational safety, and wave and surge exposure.

In developing Alternative 8, multiple locations and boat launch ramp facility designs were considered based on past studies and a new investigation. As discussed further below, four possible locations were identified as potential locations for a boat launch ramp facility, considering navigational safety, site constraints (such as location of

existing boat slips and other physical features), and other factors such as typical wave patterns and storm conditions: Mole A, Mole B, Mole C, and Mole D.

4.4.8.2 Description of Alternative 8

Alternative 8 includes all or most of the elements of the proposed project with an alternate location and/or design for the proposed small craft boat launch ramp facility. Under each of Alternative 8 options, most elements of the proposed project would be implemented and are considered in the impacts analysis of each alternative. Any changes in the proposed project that occur under the boat ramp options as identified below. In addition to the proposed project, the Alternative 8 boat launch ramp facility options would also be compatible with Alternatives 4 through 7.As shown on Figure 4-4, of the four possible locations, Mole C and Mole D are located within the project site, while Mole A and Mole B are located to the north. Mole A is located along the North (Outer) Breakwater at the existing King Harbor Yacht Club. There are existing docks as well as parking and yacht club facilities at this site. Mole B is the site of Moonstone Park and the Harbor Patrol Headquarters. Portofino Marina boat slips are located to the east of Mole B and the main channel is to the west.

After further review, it was determined that potential environmental impacts associated with Mole B would be greater than the proposed project, so Mole B was eliminated from further consideration. Specifically, locating a small craft boat launch ramp at Mole B could result in potential significant impacts on emergency services, by disruption of ingress and egress for land vehicles from Fire Station 3/Harbor Patrol Headquarters and use of the helipad at Mole B. Further, locating a boat launch ramp at Mole B would require removal of up to approximately 22 boat slips and marina parking stalls, and require removal of a portion of Moonstone Park. While a one-lane small craft boat launch ramp and parking could be accommodated by removing only a small portion of Moonstone Park, a two-lane ramp would require converting the entire Moonstone Park to a parking lot.

At the remaining three locations (Mole A, Mole C, and Mole D), several different designs were selected for further evaluation, resulting in six options analyzed under Alternative 8. The six small craft boat ramp design options by location are described below. Each of the boat launch ramp facility options include either one-lane or two-lane ramps with 20- or 40-stall parking lots. Each facility would have a wash down space or stall with a stormwater interceptor or other water treatment system that would treat runoff water before discharging it to the storm drain or sewer system. None of the boat launch ramp facility options would include a breakwater (as would the proposed project).

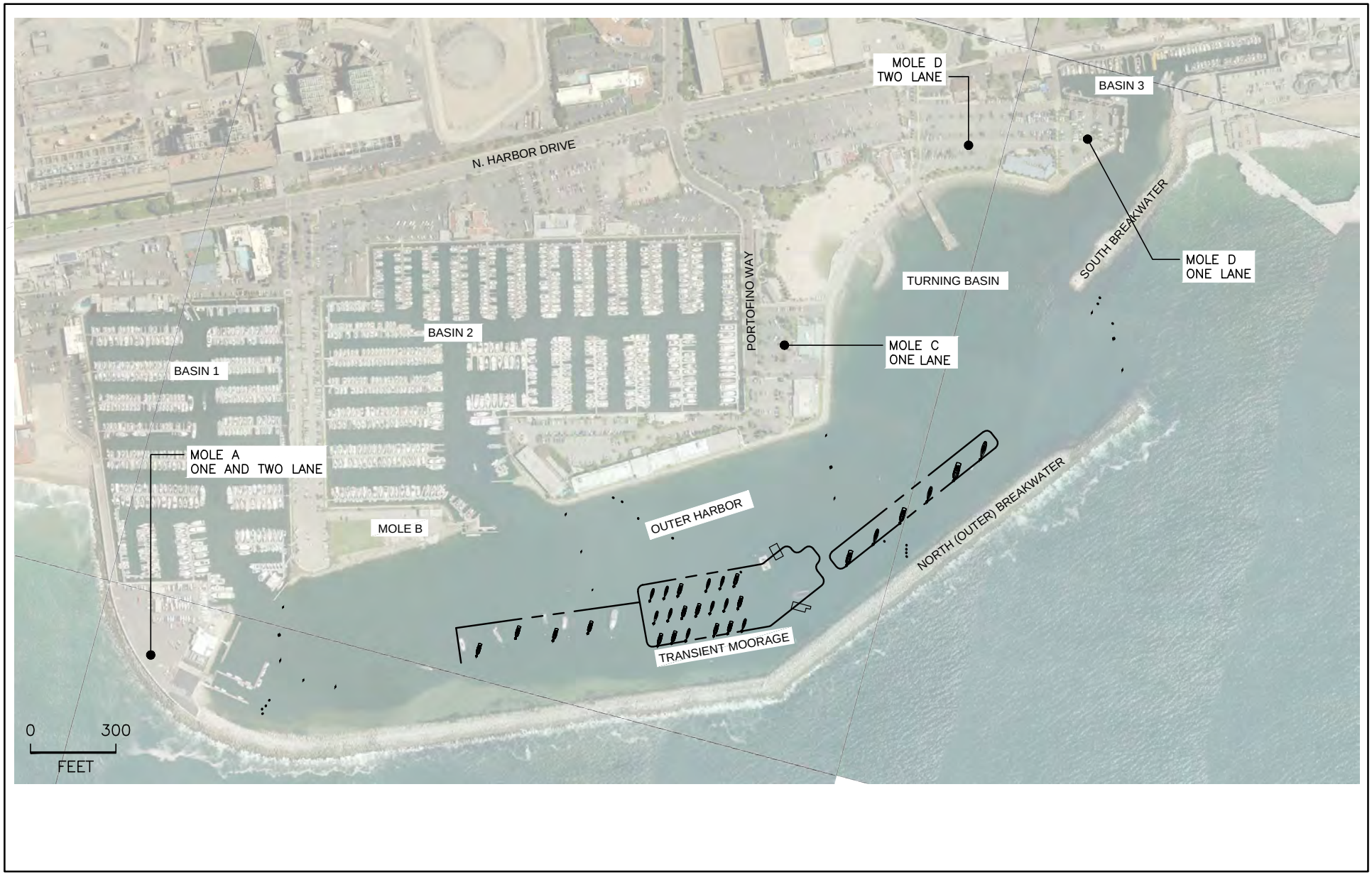
Mole A

The following three Alternative 8 boat launch ramp facility options are located at Mole A (Figures 4-5a through 4-5c):

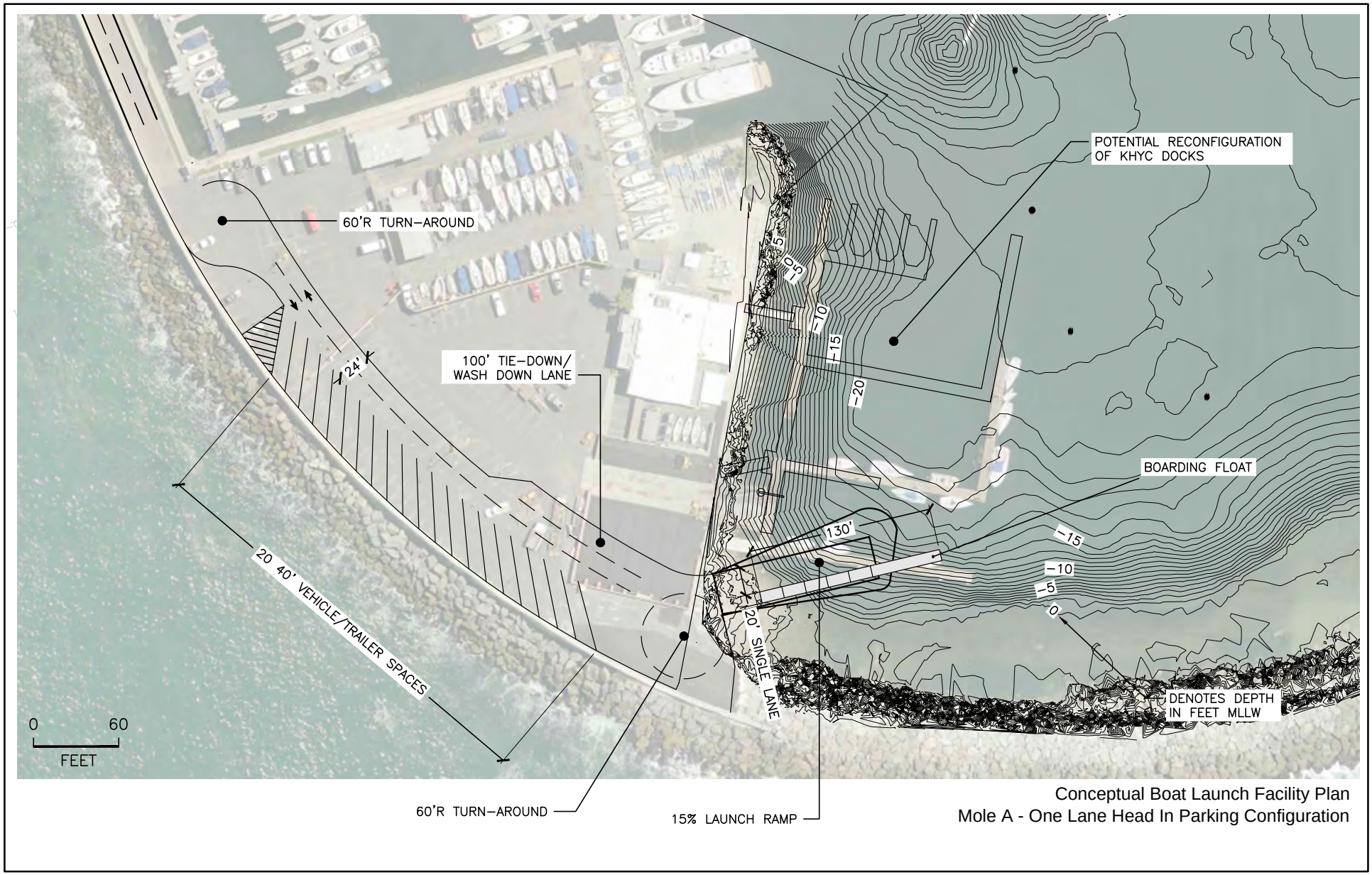
Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

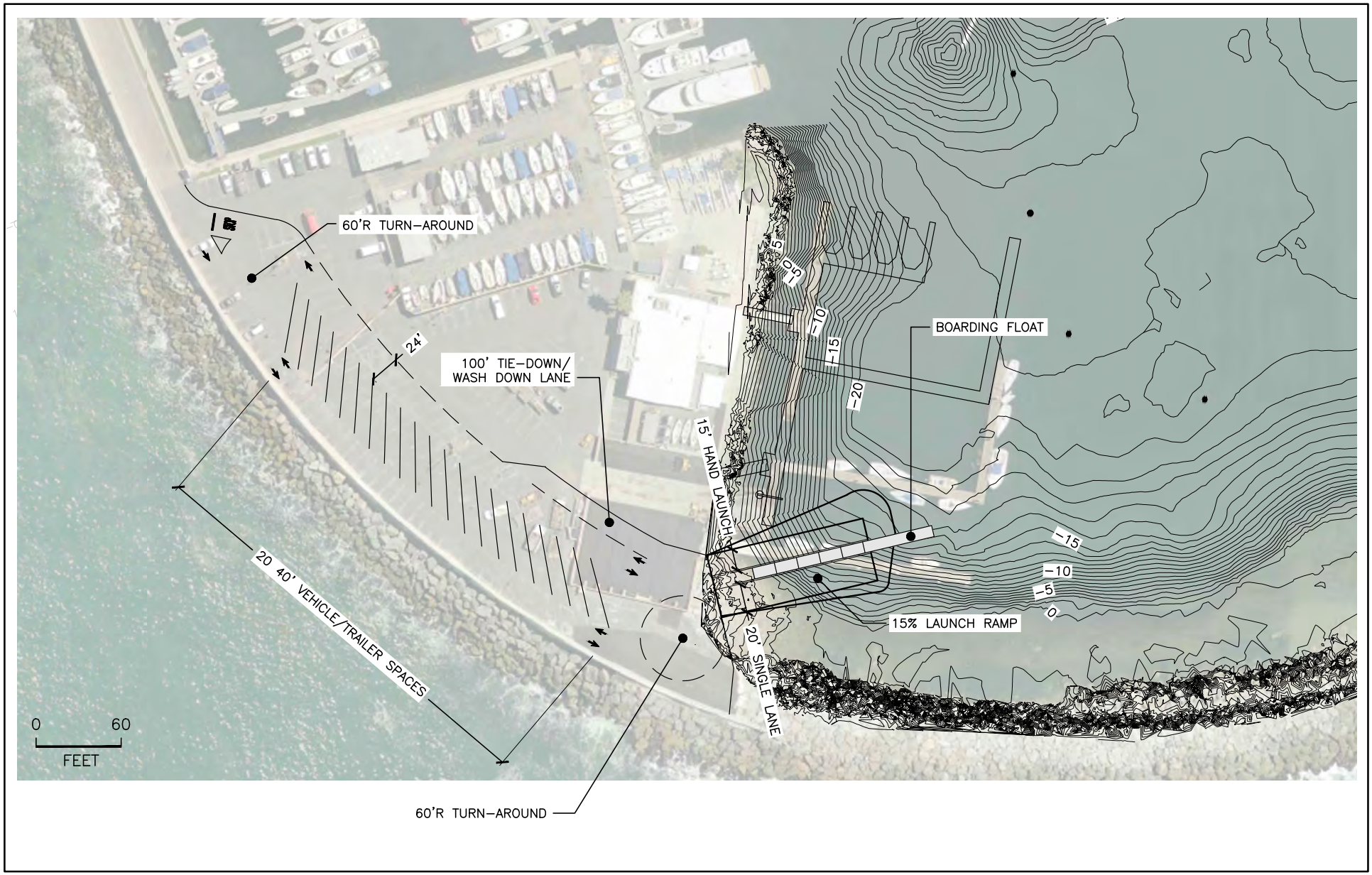


Source: Noble Consultants, Inc., 2015



Conceptual Boat Launch Facility Plan
Mole A - One Lane Head In Parking Configuration

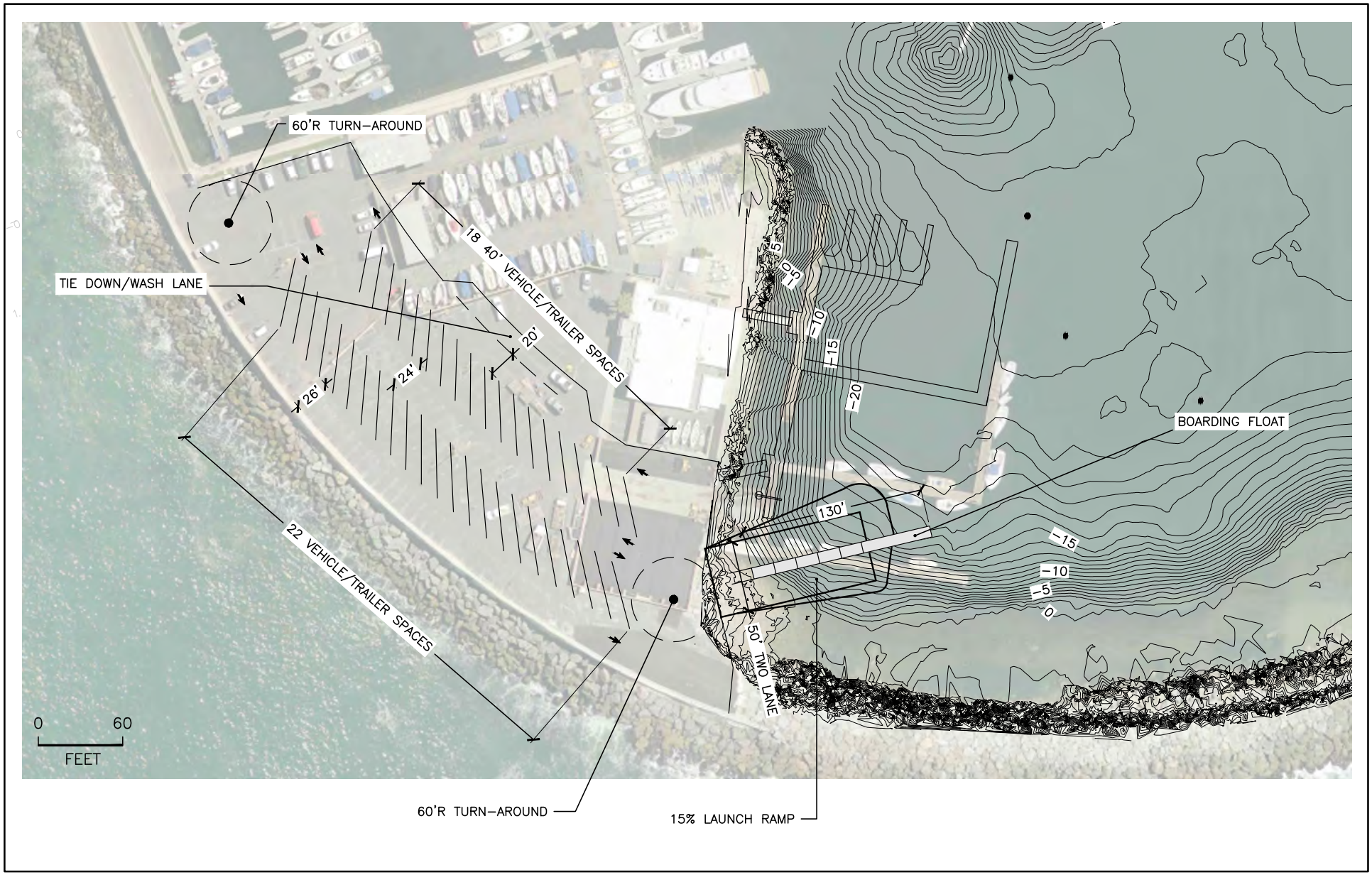
Source: Noble Consultants, Inc., 2015



Source: Noble Consultants, Inc., 2015

Figure 4-5b

Alternative 8: Mole A - Option 2 One-Lane with Hand Launch



Source: Noble Consultants, Inc., 2015

Mole A is the current site of the King Harbor Yacht Club (KHYC). The existing KHYC facilities would be reconfigured to accommodate any of the Mole A boat launch ramp facility options. The changes would include the reconfiguration of the existing drive aisles and parking to provide for ramp access, trailer turn around, and parking. The existing dry dock storage area would be relocated, and possibly reduced in size. Additionally, the existing floating timber docks at Mole A would also be relocated to accommodate the boat launch ramp. The replacement docks would have a similar size, configuration, and construction. The existing building and private boat hoists would remain.

Because the Mole A options would not develop a small craft boat launch ramp facility at Joe's Crab Shack site, no redevelopment of that portion of the project site would occur. Following are the three Mole A options:

Mole C

The following Alternative 8 boat launch ramp facility option is located at Mole C (Figure 4-5d):

One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

The Mole C option under Alternative 8 would be at the same location as the small craft boat launch ramp facility proposed as part of the project. However, the Mole C option under Alternative 8 would be a one-lane boat ramp with boarding float that is angled perpendicular to the shore with no breakwater. The parking area would be smaller (20 stalls as compared to 40 stalls under the proposed project). For purposes of this analysis, it is assumed that the remaining portion of the Joe's Crab Shack site would be covered with asphalt and potentially used for additional boat ramp or project site parking.

Mole D

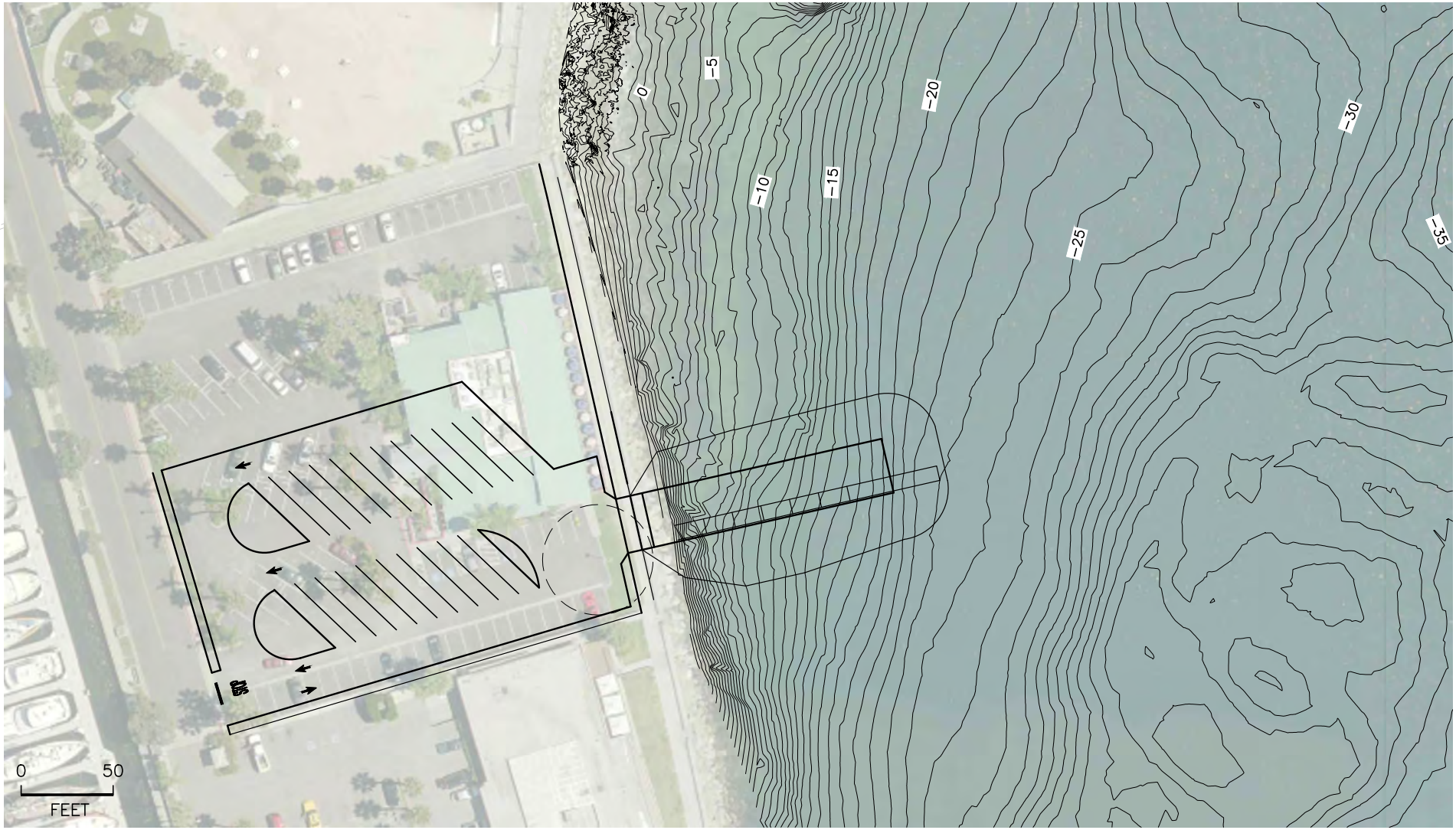
The following two Alternative 8 boat launch ramp facility options are located at Mole D (Figures 4-5e and 4-5f):

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Mole D is within the northern portion of the project site and is currently developed with the Redondo Beach Marina land facilities and restaurant pads. Under the proposed project it would be developed primarily with retail and restaurant uses, including the proposed market hall.

As shown on Figure 4-5e, the parking lot for the Mole D – Option 1 small craft boat launch ramp would be located at the southern end of the Mole D. This is currently occupied by surface parking and small several structures, and under the proposed project, it is the site of the market hall. Under Mole D – Option 1, the boat launch ramp would extend to the north, at an angle from the shore.



Source: Noble Consultants, Inc., 2015

Figure 4-5d

Alternative 8: Mole C, One-Lane

Source: Noble Consultants, Inc., 2015

Figure 4-5e

Alternative 8: Mole D - Option 1, One-Lane

Conceptual Boat Launch Facility Plan
Mole D - Two Lane without Breakwater Protection

Source: Noble Consultants, Inc., 2015

As shown on Figure 4-5f, under Mole D – Option 2, the parking lot for the small craft boat launch ramp would be located on the northern side of Mole D at a location that is currently occupied by surface parking (between the Sportfishing Pier and Samba Brazilian Steakhouse Restaurant). Under the proposed project, it is an open space and portion of a commercial building. Under Mole D – Option 2, the ramp would extend perpendicular to the shore, south of the Sportfishing Pier.

Both Mole D - Option 1 and Mole D – Option 2 would encompass a prime portion of the project site that is available for redevelopment. Both sites are centrally located and as such would disrupt the proposed design of the project site as a "village concept" that links the northern and southern portion physically and visually. Under each Mole D option, the site plan would be reconfigured as compared to the proposed project to develop the buildable area around the boat launch ramp locations.

To present a conservative analysis, it is assumed that the same maximum net new square footage as the proposed project would be constructed on-site.[8] This would result in more dense development in other areas of the northern portion of the project site and may result in some development shifting from the northern portion of the site to the southern portion.

In the northern portion of the site, to accommodate the increased density, it is likely that the new main street would be eliminated and vehicle access to the commercial development interior to the site would be limited to service and emergency vehicles. Pedestrian pathways would be provided. The access for vehicles with trailers entering and existing the boat ramp site would likely be available from Harbor Drive. As with the proposed project, the Sportfishing Pier would be removed or replaced. Seaside Lagoon would be opened to the waters of King Harbor; however, the design of the upland portion of the park would be modified as compared to proposed project to correspond with the overall reconfiguration of the site plan, including the eliminate of the new main street.

No pedestrian/bicycle bridge would be constructed given that the redesign of Mole D under both Mole D options would eliminated the village concept linking the northern and southern portions of the site. However, the Pacific Avenue Reconnection would continue to occur to improve vehicle and emergency access at the site.

No new development, including enhancement of the walkway along the water, would occur at the Joe's Crab Shack site.

In the southern portion of the project site, the redevelopment would include a replacement parking structure and a stand-alone development, such as a hotel or an office development similar to the existing Pier Plaza. The timber portion of the Horseshoe Pier

[8] Based on the maximum allowable floor area ratio (FAR) of 0.35 and a maximum FAR bonus of .30 allowed under the Coastal Zoning, the same square footage as the proposed project could be developed under the Mole D options. However, given site constraints and other development standards (such as providing adequate site access and compliance with requirements for open space, parking, and height limits), the actual amount of square footage that may be developed may in fact be less (i.e., the maximum square footage that could be constructed would be similar to Alternative 7; however, given the smaller site size, the density of the developable areas would be greater).

and associated buildings would be replaced and a new building would be constructed on Pad 2 of the Horseshoe Pier.

Basin 3 improvements would occur similar to the proposed project. Some modest improvements to pedestrian and bicycle paths, as well as landscaping would also occur; however, the increased density in buildable areas of the project site would result in constraints on pedestrian and bicycle path design and linkages. A walkway along the water's edge to meet minimum code requirements and safety needs (i.e., at the ramp crossing) would be provided at the boat launch ramp facility under either Mole D option. Therefore, continuous access to the water's edge would be provided; similar to the existing walkway along Mole D and without enhancements as would occur under the proposed project.

Given the additional site constraints, open space and public spaces, including pathways and seating areas, would be reduced compared to the proposed project, although would be designed to meet minimum requirements of the Coastal Zoning and achieve a floor area ration bonus if feasible based on site constraints.

4.4.8.3 Alternative 8 Environmental Analysis

As described above, most or all of elements of the proposed project would be implemented under the Alternative 8 options. Accordingly, the construction and operation assumptions are similar or generally the same as that of the same as the proposed project.

The following analysis focus on the differences between the boat ramp options and the proposed project. However, the impacts that would occur under both the proposed project and Alternative 8 are also considered in the analysis and impact determinations presented herein (i.e., the Alternative 8 analysis takes in to account the construction and operation that would occur across the entire project site and not just at the boat ramp launch facility location).

The Alternative 8 options include both one-lane and two-lane boat launch ramps with 20- or 40-stall parking lots, respectively. Unless otherwise described in the analysis below, there would not be a substantial difference between the construction or operation of the facilities of either size, and therefore, impacts are considered to be similar.

Aesthetics and Visual Resources

Impact AES-1: Alternative 8 would not have a substantial adverse effect on a designated local valued view.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not developing the Joe's Crab Shack portion of the project site and not constructing a breakwater as part of the boat launch ramp facility, the development and grading would be similar to the proposed project. The visual conditions and public views of Mole A are described below.

Mole A is located at the northeastern inner edge of the North (Outer) Breakwater at the site of the King Harbor Yacht Club. Currently, there is existing surface parking for automobiles and vessels, buildings, and docks. Public views of Mole A primarily consist of views from land and water within King Harbor located south and east of Mole A. There are also views available from roadways such as Yacht Club Way, Marina Way, Chart House Restaurant, the County beach to the north, and Moonstone Park. The valued views from these locations primarily consist of views of the harbor and open ocean.

During construction, construction equipment at the Mole A site would be visible from the surrounding locations. While these activities would temporarily detract from the scenic quality of the harbor, views of the harbor and ocean would remain available. Further, King Harbor is a busy harbor that supports a high level of activity and variety of vessel types and the presence of construction equipment and activities would not have a substantial adverse impact on a local valued view.

During operation, the Mole A – Option 1 boat launch ramp facility would have the same visual elements of surface parking and docks, albeit reconfigured, as compared to the existing conditions. This would not change the public views available from the surrounding areas.

Under Mole A – Option 1, there would be no visual change at the Joe's Crab Shack site, as compared to existing conditions.

There are no views of the Mole A site available from the Key Observation Views analyzed for the proposed project, including protected views from Czuleger Park and Harbor Drive, nor is the Mole A site visually prominent from other view points in the area. Therefore, under Mole A – Option 1, the views of the project site from Key Observation Views 1 through 7 would be the same as the proposed project, and Mole A – Option 1 would not have a substantial adverse effect on a designated local valued view. As with the proposed project, impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts associated with Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 2 would not have a substantial adverse effect on a designated local valued view and impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts associated with Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 3 would not have a substantial adverse effect on a designated local valued view and impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would

be smaller and would not include a breakwater. As with the proposed project, views of the boat launch ramp facility at Mole C would not be visible from the Key Observation Views, including protected views from Czuleger Park and Harbor Drive, nor is the Mole C site visually prominent from other view points in the area. Therefore, under Mole C, the views of the project site from Key Observation Views 1 through 7 would be the same as the proposed project. Mole C would not have a substantial adverse effect on a designated local valued view. As with the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur; however, the site plan would be reconfigured and there would be no pedestrian/bicycle bridge, breakwater at the boat launch ramp site, or redevelopment of the Joe's Crab Shack site. As with the proposed project, construction activities would be visible from Key Observation Views, and while they would detract from the scenic quality of the harbor, views of the harbor and ocean would remain available and the presence of construction equipment and activities would not have a substantial adverse impact on a local valued view.

Under project operation, because less redevelopment would occur, views from Key Observation Views would be more similar to existing conditions than under the proposed project as follows:

Czuleger Park – Key Observation Views 1 through 3: views from Key Observation Views 1 and 2 would not change. From Key Observation View 3, the boat launch ramp facility would be visible in the distance, given the distance and low profile of the ramp, would visually blend in to other visible features, such as the breakwaters. Vehicles using the boat launch ramp parking lot would be visible. This would be similar to existing conditions and thus no change in the locally designated valued view would occur.

North Harbor Drive – Key Observation Views 4 and 5: views from Harbor Drive would be similar to the proposed project; however, the layout would change. The density of the development within the northern portion of the site not occupied by the boat launch ramp facility would increase, which may result in reduced views of the water as compared to the proposed project. Under Mole D – Option 1, a view corridor would be provided at Key Observation View 4 similar to the proposed project; however, a view corridor similar to what is provided at Key Observation View 5 under the proposed project would likely be reduced or eliminated. At the boat launch ramp location, open views towards the water across the surface parking would be available. These views would likely be available at the intersection of Harbor Drive and boat ramp launch access road, although the amount of the water view available would depend on the final site layout. There would be no new main street provide views of the water to motorists as would occur under the proposed project. However, the new views available to motorists from the Pacific Avenue Reconnection would occur as with the proposed project.

Internal View – Key Observation View 6: Depending on the precise site configuration, the view at this location would likely be similar to that of the proposed project. However, given that the density of the development would increase in parts of the northern portion

of the project site, the views of Seaside Lagoon and harbor beyond may decrease. As with the proposed project, the view of Seaside Lagoon would change from a view of chain link fence, landscaping, and the lagoon water (available when the lagoon is full) to a more open water area that visually blends into the harbor. Operation would not result in an adverse change in the locally designated valued view from Key Observation View 6.

Views from the Water – Key Observation View 7: No pedestrian bridge would be implemented under Mole D – Option 1, otherwise views would be similar to the proposed project with new development visible but at a lower height and elevation than the existing development to the east. However, the density would increase in the portions of the northern portion site not occupied by the boat ramp, and possibly in the southern portion of the site. This would contrast with the open surface parking for the boat launch ramp. Similar to the proposed project, while views from this location would be altered under Mole D – Option 1, this would not result in an adverse change in the locally designated valued view from Key Observation View 7.

Mole D – Option 1would not have a substantial adverse effect on a designated local valued view. Impacts during operation would be less than significant. This is similar to the proposed project, but greater as the density of the development would be higher in parts of the northern portion of the project site, which would reduce available views of the water as compared to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts associated with Mole D – Option 2 would be similar to Mole D - Option 1 described above. Therefore, as with the proposed project, Mole D – Option 2 would not have a substantial adverse effect on a designated local valued view and impacts would be less than significant. This is similar to the proposed project, but greater as the density of the development would be higher in parts of the northern portion of the project site, which would reduce available views of the water as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-2: Alternative 8 would not substantially degrade the existing visual character or quality of the site and its surroundings.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site and no construction of a breakwater, the overall amount of development would be similar to the proposed project. Thus, the changes in visual character and quality would be similar to the proposed project. The existing character of the site as a coastal commercial and recreation center would be retained if not enhanced,

and Mole A - Option 1 would not result in the removal of any substantial visual resources, such as the harbor or ocean.

As with the proposed project, Mole A - Option 1 would establish a new design for the project site, subject to Harbor Commission design review process, that creates a more visually harmonious style across the northern and southern portions of the site that incorporates some similar style and design elements. Other visual changes would include new landscaping, enhanced high-quality public open space, and new public art. Although the changes to the visual quality of the site would be noticeable, the addition of new design elements and improved public spaces will enhance the visual quality of the site.

Specific to Mole A, while construction at Mole A would temporarily change the visual character and reduce the visual quality of the site, construction activities and equipment would be temporary and not result in permanent visual degradation of the existing visual character or quality of the site and its surroundings. Therefore, impacts during construction would be less than significant.

The existing visual character of the Mole A is of a marina/yacht club, and primary visual features include surface parking, docks, and a boat hoist. The Mole A – Option 1 boat launch ramp facility would result in the reconfiguring of the site to provide additional surface parking and a new ramp. The new and reconfigured facilities would be similar to the existing visual character and quality, and would not result in visual degradation.

The visual character and quality of the Joe's Crab Shack would not change under Mole A – Option 1. While this would not degrade the visual character or quality, the visual enhancements of new landscaping and expansion of the boardwalk along this portion of the project site would occur.

Mole A – Option 1 would not substantially degrade the visual character or quality of the project site. As with the proposed project, the impact would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts associated with Mole A – Option 2 would be the same as Mole A – Option 1 described above. Therefore, Mole A – Option 2 would not substantially degrade the visual character or quality of the project site. As with the proposed project, the impact would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts associated with Mole A – Option 3 would be the same as Mole A – Option 1 described above. Therefore, Mole A – Option 3 would not substantially degrade the visual character or quality of the project site. As with the proposed project, the impact would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would

be smaller and would not include a breakwater. The changes in visual character and quality under Mole C would be similar to the proposed project. The existing character of the site as a coastal commercial and recreation center would be retained if not enhanced, and Mole C would not result in the removal of any substantial visual resources, such as the harbor or ocean.

As with the proposed project, Mole C would establish a new design for the project site, subject to the Harbor Commission design review process, that creates a more visually harmonious style across the northern and southern portions of the site that incorporates some similar style and design elements. Other visual changes would include new landscaping, enhanced high-quality public open space, and new public art. Although noticeable visual to the site would occur, the addition of new design elements and improved public spaces will enhance the visual quality of the site. As with the proposed project, the visual character of the boat launch ramp facility would be consistent with the waterfront character of the site, as well as existing facilities such as the nearby Portofino Marina. Further enhancement of the boardwalk along the water's edge, including a new landscaped median would also improve the visual quality of the site.

Mole C would not substantially degrade the visual character or quality of the project site. As with the proposed project, the impact would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur; however, the site plan would be reconfigured and there would be no pedestrian/bicycle bridge, breakwater at the boat launch ramp site, or redevelopment of the Joe's Crab Shack site. Mole D – Option 1 would replace existing structure suffering from age and deterioration. As with the proposed project, Mole D would establish a new design for the project site, subject to the Harbor Commission design review process. However, the boat launch ramp would located centrally within the site, which would result in a physical and visual separation (similar to existing conditions), and thus instead of establishing a site-wide seaside "village" concept, the northern and southern portions of the site would be designed separately without incorporating similar and/or complementary style and design elements. Further, while the visual character of the boat launch ramp facility would be consistent with waterfront character of the site, the presence of the boat launch ramp with an expanse of surface parking for vehicles and trailers at prominent location near the center of the site would visually detract from the overall design of the site. The increased density in parts of the site would also result in larger and/or more closely spaced buildings that reduce opportunities for providing new landscaping, view corridors to the water, and open areas with amenities such as outdoor seating fountains and public art.

Mole D – Option 1 would not substantially degrade the visual character or quality of the project site. As with the proposed project, the impact would be less than significant. However, because of the increased density in parts of the northern portion of the site, lack of visual improvements at center of the project site, and lack of visual connectivity throughout the site, visual enhancements would occur to a lesser degree than the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts associated with Mole D – Option 2 would be the same as Mole D – Option 1 described above. Therefore, Mole D – Option 2 would not substantially degrade the visual character or quality of the project site. As with the proposed project, the impact would be less than significant. However, because of the increased density in parts of the northern portion of the site, lack of visual improvements at center of the project site, maintenance of the International Boardwalk, and lack of visual connectivity throughout the site, visual enhancements would occur to a lesser degree than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact AES-3: Alternative 8 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not developing the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project, and as such, potential sources of light and glare during construction and operation would be similar. As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Mole A - Option 1 would not incorporate substantial amounts of reflective building materials in areas that are highly visible to off-site glare-sensitive uses.

Specific to Mole A, lighting and glare (i.e., associated with vehicles parked in the surface parking lot) associated with the boat launch ramp facility would be similar to the existing lighting for the yacht club and no new source of substantial light or glare would be implemented.

Mole A - Option 1 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, as with the proposed project, impacts would be less than significant. Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to lighting and glare under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. As with the proposed project, impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to lighting and glare under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. As with the proposed project, impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Mole C would not incorporate substantial amounts of reflective building materials in areas that are highly visible to off-site glare-sensitive uses. Specific to Mole C, lighting and glare (i.e., associated with vehicles parked in the surface parking lot) associated with the boat launch ramp facility would be similar to the existing lighting and no new source of substantial light or glare would be implemented.

Mole C would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area; therefore, as with the proposed project, impacts would be less than significant. Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur; however, the site plan would be reconfigured and there would be no pedestrian/bicycle bridge, breakwater at the boat launch ramp site, or redevelopment of the Joe's Crab Shack site. Therefore, potential sources of light and glare during construction and operation would be similar as compared to the proposed project. As with the proposed project, although the new lighting would contribute to the overall ambient glow of the project site and immediately surrounding areas, lighting from on-site

uses would be required to be reflected away from adjacent residential premises so no light spillover would occur, and no significant impacts would occur. Similarly, as with the proposed project, Mole D - Option 1 would not incorporate substantial amounts of reflective building materials in areas that are highly visible to off-site glare-sensitive uses.

Specific to Mole D, lighting and glare (i.e., associated with vehicles parked in the surface parking lot) associated with the boat launch ramp facility would be similar to the existing lighting and no new source of substantial light or glare would be implemented.

Mole D - Option 1 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval AES-1: Lighting and AES-2: Glare. As with the proposed project, impacts would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to lighting and glare under Mole D – Option 1 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 1 would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Air Quality

Impact AQ-2: Alternative 8 would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation.

Construction emissions under each Alternative 8 option would result in peak daily construction emissions that would be the same or slightly below the proposed project. This is because, while emissions associated specifically with the boat launch would vary based on the option chosen, the site would still be undergoing other demolition and construction activities at a similar level as the proposed project. Since emissions are analyzed based on peak daily emissions, the slight change in activities based on the Alternative 8 boat ramp options would have a negligible change in peak daily emissions. As with the proposed project, compliance with Rule 403 and Rule 1113 as pre-existing regulatory requirements were accounted for in the construction emissions modeling. Rule 1113 is included as part of the default modeling scenario.

Table 4-41 summarizes the modeled peak daily emissions of criteria air pollutants and ozone precursors for the proposed project boat launch ramp facility and each Alternative 8 boat launch ramp facility option. As shown in the table, maximum peak daily construction emissions generated by the proposed project boat launch ramp facility would

be from demolition of Joe's Crab Shack. This would be the same for the Mole C alternative. The Mole A and Mole D options would have less demolition, and thus, the maximum peak daily emissions would be less than the proposed project and would either be from ramp construction or parking lot construction.

For the remainder of project site, demolition would be the same as proposed project under all of the Alternative 8 options. The reduction in construction emissions associated with the Mole A and Mole D options would not be enough to reduce daily emissions estimates to below regulatory thresholds for the development of the project site for ROG, NOx or CO. Therefore, as with the proposed project, all of the Alternative 8 options would have significant impacts relative to ROG, NOx and CO.

Potential health effects of exposure to these criteria pollutants would be the same as the proposed project and are included in the background information Section 3.2.2.2.3 and Table 3.2-1. Since the boat launch ramp construction activities were anticipated to occur at the beginning of the proposed project construction, the emissions from the boat launch are only associated with 2017 emissions.

Table 4-41: Alternative 8 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Proposed Project Boat Launch						
Demolition	4.09	48.32	36.21	0.09	11.37	2.88
Breakwater	2.68	28.58	13.14	0.02	1.69	1.32
Ramp Construction	2.09	26.68	12.88	0.04	1.68	1.06
Parking lot	3.07	34.56	25.29	0.07	0.28	1.23
Mole A – Option 1						
Ramp Construction	1.39	17.78	8.58	0.02	1.12	0.71
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Daily Emissions as Compared to the Proposed Project	*-2.04*	*-25.28*	*-19.35*	*-0.04*	*-9.99*	*-2.05*
Mole A – Option 2						
Ramp Construction	2.09	26.68	12.88	0.04	1.68	1.06
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Daily Emissions as Compared to the Proposed Project	*-1.99*	*-21.64*	*-19.35*	*-0.04*	*-9.69*	*-1.81*
Mole A – Option 3						
Ramp Construction	2.09	26.68	12.88	0.04	1.68	1.06
Parking lot	3.07	34.56	25.29	0.07	2.08	1.23

Table 4-41: Alternative 8 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions as Compared to the Proposed Project	*-1.01*	*-13.76*	*-10.92*	*-0.02*	*-9.29*	*-1.64*
Mole C						
Demolition	4.09	48.32	36.21	0.09	11.37	2.88
Ramp Construction	1.39	17.78	8.58	0.02	1.12	0.71
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Daily Emissions as Compared to the Proposed Project	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Mole D – Option 1						
Ramp Construction	1.39	17.78	8.58	0.02	1.12	0.71
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Daily Emissions as Compared to the Proposed Project	*-2.04*	*-25.28*	*-19.35*	*-0.04*	*-9.99*	*-2.05*
Mole D – Option 2						
Ramp Construction	2.09	26.68	12.88	0.04	1.68	1.06
Parking lot	3.07	34.56	25.29	0.07	2.08	1.23
Maximum Daily Emissions as Compared to the Proposed Project	*-1.01*	*-13.76*	*-10.92*	*-0.02*	*-9.29*	*-1.64*
Maximum Proposed Project Emissions						
2017	66.94	718.75	736.14	1.36	64.27	35.36
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	**Yes**	**Yes**	**Yes**	No	No	No
Maximum reduction from Alternative 8 Options	-2.04	-25.28	-19.35	-0.04	-9.99	-2.05
Maximum potential reduced emissions from Alternative 8 (2017)	64.90	**693.47**	**716.79**	1.32	54.28	33.31
Significant impact?	**Yes**[a]	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

a. There is not an exceedance of ROG thresholds in 2017 when the boat launch ramp would be constructed; however, overall the proposed project under all Alternative 8 options would exceed the threshold in 2018, and therefore, would have a significant impact.

Operational activities under the Alternative 8 options would be the same as compared to those of the proposed project. As with the proposed project, the net emissions from all Alternative 8 options would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. Therefore, the net operational emissions under all Alternative 8 options would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. While the Joe's Crab Shack site would not be altered (i.e., the existing building would not be demolished), Mole A – Option 1 includes demolition and replacement of existing docks, which would result in peak daily construction emissions associated with boat launch ramp facility construction that are similar but slightly reduced as compared to the proposed project. As shown in Table 4-41 and excerpted in Table 4-42 below, Mole A – Option 1 would result in reductions in the maximum daily emissions as compared to the proposed project. However, overall the maximum daily emissions associated with construction of the entire project site under Mole A – Option 1 would exceed regulatory thresholds for ROG, NOx or CO. Therefore, as with the proposed project, Mole A - Option 1 would have in significant impacts relative to ROG, NOx and CO.

Table 4-42: Mole A – Option 1 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Ramp Construction	1.39	17.78	8.58	0.02	1.12	0.71
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Emissions						
2017	64.90	693.47	716.79	1.32	54.28	33.31
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	75	100	550	150	150	55
Significant impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

a. There is not an exceedance of ROG thresholds in 2017 when the boat launch ramp would be constructed; however, overall the proposed project under Mole A – Option 1 would exceed the threshold in 2018, and therefore, would have a significant impact.

Operational activities under Mole A – Option 1 would be the same as the proposed project. Therefore, as with the proposed project, the net emissions from Mole A – Option 1 would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. Therefore, the net operational emissions under Mole A – Option 1 would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Under Mole A - Option 2, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. While the Joe's Crab Shack site would not be altered (i.e., the existing building would not be demolished), Mole A – Option 2 includes demolition and replacement of existing docks, and construction of a hand launch ramp, which would result in peak daily construction emissions associated with boat launch ramp facility construction that are similar but slightly reduced as compared to the proposed project. As shown in Table 4-41 above and excerpted in Table 4-43 below, Mole A – Option 2 would result in reductions in the maximum daily emissions as compared to the proposed project. However, overall the maximum daily emissions associated with construction of the entire project site under Mole A – Option 1 would exceed regulatory thresholds for ROG, NOx or CO. Therefore, as with the proposed project, Mole A - Option 1 would have in significant impacts relative to ROG, NOx and CO.

Table 4-43: Mole A – Option 2 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Ramp Construction	2.09	26.68	12.88	0.04	1.68	1.06
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Emissions						
2017	64.95	697.11	716.79	1.32	54.58	33.55
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	75	100	550	150	150	55
Significant impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

a. There is not an exceedance of ROG thresholds in 2017 when the boat launch ramp would be constructed; however, overall the proposed project under Mole A – Option 1 would exceed the threshold in 2018, and therefore, would have a significant impact.

b.

Operational activities under Mole A – Option 2 would be the same as the proposed project. Therefore, as with the proposed project, the net emissions from Mole A – Option 2 would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or

$PM_{2.5}$. Therefore, the net operational emissions under Mole A – Option 2 would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Under Mole A - Option 3, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. While the Joe's Crab Shack site would not be altered (i.e., the existing building would not be demolished), Mole A – Option 3 includes demolition and replacement of existing docks, which would result in peak daily construction emissions associated with boat launch ramp facility construction that are similar but slightly reduced as compared to the proposed project. As shown in Table 4-41 and excerpted in Table 4-44 below, Mole A – Option 3 would result in reductions in the maximum daily emissions as compared to the proposed project. However, overall the maximum daily emissions associated with construction of the entire project site under Mole A – Option 3 would exceed regulatory thresholds for ROG, NOx or CO. Therefore, as with the proposed project, Mole A - Option 3 would have in significant impacts relative to ROG, NOx and CO.

Table 4-44: Mole A – Option 3 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Ramp Construction	2.09	26.68	12.88	0.04	1.68	1.06
Parking lot	3.07	34.56	25.29	0.07	2.08	1.23
Maximum Emissions						
2017	65.93	704.99	725.22	1.34	54.98	33.72
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	75	100	550	150	150	55
Significant impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

a. There is not an exceedance of ROG thresholds in 2017 when the boat launch ramp would be constructed; however, overall the proposed project under Mole A – Option 1 would exceed the threshold in 2018, and therefore, would have a significant impact.

Operational activities under Mole A – Option 3 would be the same as the proposed project. Therefore, as with the proposed project, the net emissions from Mole A – Option 3 would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. Therefore, the net operational emissions under Mole A – Option 3 would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be located under the proposed project; however no breakwater would be constructed. As with the proposed project, the peak daily construction emissions associated with construction of the boat launch ramp facility under Mole C are associated with demolition Joe's Crab Shack. As shown in Table 4-41 and excerpted in Table 4-45 below, the maximum peak daily emissions are the same as the proposed project. Further, overall the maximum daily emissions associated with construction of the entire project site under Mole C would exceed regulatory thresholds for ROG, NOx or CO. As with the proposed project, Mole C would have in significant impacts relative to ROG, NOx and CO.

Table 4-45: Mole C Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	4.09	48.32	36.21	0.09	11.37	2.88
Ramp Construction	1.39	17.78	8.58	0.02	1.12	0.71
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Emissions						
2017	66.94	718.75	736.14	1.36	64.27	35.36
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	75	100	550	150	150	55
Significant impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

a. There is not an exceedance of ROG thresholds in 2017 when the boat launch ramp would be constructed; however, overall the proposed project under Mole A – Option 1 would exceed the threshold in 2018, and therefore, would have a significant impact.

Operational activities under Mole C would be the same as the proposed project. Therefore, as with the proposed project, the net emissions from Mole C would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. Therefore, the net operational emissions under Mole C would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur; however, the site plan would be reconfigured and there would be no pedestrian/bicycle bridge, breakwater at the boat launch ramp site, or redevelopment of the Joe's Crab Shack site. Under Mole D, the Joe's Crab Shack site would not be altered (i.e., the existing building would not be demolished), no breakwater would be constructed, and demolition of existing facilities at Mole D would be the same as would occur under the proposed project. As such maximum daily construction emissions associated with boat launch ramp facility under Mole D – Option 1 would be similar but slightly reduced as compared to the proposed project. As shown in Table 4-41 and excerpted in Table 4-46 below, Mole D – Option 1 would result in reductions in the maximum daily construction emissions as compared to the proposed project. However, as the amount of demolition would be similar to the proposed project, the overall maximum daily emissions associated with construction of the entire project site under Mole D – Option 1 would exceed regulatory thresholds for ROG, NOx or CO. Therefore, as with the proposed project, Mole D - Option 1 would have in significant impacts relative to ROG, NOx and CO.

Table 4-46: Mole D – Option 1 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Ramp Construction	1.39	17.78	8.58	0.02	1.12	0.71
Parking lot	2.05	23.04	16.86	0.04	1.38	0.82
Maximum Emissions						
2017	64.9	693.47	716.79	1.32	54.28	33.31
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	75	100	550	150	150	55
Significant impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

a. There is not an exceedance of ROG thresholds in 2017 when the boat launch ramp would be constructed; however, overall the proposed project under Mole A – Option 1 would exceed the threshold in 2018, and therefore, would have a significant impact.

Operational activities under Mole A – Option 2 would be similar to the proposed project. Therefore, as with the proposed project, the net emissions from Mole D – Option 1 would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. The net operational emissions under Mole D – Option 1 would not have the potential to result

in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 2, the project site would be redeveloped similar to the proposed project. Under Mole D, the Joe's Crab Shack site would not be altered (i.e., the existing building would not be demolished) and no breakwater would be constructed. As such maximum daily construction emissions associated with boat launch ramp facility under Mole D – Option 2 would be similar but slightly reduced as compared to the proposed project. As shown in Table 4-41 and excerpted in Table 4-47 below, Mole D – Option 2 would result in reductions in the maximum daily construction emissions as compared to the proposed project. However, as the amount of demolition would be similar to the proposed project, the overall maximum daily emissions associated with construction of the entire project site under Mole D – Option 2 would exceed regulatory thresholds for ROG, NOx or CO. Therefore, as with the proposed project, Mole D - Option 2 would have in significant impacts relative to ROG, NOx and CO.

Table 4-47: Mole A – Option 2 Regional Construction Emissions

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Ramp Construction	2.09	26.68	12.88	0.04	1.68	1.06
Parking lot	3.07	34.56	25.29	0.07	2.08	1.23
Maximum Emissions						
2017	65.93	704.99	725.22	1.34	54.98	33.72
2018	198.93	173.22	272.38	0.52	17.35	8.54
2019	49.03	61.80	79.76	0.15	4.78	3.05
Regional Significance Threshold	75	100	550	150	150	55
Significant impact?	**Yes**	**Yes**	**Yes**	No	No	No

Source: ESA CalEEMod Modeling 2015 (see Appendix N)

a. There is not an exceedance of ROG thresholds in 2017 when the boat launch ramp would be constructed; however, overall the proposed project under Mole A – Option 1 would exceed the threshold in 2018, and therefore, would have a significant impact.

Operational activities under Mole D – Option 2 would be the same as the proposed project. Therefore, as with the proposed project, the net emissions from Mole A – Option 2 would not result in long-term regional emissions of ROG, NOx, CO, SOx, PM_{10} or $PM_{2.5}$. Therefore, the net operational emissions under Mole D – Option 2 would not have the potential to result in or substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS and the impact would not be significant.

Mitigation Measures

As with the proposed project, mitigation measures MM AQ-1: Fleet Modernization for Construction Equipment and MM AQ-2: Use of Los-VOC Coatings and Paints, would reduce criteria pollutant emissions associated with project construction.

Residual Impacts

Similar to the proposed project, implementation of mitigation measures MM AQ-1 and MM AQ-2 would reduce the impacts of ROG to less than significant; however, NOx and CO would remain significant and unavoidable for construction. No other feasible methods to reduce emissions were identified.

Impact AQ-2: Alternative 8 would not expose sensitive receptors to substantial pollutant concentrations.

Because a similar, or reduced, level of construction and operational activities would occur under Alternative 8 as the proposed project, all of the impacts associated with the Alternative 8 options would be identical to, or reduced from, that of the proposed project.

As such, all of the Alternative 8 options would not expose sensitive receptors to significant localized concentrations of NOx, CO, PM_{10}, and $PM_{2.5}$ during construction and operation. Additionally, all of the Alternative 8 options are also not anticipated to expose sensitive receptors to localized significant pollutant concentrations with respect to mobile CO emissions and toxic air contaminants during operations. Further, the operation boat launch ramp, as well as the commercial retail, office, hotel, and specialty uses associated with all of the Alternative 8 options are not anticipated to result in the emissions of TACs; therefore, as with the proposed project, the operation of all of the Alternative 8 options are would have no impact on localized sensitive receptors. Therefore, Alternative 8 would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be similar to the proposed project.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Likewise, operational activities and traffic generation would be similar to the proposed project. Therefore, as described above, Mole A – Option 1 would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be similar to the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to exposure of sensitive receptors to substantial pollutant concentrations under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 2 would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be similar to the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to exposure of sensitive receptors to substantial pollutant concentrations under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 3 would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be similar to the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Likewise, operational activities and traffic generation would be similar to the proposed project. Therefore, as described above for all of the Alternative 8 options, Mole C would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be similar to the proposed project.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur; however, the site plan would be reconfigured and there would be no pedestrian/bicycle bridge, breakwater at the boat launch ramp site, or redevelopment of the Joe's Crab Shack site. Therefore, as described above for all of the Alternative 8 options, Mole D – Option 1 would not expose sensitive receptors to substantial pollutant concentrations. Impacts are less than significant. The impacts would be similar to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to exposure of sensitive receptors to substantial pollutant concentrations under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, as with the proposed project, Mole D – Option 2 would not expose sensitive receptors to substantial pollutant concentrations and impacts are less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact AQ-3: Alternative 8 would not create objectionable odors affecting a substantial number of people.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Likewise, operational activities and traffic generation would be similar to the proposed project. As with the proposed project, construction odors, including odors associated with dredging activities for Seaside Lagoon, could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Mole A – Option 1 as with the proposed project, no on-site sources of emissions would occur as a result of operational activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). Therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to odors under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 2 would not create objectionable odors affecting a substantial number of people and impacts are less than significant. The impacts would be similar to the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to odors under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 3 would not create objectionable odors affecting a substantial number of people and impacts are less than significant. The impacts would be similar to the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Likewise, operational activities and traffic generation would be similar to the proposed project. As with the proposed project, construction odors, including odors associated with dredging activities for Seaside Lagoon, could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Mole C as with the proposed project, no on-site sources of emissions would occur as a result of operational activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). Therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur; however, the site plan would be reconfigured and there would be pedestrian/bicycle bridge, breakwater at the boat launch ramp site, or redevelopment of the Joe's Crab Shack site. As with the proposed project, construction odors, including odors associated with dredging activities for Seaside Lagoon, could be a temporary source of nuisance to adjacent uses, but would be temporary, intermittent and not affect a substantial number of people. Additionally, as the operational conditions are the same under Mole D – Option 1 as with the proposed project, no on-site sources of emissions would occur as a result of operational activities, as analyzed in the NOP/IS (Appendix A of this Draft EIR). Therefore, impacts would be less than significant. The impacts would be similar to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to odors under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, as with the proposed project, Mole D – Option 2 would not create objectionable odors affecting a substantial number of people and impacts are less than significant. The impacts would be similar to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Biological Resources

Impact BIO-1: Alternative 8 could have a substantial adverse impact, 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 CDFW or USFWS, or any species that meets the criteria for endangered, rare or threatened in CEQA Guidelines Section 15380.

Under each of the Alternative 8 options, the level of demolition/construction activities and operational activities would be similar to that of the proposed project. Additionally, in general, all of the elements of the proposed project, including all of the proposed waterside elements, would be constructed under Alternative 8, although no breakwater would be constructed as part of the boat launch ramp facility and the size and location of the boat launch ramp facility would vary. Therefore, construction and operation impacts on terrestrial and marine biological resources would be similar to that of the proposed project, but slightly reduced as no breakwater would be constructed.

Below is a summary of the construction and operation impacts that would be the same for each option. Details specific to each boat ramp option are addressed subsequent to the

general analysis.

As with the proposed project, construction and operation of the landside elements of Alternative 8, including the parking associated with all boat launch ramp options, would occur in previously developed areas that do not have any sensitive terrestrial biological resources and impacts on terrestrial biological resources would be less than significant. Impacts are the same as the proposed project.

As discussed further under Impact BIO-2, the marine habitat types at each Alternative 8 boat launch ramp location are similar to the proposed project. Further, special status species that may occur within the vicinity of the Alternative 8 boat launch ramp locations would be the same as those that may occur near the proposed project boat launch ramp locations.

As with the proposed project, the waterside elements, including all boat launch ramp options, would result in temporary significant impacts on marine mammals during pile driving. Significant impacts would also occur relative to grunion if replacement of the timber portion of the Horseshoe Pier occurs during spawning season (March to August). Other construction impacts, including relative to least terns and broomtail grouper, would be less than significant and further reduced with implementation of COA BIO-1 that requires least tern monitoring during construction and COA BIO-2 that requires implementation of BMPs to control turbidity. Impacts are similar but slightly reduced as compared to the proposed project because no breakwater would be constructed.

Under each of the Alternative 8 options, the amount of surface coverage would be less than the proposed project. The amount of surface coverage would vary under each option varies based on the size of the ramp and any other dock/hand launch construction (which would occur under the Mole A options). However, as with the proposed project, under each Alternative 8 option at Mole A or Mole C, if the Sportfishing Pier is reconstructed, a net increase in surface coverage would occur. An increase in surface cover which would reduce open water foraging habitat for waterbirds and is a significant impact. Therefore, the Alternative 8 options are Mole A and C are similar but reduced as compared to the proposed project. Under the Alternative 8 Mole D options, the pedestrian bridge would not be constructed and no net increase in surface cover would occur whether or not the Sportfishing Pier is reconstructed. The Alternative 8 Mole D options are less than significant, which is a reduced impacted compared to the proposed project.

Table 4-48 shows the change in surface coverage that would occur at the boat launch ramp site under the proposed project and each Alternative 8 option. Additional details are presented in the analysis specific to each option.

As with the proposed project, the opening of Seaside Lagoon and construction of the small craft boat launch ramp would not result in a substantially adverse impact on pinnipeds as a result of increased human-pinniped interactions in comparison to existing conditions; therefore, impacts would be less than significant. However, as no breakwater would be constructed, fewer potential new haul out locations would be constructed and impacts would be similar, but reduced, in comparison to the proposed project. While impacts are less than significant without mitigation, as with the proposed project, the City is proposing Condition of Approval COA BIO-2: Marine Mammal Management Program, as part of its Conditional Use Permit procedures.

Table 4-48: Change in Surface Cover Associated with Each Alternative 8 Boat Launch Ramp Option

Boat Launch Ramp Site Surface Cover	Mole C (Proposed Project)		Mole A - Option 1		Mole A - Option 2		Mole A – Option 3		Mole C		Mole D - Option 1		Mole D - Option 2	
	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2
Existing Surface Cover – Boarding Floats and Gangways	0.0	0.0	5,752.4	534.4	5,752.4	534.4	5,752.4	534.4	0.0	0.0	0.0	0.0	0.0	0.0
Proposed Surface Cover – Includes Boarding Floats and Gangways	2734.7	254.1	7,441.9	691.4	6,768.0	628.8	6,768.1	628.8	1,167.4	108.5	1,567.2	145.6	1,567.2	145.6
Surface Cover (Net Change)	**2734.7**	**254.1**	**1,689.5**	**157.0**	**1,015.6**	**94.4**	**1,015.6**	**94.4**	**1,167.4**	**108.5**	**1,567.2**	**145.6**	**1,567.2**	**145.6**

Notes:

ft^2 – square feet
m^2 – square meters

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole A is currently developed with surface parking and marina uses. The Mole A site has no sensitive terrestrial biological resources and no ornamental landscaping and therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

Impacts associated with waterside construction would be the same as described above for all of the Alternative 8 options. Therefore, significant impacts would occur on marine mammals relative to pile driving and on grunion relative to replacement of the timber portion of the Horseshoe Pier. This is the same as the proposed project.

As shown in Table 4-49, operation of Mole A – Option 1 would result in an increase in surface cover if the Sportfishing Pier is replaced. This is similar but reduced in comparison to the proposed project. However, if the Sportfishing Pier is not replaced, no increase in surface cover would occur and impacts would be less than significant. This impact is similar but reduced in comparison to the proposed project.

Table 4-49: Mole A Option 1 Summary of Exposure of Water or Increase in Surface Cover for Each Project Element Under Various Redondo Beach Marina in Basin 3 and Sportfishing Pier Options

Project Element	Surface Cover Net Change ft^2 (m^2)	
	With Basin 3 – Similar Slips	With Basin 3 – Fewer Slips
With replacement of Sportfishing Pier		
Bulkhead Repair	0	0
Small Craft Boat Launch Ramp	+1,689.5 (+157.0)	+1,689.5 (+157.0)
Sportfishing Pier (Remove/Replace)	0	0
Seaside Lagoon[a]	0	0
Basin 3 – Fewer Slips than Existing	-4,573.9 (-424.9)	NA
Basin 3 – Similar Slips to Existing	NA	-1,427.7 (-132.6)
Horseshoe Pier	0	0
Pedestrian Bridge	+4,065.6 (+377.7)	+4,065.6 (+377.7)
Total (with Replacement of Sportfishing Pier)	**+1,181.2 (+109.8)**	**-4,327.4 (+667.3)**
Total with Removal of Sportfishing Pier Only		
Sportfishing Pier Removal	-7,290.0 (-677.3)	-7,290.0 (-677.3)
Total (With Removal of Sportfishing Pier)	**-6,108.8 (-567.5)**	**-2,962.6 (-275.2)**

Notes:

a. The opening of Seaside Lagoon would result in the creation of 8,107.6 square feet of new open water by the removal of a portion of the existing breakwater, and it is not included in the table because it is not considered exposure of surface water (i.e., it is not considered a reduction of surface coverage).

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to sensitive species under Mole A – Option 2 would be the same as Mole A - Option 1 described above, except that the amount of surface cover would be slightly reduced as shown in Table 4-48 above and detailed in Table 4-50 below. Therefore, similar to the proposed project, Mole A – Option 2 would result in significant impacts on sensitive species. This is similar but reduced in comparison to the proposed project.

Table 4-50: Mole A Option 2 Summary of Exposure of Water or Increase in Surface Cover for Each Project Element Under Various Redondo Beach Marina in Basin 3 and Sportfishing Pier Options

Project Element	Surface Cover Net Change ft^2 (m^2)	
	With Basin 3 – Fewer Slips	With Basin 3 – Similar Slips
With replacement of Sportfishing Pier		
Bulkhead Repair	0	0
Small Craft Boat Launch Ramp	+1,015.6 (+94.4)	+1,015.6 (+94.4)
Sportfishing Pier (Remove/Replace)	0	0
Seaside Lagoon[a]	0	0
Basin 3 – Fewer Slips than Existing	-4,573.9 (-424.9)	NA
Basin 3 – Similar Slips to Existing	NA	-1,427.7 (-132.6)
Horseshoe Pier	0	0
Pedestrian Bridge	+4,065.6 (+377.7)	+4,065.6 (+377.7)
Total (with Replacement of Sportfishing Pier)	**+507.3 (+47.2)**	**+3,653.5 (+339.5)**
Total with Removal of Sportfishing Pier Only		
Sportfishing Pier Removal	-7,290.0 (-677.3)	-7,290.0 (-677.3)
Total (With Removal of Sportfishing Pier)	**-6,782.7 (-630.1)**	**-3,636.5 (-337.8)**

Notes:

a. The opening of Seaside Lagoon would result in the creation of 8,107.6 square feet of new open water by the removal of a portion of the existing breakwater, and it is not included in the table because it is not considered exposure of surface water (i.e., it is not considered a reduction of surface coverage).

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to sensitive species under Mole A – Option 3 would be the same as Mole A - Option 1 described above, except that the amount of surface cover would be slightly reduced as shown in Table 4-48 above and detailed in Table 4-51 below. Therefore, similar to the proposed project, Mole A – Option 3 would result in significant impacts on sensitive species. This is similar but reduced in comparison to the proposed project.

Table 4-51: Mole A Option 3 Summary of Exposure of Water or Increase in Surface Cover for Each Project Element Under Various Redondo Beach Marina in Basin 3 and Sportfishing Pier Options

Project Element	Surface Cover Net Change ft^2 (m^2)	
	With Basin 3 – Fewer Slips	With Basin 3 – Similar Slips
With replacement of Sportfishing Pier		
Bulkhead Repair	0	0
Small Craft Boat Launch Ramp	+1,015.6 (+94.4)	+1,015.6 (+94.4)
Sportfishing Pier (Remove/Replace)	0	0
Seaside Lagoon[a]	0	0
Basin 3 – Fewer Slips than Existing	-4,573.9 (-424.9)	NA
Basin 3 – Similar Slips to Existing	NA	-1,427.7 (-132.6)
Horseshoe Pier	0	0
Pedestrian Bridge	+4,065.6 (+377.7)	+4,065.6 (+377.7)
Total (with Replacement of Sportfishing Pier)	**+507.3 (+47.2)**	**+3,653.5 (+339.5)**
Total with Removal of Sportfishing Pier Only		
Sportfishing Pier Removal	-7,290.0 (-677.3)	-7,290.0 (-677.3)
Total (With Removal of Sportfishing Pier)	**-6,782.7 (-630.1)**	**-3,636.5 (-337.8)**

Notes:
a. The opening of Seaside Lagoon would result in the creation of 8,107.6 square feet of new open water by the removal of a portion of the existing breakwater, and it is not included in the table because it is not considered exposure of surface water (i.e., it is not considered a reduction of surface coverage).

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be located under the proposed project. The Mole C site has no sensitive terrestrial biological resources and as with the proposed project, impacts on terrestrial biological resources would be less than significant.

Impacts associated with waterside construction would be the same as described above for all of the Alternative 8 options. Therefore, significant impacts would occur on marine mammals relative to pile driving and on grunion relative to replacement of the timber portion of the Horseshoe Pier. This is the same as the proposed project.

As shown in Table 4-48 above and detailed in Table 4-52 below, operation of Mole C would result in an increase in surface cover if the Sportfishing Pier is replaced. This is similar but reduced in comparison to the proposed project. However, if the Sportfishing Pier is not replaced, no increase in surface cover would occur and impacts would be less than significant. This impact is similar but reduced in comparison to the proposed project.

Table 4-52: Mole C Summary of Exposure of Water or Increase in Surface Cover for Each Project Element Under Various Redondo Beach Marina in Basin 3 and Sportfishing Pier Options

Project Element	Surface Cover Net Change ft^2 (m^2)	
	With Basin 3 – Fewer Slips	With Basin 3 – Similar Slips
With replacement of Sportfishing Pier		
Bulkhead Repair	0	0
Small Craft Boat Launch Ramp	+1,167.4 (+108.5)	+1,167.4 (+108.5)
Sportfishing Pier (Remove/Replace)	0	0
Seaside Lagoon[a]	0	0
Basin 3 – Fewer Slips than Existing	-4,573.9 (-424.9)	NA
Basin 3 – Similar Slips to Existing	NA	-1,427.7 (-132.6)
Horseshoe Pier	0	0
Pedestrian Bridge	+4,065.6 (+377.7)	+4,065.6 (+377.7)
Total (with Replacement of Sportfishing Pier)	**+659.1 (+61.3)**	**+3,805.3 (+353.6)**
Total with Removal of Sportfishing Pier Only		
Sportfishing Pier Removal	-7,290.0 (-677.3)	-7,290.0 (-677.3)
Total (With Removal of Sportfishing Pier)	**-6,630.9 (616.0)**	**-3,484.7 (-323.7)**

Notes:
a. The opening of Seaside Lagoon would result in the creation of 8,107.6 square feet of new open water by the removal of a portion of the existing breakwater, and it is not included in the table because it is not considered exposure of surface water (i.e., it is not considered a reduction of surface coverage).

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur, however, the site plan would be reconfigured and there would be pedestrian bridge, breakwater, or redevelopment of the Joe's Crab Shack site. The Mole D site has no sensitive terrestrial biological resources and as with the proposed project, impacts on terrestrial biological resources would be less than significant.

Impacts associated with waterside construction would be similar as described above for all of the Alternative 8 options; however, slightly reduced from the Mole A and Mole C options because the pedestrian bridge would not constructed. Therefore, significant impacts would occur on marine mammals relative to pile driving and on grunion relative to replacement of the timber portion of the Horseshoe Pier. This is similar but slightly reduced as compared to the proposed project.

As shown in Table 4-48 above and detailed in Table 4-53 below, operation of Mole D – Option 1 would not result in an increase in surface cover whether or not the Sportfishing

Pier is replaced. The impact is less than significant, which is a reduced impact as compared to the proposed project.

Table 4-53: Mole D – Option 1 Summary of Exposure of Water or Increase in Surface Cover for Each Project Element Under Various Redondo Beach Marina in Basin 3 and Sportfishing Pier Options

Project Element	Surface Cover Net Change ft^2 (m^2)	
	With Basin 3 – Fewer Slips	With Basin 3 – Similar Slips
With replacement of Sportfishing Pier		
Bulkhead Repair	0	0
Small Craft Boat Launch Ramp	+1,567.2 (+145.6)	+1,567.2 (+145.6)
Sportfishing Pier (Remove/Replace)	0	0
Seaside Lagoon[a]	0	0
Basin 3 – Fewer Slips than Existing	-4,573.9 (-424.9)	NA
Basin 3 – Similar Slips to Existing	NA	-1,427.7 (-132.6)
Horseshoe Pier	0	0
Pedestrian Bridge	0	0
Total (with Replacement of Sportfishing Pier)	**-3,006.7 (-279.3)**	**+139 (+13)**
Total with Removal of Sportfishing Pier Only		
Sportfishing Pier Removal	-7,290.0 (-677.3)	-7,290.0 (-677.3)
Total (With Removal of Sportfishing Pier)	**-10,296.7 (-956.6)**	**-7,150.5 (-664.3)**

Notes:
a. The opening of Seaside Lagoon would result in the creation of 8,107.6 square feet of new open water by the removal of a portion of the existing breakwater, and it is not included in the table because it is not considered exposure of surface water (i.e., it is not considered a reduction of surface coverage).

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to sensitive species under Mole D – Option 2 would be the same as Mole D - Option 1 described above as shown in Table 4-48 above and detailed in Table 4-54 below. Therefore, similar to the proposed project, construction of Mole D – Option 2 would result in significant impacts on sensitive species. This is similar but reduced in comparison to the proposed project. Operational impacts would be less than significant. This is reduced in comparison to the proposed project.

Table 4-54: Mole D – Option 2 Summary of Re-Exposure of Water or Increase in Surface Cover for Each Project Element Under Various Redondo Beach Marina in Basin 3 and Sportfishing Pier Options

Project Element	Surface Cover Net Change ft^2 (m^2)	
	With Basin 3 – Fewer Slips	With Basin 3 – Similar Slips
With replacement of Sportfishing Pier		
Bulkhead Repair	0	0
Small Craft Boat Launch Ramp	+1,567.2 (+145.6)	+1,567.2 (+145.6)
Sportfishing Pier (Remove/Replace)	0	0
Seaside Lagoon[a]	0	0
Basin 3 – Fewer Slips than Existing	-4,573.9 (-424.9)	NA
Basin 3 – Similar Slips to Existing	NA	-1,427.7 (-132.6)
Horseshoe Pier	0	0
Pedestrian Bridge	0	0
Total (with Replacement of Sportfishing Pier)	**-3,006.7 (-279.3)**	**+139.5 (+13.0)**
Total with Removal of Sportfishing Pier Only		
Sportfishing Pier Removal	-7,290.0 (-677.3)	-7,290.0 (-677.3)
Total (With Removal of Sportfishing Pier)	-10,296.7 (-956.6)	-7,150.5 (-664.3)

Notes:
a. The opening of Seaside Lagoon would result in the creation of 8,107.6 square feet of new open water by the removal of a portion of the existing breakwater, and it is not included in the table because it is not considered exposure of surface water (i.e., it is not considered a reduction of surface coverage).

Mitigation Measures

Mitigation measures MM BIO-1: Protection of Marine Mammals During Construction, and MM BIO-2: California Grunion would be implemented to address construction impacts on special status species under all Alternative 8 options. Mitigation measure MM BIO-3: Mitigation for Increase in Surface Coverage would be implemented to address an increase in surface coverage if the Sportfishing Pier is replaced under the Alternative 8 options for Mole A and Mole C. No mitigation is required for the Alternative 8 Mole D options. If the Sportfishing Pier is not replaced, the operational impacts for all Alternative 8 options would be less than significant and no mitigation is required.

Residual Impacts

Mitigation measure MM BIO-1 would reduce to less than significant impacts to marine mammal caused by noise and vibration from pile-driving associated with the in-water construction of Alternative 8. In addition, although impacts to fish, including broomtail groupers, from pile-driving activities would be less than significant, mitigation measure MM BIO-1 would further reduce the likelihood of impacts to fish (as well as marine mammals) as a result of pile-driving as a soft start would warn mobile aquatic species to leave the area as pile-driving is commenced.

Mitigation measure MM BIO-2 would reduce to less than significant the construction associated with the Horseshoe Pier at or near the sandy beach habitat of Horseshoe Beach to result in direct impacts (including mortality or injury) to grunion if they are present in the project area during their spawning season (March to August).

Mitigation measure MM BIO-3 would reduce to less than significant the net increase in surface coverage that would occur if the Sportfishing Pier is rebuilt at Mole A or Mole C. If the Sportfishing Pier is not replaced, impacts would be less than significant without mitigation under all Alternative 8 options.

With implementation of mitigation, significant impacts to special-status species during construction and operation would be reduced to less than significant.

Impact BIO-2: Alternative 8 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

As with the proposed project, the boat launch ramp would be constructed in areas with the following habitat types: upland – revetment; intertidal - artificial substrate (riprap); subtidal – rock bottom (rubble/cobble); subtidal – unconsolidated bottom (soft bottom). The amount of habitat that would be affected for the proposed project and each Alternative 8 option is shown on Table 4-55. The amount of habitat amount under each option varies based on the size of the ramp and associated riprap. The amount of habitat affected would be greatest under the proposed project because of the proposed breakwater. No wetlands or eelgrass are located at any of the boat launch ramp locations.

Under all of the Alternative 8 options, the overall activity level and amount of area disturbed would be similar and thus construction impacts on terrestrial and marine habitat would be similar to that of the proposed project. As with the proposed project, construction and operation of the landside elements under the Alternative 8 options would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including riparian habitat, native grassland, wildlife corridors, vernal pool habitat, freshwater marsh, or other sensitive or critical natural community. Therefore, as with the proposed project, there would be no impacts on terrestrial biological resources.

Construction of the Alternative 8 options would disturb less marine benthic habitat as the proposed project. No significant impacts on marine and riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS would occur. This is similar, but reduced, in comparison with the proposed project. Further, the City is proposing, as with the proposed project, the following Conditions of Approval as part of its Conditional Use Permit procedures: COA BIO-4: Eelgrass; COA BIO-5: Caulerpa; and COA BIO-6: Compliance with NMFS Guidelines for Overwater Structures.

Table 4-55: Habitat Disturbed Under the Proposed Project and Alternative 8 Boat Launch Ramp Options

Habitat Type	Mole C (Proposed Project)		Mole A - Option 1		Mole A - Option 2		Mole A – Option 3		Mole C		Mole D - Option 1		Mole D - Option 2	
	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2
Upland Habitats: Revetment	256.7	23.8	156.8	14.6	193.9	18.0	197.0	18.3	129.5	12.0	0.0	0.0	0.0	0.0
Marine: Intertidal: Artificial Substrate: Riprap	972.2	90.3	530.1	49.3	717.4	66.7	762.9	70.9	650.8	60.5	737.8	68.5	987.3	91.7
Marine: Subtidal: Rock Bottom: Rubble/Cobble	5,772.7	536.3	814.5	75.7	949.7	88.2	1,034.2	96.1	3,182.3	295.6	3,203.5	297.6	3,945.0	366.5
Marine: Subtidal: Unconsolidated Bottom: Soft Bottom	61,896.6	5,750.4	3,823.2	355.2	5,283.0	490.8	5,765.0	535.6	8,351.9	775.9	5,024.9	466.8	8,433.9	783.5
Total	**68,898.2**	**6,400.9**	**5,167.8**	**480.1**	**6,950.1**	**645.7**	**7,562.0**	**702.5**	**12,185.0**	**1,132.0**	**8,966.2**	**833.0**	**13,366.1**	**1,241.8**

Notes:

ft^2 – square feet
m^2 – square meters

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole A is currently developed with surface parking and marina uses.

Impacts associated with landside and waterside construction would be the same as described above for all of the Alternative 8 options. Construction and operation of Mole A – Option 1 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. Therefore, no significant impacts would occur. This is similar to the proposed project, but reduced because no breakwater would be constructed.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to riparian habitat or other sensitive natural community under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole A – Option 2 would result in less than significant impacts on riparian habitat or other sensitive natural community. This is similar but reduced in comparison to the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to riparian habitat or other sensitive natural community under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole A – Option 3 would result in less than significant impacts on riparian habitat or other sensitive natural community. This is similar but reduced in comparison to the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be located under the proposed project

Impacts associated with landside and waterside construction would be the same as described above for all of the Alternative 8 options. Mole C 1 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. Therefore, no significant impacts would occur. This is similar to the proposed project, but reduced because no breakwater would be constructed.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur, however, the site plan would be reconfigured and there would be no breakwater, pedestrian bridge, or redevelopment of the Joe's Crab Shack site.

Impacts associated with landside and waterside construction would be similar as described above for all of the Alternative 8 options. Mole D – Option 1 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. Therefore, no significant impacts would occur. This is similar to the proposed project, but reduced because no breakwater or pedestrian bridge would be constructed.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to riparian habitat or other sensitive natural community under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole D – Option 1 would result in less than significant impacts on riparian habitat or other sensitive natural community. This is similar but reduced in comparison to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-3: Alternative 8 would not have a substantial adverse effect on federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Under all of the Alternative 8 options, the overall activity level and amount of area disturbed would be similar and thus construction impacts on terrestrial and marine habitat would be similar to that of the proposed project.

As with the proposed project, construction and operation of the landside elements under the Alternative 8 options would occur in previously developed areas that do not have any sensitive terrestrial biological resources, including marshes, vernal pools, and coastal wetlands. Therefore, as with the proposed project, there would be no impacts on these sensitive terrestrial habitat resources.

Under Alternative 8, the proposed waterside elements to be constructed would be similar to the proposed project and there would be temporary impacts to federally protected waters. However, under the Alternative 8 options, the location of the boat launch ramp would vary, no breakwater would be constructed, and no pedestrian bridge would be constructed under the Mole D options. Therefore, construction impacts on marine biological resources would be similar, but reduced, in comparison to that of the proposed

project. Temporary construction impacts on aquatic vegetation and benthic communities through direct removal or indirect loss or disturbance as a result of turbidity would be less than significant. This is similar, but reduced, in comparison with the proposed project. Further, as with the proposed project, COA BIO-2 would require Alternative 8 to implement BMPs to control turbidity in the water column adjacent to in-water work.

Under the proposed project, a substantial adverse effect on federally protected waters and associated habitat would occur if the USACE determines that the Seaside Lagoon is jurisdictional waters, which is a significant impact. Under the Alternative 8 options, while habitat would be converted to soft bottom to hard bottom, no fill of federally protected waters and associated habitat would occur because no breakwater would be constructed. No other project elements would result in fill of federally protected waters and an associated loss of habitat, and the modification of Seaside Lagoon would result in a increase of habitat. Seaside Lagoon would result in -7,207.4 square feet (669.6 square meters) of habitat created if the Lagoon is determined to be jurisdictional and 27,224.3 square feet (2,529.2 square meters) if the Lagoon is determined to not be jurisdictional. Table 4-56 shows the amount of habitat at the boat launch ramp site that would be lost and converted under the proposed project and converted under the proposed project and Alternative 8 options. The amount of habitat conversion varies under each option based on the amount of riprap require for each boat ramp location/design. As shown in Table 4-56, the largest amount would of habitat conversion would occur under Mole D – Option 2 and the least would occur under Mole A – Option 1. All boat ramp options have less habitat conversion as compared to the proposed project. Additionally, without a breakwater, no fill of federally protected waters and associated habitat would occur with implementation of the boat launch ramp, which eliminates an impact as compared to the proposed project. Under each Alternative 8 option, the impact is less than significant, and the impact is reduced in comparison to the proposed project.

Further, as with the proposed project, the ecological function of Seaside Lagoon would be improved whether or not the lagoon is determined to be jurisdictional. No significant impacts to EFH would occur under the Alternative 8 options. This is similar but reduced in comparison the proposed project.

Table 4-56: Change in Permanent Jurisdictional Habitat/Loss Creation Associated with Each Alternative 8 Boat Launch Ramp Option

Habitat Change at Boat Launch Ramp Site	Mole C (Proposed Project)		Mole A - Option 1		Mole A - Option 2		Mole A – Option 3		Mole C		Mole D - Option 1		Mole D - Option 2	
	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2	ft^2	m^2
Loss of Open Water Habitat Due to Fill	15,315.0	1,422.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Habitat Conversion - Soft bottom to hard bottom habitat	67,669.2	6,286.7	4,637.7	430.9	6,232.7	579.0	6,799.1	631.7	11,534.2	1,071.6	8,228.4	764.4	12,378.9	1,150.0

Notes:

ft^2 – square feet
m^2 – square meters

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole A is currently developed with surface parking and marina uses.

Impacts associated with landside and waterside construction would be the same as described above for all of the Alternative 8 options. Construction and operation of Mole A – Option 1 would not have a substantial adverse effect on any federally protected waters or wetlands. Therefore, impacts would be less than significant. This is reduced compared to the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to federally protected waters and wetlands under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole A – Option 2 would result in less than significant impacts on federally protected waters and wetlands. This is reduced in comparison to the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to federally protected waters and wetlands under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole A – Option 3 would result in less than significant impacts on federally protected waters and wetlands. This is reduced in comparison to the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be located under the proposed project.

Impacts associated with landside and waterside construction would be the same as described above for all of the Alternative 8 options. Construction and operation of Mole C would not have a substantial adverse effect on any federally protected waters or wetlands. Therefore, impacts would be less than significant. This is reduced compared to the proposed project.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur, however, the site plan would be reconfigured and there would be no pedestrian bridge, breakwater or redevelopment of the Joe's Crab Shack site.

Impacts associated with landside and waterside construction would be the same as described above for all of the Alternative 8 options. Construction and operation of Mole D – Option 1 would not have a substantial adverse effect on any federally protected waters or wetlands. Therefore, impacts would be less than significant. This is reduced compared to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to federally protected waters and wetlands under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole D – Option 2 would result in less than significant impacts on federally protected waters and wetlands. This is reduced in comparison to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact BIO-4: Alternative 8 could 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.

<u>Mole A</u>

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Therefore, construction and operation impacts on terrestrial and marine biological resources would be similar to that of the proposed project.

Construction and operation of the landside elements of Mole A – Option 1, including the boat launch ramp site at Mole A, would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Mole A – Option 1would be similar to the same as the proposed project. Therefore, as with the proposed project, construction of Mole A – Option 1 could result in a significant impact to established native resident or migratory wildlife corridors or native wildlife nursery site if replacement of the timber portion of the Horseshoe Pier occurs during grunion spawning season (March to August).

As with the proposed project, during operation, a boat launch ramp located at the Mole A site would be similar to existing structures existing at Mole A and elsewhere in the harbor and no substantial changes in harbor configuration or barriers would occur in a manner to affect fish and wildlife movement patterns or water circulation. As with the proposed project, operational impacts would be less than significant. Construction and operation impacts would be similar to the proposed project, but reduced because no breakwater would be constructed.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to wildlife movement and wildlife nursery sites under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole A – Option 2 would not 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. The impact would be less than significant. This is similar to the proposed project, but reduced because no breakwater would be constructed.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to wildlife movement and wildlife nursery sites under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole A – Option 2 would not 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. The impact would be less than significant. This is similar to the proposed project, but reduced because no breakwater would be constructed.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be located under the proposed project.

Construction and operation of the landside elements of Mole C, including the boat launch ramp site at Mole C, would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Mole C would be similar to the same as the proposed project. Therefore, as with the proposed project, construction of Mole A – Option 1 could result in a significant impact to established native resident or migratory wildlife corridors or native wildlife nursery site if replacement of the timber portion of the Horseshoe Pier occurs during grunion spawning season (March to August).

As with the proposed project, during operation, a boat launch ramp located at the Mole C site would be similar to existing structures within the harbor and no substantial changes in harbor configuration or barriers would occur in a manner to affect fish and wildlife movement patterns or water circulation. As with the proposed project, operational impacts would be less than significant. Construction and operation impacts would be similar to the proposed project, but reduced because no breakwater would be constructed.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur, however, the site plan would be reconfigured and there would be no breakwater, pedestrian bridge, or redevelopment of the Joe's Crab Shack site.

Construction and operation of the landside elements of Mole D – Option 1, including the boat launch ramp site at Mole D, would occur in previously developed areas that do not have any established native resident or migratory wildlife corridors or native wildlife nursery site, and would not impede the movement of any wildlife. Any removal of existing ornamental trees and landscaped areas would require compliance with the City's tree trimming/tree removal ordinance specific to the harbor area relative to bird species of special concern and wading birds. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Mole D – Option 1would be similar to the same as the proposed project. Therefore, as with the proposed project, construction of Mole D – Option 1 could result in a significant impact to established native resident or migratory wildlife corridors or native wildlife nursery site if replacement of the timber portion of the Horseshoe Pier occurs during grunion spawning season (March to August).

As with the proposed project, during operation, a boat launch ramp located at the Mole D site would be similar to existing structures existing in the harbor and no substantial changes in harbor configuration or barriers would occur in a manner to affect fish and wildlife movement patterns or water circulation. As with the proposed project, operational impacts would be less than significant. Construction and operation impacts would be similar to the proposed project, but reduced because no breakwater and no pedestrian bridge would be constructed.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to wildlife movement and wildlife nursery sites under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole D – Option 2 would not 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. The impact would be less than significant. This is similar to the proposed project, but reduced because no breakwater and no pedestrian bridge would be constructed.

Mitigation Measures

Mitigation measure MM BIO-2: California Grunion would be implemented to address construction impacts on wildlife nursery sites should Horseshoe Pier construction that could disturb sandy beach occur during the grunion spawning season.

Residual Impacts

With implementation of mitigation measure MM BIO-2, impacts related to the movement of migratory birds, fish, mammals, or other species, and the use of a native wildlife nursery would be less than significant.

Impact BIO-5: Alternative 8 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

As described above for Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole A is currently developed with surface parking and marina uses.

Construction and operation of the landside elements of Mole A - Option 1would require compliance with local policies and ordinances protecting biological resources, including during tree trimming/tree removal activities. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Mole A - Option 1 would be the similar, but reduced compared to the proposed project because no breakwater would be constructed. Therefore, as with the proposed project, construction and operation of Mole A - Option 1would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the City is proposing COA BIO-4 and COA BIO-5, which require compliance with policies related to eelgrass and Caulerpa taxifolia as part of the Conditional Use Permit process. Therefore, as with the proposed project, impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to compliance with local policies and ordinances protecting biological resources under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, construction and operation of Mole A – Option 2 would result in less than significant impacts related to compliance with local policies and ordinances protecting biological resources. This is similar to the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to compliance with local policies and ordinances protecting biological resources under Mole A – Option 3 would be the same as Mole A - Option 1 described above.

Therefore, similar to the proposed project, construction and operation of Mole A – Option 3 would result in less than significant impacts related to compliance with local policies and ordinances protecting biological resources. This is similar to the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project.

Construction and operation of the landside elements of Mole C would require compliance with local policies and ordinances, including during tree trimming/tree removal activities. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Mole C would be the similar, but reduced compared to the proposed project because no breakwater would be constructed. Therefore, as with the proposed project, construction and operation of Mole C would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the City is proposing COA BIO-4 and COA BIO-5, which require compliance with policies related to eelgrass and Caulerpa taxifolia as part of the Conditional Use Permit process. Mole C would result in less than significant impacts related to compliance with local policies and ordinances protecting biological resources. This is similar to the proposed project.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, a similar amount of construction and operational activities would occur, however, the site plan would be reconfigured and there would be no breakwater, pedestrian bridge, or redevelopment of the Joe's Crab Shack site.

Construction and operation of the landside elements of Mole D - Option 1would require compliance with local policies and ordinances, including during tree trimming/tree removal activities. Therefore, as with the proposed project, impacts on terrestrial biological resources would be less than significant.

The waterside elements of Mole D - Option 1would be the similar, but reduced compared to the proposed project because no breakwater and pedestrian bridge would be constructed. Therefore, as with the proposed project, construction and operation of Mole D - Option 1 would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the City is proposing COA BIO-4 and COA BIO-5, which require compliance with policies related to eelgrass and Caulerpa taxifolia as part of the Conditional Use Permit process. Mole D – Option 1 would result in less than significant impacts related to compliance with local policies and ordinances protecting biological resources. This is similar to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to compliance with local policies and ordinances protecting biological resources under Mole D – Option 2 would be the same as Mole D - Option 1 described above.

Therefore, similar to the proposed project, construction and operation of Mole D – Option 2 would result in less than significant impacts related to compliance with local policies and ordinances protecting biological resources. This is similar to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Cultural Resources

Impact CUL-1: Alternative 8 would cause a substantial adverse change in the significance of a historical resource.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development, and demolition of existing structures would be similar to the proposed project. Development of Mole A - Option 1 as a small craft boat launch ramp facility would also include demolition of existing docks at Mole A. These docks are not historic structures. Therefore, under Mole A - Option 1, no additional historical resources would be impacted, and therefore, impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to historical resources associated with Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 2 no additional historical resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to historical resources associated with Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 3, no additional historical resources would be impacted, and therefore, impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project. Although the alternative Mole C facility would be smaller, the amount of development and demolition would be the same as the proposed project. Therefore, under Mole C, no additional historical resources would be impacted, and impacts would be the same as the proposed project. As with the proposed project, impacts would be significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped similar to the proposed project, although with a reconfigured site plan. The amount of demolition would be the same, and thus the historical resources identified with the project site (Sportfishing Pier and buildings and the timber portion of the Horseshoe Pier and buildings) would be demolished under Mole D – Option 1. Therefore, under Mole D – Option 1, no additional historical resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to historical resources associated with Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, under Mole D – Option 2, no additional historical resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Mitigation Measures

As with the proposed project, mitigation measures MM CUL-1: Recordation, MM CU-2: Interpretive Program and MM CUL-3: Protection of the Monstad Pier During Construction would be implemented.

Residual Impacts

Similar to the proposed project, implementation of Alternative 8 would result in the demolition of potentially historic structures. While mitigation measures MM CUL-1, MM CUL-2, and MM CUL-3 are proposed, in the case of the full demolition of an historic property, residual impacts to historical resources are considered significant and unavoidable.

Impact CUL-2: Alternative 8 could cause a substantial adverse change in the significance of an unknown archaeological resource.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping of the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. Based on the 0.5-mile record search, there were no documented prehistoric or archaeological sites or resources in the surrounding area of the project site (which includes the Mole A site). In addition, the construction of the small craft boat launch ramp facility at Mole A – Option 1, would be performed with minimal grading on artificial fill; therefore, no unknown archaeological resources (including buried features or possible structural remnants) are expected to be present at this alternative ramp location. Therefore, under Mole A - Option 1, no additional archaeological resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to archaeological resources associated with Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 2 no additional archaeological resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to archaeological resources associated with Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 3 no additional archaeological resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project. Although the alternative Mole C facility would be smaller, the amount of development and ground disturbance would be the same as the proposed project. Therefore, under Mole C, no additional archaeological resources would be impacted, and impacts would be the same as the proposed project. As with the proposed project, impacts would be significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped, similar to the proposed project, although with a reconfigured site plan. It is anticipated that grading would occur throughout the site and the amount of development and ground disturbance would be the same as the proposed project. Therefore, under Mole D, no additional archaeological resources would be impacted, and impacts would be similar to the proposed project. As with the proposed project, impacts would be significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to archaeological resources associated with Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, under Mole D – Option 2, no additional archaeological resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Mitigation Measures

Due to the sensitivity for unknown archaeological resources, mitigation measure MM CUL-4: Phase I Archaeological Work, would be implemented to reduce the potential impact of excavation on unknown archaeological resources at the project site to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-4, the potential impact of excavation on unknown archaeological resources at the project site under Alternative 8 would be less than significant.

Impact CUL-3: Alternative 8 could directly or indirectly destroy an unknown paleontological resource.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. Construction of the small craft boat launch ramp facility at Mole A – Option 1, would be performed with minimal grading on artificial fill; therefore, no unknown paleontological resources are expected to be encountered at this alternative ramp location. Therefore, under Mole A - Option 1, no additional unknown paleontological resource would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts to paleontological resources under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 2 no additional paleontological resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts to paleontological resources under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 3 no additional paleontological resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project. Although the alternative Mole C facility would be smaller, the amount of ground disturbance would be the same as the proposed project. Therefore, under Mole C, no additional paleontological resources would be impacted, and impacts would be the same as the proposed project. As with the proposed project, impacts would be significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped, similar to the proposed project, although with a reconfigured site plan. It is anticipated that grading would occur throughout the site and the amount of ground disturbance would be the same as the proposed project. Therefore, under Mole D, no additional paleontological resources would be impacted, and impacts would be similar to the proposed project. As with the proposed project, impacts would be significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to paleontological resources associated with Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, under Mole D – Option 2, no additional paleontological resources would be impacted, and impacts would be similar as compared to the proposed project. As with the proposed project, impacts would be significant.

Mitigation Measures

Mitigation measure MM CUL-5: Potential to Encounter Unknown Paleontological Resources, would be implemented in order to preserve a representative sample of any scientifically important fossil remains and associated data that might be exposed by excavation at the project site; thereby, reducing the impact of excavation on unknown paleontological resources at the project site to a less than significant level.

Residual Impacts

With application of mitigation measure MM CUL-5, the potential impact of earth-moving activities from implementation of Alternative 8 on the paleontological resources at the project site would be reduced to a less than significant level.

Geology and Soils

Impact GEO-1: Alternative 8 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, or seismic-related ground failure.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. Similar to the proposed project, the implementation of the Mole A – Option 1 boat launch ramp facility would be required to comply with the recommendations detailed in the approved site-specific geotechnical evaluation(s) and engineering analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria

and specified seismic parameters. The design- and project-specific geotechnical evaluation(s), engineering analysis and plans would be reviewed by the City's Building and Safety Division during the design phase would include recommendations and specific conditions that are project site-specific. Therefore, the Mole A – Option 1 boat launch ramp facility would be designed, located, and built in compliance with the most up-to-date building code requirements of the CBC applicable at the time of development. Similar to the proposed project, Mole A – Option 1 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts are less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to rupture of a known earthquake fault associated with Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts are less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to rupture of a known earthquake fault associated with Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts are less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. Similar to the proposed project, the implementation of the alternative Mole C boat launch ramp facility would be required to comply with the recommendations detailed in the approved site-specific geotechnical evaluation(s) and engineering analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria and specified seismic parameters. The design- and project-specific geotechnical evaluation(s), engineering analysis and plans would be reviewed by the City's Building and Safety Division during the design phase would include recommendations and specific conditions that are project site-specific. Therefore, the alternative Mole C boat launch ramp facility would be designed, located, and built in compliance with the most up-to-date building code requirements of the CBC applicable at the time of development. Similar to the proposed project, the Mole C alternative would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts are less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped, similar to the proposed project, although with a reconfigured site plan. Similar to the proposed project, the implementation of Mole D – Option 1 boat launch ramp facility would be required to comply with the recommendations detailed in the approved site-specific geotechnical evaluation(s) and engineering analysis during the design phase, grading plan, and any other relevant reports pertaining to construction criteria and specified seismic parameters. The design- and project-specific geotechnical evaluation(s), engineering analysis and plans would be reviewed by the City's Building and Safety Division during the design phase would include recommendations and specific conditions that are project site-specific. Therefore, the Mole D – Option 1 boat launch ramp facility would be designed, located, and built in compliance with the most up-to-date building code requirements of the CBC applicable at the time of development. Similar to the proposed project, Mole D – Option 1 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts are less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to rupture of a known earthquake fault associated with Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2 would not expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, and impacts are less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-2: Alternative 8 would not result in substantial soil erosion or the loss of topsoil.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. Therefore, impacts associated with erosion and loss of top soil would be similar.

Specific to Mole A, similar to the conditions at Mole C under the proposed project, construction of Mole A – Option 1 would involve ground-disturbing activities, such as demolition, grading, and resurfacing similar to the proposed project; however, to a lesser degree because there is no existing building at the Mole A site. Although the amount of

ground-disturbing activities would be less than the proposed project, ground-disturbing activities in general have the potential to expose surficial soils to wind and water erosion and sedimentation, though soil exposure would be temporary and short-term in nature. As with the proposed project, construction activities associated with the boat launch ramp facility, as with all project construction, would be required to comply with existing regulatory requirements including implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, Mole A – Option 1 would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust). Therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and operation, as with the proposed project, potential impacts related to soil erosion or the loss of topsoil would be less than significant under Mole A – Option 1.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to soil erosion and loss of top soil under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, given compliance with existing rules and regulations, potential impacts related to soil erosion or the loss of topsoil would be less than significant under Mole A – Option 2.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to soil erosion and loss of top soil under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, given compliance with existing rules and regulations, potential impacts related to soil erosion or the loss of topsoil would be less than significant under Mole A – Option 3.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under the Mole C alternative, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. Ground-disturbing activities in general have the potential to expose surficial soils to wind and water erosion and sedimentation, though soil exposure would be temporary and short-term in nature. As with the proposed project, construction activities associated with the boat launch ramp facility, as with all project construction, would be required to comply with existing regulatory requirements including implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, the alternative Mole C boat launch ramp facility would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust). Therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and operation, as with the proposed project, potential impacts related to soil erosion or the loss of topsoil would be less than significant under alternative Mole C.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped, similar to the proposed project, although with a reconfigured site plan. It is anticipated that grading would occur throughout the site similar to the proposed project As with the proposed project, construction activities associated with the boat launch ramp facility, as with all project construction, would be required to comply with existing regulatory requirements including implementation of BMPs and other erosion and sedimentation control measures that would enable project-related grading, excavation, and other earth-moving activities to avoid a significant impact. Similar to the proposed project, the Mole D – Option 1 boat launch ramp facility would require implementation of a SWPPP for erosion and sedimentation control, as well as adherence to the state Construction General Permit and SCAQMD Rule 403 (Fugitive Dust). Therefore, given compliance with existing rules and regulations and implementation of BMPs and erosion and sedimentation control measures during construction and operation, as with the proposed project, potential impacts related to soil erosion or the loss of topsoil would be less than significant under Mole D – Option 1.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to soil erosion and loss of top soil under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, as with the proposed project, given compliance with existing rules and regulations, potential impacts related to soil erosion or the loss of topsoil would be less than significant under Mole D – Option 2.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-3: Alternative 8 would not result in a significant impact due to on-site or off-site lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not developing the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. As with all of the land within King Harbor, the Mole A site is located in an area mapped with liquefiable soil and there is potential for seismic-related (earthquake-induced) liquefaction at the project site, which could lead to ground settlement and lateral spreading. Therefore, grading, compaction and individual foundations associated with Mole A – Option 1 (as with the boat ramp at Mole C under the proposed project) would have to adhere to design- and project-specific standards and requirements of the current CBC using proven

geotechnical engineering technologies to alleviate the liquefaction (and lateral spreading) potential at the site.

Determination of the appropriate option, or combination of options, to address liquefaction would be determined through the review of project-specific geotechnical evaluations and supplemental engineering analysis in compliance with CBC requirements and subsequent recommendations based on City design and review. As with liquefaction, ground settlement and lateral spreading, the potential for subsidence, collapse, and corrosive soils would be similar to existing conditions. Consequently, similar to the proposed project, impacts under Mole A – Option 1 would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, impacts under Mole A – Option 2 are less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, impacts under Mole A – Option 3 are less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under the Mole C alternative, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. Similar to the proposed project, grading, compaction and individual foundations associated with the alternative Mole C boat launch ramp facility (as with the boat ramp at Mole C under the proposed project) would have to adhere to design- and project-specific standards and requirements of the current CBC using proven geotechnical engineering technologies to alleviate the liquefaction (and lateral spreading) potential at the site.

Determination of the appropriate option, or combination of options, to address liquefaction would be determined through the review of project-specific geotechnical evaluations and supplemental engineering analysis in compliance with CBC requirements and subsequent recommendations based on City design and review. As with liquefaction, ground settlement and lateral spreading, the potential for subsidence, collapse, and corrosive soils would be similar to existing conditions. Consequently, similar to the proposed project, impacts under alternative Mole C would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped similar to the proposed project, although with a reconfigured site plan. As with the proposed project, grading, compaction and individual foundations associated with Mole D – Option 1 (as with the boat ramp at Mole C under the proposed project) would have to adhere to design- and project-specific standards and requirements of the current CBC using proven geotechnical engineering technologies to alleviate the liquefaction (and lateral spreading) potential at the site.

Determination of the appropriate option, or combination of options, to address liquefaction would be determined through the review of project-specific geotechnical evaluations and supplemental engineering analysis in compliance with CBC requirements and subsequent recommendations based on City design and review. As with liquefaction, ground settlement and lateral spreading, the potential for subsidence, collapse, and corrosive soils would be similar to existing conditions and the proposed project. Consequently, impacts under Mole D – Option 1 would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to lateral spreading, subsidence, liquefaction, corrosiveness, or collapse due to being located on a geologic unit or soil that is unstable under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, as with the proposed project, impacts under Mole D – Option 2 are less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact GEO-4: Alternative 8 would not create substantial risks to life or property due to the presence of expansive soil, as defined in the California Building Code.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not developing the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. Similar to the proposed project, under Mole A – Option 1 if expansive soils are found based on a design- and project-specific evaluation of the expansion potential associated with on-site soils, Mole A – Option 1 would incorporate into final design plans the City's recommendations to address expansive soils. Therefore, similar to the proposed project, Mole A – Option 1 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to the presence of expansive soil under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project and Mole A – Option 1, Mole A – Option 2 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to the presence of expansive soil under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project and Mole A – Option 1, Mole A – Option 3 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under alternative Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. Similar to the proposed project, under alternative Mole C if expansive soils are found based on a design- and project-specific evaluation of the expansion potential associated with on-site soils, the alternative Mole C would incorporate into final design plans the City's recommendations to address expansive soils. Therefore, similar to the proposed project, the alternative Mole C would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped similar to the proposed project, although with a reconfigured site plan. Similar to the proposed project, under Mole D – Option 1, if expansive soils are found based on a design- and project-specific evaluation of the expansion potential associated with on-site soils, Mole D – Option 1 would incorporate into final design plans the City's recommendations to address expansive soils. Therefore, similar to the proposed project, Mole D – Option 1 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to the presence of expansive soil under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project and Mole D – Option 1, Mole D – Option 2 would not create a substantial risk to life or property due to the presence of expansive soil, as defined in the CBC.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Greenhouse Gas Emissions

Impact GHG-1: Alternative 8 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Construction emissions from Alternative 8 options would be similar to that of the proposed project, but reduced slightly because no breakwater would be constructed under each of the Alternative 8 options. Operational emissions from Alternative 8 options would be generally the same as that of the proposed project, although under the Mole A and Mole D options, Joe's Crab Shack would continue to be operational, this would not appreciably change operational GHG emissions. Therefore, the GHG emissions calculations and significance findings for the proposed project would be slightly reduced for construction and the generally same for operations under the Alternative 8 options.

SCAQMD Threshold Analysis

Construction Emissions

Total estimated construction-related GHG emissions for the proposed project and Alternative 8 are shown in Table 4-57. As shown, the total estimated GHG emissions during construction under the Alternative 8 options for a two-lane boat launch ramp facility and one lane boat launch ramp facility with a hand launch would represent the greatest GHG emissions and would be approximately 11,784 $MTCO_2e$. This would equal approximately 393 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology. The one-lane boat ramp options without a hand launch would have lower construction emissions. The proposed project would result in the greatest emissions because it includes construction of a breakwater.

Table 4-57: Estimated Total Construction-Related GHG Emissions

Construction Year	Estimated CO_2e Emissions (MT)	Amortized Construction (MT/Yr)
Proposed Project	12,329.14	410.97
Mole A – Option 1	11,715.92	390.53
Mole A – Option 2	11,784.40	392.81
Mole A – Option 3	11,784.40	392.81
Mole C	11,736.05	391.20
Mole D – Option 1	11,715.92	390.53
Mole D – Option 2	11,784.40	392.81

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes:
CO_2e= carbon dioxide equivalent; MT =metric tons; MT/yr = metric tons per year.

Operational Emissions

The estimated operational GHG emissions resulting from operation of the Alternative 8 options are shown in Table 4-58. Operational emissions are anticipated to be identical to the proposed project. Additionally, in accordance with SCAQMD's recommendation, the amortized construction-related GHG emissions from Table 4-57 are added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown in Table 4-58, the total amortized annual emissions for the Alternative 8 options with a two-lane boat launch ramp facility and one lane boat launch ramp facility with a hand launch would result in the greatest emission increase. This increase is of 5,054.50 $MTCO_2e$ per year, which would be less than the proposed project and would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions.

As with the proposed project, the Alternative 8 options would have a net increase of 1,438 employees, although this number may be reduced under the Mole D options. Therefore, the per service population emissions for Alternative 8 options with a two-lane boat launch ramp facility and one lane boat launch ramp facility with a hand launch would equal 4.39 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 project level service population.

All Alternative 8 options would result in reduced total emissions and reduced emissions per service population as compared to the proposed project and would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, the net increase in GHG emissions resulting from implementation of the Alternative 8 alternatives is less than significant, as with the proposed project.

Table 4-58: Estimated Construction- and Operations-Related GHG Emissions For Alternative 8 Options and Proposed Project

Emission Source	Estimated Emissions CO_2e (MT/yr)
Net Emissions Increase[c]	
Area Sources	0.03
Energy Consumption[a]	3,078.22
Mobile Sources	2,601.78
Solid Waste	102.39
Water Consumption[b]	135.51
Total Net Emissions Increase	*5,917.92*

	Amortized Emissions	Total Project[d]	Emissions / SP[e]	> 4.6 MT/SP	> 25,000 MT/SP
Proposed Project	410.97	5,072.66	3.528	No	No
Mole A – Option 1	390.53	5,052.22	3.513	No	No
Mole A – Option 2	392.81	5,054.50	3.515	No	No
Mole A – Option 3	392.81	5,054.50	3.515	No	No
Mole C	391.20	5,052.89	3.514	No	No
Mole D – Option 1	390.53	5,052.22	3.513	No	No
Mole D – Option 2	392.81	5,054.50	3.515	No	No

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes: CO_2e= carbon dioxide equivalent; MT/yr = metric tons per year; %=percent.

a. The energy-related GHG emissions, as estimated by CalEEMod, use 2008 Title 24 energy usage rates. However, according to the CEC, buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards would be 15 percent more energy efficient than the 2008 Standards. As such, this additional reduction in energy consumption was accounted for in the proposed project's estimated GHG emissions associated with energy consumption.

b. GHG emissions reductions associated with water use resulting from compliance with CALGreen requirements, which requires a minimum 20 percent reduction in indoor water use and the provision of irrigation controllers for outdoor water use, were accounted for in CalEEMod model run.

c. Net emissions equal the total project emissions minus the emissions from the existing operations. Because the emissions are compared to the threshold using a net increase, the service population represents the net increase in service population. Full discussion of existing and project emissions are detailed in the proposed project discussion as well as in Appendix N.

d. Total project emissions equal the *Total Net Emissions Increase* plus the amortized emissions for each scenario.

e. Emissions per service population is the Total project emissions divided by a service population of 1,4738 employees.

BAU Analysis

GHG emissions for the BAU scenario under Alternative 8 options with a two-lane boat launch ramp facility and one lane boat launch ramp facility with a hand launch would result in the greatest BAU emissions of 32,403.28 $MTCO_2e$. This includes amortized construction emissions. Alternative 8-related GHG emissions that accounted for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 24,568.54 $MTCO_2e$ under Alternative 8 options with a two-lane boat launch ramp facility and one lane boat launch ramp facility with a hand launch. All other Alternative 8 options would have slightly lower emissions levels. The proposed project is greater than all Alternative 8 options at 24,586.70 $MTCO_2e$ annually.

Table 4-59 summarizes the GHG emissions for both the BAU scenario and emissions under the Alternative 8 options. As shown, the emissions result in a minimum percent reduction from BAU of 24.17 percent under the proposed project and a reduction of 24.18 percent from BAU under the Alternative 8 options. Under all Alternative 8 options, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions. Therefore, Alternative 8 options would result in less than significant emissions.

Table 4-59: Unmitigated BAU Emissions Comparison

Emission Source	Estimated Emissions CO_2e (MT/yr)
BAU Scenario (without Amortized Construction)	
Area Sources	0.03
Energy Consumption	5,887.90
Mobile Sources	25,179.24
Solid Waste	514.32
Water Consumption	428.97
Total BAU Emissions	32,421.44
2020 Buildout Scenario (without Amortized Construction)	
Area Sources	0.03
Energy Consumption[a]	4,771.87

Mobile Sources	18,859.87
Solid Waste	258.54
Water Consumption[b]	285.41
Total Emissions	24,175.73

Scenario	Amortized Emissions	BAU + Amortized Emissions	Project + Amortized Emissions	Percent Reduction from BAU	< 15 Percent Reduction from BAU
Proposed Project	410.97	32,421.44	24,586.70	24.17	No
Mole A – Option 1	390.53	32,401.00	24,566.26	24.18	No
Mole A – Option 2	392.81	32,403.28	24,568.54	24.18	No
Mole A – Option 3	392.81	32,403.28	24,568.54	24.18	No
Mole C	391.20	32,401.67	24,566.93	24.18	No
Mole D – Option 1	390.53	32,401.00	24,566.26	24.18	No
Mole D – Option 2	392.81	32,403.28	24,568.54	24.18	No

Source: ESA CalEEMod Modeling 2015 (Appendix N)

Notes:

CO_2e= carbon dioxide equivalent; MT/yr = metric tons per year

a. The energy-related GHG emissions, as estimated by CalEEMod, use 2008 Title 24 energy usage rates. However, according to the CEC, buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards would be 15 percent more energy efficient than the 2008 Standards. As such, this additional reduction in energy consumption was accounted for in the proposed project's estimated GHG emissions associated with energy consumption.

b. GHG emissions reductions associated with water use resulting from compliance with CALGreen requirements, which requires a minimum 20 percent reduction in indoor water use and the provision of irrigation controllers for outdoor water use, were accounted for in CalEEMod model run.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site and no construction of a breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. While the Joe's Crab Shack site would not be altered (i.e., the existing building would not be demolished), Mole A – Option 1 includes demolition and replacement of existing docks, which would result in peak daily construction emissions associated with boat launch ramp facility construction that are similar but slightly reduced as compared to the proposed project. As shown in Table 4-57 above, the total estimated GHG emissions during construction under Mole A – Option 1 would be approximately 11,716 $MTCO_2e$. This would equal approximately 391 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology. This is somewhat less than the proposed project.

The estimated operational GHG emissions resulting from operation of Mole A – Option 1 would be the same as the proposed project as shown in Table 4-58 above. In accordance with SCAQMD's recommendation, the amortized construction-related GHG emissions from Table 4-57 are added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown in Table 4-58, the total amortized construction and operational emissions for Mole A – Option 1 are 5,072.66 $MTCO_2e$ per year, which would be less than the proposed project and would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions. As with the proposed project, Mole A – Option 1 would have a net increase of 1,438 employees.

Therefore, the per service population emissions would equal 3.51 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 project level service population.

GHG emissions for the BAU scenario under Mole A – Option 1 would result in BAU emissions of 32,401.00 $MTCO_2e$. This includes amortized construction emissions. Mole A – Option 1 related GHG emissions that account for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 24,566.26 $MTCO_2e$ under Mole A – Option 1. This is a reduction of 24.18 percent from BAU, which is a slightly greater percent reduction as compared to the proposed project. Under all Mole A – Option 1, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions.

Mole A – Option 1 would result in slightly lower GHG emissions as compared to the proposed project. Mole A – Option 1 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts are less than significant. This is similar to the proposed project, but slightly reduced.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

As under Mole A - Option 1 described above, the overall amount of development and grading would be similar, but slightly less than the proposed project. As shown in Table 4-58 above, the total estimated GHG emissions during construction under Mole A – Option 2 would be approximately 11,784 $MTCO_2e$. This would equal approximately 393 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology. This is somewhat less than the proposed project.

The estimated operational GHG emissions resulting from operation of Mole A – Option 2 would be the same as the proposed project as shown in Table 4-58 above. The total amortized construction and operational emissions for Mole A – Option 2 are 5,054.50 $MTCO_2e$ per year, which would be slightly less than the proposed project and would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions. As with the proposed project, Mole A – Option 2 would have a net increase of 1,438 employees. Therefore, the per service population emissions would equal 3.52 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 project level service population.

GHG emissions for the BAU scenario under Mole A – Option 2 would result in BAU emissions of 32,403.28 $MTCO_2e$. This includes amortized construction emissions. Mole A – Option 1 related GHG emissions that account for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 24,568.54 $MTCO_2e$ under Mole A – Option 2. This is a reduction of 24.18 percent from BAU, which is a slightly greater percent reduction as compared to the proposed project. Under all Mole A – Option 2, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions.

Mole A – Option 2 would result in slightly lower GHG emissions as compared to the proposed project. Mole A – Option 2 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts are less than significant. This is similar to the proposed project, but slightly reduced.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to generation of GHG emissions Mole A – Option 3 would be the same as Mole A - Option 2 described above. Therefore, as with the proposed project, Mole A – Option 3 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and impacts are less than significant. Therefore, impacts are less than significant. This is similar to the proposed project, but slightly reduced.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, with the exception of no breakwater at the boat launch ramp site, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be located under the proposed project; however no breakwater would be constructed. As shown in Table 4-58 above, the total estimated GHG emissions during construction under Mole C would be approximately 11,736 $MTCO_2e$. This would equal approximately 391 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology. This is somewhat less than the proposed project.

The estimated operational GHG emissions resulting from operation of Mole C would be the same as the proposed project as shown in Table 4-58 above. In accordance with SCAQMD's recommendation, the amortized construction-related GHG emissions from Table 4-57 are added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown in Table 4-58, the total amortized construction and operational emissions for Mole C are 5,052.89 $MTCO_2e$ per year, which would be less than the proposed project and would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions. As with the proposed project, Mole C would have a net increase of 1,438 employees. Therefore, the per service population emissions would equal 3.51 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 project level service population.

GHG emissions for the BAU scenario under Mole C would result in BAU emissions of 32,401.67 $MTCO_2e$. This includes amortized construction emissions. Mole C related GHG emissions that account for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 24,566.93 $MTCO_2e$ under Mole C. This is a reduction of 24.18 percent from BAU, which is a slightly greater percent reduction as compared to the proposed project. Under all Mole C, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions.

Mole C would result in slightly lower GHG emissions as compared to the proposed project. Mole C would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts are less than significant. This is similar to the proposed project, but slightly reduced.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of not redeveloping the Joe's Crab Shack site, and no construction of a breakwater or pedestrian/bicycle bridge, the overall amount of

development and grading would be similar to the proposed project. As shown in Table 4-58 above, the total estimated GHG emissions during construction under Mole D – Option 1 would be approximately 11,716 $MTCO_2e$. This would equal approximately 391 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology. This is somewhat less than the proposed project.

The estimated operational GHG emissions resulting from operation of Mole D – Option 1 would be the same as the proposed project as shown in Table 4-58 above. In accordance with SCAQMD's recommendation, the amortized construction-related GHG emissions from Table 4-57 are added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown in Table 4-58, the total emissions for Mole D – Option 1 are 5,052.22 $MTCO_2e$ per year, which would be slightly less than the proposed project and would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions. As with the proposed project, Mole D – Option 1 would have a net increase of 1,438 employees. Therefore, the per service population emissions would equal 3.51 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 project level service population

GHG emissions for the BAU scenario under Mole D – Option 1 would result in BAU emissions of 32,401.00 $MTCO_2e$. This includes amortized construction emissions. Mole D – Option 1 related GHG emissions that account for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 24,566.26 $MTCO_2e$ under Mole D – Option 1. This is a reduction of 24.18 percent from BAU, which is a slightly greater percent reduction as compared to the proposed project. Under all Mole D – Option 1, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions.

Mole D – Option 1 would result in slightly lower GHG emissions as compared to the proposed project. Mole D – Option 1 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts are less than significant. This is similar to the proposed project, but slightly reduced.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site, no construction of a breakwater at the boat launch ramp site and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. As shown in Table 4-58 above, the total estimated GHG emissions during construction under Mole D – Option 2 would be approximately 11,784 $MTCO_2e$. This would equal approximately 391 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology. This is somewhat less than the proposed project.

The estimated operational GHG emissions resulting from operation of Mole D – Option 2 would be the same as the proposed project as shown in Table 4-58 above. In accordance with SCAQMD's recommendation, the amortized construction-related GHG emissions from Table 4-57 are added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown in Table 4-58, the total emissions for Mole D – Option 2 are 5,052.22 $MTCO_2e$ per year, which would be less than the proposed project and would not exceed the second requirement of SCAQMD's efficiency threshold of 25,000 $MTCO_2e$ per year maximum net emissions. Therefore, impacts are less than significant. This is similar to

the proposed project, but slightly reduced. As with the proposed project, Mole D – Option 2 would have a net increase of 1,438 employees. Therefore, the per service population emissions would equal 3.52 $MTCO_2e$ annually. This would not exceed the first requirement of SCAQMD's efficiency threshold of 4.6 project level service population

GHG emissions for the BAU scenario under Mole D – Option 2 would result in BAU emissions of 32,403.28 $MTCO_2e$. This includes amortized construction emissions. Mole D – Option 2 related GHG emissions that account for applicable regulatory developments that would reduce GHG emissions from direct and indirect sources would total 24,568.54 $MTCO_2e$ under Mole D – Option 2. This is a reduction of 24.18 percent from BAU, which is a slightly greater percent reduction as compared to the proposed project. Under all Mole D – Option 2, the GHG reduction would meet the AB 32 Scoping Plan's reduction target for local governments of 15 percent below the BAU scenario for municipal emissions.

Mole D – Option 2 would result in slightly lower GHG emissions as compared to the proposed project. Mole D – Option 2 would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts are less than significant. This is similar to the proposed project, but slightly reduced.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Alternative 8 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

<u>Mole A</u>

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Mole A – Option 1 would be similar to the same as the proposed project with respect to the level of construction activities (i.e., daily peak) and subsequent operational activities (i.e., same overall development). As with the proposed project, Mole A – Option 1 would be consistent with the CARB Scoping Plan, SB 375, and the Redondo Beach Sustainable Development Strategic Plan. Therefore, Mole A – Option 1would have a less than significant impact. The impacts would be similar to the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts associated with Mole A – Option 2 relative to reduction of GHG emissions would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 2 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts associated with Mole A – Option 3 relative to reduction of GHG emissions would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A – Option 3 not would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Mole C would be similar to the same as the proposed project with respect to the level of construction activities (i.e., daily peak) and subsequent operational activities (i.e., same overall development). As with the proposed project, Mole C would be consistent with the CARB Scoping Plan, SB 375, and the Redondo Beach Sustainable Development Strategic Plan. Therefore, Mole C would have a less than significant impact. The impacts would be similar to the proposed project.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Mole D – Option 1 would be similar to the same as the proposed project with respect to the level of construction activities (i.e., daily peak) and subsequent operational activities (i.e., similar level of overall development). As with the proposed project, Mole D – Option 1 would be consistent with the CARB Scoping Plan, SB 375, and the Redondo Beach Sustainable Development Strategic Plan. Therefore, Mole D – Option 1would have a less than significant impact. The impacts would be similar to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts associated with Mole D – Option 2 relative to reduction of GHG emissions would be the same as Mole D - Option 1 described above. Therefore, as with the proposed project, Mole D – Option 2 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Alternative 8 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not developing the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project. As with the construction of the small craft boat launch ramp under the proposed project, construction of the Mole A - Option 1 boat launch ramp facility would involve the use of certain hazardous materials, including vehicle fuels (both gasoline and diesel), oils, solvents, and transmission fluids. Inadvertent releases of hazardous materials on construction sites are typically localized and would be cleaned up in a timely manner. The use of construction BMPs implemented as part of a SWPPP as required by the NPDES General Construction Permit would minimize the potential adverse effects to the general public and environment associated with construction of Mole A - Option 1.

Construction of the Mole A - Option 1 boat launch ramp facility would involve a minor amount of grading, limited dredging activities, and removal of existing docks. Construction would not occur in an area of any known contaminated soils. As with the proposed project, in the unlikely event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include RBFD, LACFD, LARWQCB, and/or DTSC. While Mole A – Option 1 would not create a significant hazard to the public (including construction workers) or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

Therefore, Mole A – Option 1 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and similar to the proposed project, impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to the release of hazardous materials under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to the release of hazardous materials under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under the Mole C alternative, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. As with the construction of the small craft boat launch ramp under the proposed project, construction of the Mole C boat launch ramp facility would involve the use of certain hazardous materials, including vehicle fuels (both gasoline and diesel), oils, solvents, and transmission fluids. Inadvertent releases of hazardous materials on construction sites are typically localized and would be cleaned up in a timely manner. The use of construction BMPs implemented as part of a SWPPP as required by the NPDES General Construction Permit would minimize the potential adverse effects to the general public and environment associated with construction of Mole C.

Construction of the alternative Mole C boat launch ramp facility would involve a minor amount of grading and limited dredging activities. Construction would not occur in an area of any known contaminated soils. As with the proposed project, in the unlikely event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include RBFD, LACFD, LARWQCB, and/or DTSC. While Mole C would not create a significant hazard to the public (including construction workers) or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

Therefore, Mole C would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and similar to the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped similar to the proposed project, although with a reconfigured site plan. It is anticipated that grading would occur throughout the site similar to the proposed project.

As with the construction of the small craft boat launch ramp under the proposed project, construction of the Mole D - Option 1 boat launch ramp facility would involve the use of

certain hazardous materials, including vehicle fuels (both gasoline and diesel), oils, solvents, and transmission fluids. Inadvertent releases of hazardous materials on construction sites are typically localized and would be cleaned up in a timely manner. The use of construction BMPs implemented as part of a SWPPP as required by the NPDES General Construction Permit would minimize the potential adverse effects to the general public and environment associated with construction of Mole D - Option 1.

Construction of the Mole D - Option 1 boat launch ramp facility would involve a minor amount of grading and limited dredging activities. The Mole D – Option 1 boat ramp launch site is at the location of six former USTs. UST removal and the soil excavation to 12 feet in depth occurred in 1990. Earthwork for the boat ramp launch site would not disturb soils 12 feet in depth or come in contact with native soils at the former UST location. Therefore, it is not anticipated that any contamination would be encountered. As with the proposed project, in the unlikely event that contaminated soils are encountered during construction of Mole D – Option 1, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include RBFD, LACFD, LARWQCB, and/or DTSC. While Mole D – Option 1 would not create a significant hazard to the public (including construction workers) or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, as part of the Conditional Use Permit process, the City would require (similar to the proposed project) COA HAZ-1 Contamination Contingency Plan, should unknown contaminated soils be encountered during construction.

Therefore, Mole D – Option 1 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction, and impacts would be less than significant. This would be similar to the proposed project, but reduced because less grading or disturbance of native soils would occur at the former UST site.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to the release of hazardous materials under Mole D – Option 2 would be similar to Mole D - Option 1 described above. However, the Mole D – Option 2 boat launch ramp facility is located to the north of the former USTs. Instead of boat launch ramp facility being located at the former UST site, as under Mole D – Option 1, there could be a building at or near this location. Therefore, under Mole D – Option 2, the amount of grading and potential for native soils to be disturbed at the former UST site is the same as the proposed project. As with the proposed project, in the unlikely event that contaminated soils are encountered during construction of Mole D – Option 2, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include RBFD, LACFD, LARWQCB, and/or DTSC. Similar to the proposed project, Mole D – Option 2 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction and impacts are less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-2: Alternative 8 would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but is not expected to create a significant hazard to the public or the environment.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not developing the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. The Mole A site is not identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, nor are there identified sites within 0.25 mile. Therefore, impacts associated with being located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would be the same as the proposed project (there is a LUST site within the project site at the Redondo Beach Marina). As with the proposed project, in the event that contaminated soils are encountered under Mole A – Option 1, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, as with the proposed project, under Mole A - Option 1, the City would require COA HAZ-1 Contamination Contingency Plan as part of the Conditional Use Permit process, should unknown contaminated soils be encountered during construction.

Therefore, similar to the proposed project, implementation of Mole A – Option 1 is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to being located on a site that is included on a list of hazardous materials sites would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2, is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to being located on a site that is included on a list of hazardous materials sites would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3, is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under the Mole C, the overall amount of development would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. The Mole C site is not identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, similar to the proposed project, construction would occur at a LUST site at the Redondo Beach Marina. Therefore, impacts associated with being located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would be the same as the proposed project. As with the proposed project, in the event that contaminated soils are encountered under Mole C, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, as with the proposed project, under Mole C, the City would require COA HAZ-1 Contamination Contingency Plan as part of the Conditional Use Permit process, should unknown contaminated soils be encountered during construction.

Therefore, similar to the proposed project, implementation of Mole C is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped similar to the proposed project, although with a reconfigured site plan. The Mole D – Option 1 boat launch ramp site is at the Redondo Beach Marina, which is LUST site identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, as described under Impact HAZ-1 above, less grading would occur at this site as compared to the proposed project and, thus, the potential for encountering contaminated soils is reduced. However, as with the proposed project, in the event that contaminated soils are encountered under Mole D (as throughout the project site), the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies, which could include the RBFD, LACFD, LARWQCB, and/or DTSC. Additionally, as with the proposed project, under Mole D – Option 1, the City would require COA HAZ-1 Contamination Contingency Plan as part of the Conditional Use Permit process, should unknown contaminated soils be encountered during construction.

Therefore, implementation of Mole D – Option 1 is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant. This is similar, but reduced as compared to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to being located on a site that is included on a list of hazardous materials sites would be the similar to Mole D - Option 1 described above. However, Mole D – Option 2 would not be located at the LUST site identified on a list of hazardous materials sites compiled

pursuant to Government Code Section 65962.5. Under Mole D – Option 2, construction at the LUST site would occur similar to the proposed project, and in the event that contaminated soils are encountered, the soils would be excavated, transported, and treated (or disposed of) in accordance with applicable regulatory agencies.. Therefore, similar to the proposed project, Mole D – Option 2, is not expected to create a significant hazard to the public (including construction workers) or the environment during construction and exposure to potentially hazardous materials is less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HAZ-3: Alternative 8 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. Construction and operation of a small craft boat launch ramp facility at Mole A would occur on-site at the terminus of Yacht Club Way and would not interfere with emergency responses or evacuation plans. As detailed in Section 3.11 Public Services, all construction projects within the City must follow the California Fire Code (Chapter 33, Fire Safety During Construction and Demolition), which includes requirements to provide adequate access for firefighting (Chapter 33, Section 3310) and approved temporary means of egress (Chapter 33, Section 3311). Therefore, as with the proposed project, emergency access in and out of the site, including evacuation routes for construction workers, would remain the same as existing conditions during the construction process.

The City's tsunami evacuation route includes roadways east of King Harbor, including Herondo Street (closest to Mole A), Beryl Street and Torrance Boulevard. As described above, adequate emergency vehicular access would be provided and maintained during construction, as required by the RBFD. Therefore, as with the proposed project, Mole A - Option 1 would not conflict with the City's evacuation route during construction.

Similar to the proposed project, Mole A – Option 1 would implement vehicle circulation and access improvements (Pacific Avenue Reconnection between the northern and southern portions of the site and a new main street through the northern portion of the site), which would aid emergency evacuation and response.

As with the proposed project, Mole A - Option 1 would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to emergency response and emergency evacuation under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2, would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to emergency response and emergency evacuation under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. As with the proposed project, construction of Mole C would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Although temporary lane and sidewalk closures of immediately adjacent roadways (e.g., Portofino Way and Harbor Drive) may be necessary at times during construction, adequate emergency vehicular access to the project site and adjacent properties would be provided and maintained during construction, as required by the RBFD. As detailed in Section 3.11 Public Services, all construction projects within the City must follow the California Fire Code (Chapter 33, Fire Safety During Construction and Demolition), which includes requirements to provide adequate access for firefighting (Chapter 33, Section 3310) and approved temporary means of egress (Chapter 33, Section 3311). Therefore, as with the proposed project, emergency access in and out of the site, including evacuation routes for construction workers, would remain the same as existing conditions during the construction process.

The City's tsunami evacuation route includes roadways immediately to the north and south of the project site (Beryl Street and Torrance Boulevard respectively). As described above, adequate emergency vehicular access would be provided and maintained during construction, as required by the RBFD. Therefore, Mole C would not conflict with the City's evacuation route during construction.

Similar to the proposed project, Mole C would implement vehicle circulation and access improvements (Pacific Avenue Reconnection between the northern and southern portions of the site and a new main street through the northern portion of the site), which would aid emergency evacuation and response.

As with the proposed project, Mole C would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped, similar to the proposed project, although with a reconfigured site plan. As with the proposed project, construction of Mole D – Option 1 would occur on-site and is not expected to interfere with emergency responses or evacuation plans. Although temporary lane and sidewalk closures of immediately adjacent roadways (e.g., Portofino Way and Harbor Drive) may be necessary at times during construction, adequate emergency vehicular access to the project site and adjacent properties would be provided and maintained during construction, as required by the RBFD. As detailed in Section 3.11 Public Services, all construction projects within the City must follow the California Fire Code (Chapter 33, Fire Safety During Construction and Demolition), which includes requirements to provide adequate access for firefighting (Chapter 33, Section 3310) and approved temporary means of egress (Chapter 33, Section 3311). Therefore, as with the proposed project, emergency access in and out of the site, including evacuation routes for construction workers, would remain the same as existing conditions during the construction process.

The City's tsunami evacuation route includes roadways immediately to the north and south of the project site (Beryl Street and Torrance Boulevard respectively). As described above, adequate emergency vehicular access would be provided and maintained during construction, as required by the RBFD. Therefore, Mole D – Option 1 would not conflict with the City's evacuation route during construction. As with the proposed project, impacts would be less than significant.

Similar to the proposed project, Mole D – Option 1 would implement the Pacific Avenue Reconnection between the northern and southern portions of the site which would aid emergency response. No new main street would be constructed in the northern portion of the site as would occur under the proposed project; however, the development would be required to comply with emergency access requirements and thus no interference with the adopted Hazard Mitigation Action Plan would occur.

Mole D – Option 1 would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant. This would be similar to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to emergency response and emergency evacuation under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2, would not impair implementation of or physically interfere with the adopted Hazard Mitigation Action Plan and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Hydrology and Water Quality

Impact HWQ-1: Alternative 8 would not potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site and not constructing the breakwater, the overall amount of development and grading would be similar to the proposed project. Similar to the proposed project, under Mole A – Option 1 construction impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with construction of the boat launch ramp and other marine construction), would be less than significant. Compliance with regulatory requirements, including implementation of BMPs, and would ensure that Mole A – Option 1 would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

As with the proposed project, temporary and localized increases in turbidity would occur during in-water construction activities, including those associated with the boat launch ramp. This would not be expected to result in violations of water quality standards, and as such, construction-related impacts to harbor water quality would be less than significant. This is similar to the proposed project, but slightly reduced because no construction of the breakwater would occur.

The Mole A site is currently impervious (covered by asphalt) and this condition would not change under Mole A – Option 1. Also, the imperviousness of the Joe's Crab Shack site would not change under Mole A Option 1. For other areas within the project site, the imperviousness of the site would be similar to the proposed project (approximately 64 percent impervious). This is a decrease in imperviousness as compared to existing conditions (79 percent impervious). No changes to the existing stormwater system at Mole A and the Joe's Crab Shack site would occur. However, the boat launch ramp facility would have a wash down space or stall with a stormwater interceptor or other water treatment system that would treat runoff water before discharging it to the storm drain or sewer system.

Elsewhere in the project site, as with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. Contaminants in runoff from the project site from roadways, parking lots, landscaping, and accumulated atmospheric deposition on impervious surfaces would be reduced in comparison to existing conditions. Mole A – Option 1 would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Impacts would be less than significant. This would be similar to the proposed project, but slightly reduced as the breakwater would not be constructed.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts to water quality under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, Mole A – Option 2, would not violate water quality standards or

waste discharge requirements or otherwise substantially degrade water quality and impacts would be less than significant. This would be similar to the proposed project, but slightly reduced as the breakwater would not be constructed.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts to water quality under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, Mole A – Option 3, would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality and impacts would be less than significant. This would be similar to the proposed project, but slightly reduced as the breakwater would not be constructed.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and no breakwater would be constructed. Similar to the proposed project, under Mole C construction impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with construction of the boat launch ramp and other marine construction), would be less than significant. Compliance with regulatory requirements, including implementation of BMPs, and would ensure that Mole C would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. The boat launch ramp facility would have a wash down space or stall with a stormwater interceptor or other water treatment system that would treat runoff water before discharging it to the storm drain or sewer system.

As with the proposed project, temporary and localized increases in turbidity would occur during in-water construction activities, including those associated with the boat launch ramp. As with the proposed project, BMPs would be implemented to control turbidity in the water column adjacent to work areas and no violations of water quality standards would occur. As such, construction-related impacts to harbor water quality would be less than significant. This would be similar to the proposed project, but slightly reduced as the breakwater would not be constructed.

The imperviousness of the project site under Mole C would be the same as under the proposed project (approximately 64 percent impervious). This is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. Contaminants in runoff from the project site from roadways, parking lots, landscaping, and accumulated atmospheric deposition on impervious surfaces would be reduced in comparison to existing conditions. Mole C would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Impacts would be less than significant. This would be similar to the proposed project, but slightly reduced as the breakwater would not be constructed.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped similar to the proposed project, although with a reconfigured site plan and no pedestrian bridge or breakwater, and no redevelopment of the Joe's Crab Shack site. Similar to the proposed project, under Mole D – Option 1 construction impacts on groundwater, surface water (runoff from landside construction), and harbor water (associated with construction of the boat launch ramp and other marine construction), would be less than significant. Compliance with regulatory requirements, including implementation of BMPs, and would ensure that Mole D – Option 1would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. The boat launch ramp facility would have a wash down space or stall with a stormwater interceptor or other water treatment system that would treat runoff water before discharging it to the storm drain or sewer system.

As with the proposed project, temporary and localized increases in turbidity would occur during in-water construction activities, including those associated with the boat launch ramp. This would be reduced as compared to the proposed project as no pedestrian/bicycle bridge or breakwater would be constructed. Turbidity associated with in-water construction would not be expected to result in violations of water quality standards, and as such, construction-related impacts to harbor water quality would be less than significant. This is similar, but reduced, as compared to the proposed project.

The imperviousness of the project site under Mole D – Option 1 would be similar to the proposed project; however, the amount of impervious surfaces may be slightly higher as part of the northern portion of the site would be developed at a higher density, which could result in a reduction of pervious landscaped area. As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. Contaminants in runoff from the project site from roadways, parking lots, landscaping, and accumulated atmospheric deposition on impervious surfaces would be reduced in comparison to existing conditions; however, to a slightly lesser degree as compared with the proposed project given that there may be a greater amount of impervious area under Mole D – Option 1. Mole D – Option 1 would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. As with the proposed project, impacts would be less than significant. However, turbidity generated during in-water construction would be slightly reduced as compared to the proposed project, and the benefits associated with stormwater improvements would be slightly reduced as compared to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts to water quality under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2, would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality and impacts would be less than significant. However, turbidity generated during in-water construction would be reduced as compared to the proposed project, and the benefits associated with stormwater improvements may be slightly reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-2: Alternative 8 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site and not constructing the breakwater, the overall amount of development and grading would be similar to the proposed project. Similar to the proposed project, under Mole A – Option 1, BMPs would be implemented during construction to eliminate or reduce pollutant discharges, including sediment, and control stormwater, erosion, and siltation during construction. With adherence to regulations, including implementation of BMPs, Mole A - Option 1 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant.

The Mole A site is currently impervious (covered by asphalt) and this condition would not change under Mole A – Option 1. Also, the imperviousness of the Joe's Crab Shack site would not change under Mole A Option 1. For other areas within the project site, the imperviousness of the site would be similar to the proposed project (approximately 64 percent impervious). This is a decrease in imperviousness as compared to existing conditions (79 percent impervious). No changes to the existing stormwater system at Mole A and the Joe's Crab Shack site would occur. However, the boat launch ramp facility would have a wash down space or stall with a stormwater interceptor or other water treatment system that would treat runoff water before discharging it to the storm drain or sewer system.

Elsewhere in the project site, as with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. With adherence to regulations, including LID criteria and implementation of BMPs, Mole A – Option 1 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, similar to the proposed project, impacts are considered less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to drainage under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not

substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site and impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to drainage under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site and impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include the breakwater. Similar to the proposed project, under Mole C, BMPs would be implemented during construction to eliminate or reduce pollutant discharges, including sediment, and control stormwater, erosion, and siltation during construction. With adherence to regulations, including implementation of BMPs, Mole C would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant.

The imperviousness of the site would be the same as the proposed project (approximately 64 percent impervious). This is a decrease in imperviousness as compared to existing conditions (79 percent impervious). As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. With adherence to regulations, including LID criteria and implementation of BMPs, Mole C would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, similar to the proposed project, impacts are considered less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of not redeveloping the Joe's Crab Shack site, and no construction of a breakwater or pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. Similar to the proposed project, under Mole D – Option 1, BMPs would be implemented during construction to eliminate or reduce pollutant discharges, including sediment, and control stormwater, erosion, and siltation during construction. With adherence to regulations, including implementation of BMPs, Mole D - Option 1 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would

result in flooding on-site or off-site. Therefore, impacts during construction related activities are considered less than significant.

The imperviousness of the project site under Mole D – Option 1 would be similar to the proposed project; however, the amount of impervious surfaces may be slightly higher as part of the northern portion of the site would be developed at a higher density, which could result in a reduction of pervious landscaped area. As with the proposed project, updates to the on-site stormwater system would be designed to comply with the City's LID Ordinance, which reflects the Los Angeles County LID standards, to treat both the quantity and quality of flow. With adherence to regulations, including LID criteria and implementation of BMPs, Mole D – Option 1 would not substantially alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site. Therefore, similar to the proposed project, impacts are considered less than significant. However, the benefits associated with stormwater improvements would be slightly reduced as compared to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to drainage under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2 would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site and impacts would be less than significant. However, the benefits associated with stormwater improvements would be slightly reduced as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-3: Alternative 8 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project.

<u>Mole A</u>

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. Similar to the proposed project, under Mole A – Option 1 construction would not result in polluted runoff. Construction BMPs would be implemented to eliminate or

reduce pollutant discharges and control stormwater and other runoff during construction. Therefore, no significant construction impacts would occur.

Updates to the existing drainage and stormwater system under Mole A – Option 1 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow.

The Mole A site is currently impervious (covered by asphalt) and this condition would not change under Mole A – Option 1. Also, the imperviousness of the Joe's Crab Shack site would not change under Mole A Option 1. For other areas within the project site, as with the proposed project, the amount of pervious surface area within the project site would increase under Mole A – Option 1 and LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. As with the proposed project, impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to runoff under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project and impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to runoff under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project and impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. Similar to the proposed project, under Mole C construction would not result in polluted runoff. Construction BMPs would be implemented to eliminate or reduce pollutant discharges and control stormwater and other runoff during construction. Therefore, no significant construction impacts would occur.

Updates to the existing drainage and stormwater system under Mole C would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow.

As with the proposed project, the amount of pervious surface area within the project site would increase under Mole C and LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. As with the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped, although the amount of development would be less than the proposed project. Similar to the proposed project, under Mole D – Option 1 construction would not result in polluted runoff. Construction BMPs would be implemented to eliminate or reduce pollutant discharges and control stormwater and other runoff during construction. Therefore, no significant construction impacts would occur.

Updates to the existing drainage and stormwater system under Mole D – Option 1 would reduce runoff from the project site, and be designed to comply with the City's LID Ordinance requirements to treat both the quantity and quality of flow.

The imperviousness of the project site under Mole D – Option 1 would be similar to the proposed project; however, the amount of impervious surfaces may be slightly higher as part of the northern portion of the site would be developed at a higher density, which could result in a reduction of pervious landscaped area. As with the proposed project, LID criteria would be implemented; thus, stormwater volumes and pollutants would be reduced in comparison to existing conditions and would not require the construction of new stormwater drainage facilities or expansion of existing facilities which could cause significant environmental effects not already addressed as part of the alternative. As with the proposed project, impacts would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to runoff under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff that would 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 not already addressed as part of the project and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-4: Alternative 8 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack site and constructing the breakwater, the overall amount of development and grading would be similar to the proposed project. As with the proposed project, under Mole A – Option 1, several new structures, including the boat launch ramp, would be built in Zones AE, VE, and X. Additionally the existing docks at Mole A, which are currently in the flood zone, would be reconstructed in a similar location. The finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. The existing North Breakwater would provide some protection; however, the boat launch ramp would be exposed to occasional wave surge and storm wave overtopping. However, the boat launch ramp, as well as the replacement docks at Mole A and Basin 3, and the pedestrian/bicycle bridge would be not impede or redirect flood flows. Therefore, as with the proposed project, under Mole A – Option 1, impacts would be less than significant. Under Mole A – Option 1, the breakwater would not be constructed in the flood zone as would occur under the proposed project; however, replacement docks at Mole A would be constructed in the flood zone. Impacts would be similar as compared to the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to flooding safety under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding and impacts would be less than significant. The breakwater would not be constructed in the flood zone as would occur under the proposed project; however, replacement docks at Mole A would be constructed in the flood zone. Impacts would be similar as compared to the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to flooding safety under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding and impacts would be less than significant. The breakwater would not be constructed in the flood zone as would occur under the proposed project; however, replacement docks at Mole A would be constructed in the flood zone. Impacts would be similar as compared to the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. As with the proposed project, under Mole C, several new structures, including the boat launch ramp, would be built in Zones AE, VE, and X. The finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. Without a breakwater, one fewer structure would occur in the flood zone as compared to the proposed project; however, without the breakwater, the alternative Mole C boat launch ramp would be subject to more exposure to storm waves as compared to the proposed project. However, the boat launch ramp, as well as the pedestrian/bicycle bridge, would not impede or redirect flood flows. Therefore, as with the proposed project, under Mole C, impacts would be less than significant. However, one less structure would be placed in the flood zone.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of not redeveloping the Joe's Crab Shack site, and no construction of a breakwater or pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. Similar the proposed project, under Mole D – Option 1, the boat launch ramp, would be built in Zones AE, VE, and X, although under Mole D – Option 1, the pedestrian/bicycle bridge and the breakwater would not be constructed. The finished floor elevation of the buildings located on the piers would be a minimum of nine feet above the 100-year flood elevation and would not impede or redirect flows, nor would the new/rebuilt buildings expose people or structures to a significant risk of loss, injury, or death involving flooding. Not constructing a breakwater would reduce the number of structures placed within the flood zone as compared to the proposed project; however, the Mole D – Option 1 boat launch ramp would be subject to more exposure to storm waves as compared to the proposed project. However, the boat launch ramp would not impede or redirect flood flows. Therefore, similar to the proposed project, under Mole D – Option 1, impacts would be less than significant. However, fewer structures would be placed in the flood zone.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to flooding safety under Mole D – Option 2 would generally be the same as Mole D - Option 1 described above. However, the Mole D – Option 2 boat launch ramp would have less exposure to storm waves as compared to Mole D – Option 1. Similar to the proposed project, Mole D – Option 2 would not create or place structures within a 100-year flood hazard area such that flood flows would be impeded or redirected or expose people or structures to a significant risk of loss, injury, or death involving flooding and impacts would be less than significant. The pedestrian/bicycle bridge and breakwater would not be constructed in the flood zone and impacts would be similar, but slightly reduced, as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact HWQ-5: Alternative 8 would expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack site or constructing the breakwater, the overall amount of development and grading would be similar to the proposed project, as would the risk associated with inundation by seiche, tsunami, mudflow, or sea level rise.

The exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact. Further, as with the proposed project, the existing potential for wave uprush to occur at the northern segment of the protective revetment/wall along Horseshoe Beach is considered a significant impact as the number of structures and number of people who may be present at this location would increase. However, the wave uprush along the promenade at the western edge of Seaside Lagoon and Basin 3 would not result in increased risk of injury or damage to structures and, as with the proposed project, impacts are considered less than significant.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is materialized. As with the proposed project, sea level rise would not be affected by Mole A – Option 1 and the raising of the promenade and some portions of the site in the northern portion would reduce hazards and damage associated with future sea level rise as compared to existing conditions. However, there would be more structures and more people being present at the project site, including at the Mole A site, that could be subject to increased risks associated with an increase in sea level rise. Therefore, as with the proposed project, should the projected high sea level rise occur in the future, the impacts under Mole A – Option 1 are considered significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to risk of inundation under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 could expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise and impacts would be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to risk of inundation under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 could expose people and structures to substantial risk associated with inundation by seiche, tsunami, mudflow, or sea level rise and impacts would be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. The risk associated with inundation by seiche, tsunami, mudflow, or sea level rise would be the same as under the proposed project.

The exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact. Further, as with the proposed project, the existing potential for wave uprush to occur at the northern segment of the protective revetment/wall along Horseshoe Beach is considered a significant impact as the number of structures and number of people who may be present at this location would increase. However, the wave uprush along the promenade at the western edge of Seaside Lagoon and Basin 3 would not result in increased risk of injury or damage to structures and, as with the proposed project, impacts are considered less than significant.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is materialized. As with the proposed project, sea level rise would not be affected by Mole C and the raising of the promenade and some portions of the site in the northern portion would reduce hazards and damage associated with future sea level rise as compared to existing conditions. However, there would be more structures and more people being present at the project site that could be subject to increased risks associated with an increase in sea level rise. Therefore, as with the proposed project, should the projected high sea level rise occur in the future, the impacts under Mole C are considered significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of not redeveloping the Joe's Crab Shack site, and no construction of a breakwater or pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. The risk associated with inundation by seiche, tsunami, mudflow, or sea level rise would be similar as under the proposed project. The exposure of buildings and people at the project site to risk and damage associated with a tsunami or seiche is considered to be a significant impact.

Further, as with the proposed project, the existing potential for wave uprush to occur at the northern segment of the protective revetment/wall along Horseshoe Beach is considered a significant impact as the number of structures and number of people who may be present at this location may increase. However, the wave uprush along the promenade at the western edge of Seaside Lagoon would not result in increased risk of injury or damage to structures and, as with the proposed project, impacts are considered less than significant.

More frequent inundation and associated nuisance from the flooding events would occur due to future sea level rise, particularly if the projected high sea level rise is realized. As with the proposed project, sea level rise would not be affected by Mole D – Option 1 and the raising of the promenade and some portions of the site in the northern portion would reduce hazards and damage associated with future sea level rise as compared to existing conditions. However, in

general, there may be more structures and more people present at the project site that could be subject to increased risks associated with an increase in sea level rise. Therefore, as with the proposed project, should the projected high sea level rise occur in the future, the impacts under Mole D – Option 1 are considered significant.

Mole D – Option 1 could expose people and structures to substantial risk associated with inundation by seiche, tsunami, or sea level rise. Similar to the proposed project, the impacts would be significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to risk of inundation under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2 could expose people and structures to substantial risk associated with inundation by seiche, tsunami, or sea level rise and impacts would be significant. .

Mitigation Measures

Mitigation measure MM HWQ-1: Tsunami/Seiche Awareness Notification Program would be implemented to reduce impacts associated with people being exposed to potential hazards associated with a future tsunami or seiche. In addition, mitigation measures MM HWQ-2: Wave Uprush Protection, and MM HWQ-3: Sea Level Rise Adaptation Plan, would be implemented to reduce impacts associated with possible inundation associated with wave uprush and future sea level rise.

Residual Impacts

With implementation of mitigation measure MM HWQ-1, impacts associated with people potentially being exposed to a tsunami or seiche at the project site would be reduced; however, due to natural uncertainties of such an event occurring in the future, it is not possible to conclude that the associated risks would be fully mitigated. As such, the residual impact associated with tsunami or seiche exposure is considered to be significant and unavoidable.

MM HWQ-2 requires a four-foot high recurved splash wall anchored at the seaward edge of the promenade landward of the northern portion of the Horseshoe Pier. The splash wall would redirect the up-rushed water back toward the ocean, thereby deflecting the water away from the promenade and preventing inundation from occurring. Installation of a splash wall along the revetment would be subject to Coastal Commission approval. Alternatively, as stated in MM HWQ-2, the Coastal Commission may recommend an alternative method to reduce potential for inundation to occur. With implementation of mitigation measure MM HWQ-2, impacts associated with possible inundation from wave uprush under current sea levels would be less than significant.

MM HWQ-3 requires that a plan be developed to address future sea level rise within the project area by instituting a monitoring program to assess sea level changes, and by identifying structural options to be implemented if necessary (subject to approval by the applicable regulatory agencies), that reduce risks to people and structures within the coastal zone. With implementation of mitigation measure MM HWQ-3, impacts associated with possible inundation from wave uprush under future sea level rise conditions would be less than significant.

Land Use and Planning

Impact LUP-1: Alternative 8 would not conflict with any applicable land use plan, policy, or regulation (including, but not limited to, the general plan, local coastal program, or zoning ordinance) and would not result in a physical change to the environment not already addressed in the other resource chapters of this EIR.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site and constructing the breakwater, the overall amount of development and grading would be similar to the proposed project. However, the net new development on-site would be slightly greater (8,231 square feet), given that Joe's Crab Shack would remain. The boat launch ramp facility at Mole A would be consistent with the allowable land uses and similar to the existing yacht club uses. Further, it would not conflict with applicable land use and planning documents, including the Public Trust Doctrine, SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. Therefore, as with the proposed project, Mole A – Option 1 would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to consistency with applicable land use and planning documents under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2, would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to consistency with applicable land use and planning documents under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3, would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and not include a breakwater. As with the proposed project, the boat launch ramp facility at Mole C would be consistent with the allowable land uses. Further, it would not conflict with applicable land use and planning documents, including the Public Trust Doctrine, SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. Therefore, as with the proposed project, Mole C would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of not redeveloping the Joe's Crab Shack site, and no construction of a breakwater or pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. The boat launch ramp facility at Mole D would be consistent with the allowable land uses and similar to the existing marina uses. Further, it would not conflict with applicable land use and planning documents, including the Public Trust Doctrine, SCAG RTP/SCS, General Plan, Coastal Land Use Plan, Coastal Zoning, and Harbor/Civic Center Specific Plan. However, under Mole D – Option 1, given that the northern portion of the project site would have a greater density and the northern and southern portions of the project site would not be developed as a connected project site, some goals and objectives included in those plans, would not be as fully implemented as compared to the proposed project under Mole D Option 1, such as encouraging a reconfiguration of development to create a unified seaside "village."

Therefore, as with the proposed project, Mole D – Option 1 would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant. However, some goals and objectives included in those plans would not be as fully implemented under Mole D – Option 1 as compared to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to consistency with applicable land use and planning documents under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2, would not conflict with any applicable land use plan, policy, or regulation and impacts would be less than significant. However, some goals and objectives included in those plans would not be as fully implemented under Mole D – Option 2 as compared to the proposed project.

Mitigation Measures

No mitigation would be required.

Residual Impacts

Impacts would be less than significant.

Noise

Impact NOI-1: Alternative 8 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A – Option 1, with the exception of not redeveloping the Joe's Crab Shack site or constructing the breakwater, the overall amount of development and grading would be similar

to the proposed project. As with the proposed project, all construction activity, including construction of the boat launch ramp facility, would be subject to, and is assumed to comply with, the requirements of the City's Noise Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities would not exceed applicable standards, and, as with the proposed project construction noise impacts occurring under Mole A – Option 1 would be less than significant.

There is an existing yacht club at Mole A that includes uses similar to the boat launch ramp facility that would be established under Mole A – Option A. Relative to sensitive noise receptors located near Mole A, specifically liveaboards within King Harbor Marina, the small craft boat launch ramp and surface parking that is proposed within the project site would provide for activities with noise characteristics comparable to those that currently exist. As with the boat launch ramp facility, the types of land uses proposed elsewhere in the project site under Mole A – Option 1 would be comparable to those in the proposed project, which are, in general, comparable to those that currently exist at the project site, and all of which would be subject to, and would comply with, the applicable requirements of the Noise Ordinance.

As such, operation of the project site under Mole A – Option 1 would not exceed applicable standards, and, as with the proposed project, operational noise impacts occurring under this threshold would be less than significant. Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval NOI-1: Parking Area/Structure Design. Therefore, similar to the proposed project, Mole A – Option 1 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance. Impacts would be less than significant. This is similar to the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to noise in excess of standards under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance. Impacts would be less than significant. This is similar to the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to noise in excess of standards under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance. Impacts would be less than significant. This is similar to the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and not include a breakwater. As with the proposed project, all construction activity would be subject to, and is assumed to comply with, the requirements of the City's Noise

Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities would not exceed applicable standards, and, as with the proposed project construction noise impacts occurring under Mole C would be less than significant. This is similar to the proposed project.

Relative to sensitive noise receptors located near Mole C, specifically liveaboards within Basin 2, the small craft boat launch ramp and surface parking that is proposed within the project site would provide for activities with noise characteristics comparable to those that currently exist. As with the boat launch ramp facility, the types of land uses proposed elsewhere in the project site under Mole C would be comparable to those in the proposed project, which are, in general, comparable to those that currently exist at the project site, and all of which would be subject to, and would comply with, the applicable requirements of the Noise Ordinance.

As such, operation of the project site under Mole C would not exceed applicable standards, and, as with the proposed project, operational noise impacts occurring under this threshold would be less than significant. Further, as part of the Conditional Use Permit process, as with the proposed project, the City is proposing the Condition of Approval NOI-1: Parking Area/Structure Design.

Therefore, similar to the proposed project, Mole C would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance. As with the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site no construction of a breakwater at the boat launch ramp site and no breakwater, the overall amount of development and grading would be similar to the proposed project. As with the proposed project, all construction activity would be subject to, and is assumed to comply with, the requirements of the City's Noise Ordinance, including limitations on the days of the week and hours of the day when construction activities are allowed. As such, construction activities would not exceed applicable standards, and, as with the proposed project, construction noise impacts occurring under Mole D – Option 1 would be less than significant. This is similar to the proposed project.

Relative to sensitive noise receptors located near Mole D, specifically liveaboards within the Redondo Beach Marina, the small craft boat launch ramp and surface parking that is proposed within the project site would provide for activities with noise characteristics comparable to those that currently exist. As with the boat launch ramp facility, the types of land uses proposed elsewhere in the project site under Mole D – Option 1 would be comparable to those in the proposed project, which are, in general, comparable to those that currently exist at the project site, and all of which would be subject to, and would comply with, the applicable requirements of the Noise Ordinance.

As such, continued operation of the project site under Mole D – Option 1 would not exceed applicable standards, and, as with the proposed project, operational noise impacts occurring under this threshold would be less than significant. Further, as part of the Conditional Use

Permit process, as with the proposed project, the City is proposing the Condition of Approval NOI-1: Parking Area/Structure Design.

Therefore, similar to the proposed project, Mole D – Option 1 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance. As with the proposed project, impacts would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to noise in excess of standards under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, similar to the proposed project, Mole D – Option 2 would not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact NOI-2: Alternative 8 would expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack site and constructing the breakwater, the overall amount of development and grading would be similar to the proposed project. While the breakwater would not be constructed, the existing docks at Mole A would be removed and reconstructed. Therefore, groundborne vibration or groundborne noise levels generated during construction noise levels would be similar to that of the proposed project.

Construction of the boat launch ramp is unlikely to require the use of construction equipment with relatively high vibration levels, such as pile drivers and vibratory rollers. The types of construction equipment likely to be involved would include bulldozers/loaders, excavators/track hoes, dump/haul trucks, redi-mix concrete delivery trucks, paving equipment, and the like. Of the construction equipment types that were modelled in the vibration analysis for the project (see Table 3.10-9 in Section 3.10 Noise), the vibration levels associated with a large bulldozer/hoe ram have the highest vibration levels and would thus be the most conservative to consider for the types of equipment that might be used during construction. Based on typical vibration levels of 0.089 PPV in/sec and 87 VdB at 25 feet, the threshold of significance for potential structural damage to non-engineered timber and masonry structures (i.e., 0.2 PPV in/sec) would be exceeded if that type of equipment was operating at a distance of less than 15 feet from such a structure and the threshold of significance for potential structural damage to structures constructed of reinforced-concrete, steel, or timber (i.e., 0.5 PPV in/sec) would be exceeded if that type of equipment was operating at a distance of less

than 8 feet from such a structure, and the threshold of significance for human annoyance associated with frequent to occasional vibration (75 VdB) would be exceeded if that type of equipment was operating at a distance of less than 65 feet from an occupied structure and the threshold of significance for human annoyance associated with infrequent vibration (80 VdB) would be exceeded if that type of equipment was operating at a distance of less than 45 feet from an occupied structure.

There are no structures located within 8 feet of the potential improvement area. As such, no vibration-related potential structural damage would occur at Mole A.

Relative to the potential for significant human annoyance from construction-related vibration, Mole A – Option 1 would include construction activities within approximately 45 feet of the King Harbor Yacht Club, but it is unlikely that such activity would involve heavy equipment with vibration levels such as that assumed above. Construction of the new boat launch ramp to the west of the yacht club would more likely involve such equipment, but would be more than 100 feet away; consequently no significant human annoyance impacts would occur at Mole A. However, as with the proposed project, at other locations with the project site, vibration from construction activities associated with the proposed project would result in significant impacts relative to potential structural damage if pile drivers operate within 55 feet of non-engineered timber and masonry buildings or within 30 feet of structures or buildings constructed of reinforced-concrete, steel, or timber. Additionally, short-term significant impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors, specifically patrons within businesses on Monstad Pier. As such, Mole A – Option 1 would expose persons to or generate excessive groundborne vibration or groundborne noise levels. As with the proposed project, impacts would be significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to groundborne vibration or groundborne noise levels under Mole A – Option 2 would be the same as Mole A - Option 1 described above. As such, Mole A – Option 2 would expose persons to or generate excessive groundborne vibration or groundborne noise levels. As with the proposed project, impacts would be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to groundborne vibration or groundborne noise levels under Mole A – Option 3 would be the same as Mole A - Option 1 described above. As such, Mole A – Option 3 would expose persons to or generate excessive groundborne vibration or groundborne noise levels. As with the proposed project, impacts would be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and not include a breakwater. Therefore, groundborne vibration or groundborne noise levels generated during construction noise levels would be similar to that of the proposed project.

The types of construction equipment likely to be involved in the construction of the boat launch ramp and the potential for these to have vibratory impacts are addressed under Mole A – Option 1 above. There are no structures located within 8 feet of the Mole C site, and although the Portofino Hotel conference center, is located within 15 feet of the parking lot for the boat launch ramp, it is not a non-engineered timber and masonry structure that would be subject to vibratory damage. As such, no vibration-related potential structural damage would occur under Mole C, which would also be the case for the proposed project.

Under Mole C, construction of the parking lot for the boat launch ramp would occur within 15 feet of the aforementioned Portofino Hotel conference center, which could result in temporary significant human annoyance impacts to people present in the eastern portion of the building. That would also be the case for the proposed project.

As with the proposed project, at other locations with the project site, vibration from construction activities associated with the proposed project would result in significant impacts relative to potential structural damage if pile drivers operate within 55 feet of non-engineered timber and masonry buildings or within 30 feet of structures or buildings constructed of reinforced-concrete, steel, or timber. Additionally, short-term significant impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors, specifically patrons within businesses on Monstad Pier. As such, Mole C would expose persons to or generate excessive groundborne vibration or groundborne noise levels. As with the proposed project, impacts would be significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. Therefore, groundborne vibration or groundborne noise levels generated during construction noise levels would be similar to the proposed project.

The types of construction equipment likely to be involved in the construction of the boat launch ramp and the potential for these to have vibratory impacts are addressed under Mole A – Option 1 above.

Under Mole D – Option 1, the nearest structure would be the residential complex located east of the project site (the Village/Seascape condominiums and townhouses), which is over 300 feet from the nearest point of the boat launch ramp parking lot at that site. As such, no vibration-related potential structural damage or human annoyance impacts would occur.

However, as with the proposed project, at other locations with the project site, vibration from construction activities associated with development under Mole D – Option 1 would result in significant impacts relative to potential structural damage if pile drivers operate within 55 feet of non-engineered timber and masonry buildings or within 30 feet of structures or buildings constructed of reinforced-concrete, steel, or timber. Additionally, short-term significant impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors, specifically patrons within businesses on Monstad Pier. As such, Mole D – Option 1 would expose persons to or generate excessive groundborne

vibration or groundborne noise levels. As with the proposed project, impacts would be significant and impacts would be similar to the proposed project.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to groundborne vibration or groundborne noise levels under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Althrough, under Mole D – Option 2, the nearest structure would be the office complex located north of the intersection of North Harbor Drive and Pacific Avenue, which is over 200 feet from the nearest point of the boat launch ramp parking lot at that site. As such, no vibration-related potential structural damage or human annoyance impacts associated with the boat launch ramp facility would occur.

However, as described above, vibration from construction activities associated with development under Mole D – Option 2 would result in significant impacts relative to potential structural damage if pile drivers operate within 55 feet of non-engineered timber and masonry buildings or within 30 feet of structures or buildings constructed of reinforced-concrete, steel, or timber. Additionally, short-term significant impacts related to human annoyance from vibration would occur during construction activities in close proximity to sensitive receptors, specifically patrons within businesses on Monstad Pier. As such, Mole D – Option 2 would expose persons to or generate excessive groundborne vibration or groundborne noise levels. As with the proposed project, impacts would be significant.

Mitigation Measures

Mitigation measure NOI-1 Pile Driving Vibration, would be implemented to reduce impacts where there is the potential for vibration-related structural damage to occur.

Residual Impacts

With implementation of MM NOI-1, impacts related to potential structural damage from construction-related vibration, particularly as related to pile driving, would be less than significant.

No feasible mitigation measures are available relative to human annoyance from construction-related vibration, although such impacts would only be short-term and periodic. Nevertheless, the impact would be significant and unavoidable.

Impact NOI-3: Alternative 8 would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

<u>Mole A</u>

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack site and constructing the breakwater, the overall amount of development and grading would be similar to the proposed project. Therefore, the operational noise impacts associated with Mole A – Option 1 would be similar to those of the proposed project. As with the proposed project, the types of uses are comparable to those that currently exist and operate at the project site, including Mole A. As such, noise levels associated with on-site operational sources under

Mole A – Option 1 would, for the most part, be similar to existing conditions, as is also the case for the proposed project. However, as with the proposed project, increased traffic on Torrance Boulevard between the project site and Catalina Avenue would result in a significant increase in roadway noise levels along that segment, compared to existing conditions. Therefore, under Mole A – Option 1, there would be a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As with the proposed project, the impacts would be significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to an increase in ambient noise levels under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 2, there would be a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As with the proposed project, the impacts would be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to an increase in ambient noise levels under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, under Mole A – Option 3, there would be a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As with the proposed project, the impacts would be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and not include a breakwater. Therefore, the operational noise impacts associated with Mole C would be the same as those of the proposed project. As with the proposed project, the types of uses are comparable to those that currently exist and operate at the project site, including Mole C. As such, noise levels associated with on-site operational sources under Mole C would, for the most part, be similar to existing conditions, as is also the case for the proposed project. Increased traffic on Torrance Boulevard between the project site and Catalina Avenue would result in a significant increase in roadway noise levels along that segment, compared to existing conditions. Therefore, under Mole C, there would be a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As with the proposed project, the impacts would be significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped, similar, although with a reconfigured site plan, as compared to the proposed project. As with the proposed project, the types of uses are comparable to those that currently exist and operate at the project site, including Mole D. Therefore, the operational noise impacts associated with Mole D – Option 1 would be similar to the proposed project. As with the proposed project, the types of uses are

comparable to those that currently exist and operate at the project site, including at Mole D. As such, noise levels associated with on-site operational sources under Mole D – Option 1 would, for the most part, be similar to existing conditions, as is also the case for the proposed project. Increased traffic on Torrance Boulevard between the project site and Catalina Avenue would result in a significant increase in roadway noise levels along that segment, compared to existing conditions. Therefore, under Mole D – Option 1, there would be a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As with the proposed project, the impacts would be significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to an increase in ambient noise levels under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, under Mole D – Option 2, there would be a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, and, similar to the proposed project, the impact would be significant.

Mitigation Measures

No feasible mitigation is available for the significant increase in the roadway noise level on Torrance Boulevard between project site and Catalina Avenue.

Residual Impacts

Impacts would be significant and unavoidable.

Impact NOI-4: Alternative 8 would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

<u>Mole A</u>

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack site and constructing the breakwater, the overall amount of development would be similar to the proposed project. Therefore, Mole A - Option 1 would be the same as the proposed project with respect to the level of construction activities and subsequent operational activities. As with the proposed project, construction of Mole A - Option 1 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use); a significant noise impact would occur.

Relative to construction noise impacts specific to the boat launch ramp, at the Mole A potential boat ramp site, there are noise sensitive uses in the form of liveaboards that could located as close as 100 feet. As indicated in Table 3.10-5 in Section 3.10 Noise, the typical noise levels associated with different phases of construction range from approximately 75 dBA to 79 dBA at a distance of 100 feet. Based on the similarity in land use setting between the Mole A site and the proposed project site (Mole C), it is reasonable to assume that the existing ambient noise level at the Mole A site is approximately 63 dBA, similar to Mole C (see Table 3.10-2). When the construction noise levels are added to the assumed existing ambient noise

level, the resultant ambient noise level would be approximately 75 dBA to 79 dBA. This temporary increase of between 12 and 16 dB in ambient noise levels would exceed the 10 dB threshold of significance; hence, implementation of Mole A – Option 1 could result in a significant impact related to construction noise if there are liveaboards located approximately 100 feet of construction activities.

At other locations within the project, as with the proposed project, construction of the Mole A - Option 1 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use). Similar to the proposed project, a significant noise impact would occur; however the significant noise impact on liveaboards in Basin 2 associated with construction of the boat launch ramp facility at Mole C would not occur and a new significant impact on liveaboards within Basin 1 would occur.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to a temporary increase in ambient noise levels under Mole A – Option 2 would be the same as Mole A – Option 1 described above. Therefore, as with the proposed project, construction of the Mole A – Option 2 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use). Similar to the proposed project, a significant noise impact would occur; however the significant noise impact on liveaboards in Basin 2 associated with construction of the boat launch ramp facility at Mole C would not occur and a new significant impact on liveaboards within Basin 1 would occur.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to a temporary increase in ambient noise levels under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, construction of the Mole A - Option 3 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use). Similar to the proposed project, a significant noise impact would occur; however the significant noise impact on liveaboards in Basin 2 associated with construction of the boat launch ramp facility at Mole C would not occur and a new significant impact on liveaboards within Basin 1 would occur.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. Therefore, Mole C would be similar to the proposed project with respect to the level of construction activities, and similar to the proposed project with respect to the level of operational activities. As with the proposed project, construction of Mole C would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction

activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use); a significant noise impact would occur.

Relative to construction noise impacts specific to the boat launch ramp, construction nearest to noise-sensitive receptors would be at the north end of the boat launch ramp parking lot, which would be approximately 75 feet from the nearest liveaboards in Basin 2. As such, similar to the proposed project, a significant construction noise impacts would occur.

Therefore, as with the proposed project, construction of the Mole C would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use).

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. Therefore, Mole D – Option 1 would be similar, but slightly reduced as compared to the proposed project with respect to the level of construction activities. As with the proposed project, construction of Mole D – Option 1 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use); a significant noise impact would occur.

Relative to construction noise impacts specific to the boat launch ramp, as with the proposed project, liveaboards located in Basin 3 would be temporarily relocated during construction; thus, the nearest noise-sensitive receptors would be the residential apartments and condominiums located east of the project site, approximately 300 feet from Mole D. As such, no significant construction noise impacts associated with boat launch ramp facility construction at Mole D would occur under Mole D – Option 1.

However, at other locations within the project, as with the proposed project, construction of the Mole D - Option 1 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use). Similar to the proposed project, a significant noise impact would occur; however the significant noise impact on liveaboards in Basin 2 associated with construction of the boat launch ramp facility at Mole C would not occur.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to a temporary increase in ambient noise levels under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, as with the proposed project, construction of the Mole D - Option 2 would cause a substantial temporary and periodic increase in ambient noise levels in the project vicinity above levels existing without the project (i.e., construction activities lasting more than one day would exceed existing

ambient exterior noise levels by 10 dBA or more at a noise sensitive use). Similar to the proposed project, a significant noise impact would occur; however the significant noise impact on liveaboards in Basin 2 associated with construction of the boat launch ramp facility at Mole C would not occur.

Mitigation Measures

Mitigation measures MM NOI-2 through MM NOI-6, and MM NOI-ALT-1 (see Impact NOI-4 under Alternative 6 above) would help reduce construction noise impacts.

Residual Impacts

Implementation of mitigation measures MM NOI-2 through MM NOI-5 would help reduce construction noise impacts, and mitigation measure MM NOI-6 would provide for a substantial reduction in construction noise impacts. With a 20 dBA of noise reduction associated with such noise barriers, the attenuated construction noise levels at most of the noise sensitive receptors around the project site would be generally comparable to, if not less than, existing ambient noise levels. The exceptions would be: (1) the western edge of Czulegar Park; (2) the northern edge of Veterans Park; (3) the western portions of the condominium complexes located immediately east of the project site; and (4) the Crowne Plaza Hotel during construction of the upper levels of multi-story structures within the project site. At Czulegar Park, the 20 dBA noise reduction offered by MM NOI-5 would largely, but not fully, reduce the noise exposure impact to a level that is less than significant. Similarly, a 20 dBA noise reduction offered by placement of a noise barrier along the northern edge of Veterans Park would largely, but not fully, address the construction noise impact. Relative to the condominiums east of the site, the combination of their close proximity to the project site and their elevated and multi-story nature would render any noise barrier as being unable to achieve a construction noise level reduction that would make the impact less than significant. A noise barrier located along the edge of the project site, which is approximately 20+/- feet lower than the base elevation of the condominiums, could not effectively shield/attenuate construction noise from reaching the westernmost portions of those condominium complexes, and even if it did, a 20 dBA noise reduction would not be sufficient. With regard to differences in elevation, construction of the upper levels of multi-story structures within the eastern portions of the project site, such as Buildings A and D and the parking structures at the north and south ends of the site, may expose adjacent noise sensitive receptors, such as the Crowne Plaza Hotel and the condominiums east of the site, to temporary periods of construction noise that cannot be shielded/attenuated by construction noise barriers.

Implementation of Mitigation MM NOI-ALT-1 would reduce noise impacts on liveaboards located within 150 feet of construction activities by providing a temporary moorage location during construction phases with high noise levels. This would reduce impacts on liveaboards to less than significant.

Based on the above, implementation of Alternative 8 would result in a significant and unavoidable construction noise impact.

Public Services

Impact PBS-1: Alternative 8 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities (i.e., fire stations), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development and grading would be similar to the proposed project. As with the entire project site, the Mole A boat launch ramp facility would be in an area currently being serviced by the Redondo Beach Fire Department, as well as the Harbor Patrol. As with the proposed project, during construction, precautions and requirements associated with the California Fire Code's Fire Safety During Construction and Demolition (Chapter 33) would be followed.

Implementation of Mole A - Option 1 could result in an increase in the number of water users, including motorized and non-motorized vessel traffic, which could result in an increased demand for Harbor Patrol services. This would be similar to the proposed project.

As described in Section 3.11 Public Services, current staffing levels and facilities are adequate to meet the anticipated needs associated with the proposed revitalization of the waterfront, including the proposed boat launch ramp. Therefore, as with the proposed project, Mole A – Option 1 is not expected to result in the need for new fire department and/or harbor patrol facilities. Additionally, Mole A is located in closer proximity and is in visual range of the Harbor Patrol Station, as compared to the Mole C (location of the boat launch ramp facility under the proposed project).

Therefore, as with the proposed project, the existing fire protection staff and equipment can adequately support development under Mole A - Option 1, and thus it is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. Additionally, a boat launch ramp facility located at Mole A would have the benefit of being located closer to and within visual range of the Harbor Patrol Station.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to fire protection services under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 2 would not result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. Additionally, a boat launch ramp facility located at Mole A would have the benefit of being located closer to and within visual range of the Harbor Patrol Station.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to fire protection services under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, similar to the proposed project, Mole A – Option 3 would not result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant. Additionally, a boat launch ramp facility located at Mole A would have the benefit of being located closer to and within visual range of the Harbor Patrol Station.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. As with the proposed project, during construction, precautions and requirements associated with the California Fire Code's Fire Safety During Construction and Demolition (Chapter 33) would be followed.

Implementation of Mole C could result in an increase in the number of water users, including motorized and non-motorized vessel traffic, which could result in an increased demand for Harbor Patrol services. As described in Section 3.11 Public Services, current staffing levels and facilities are adequate to meet the anticipated needs associated with the proposed revitalization of the waterfront, including the proposed boat launch ramp facility. Therefore, as with the proposed project, Mole C is not expected to result in the need for new fire department and/or harbor patrol facilities.

Therefore, as with the proposed project, the existing fire protection staff and equipment can adequately support development under Mole C, and thus it is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site, no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. As with the proposed project, during construction, precautions and requirements associated with the California Fire Code's Fire Safety During Construction and Demolition (Chapter 33) would be followed.

Implementation of Mole D – Option 1 could result in an increase in the number of water users, including motorized and non-motorized vessel traffic, which could result in an increased demand for Harbor Patrol services. This would be similar to the proposed project. As described in Section 3.11 Public Services, current staffing levels and facilities are adequate to meet the anticipated needs associated with the proposed revitalization of the waterfront, including the proposed boat launch ramp. Therefore, as with the proposed project, Mole D –

Option 1 is not expected to result in the need for new fire department and/or harbor patrol facilities.

As with the proposed project, the existing fire protection staff and equipment can adequately support development under Mole C, and thus it is not expected to result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to fire protection services under Mole D – Option 2 would be the same as Mole D - Option 1 described above. The amount of vessel traffic under Mole D – Option 2 would be similar to that of the proposed project. Therefore, similar to the proposed project, Mole D – Option 2 would not result in the need for the construction of new or physically altered fire protection facilities (i.e., fire stations) in order to maintain adequate services and, as such, the impact would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact PBS-2: Alternative 8 would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities (including land-based and maritime police protection/law enforcement), the construction of which could cause significant environmental impacts not already addressed as part of the project, in order to maintain adequate services.

<u>Mole A</u>

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redevelopingthe Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project. This would include the relocation of the Pier Police Sub-Station within the project site. As with the entire project site, the Mole A boat launch ramp facility would be in an area currently being serviced by the Redondo Beach Police Department, as well as the Harbor Patrol (discussed above). A potential increase in harbor use that could occur under Mole A – Option 1, could result in an increased demand for police protection services that would be the same as would occur under the proposed project. As with the proposed project, personnel and associated equipment needs would be addressed through the continued implementation of the City's budgeting process, and additional staff and equipment would be accommodated by the new on-site sub-station.

Therefore, as with the proposed project, with replacement of the on-site police sub-station, Mole A – Option 1 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to police protection services under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, with replacement of the on-site police sub-station, Mole A – Option 2 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to police protection services under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Therefore, as with the proposed project, with replacement of the on-site police sub-station, Mole A – Option 3 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. This would include the relocation of the Pier Police Sub-Station within the project site. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. A potential increase in harbor use that could occur under Mole C could result in an increased demand for police protection services that would be the same as would occur under the proposed project. As with the proposed project, personnel and associated equipment needs would be addressed through the continued implementation of the City's budgeting process, and additional staff and equipment would be accommodated by the new on-site sub-station.

Therefore, as with the proposed project, with replacement of the on-site police sub-station, Mole C would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site, no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. This would include the relocation of the Pier Police Sub-Station within the project site. Under Mole D- Option 1, a potential increase in harbor users and other people at the project site would be less than the proposed project, as there would be less development. Therefore, any increased demand for police protection services would be less as compared with the proposed project. As with the proposed project, personnel and associated equipment needs would be addressed through the continued implementation of the City's budgeting

process, and any additional staff and equipment would be accommodated by the new on-site sub-station.

As with the proposed project, implementation of the Pacific Avenue Reconnection would be improve emergency access throughout the site. However, without the pedestrian/bicycle bridge, non-vehicular emergency access (i.e., foot patrol) between the northern and southern portion of the site would be reduced.

As with the proposed project, with replacement of the on-site police sub-station, Mole C would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to police protection services under Mole D – Option 2 would be the same as Mole D - Option 1 described above. Therefore, as with the proposed project, with replacement of the on-site police sub-station, Mole D – Option 2 would not result in the need for the construction of new or physically altered police protection facilities (which have not already been considered in the EIR) in order to maintain adequate services, hence, the impact would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Recreation

Impact REC-1: Alternative 8 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project, including the enhancement of open space and recreational facilities, although the pedestrian path along the water's edge would not be enhanced along the Joe's Crab Shack site. The proposed boat launch ramp facility under Mole A – Option 1 would be similar to the boat launch ramp facility under the proposed project; however, the Mole A – Option 1 would be smaller (one-lane instead of the two-lane) and would be at a different location (Mole A instead of Mole C).

The recreational users that are temporarily displaced during project construction, which would include users of the King Harbor Yacht Club on Mole A, would not cause a substantial increase in use at any particular recreational facility, but would instead be expected to disperse

throughout the area. Therefore, construction of Mole A – Option 1 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and impacts would be less than significant.

During operations, as with the proposed project, Mole A - Option 1 would help with the local and regional demand for public boating facilities by providing expanded and free small craft boat launch ramp facility; thereby providing a benefit to the local community and region as a whole. Given that the boat launch ramp facility is a smaller size as compared to the proposed project, it would accommodate fewer vessels; however, based on the average usage of the Redondo Beach Marina boat hoists, it is anticipated that a smaller facility would be adequate to accommodate average demand.

Therefore, Mole A - Option 1 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As with the proposed project, impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to demand on existing parks and recreational facilities under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Additionally, Mole A - Option 2 would include a public hand launch for launching of non-motorized vessels. Mole A - Option 2 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As with the proposed project, impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to demand on existing parks and recreational facilities under Mole A – Option 2 would be the same as Mole A - Option 1 described above. However, Mole A - Option 2 would be the same size boat launch ramp facility as under the proposed project, and could accommodate a larger number of vessels as compared with Mole A - Option 1. Mole A - Option 2 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As with the proposed project, impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. Similar to the proposed project, the recreational users that are temporarily displaced during project construction would not cause a substantial increase in use at any particular recreational facility, but would instead be expected to disperse throughout the area. Therefore, construction of Mole C would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and impacts would be less than significant.

During operations, as with the proposed project, Mole C would help with the local and regional demand for public boating facilities by providing expanded and free small craft boat launch ramp facility; thereby providing a benefit to the local community and region as a whole. Given that the boat launch ramp facility is a smaller size as compared to the proposed project, it would accommodate fewer vessels; however, based on the average usage of the Redondo Beach Marina boat hoists, it is anticipated that a smaller facility would be adequate to accommodate average demand. Mole C would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As with the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site, no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. The proposed boat launch ramp facility under Mole D – Option 1 would be similar to the boat launch ramp facility under the proposed project; however, the Mole D – Option 1 would be smaller (one-lane instead of the two-lane) and at a different location (Mole D instead of Mole C). Similar to the proposed project, the recreational users that are temporarily displaced during project construction would not cause a substantial increase in use at any particular recreational facility, but would instead be expected to disperse throughout the area. Additionally, given that less development would occur on-site, the amount of time that the entire project site is closed to the public may reduced as compared to the proposed project (i.e., portions of the project site may be open to public access while other portions are under construction). Therefore, construction of Mole D would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and impacts would be less than significant.

During operations, as with the proposed project, Mole D – Option 1 would help with the local and regional demand for public boating facilities by providing expanded and free small craft boat launch ramp facility; thereby providing a benefit to the local community and region as a whole. Given that the boat launch ramp facility is a smaller size as compared to the proposed project, it would accommodate fewer vessels; however, based on the average usage of the Redondo Beach Marina boat hoists, it is anticipated that a smaller facility would be adequate to accommodate average demand.

The site connectivity (including bicycle and pedestrian path connections) and open space enhancements would be reduced under Mole D – Option 1 as compared to the proposed project. This is because, instead of being developed as a cohesive interconnected site as would occur under the proposed project, it would be redeveloped as separate developments in the north and in south and no pedestrian bridge would be implemented. Boardwalk improvements would occur; however, the enhancements would be reduced compared to the proposed project and only meet the minimum code requirements at the boat launch ramp site. Given the central location of boat launch ramp under Mole D – Option 1, (as opposed to the proposed project where the boat launch ramp is located at the edge of the development), the quality of the recreational experience along the boardwalk would be reduced as a primary portion of the walkway would cross the surface parking and ramp itself. Additionally, given the increased

density within the buildable areas of the northern portion of the project site, the amount and quality of public open space, such as view corridors, seating areas, and gathering spaces would be reduced as compared to the proposed project.

Construction and operation of Mole D – Option 1 would not result in an increased demand on existing parks and recreational facilities such that substantial physical deterioration would occur or be accelerated. As with the proposed project, impacts would be less than significant; however, the boat launch ramp facility would accommodate a smaller number of vessels and the site connectivity and open space enhancements would be reduced under Mole D – Option 1 as compared to the proposed project

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to demand on existing parks and recreational facilities under Mole D – Option 2 would be the same as Mole D - Option 1 described above. However, Mole D - Option 2 would be the same size boat launch ramp facility as under the proposed project, and could accommodate a larger number of vessels as compared with Mole A - Option 1. As with the proposed project, impacts would be less than significant; however, the site connectivity (including bicycle and pedestrian path connections) and open space enhancements would be reduced under Mole D – Option 2 as compared to the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact REC-2: Alternative 8 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A – Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project. Although the location of proposed boat launch ramp facility would be different as compared to the proposed project under Mole A – Option 1, Mole A – Option 1 would not include construction of any parks or recreational facilities beyond those already described under the proposed project.

In addition, no construction or expansion of recreational facilities not already addressed as part of the project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary, including Mole A, would occur as part of, or because of, the project). As with the proposed project, Mole A – Option 1 would not result in population growth that would increase the demand for new or expanded recreational facilities. Therefore, as with the proposed project, Mole A – Option 1 would not include recreational facilities or

require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As with the proposed project, no impacts would occur.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to construction or expansion of recreational facilities under Mole A – Option 2 would be the same as Mole A - Option 1 described above. However, Mole A - Option 2 would include a hand launch ramp. Similar to the proposed project, Mole A – Option 2, would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As with the proposed project, no impacts would occur.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to construction or expansion of recreational facilities under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Similar to the proposed project, Mole A – Option 2, would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As with the proposed project, no impacts would occur.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. As with the proposed project, Mole C would not include construction of any parks or recreational facilities beyond those already described under the proposed project.

In addition, no construction or expansion of recreational facilities not already addressed as part of the project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary would occur as part of, or because of, the project). As with the proposed project, Mole C would not result in population growth that would increase the demand for new or expanded recreational facilities. Therefore, Mole C would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As with the proposed project, no impacts would occur.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site, no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. Mole D – Option 1 would include the construction of fewer recreational

improvements than those already described under the proposed project, including reduced open space enhancements and no pedestrian/bicycle bridge.

No construction or expansion of recreational facilities not already addressed as part of the project would be required (e.g., no construction or expansion of recreational facilities outside the project boundary would occur as part of, or because of, the project). As with the proposed project, Mole D – Option 1 would not result in population growth that would increase the demand for new or expanded recreational facilities. Therefore, Mole D – Option 1 would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As with the proposed project, no impacts would occur.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Similar to the proposed project, Mole D – Option 2, would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment not already addressed as part of the alternative. As with the proposed project, no impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Traffic and Transportation

Impact TRA-1: Alternative 8 could exceed the applicable significance thresholds.

Under Alternative 8, the overall amount and type of development on the site would be similar to the proposed project, but various options are identified relative to the location, design, and capacity of the proposed boat launch ramp. As such, the overall trip generation associated with Alternative 8 would generally similar to that of the proposed project. Tables 4-60 and 4-61 summarize the results of the analysis of various boat launch ramp location and capacity options compared to the proposed project under Existing plus Alternative 8 and Cumulative plus Alternative 8 Conditions, respectively. The options vary by mole location (and thus the access intersection), and whether or not the alternative has one launch lane (with 20 parking stalls), or two launch lanes (with 40 parking stalls), otherwise all other aspects of this alternative are consistent with the proposed project. Five signalized intersections were evaluated because they represent the locations that would experience the most variability between the boat launch ramp alternatives. Other intersections are not expected to vary.

Table 4-60: Existing Plus Project Alternative 8 (Boat Launch Ramp Alternative) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Existing plus Project		Mole A One Lane		Change	Mole A Two Lane		Change	Mole C One Lane		Change	Mole D One Lane		Change	Mole D Two Lane		Change
		LOS	V/C	LOS	V/C		LOS	V/C		LOS	V/C		LOS	V/C		LOS	V/C	
4. Harbor Dr/Hermosa Ave & Herondo St	AM	A	0.553	A	0.552	-0.001	A	0.553	0.000	A	0.551	-0.002	A	0.551	-0.002	A	0.551	-0.002
	PM	B	0.611	B	0.610	-0.001	B	0.610	-0.001	B	0.609	-0.002	B	0.609	-0.002	B	0.609	-0.002
9. Harbor Dr & Yacht Club Way	AM	A	0.386	A	0.387	0.001	A	0.388	0.002	A	0.386	0.000	A	0.386	0.000	A	0.386	0.000
	PM	A	0.567	A	0.569	0.002	A	0.571	0.004	A	0.567	0.000	A	0.567	0.000	A	0.567	0.000
11. Harbor Dr & Marina Way	AM	A	0.342	A	0.341	-0.001	A	0.341	-0.001	A	0.341	-0.001	A	0.341	-0.001	A	0.341	-0.001
	PM	A	0.594	A	0.594	0.000	A	0.596	0.002	A	0.593	-0.001	A	0.593	-0.001	A	0.593	-0.001
15. Harbor Dr & Portofino Way/Beryl St	AM	A	0.351	A	0.349	-0.002	A	0.347	-0.004	A	0.350	-0.001	A	0.351	0.000	A	0.352	0.001
	PM	C	0.713	C	0.708	-0.005	C	0.706	-0.007	C	0.711	-0.002	C	0.710	-0.003	C	0.709	-0.004
35. Harbor Dr & Pacific Ave	AM	A	0.273	A	0.273	0.000	A	0.273	0.000	A	0.273	0.000	A	0.273	0.000	A	0.273	0.000
	PM	A	0.398	A	0.398	0.000	A	0.398	0.000	A	0.398	0.000	A	0.398	0.000	A	0.398	0.000

Intersections operating at LOS E or F are noted in **Bold**.

Table 4-61: Cumulative Plus Project Alternative 8 (Boat Launch Ramp Alternative) Conditions Level Of Service – Signalized Intersections

Intersection	Peak Period	Cumulative plus Project		Mole A One Lane		Change	Mole A Two Lane		Change	Mole C One Lane		Change	Mole D One Lane		Change	Mole D Two Lane		Change
		LOS	V/C	LOS	V/C		LOS	V/C		LOS	V/C		LOS	V/C		LOS	V/C	
4. Harbor Dr/Hermosa Ave & Herondo St	AM	A	0.590	A	0.590	0.000	A	0.590	0.000	A	0.589	-0.001	A	0.589	-0.001	A	0.589	-0.001
	PM	B	0.648	B	0.647	-0.001	B	0.648	0.000	B	0.647	-0.001	B	0.647	-0.001	B	0.647	-0.001
9. Harbor Dr & Yacht Club Way	AM	A	0.407	A	0.409	0.002	A	0.410	0.003	A	0.407	0.000	A	0.407	0.000	A	0.407	0.000
	PM	B	0.604	B	0.604	0.000	B	0.606	0.002	B	0.603	-0.001	B	0.603	-0.001	B	0.603	-0.001
11. Harbor Dr & Marina Way	AM	A	0.315	A	0.316	0.001	A	0.318	0.003	A	0.315	0.000	A	0.315	0.000	A	0.315	0.000
	PM	A	0.549	A	0.549	0.000	A	0.551	0.002	A	0.548	-0.001	A	0.548	-0.001	A	0.548	-0.001
15. Harbor Dr & Portofino Way/Beryl St	AM	A	0.366	A	0.365	-0.001	A	0.364	-0.002	A	0.365	-0.001	A	0.367	0.001	A	0.369	0.003
	PM	B	0.650	B	0.649	-0.001	B	0.649	-0.001	B	0.649	-0.001	B	0.651	0.001	B	0.652	0.002
35. Harbor Dr & Pacific Ave	AM	A	0.288	A	0.288	0.000	A	0.288	0.000	A	0.288	0.000	A	0.288	0.000	A	0.288	0.000
	PM	A	0.424	A	0.424	0.000	A	0.424	0.000	A	0.424	0.000	A	0.424	0.000	A	0.424	0.000

Intersections operating at LOS E or F are noted in **Bold**.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, the differences in traffic impacts compared to those of the proposed project would be negligible for both Existing plus Alternative 8 (Mole A-One Lane) Conditions and Cumulative plus Alternative 8 (Mole A-One Lane), with the changes in V/C values at the five study intersections ranging from -0.005 to 0.002. As such, implementation of this option for Alternative 8 would not result in any material changes in traffic impacts than those that would otherwise occur with the proposed project. As with the proposed project, impacts would be significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to traffic under Mole A – Option 2 would be the same as Mole A - Option 1 described above. As with the proposed project, impacts would be significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Under Mole A - Option 3, the differences in traffic impacts compared to those of the proposed project would be negligible for both Existing plus Alternative 8 (Mole A-Two Lane) Conditions and Cumulative plus Alternative 8 (Mole A-Two Lane), with the changes in V/C values at the five study intersections ranging from -0.007 to 0.004. As such, implementation of this option for Alternative 8 would not result in any material changes in traffic impacts than those that would otherwise occur with the proposed project. As with the proposed project, impacts would be significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the differences in traffic impacts compared to those of the proposed project would be negligible for both Existing plus Alternative 8 (Mole C-One Lane) Conditions and Cumulative plus Alternative 8 (Mole C-One Lane), with the changes in V/C values at the five study intersections ranging from -0.002 to 0.000. As such, implementation of this option for Alternative 8 would not result in any material changes in traffic impacts than those that would otherwise occur with the proposed project. As with the proposed project, impacts would be significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the differences in traffic impacts compared to those of the proposed project would be negligible for both Existing plus Alternative 8 (Mole D-One Lane) Conditions and Cumulative plus Alternative 8 (Mole D-One Lane), with the changes in V/C values at the five study intersections ranging from -0.003 to 0.001. As such, implementation of this option for Alternative 8 would not result in any material changes in traffic impacts than those that would otherwise occur with the proposed project. As with the proposed project, impacts would be significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 2, the differences in traffic impacts compared to those of the proposed project would be negligible for both Existing plus Alternative 8 (Mole D-Two Lane) Conditions and Cumulative plus Alternative 8 (Mole D-Two Lane), with the changes in V/C values at the five study intersections ranging from -0.004 to 0.003. As such, implementation of this option for Alternative 8 would not result in any material changes in traffic impacts than those that would otherwise occur with the proposed project. As with the proposed project, impacts would be significant.

Mitigation Measures

MM TRA-1 through MM TRA-6 presented in Section 3.13.4.2 would be implemented to address the significant impacts to operational traffic that would occur under Alternative 8. MM TRA-7 would be implemented to address parking impacts.

Residual Impacts

Implementation of MM TRA-1 through MM TRA-6 would reduce operational traffic to less than significant at all intersections. MM TRA-7 would reduce impacts related to parking to less than significant.

Impacts would be less than significant at all impacted intersections.

Impact TRA-2: Alternative 8 would not conflict with an applicable congestion management program.

As noted above, all options under Alternative 8 would have traffic generation and impacts similar to those of the proposed project. As such, similar to the proposed project, all options under Alternative 8 would not conflict with an applicable congestion management program.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRA-3: Alternative 8 could substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

<u>Mole A</u>

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, development of the boat launch ramp would occur at Mole A, which is located near the end of the main navigation channel where traffic volume is lowest. Hand launch activity does originate from Basin 1 nearby, so there would be the potential for safety conflicts if novices inadvertently venture into the navigation channel. Potential conflict with the adjacent yacht club activities could also occur at time of peak use days. It is likely, however, that such potential issues could be quickly resolved by Harbor Patrol staff via

enforcement actions and management practices to promote safe boating practice and sharing of the harbor's water space. No significant impacts are anticipated and the significant impact that would occur under the proposed project associated with the proximity of the boat launch ramp and Seaside Lagoon hand launch would be avoided.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

Impacts related to traffic under Mole A – Option 2 would be the same as Mole A - Option 1 described above. Impacts are less than significant and the significant impact that would occur under the proposed project associated with the proximity of the boat launch ramp and Seaside Lagoon hand launch would be avoided.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to traffic under Mole A – Option 3 would be the same as Mole A - Option 1 described above. Impacts are less than significant and the significant impact that would occur under the proposed project associated with the proximity of the boat launch ramp and Seaside Lagoon hand launch would be avoided.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under this option, development of a one-lane boat ramp would occur at the same location as the proposed project, but would not include the proposed breakwater. As such, the interface area for paddle/hand launch craft and boaters near the ramp area would not be as confined as what would occur under the proposed project, which, in turn, would reduce the potential for safety-related conflicts between those activities. Impacts are less than significant and the significant impact that would occur under the proposed project associated with the proximity of the boat launch ramp and Seaside Lagoon hand launch would be avoided.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the boat ramp would be developed within the same turning basin as Mole C for the proposed project; however it would not be located near the entrance to Seaside Lagoon and similar to Mole C described above, the absence of a breakwater developed at Mole D would avoid the type of potential safety conflicts associated with having a confined space. However, the Mole D – Option 1 boat launch ramp would be located near the mouth of Basin 3, which could result in a potential vessel traffic conflict. Additionally, if the Sportfishing Pier is reconstructed, there would be potential traffic conflicts with vessels (i.e., charter vessels) maneuvering to and from berths at the Sportfishing Pier. This could pose a potential safety hazard, particularly during times of peak use. As with the proposed project, a significant impact relative to vessel traffic safety could occur.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Impacts related to traffic under Mole D – Option 2 would be similar to Mole D - Option 1 described above. However, the potential conflicts with vessel traffic to and from the Sportsfishing Pier would be reduced as compared to Mole D – Option 1, although it would still

be considered a potential safety hazard, particularly during times of peak use. As with the proposed project, a significant impact relative to vessel traffic safety could occur.

Mitigation Measures

Impacts would be less than significant for the Mole A and Mole C options and no mitigation is required. Mitigation measure TRA-8 would be implemented to address significant impacts relative to vessel safety under Mole D – Option 1 and Mole D – Option 2.

Residual Impacts

Impacts under the Mole A and Mole C options would be less than significant. With implementation of mitigation, significant impacts under Mole D – Option 1 and Mole D – Option 2 would be reduced to less than significant.

Utilities

Impact UTL-1: Alternative 8 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A – Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project. Therefore, the amount of wastewater generated under Mole A – Option 1 would be similar to the proposed project, but slightly increased because Joe's Crab Shack would remain and continue to generate wastewater. As with the proposed project, at the project site, upgraded sewer infrastructure such as a new on-site trunk sewer line and local tie-ins and upgrades to the lift stations would be implemented. With the on-site improvements and lift station upgrades, there would be adequate capacity, and there would not be a need for new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. As with the boat launch ramp facility under the proposed project, there would be no new wastewater collection facilities installed at Mole A. Boaters would be expected to use existing pumpout stations in King Harbor to dispose on-board wastewater. The existing pumpout stations connect to, or are pumped into, the existing sewer system. A System Evaluation and Capacity Assurance Plan (SECAP) and Rehabilitation and Replacement Program (RRP)[9] was prepared for the City in 2010 to evaluate the City's sewer collection system and provide a framework for undertaking the construction of new and

[9] The SECAP-RRP is incorporated by reference and is available for review at the City of Redondo Beach City Hall, located at 415 Diamond Street in Redondo Beach and online at:
http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23091 (Part 1);
http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23092 (Part 2);
http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23093 (Part 3);
http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23094 (Part 4);
http://www.redondo.org/civica/filebank/blobdload.asp?BlobID=23095 (Part 5);

replacement facilities. The SECAP-RRP did not identify existing or future deficiencies near Mole A, or the project site and, thus, no sewer system upgrades are needed at Mole A. As with the proposed project, Mole A– Option 1 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant; however, the wastewater generated under Mole A – Option 1 would be slightly greater than the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

The wastewater generated under Mole A – Option 1 would be the same as would be generated under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 2 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant; however, the wastewater generated under Mole A – Option 2 would be slightly greater than the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The wastewater generated under Mole A – Option 3 would be the same as would be generated under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 3 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant; however, the wastewater generated under Mole A – Option 3 would be slightly greater than the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. The amount of wastewater generated under Mole C would be the same as the proposed project. As with the proposed project, upgraded sewer infrastructure such as a new on-site trunk sewer line and local tie-ins and upgrades to the lift stations would be implemented. With the on-site improvements and lift station upgrades, there would be adequate capacity, and there would not be a need for new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site, no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. Therefore, the amount of wastewater generated would be similar to the

proposed project, although slightly greater as Joe's Crab Shack would remain. As with the proposed project, upgraded sewer infrastructure such as a new on-site trunk sewer line and local tie-ins and upgrades to the lift stations would be implemented. With the on-site improvements and lift station upgrades, there would be adequate capacity, and there would not be a need for new off-site infrastructure, which could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The wastewater generated under Mole D – Option 2 would be the same as would be generated under Mole D - Option 1 described above. Therefore, as with the proposed project, Mole D– Option 2 would not exceed the capacity of local wastewater infrastructure and would not result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant; however, the wastewater generated under Mole D – Option 2 would be less than the proposed project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-2: Alternative 8 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project. Therefore, the amount of water demand under Mole A – Option 1 would be similar to the proposed project, but slightly increased because Joe's Crab Shack would remain. As described in Section 3.14 Utilities, CalWater concludes that for the next 20 years (2015–2035), the Hermosa-Redondo District would have adequate water supplies to meet projected demands associated with the proposed project and those of all existing customers and other anticipated future customers for normal, single dry year and multiple dry year conditions. Given that Mole A – Option 1 would be only a slight (three percent) increase over the estimate for the proposed project, it is anticipated that Mole A – Option 1 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements. Therefore, similar to the proposed project, impacts would be less than significant.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

The water demand under Mole A – Option 2 would be the same as under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 2 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements. As with the proposed project, impacts would be less than significant.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The water demand under Mole A – Option 1 would be the same as under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 2 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements. As with the proposed project, impacts would be less than significant.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. The size of the boat launch ramp facility would not change the anticipated water demand, and therefore, the amount of water demand under Mole C would be the same as the proposed project. As described in Section 3.14 Utilities, CalWater concludes that for the next 20 years (2015–2035), the Hermosa-Redondo District would have adequate water supplies to meet projected demands associated with the proposed project and those of all existing customers and other anticipated future customers for normal, single dry year and multiple dry year conditions. Therefore, Mole C would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements. Therefore, similar to the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, with the exception of no development of the Joe's Crab Shack portion of the project site, no construction of a breakwater at the boat launch ramp site, and no pedestrian/bicycle bridge, the overall amount of development and grading would be similar to the proposed project. Therefore, the water demand under Mole D – Option 1 would be similar to the proposed project, although possibly slightly greater as Joe's Crab Shack would remain. As described in Section 3.14 Utilities, CalWater concludes that for the next 20 years (2015–2035), the Hermosa-Redondo District would have adequate water supplies to meet projected demands associated with the proposed project and those of all existing customers and other anticipated future customers for normal, single dry year and multiple dry year conditions. Therefore, Mole D – Option 1 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements. Therefore, similar to the proposed project, impacts would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The water demand under Mole A – Option 2 would be the same as under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 2 would not exceed existing potable water supplies, entitlements and resources, or require and result in new and expanded entitlements. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-3: Alternative 8 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project. Under Mole A – Option 1, it is anticipated that the amount of construction waste would be slightly less. Existing docks at Mole A would be demolished and replaced, but this would generate less construction waste than Joe's Crab Shack, which would remain under Mole A – Option 1. During operation, the amount of solid waste generated may be slightly greater given that Joe's Crab Shack would remain. As described in Section 3.14 Utilities, there is adequate landfill capacity in Los Angeles County for both construction waste and solid waste that would be generated during project operations. Further, as with the proposed project, Mole A - Option 1 would comply with City waste diversion requirements. As with the proposed project, Mole A – Option 1 would not result in a substantial increase in solid waste disposal occurring at the available landfills and could be accommodated without creating a need for additional solid waste disposal facilities. Further, Mole A – Option 1 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. As with the proposed project, impacts relative to adopted solid waste diversion programs and policies would be less than significant under Mole A – Option 1; however, the amount of construction waste generated would be slightly less.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

The solid waste generation under Mole A – Option 2 would be the same as under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 2 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local

waste statutes and regulations. As with the proposed project, impacts would be less than significant, and the amount of construction waste generated under Mole A – Option 2 may be slightly less than the proposed project. Solid waste generated during operation Mole A – Option 2 would be similar to that of the proposed project; however, the amount of construction waste generated would be slightly less.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The solid waste generation under Mole A – Option 3 would be the same as under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 3 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. As with the proposed project, impacts would be less than significant, and the amount of construction waste generated under Mole A – Option 3 may be slightly less than the proposed project. Solid waste generated during operation of Mole A – Option 3 would be similar to that of the proposed project; however, the amount of construction waste generated would be slightly less.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. The size of the boat launch ramp facility would not change the anticipated solid waste generation during construction or operation, and therefore, the amount of solid waste generated under Mole C would be the same as the proposed project. As described in Section 3.14 Utilities, there is adequate landfill capacity in Los Angeles County for both construction waste and solid waste that would be generated during project operations. Further, as with the proposed project, Mole C would comply with City waste diversion requirements. As with the proposed project, Mole C would not result in a substantial increase in solid waste disposal occurring at the available landfills and could be accommodated without creating a need for additional solid waste disposal facilities. Further, Mole C would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. As with the proposed project, impacts relative to adopted solid waste diversion programs and policies would be less than significant under Mole C.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D - Option 1, the overall amount of development and level of operations would be similar to the proposed project therefore, the amount of solid waste generated under Mole D – Option 1 would be the same as the proposed project. Although, the amount of construction waste would be slightly less as Joe's Crab Shack would not be demolished. During operation, the amount of solid waste generated may be slightly greater given that Joe's Crab Shack would remain. As described in Section 3.14 Utilities, there is adequate landfill capacity in Los Angeles County for both construction waste and solid waste that would be generated during project operations. Further, as with the proposed project, Mole D – Option 1 would comply

with City waste diversion requirements. As with the proposed project, Mole D – Option 1 would not result in a substantial increase in solid waste disposal occurring at the available landfills and could be accommodated without creating a need for additional solid waste disposal facilities. Further, Mole D – Option 1 would not conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. As with the proposed project, impacts relative to adopted solid waste diversion programs and policies would be less than significant under Mole C.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The solid waste generation under Mole D – Option 2 would be the same as under Mole D - Option 1 described above. Therefore, as with the proposed project, Mole D– Option 1 would not result in a net increase in project-related solid waste generation that could not be accommodated by existing or permitted regional landfills or other disposal facilities, or conflict with solid waste policies and objectives intended to help achieve federal, state or local waste statutes and regulations. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact UTL-4: Alternative 8 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project.

Mole A

Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)

Under Mole A - Option 1, with the exception of not redeveloping the Joe's Crab Shack portion of the project site, the overall amount of development would be similar to the proposed project. Therefore, the amount of electrical and natural gas demand under Mole A – Option 1 would be similar to the proposed project, but possibly slightly increased because Joe's Crab Shack would remain. As described for the proposed project in Section 3.14 Utilities, there are adequate electricity and natural gas supplies available to serve the development that would be implemented under Mole A – Option 1. Further, with the exception of on-site connections needed for the new buildings and structures, Mole A – Option 1 would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. No modifications to the existing electrical transmission and distribution system would occur at Mole A. Implementation of Mole A – Option 1 would not exceed the capacity of electricity transmission facilities and would not result in the construction of new off-site infrastructure that could cause significant environmental impacts not already addressed as part of the project. Therefore, similar to the proposed project, impacts would be less than significant; however, the electrical energy and natural gas demand under Mole A – Option 1 would be slightly greater than the proposed project.

Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

The electrical energy and natural gas demand under Mole A – Option 2 would be the same as under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 2 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant; however, the electrical energy and natural gas demand under Mole A – Option 2 would be slightly greater than the proposed project.

Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The electrical energy and natural gas demand under Mole A – Option 3 would be the same as under Mole A - Option 1 described above. Therefore, as with the proposed project, Mole A– Option 3 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant; however, the electrical energy and natural gas demand under Mole A – Option 3 would be slightly greater than the proposed project.

Mole C: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Under Mole C, the overall amount of development and grading would be similar to the proposed project. Mole C is the same location where a boat launch ramp facility would be constructed under the proposed project, although the alternative Mole C facility would be smaller and would not include a breakwater. The size of the boat launch ramp facility would not change the anticipated electrical energy and natural gas demand during construction or operation, and therefore, the amount of energy and natural gas demand under Mole C would be the same as the proposed project. As described for the proposed project in Section 3.14 Utilities, there are adequate electricity and natural gas supplies available to serve the development that would be implemented under Mole C. Further, with the exception of on-site connections needed for the new buildings and structures, Mole C would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore, as with the proposed project, Mole C would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant.

Mole D

Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)

Under Mole D – Option 1, the project site would be redeveloped and the amount of development would be similar to the proposed project although Joe's Crab Shack would remain. Therefore, the electrical energy and natural gas demand would be similar, and possibly slightly greater, under Mole D – Option 1 as compared to the proposed project. As described for the proposed project in Section 3.14 Utilities, there are adequate electricity and natural gas supplies available to serve the development that would be implemented under Mole D – Option 1. Further, with the exception of on-site connections needed for the new buildings and

structure Mole D – Option 1 would not require modification of existing electrical transmission and distribution systems to continue to serve the project site. Therefore, as with the proposed project, Mole D – Option 1 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant.

Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

The electrical energy and natural gas demand under Mole D – Option 2 would be the same as under Mole D - Option 1 described above. Therefore, as with the proposed project, Mole D– Option 2 would not exceed the capacity of electrical and natural gas transmission facilities and result in the construction of new infrastructure that could cause significant environmental impacts not already addressed as part of the project. As with the proposed project, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.5 Alternatives' Impact Analysis Summary

Tables 4-63 and 4-64 below score the Alternatives 1 through 7 and the Alternative 8 options on the basis of a comparison of their environmental impacts with those of the proposed project (i.e., if impacts are considerably greater [+3], moderately greater [+2], somewhat greater [+1], considerably less [-3], moderately less [-2], somewhat less [-1] than or similar [0] to the proposed project). The ranking is based on the significance determinations for each resources area, as discussed in Chapter 3 Environmental Analyses and the analysis provided in this Chapter, and reflects differences in the levels of impact among alternatives. This ranking also takes into consideration the relative number of significant impacts that are mitigated to a level below significance, the number of impacts that remain significant after mitigation, and the relative intensity of impacts. If a certain aspects of alternative's impacts are less adverse when compared with the proposed project, while other aspects are more adverse when compared to proposed project, both a plus and a minus score is presented (+/-). As shown in Tables 4-63 and 4-64, Alternative 1: No Project would have the fewest impacts as compared to the proposed project.

The seven alternatives are identified as follows:

- Alternative 1 – No Project – No Build
- Alternative 2 – No Project – Necessary Infrastructure Improvements
- Alternative 3 – Landside Development Only ('No Federal Action Alternative')
- Alternative 4 – No Property Exchange with State
- Alternative 5 – No Pacific Avenue Reconnection

- Alternative 6 – Alternative Construction Phasing
- Alternative 7 – Reduced-Density

Table 4-63: Comparison of Alternatives 1 Through 7 to the Proposed Project

Environmental Resource Area*	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Aesthetics							
Impact AES-1	-3/+1	-2/+1	-1/+1	0	0	+1	-1
Impact AES-2	-3/+2	-2/+1	-1/+1	+1	+1	+1	-1
Impact AES-3	-3	-3	-1	0	-1	0	-1
Air Quality							
Impact AQ-1	-3/+1	-2/+1	-1	0	0	-1	-1
Impact AQ-2	-3	-2	-1	0	0	+1/-1	0
Impact AQ-3	-3	-2	-1	0	0	0	-1
Biological Resources							
Impact BIO-1	-3/+1	-2/+1	-2/+1	0	0	0	0
Impact BIO-2	-3/+1	-2/+1	-3	0	0	0	0
Impact BIO-3	-3/+1	-1/+3	-3/+2	0	0	0	0
Impact BIO-4	-3	-1	-3	0	0	0	0
Impact BIO-5	-2	-1	-1	0	0	0	0
Cultural Resources							
Impact CUL-1	-2	-1	-2	0	0	0	0
Impact CUL-2	-3	-2	0	0	0	0	0
Impact CUL-3	-3	-2	0	0	0	0	0
Geology and Soils							
Impact GEO-1	+3	+1	0	0	0	0	0
Impact GEO-2	-3	-2	0	0	0	0	0
Impact GEO-3	+3	+1	0	0	0	0	0
Impact GEO-4	-2	-2	0	0	0	0	0
Greenhouse Gases							
Impact GHG-1	-3/+2	-2/+1	-1	0	0	0	-1
Impact GHG-2	-3/+2	-2/+1	0	0	0	0	0
Hazards and Hazardous Materials							
Impact HAZ-1	-3	-2	-1	0	0	0	0
Impact HAZ-2	-3	-2	0	0	0	0	0
Impact HAZ-3	-2/+2	-1/+2	0	0	+2	0	0
Hydrology and Water Quality							
Impact HWQ-1	-3/+2	-2/+1	-1/+1	0	0	0	-1
Impact HWQ-2	-2/+2	-2/+1	-1	0	+2	0	-1
Impact HWQ-3	-2/+2	-2/+1	0	0	+1	0	-1
Impact HWQ-4	-2	-1	-3	0	0	0	0
Impact HWQ-5	-1/+2	-1/+1	0	0	+1	0	0

Table 4-63: Comparison of Alternatives 1 Through 7 to the Proposed Project

Environmental Resource Area*	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Land Use and Planning							
Impact LUP-1	-2/+2	-2/+2	-1/+2	+1	+1	0	0
Noise							
Impact NOI-1	-2	-1	0	0	0	0	0
Impact NOI-2	-3	-2	-1	0	0	+1	0
Impact NOI-3	-3	-3	0	0	-2	+1	-1
Impact NOI-4	-3	-2	-1	0	0	+2	0
Public Services							
Impact PBS-1	-2/+2	-1/+2	0	0	+2	0	0
Impact PBS-2	-2/+2	-1/+2	+1	0	+2	0	0
Recreation							
Impact REC-1	-1/+2	-1/+2	0/+2	0	+1	+1	0
Impact REC-2	-1/+1	-1/+1	0	0	0	0	0
Traffic							
Impact TRA-1	-3	-2	0	0	+1	0	-1
Impact TRA-2	-1	-1	0	0	0	0	0
Impact TRA-3	-3	-3	0	0	0	0	0
Utilities							
Impact UTL-1	-3/+1	-2	0	0	0	0	-1
Impact UTL-2	-3/+1	-2	0	0	0	0	-1
Impact UTL-3	-3	-2	0	0	0	0	-1
Impact UTL-4	-3/+1	-2	0	0	0	0	-1
Total	**68**	**56**	**-21**	**2**	**11**	**6**	**-15**

Notes:

* The cumulative analysis results are similar to the proposed project-level impacts.

(-3) = Impact considered to be considerably less when compared with the proposed project.

(-2) = Impact considered to be moderately less when compared with the proposed project.

(-1) = Impact considered to be somewhat less when compared with the proposed project.

(0) = Impact considered to be equal to the proposed project.

(1) = Impact considered to be somewhat greater when compared with the proposed project.

(2) = Impact considered to be moderately greater when compared with the proposed project.

(3) = Impact considered to be considerably greater when compared with the proposed project.

(-#/+#) = Certain aspects of alternative's impacts are less adverse when compared with the proposed project, while other aspects are more adverse when compared to proposed project.

Alternative 8 – Alternative Small Craft Boat Ramp Facilities Within King Harbor

Mole A

- Option 1: One-lane boat ramp with boarding float and 20 head-in parking stalls (vehicle/trailer spaces)
- Option 2: One-lane boat ramp with boarding float, hand launch ramp, and 20 drive-through parking stalls (vehicle/trailer spaces)

- Option 3: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Mole C

- One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces) and no breakwater

Mole D

- Option 1: One-lane boat ramp with boarding float and 20 parking stalls (vehicle/trailer spaces)
- Option 2: Two-lane boat ramp with boarding float and 40 parking stalls (vehicle/trailer spaces)

Table 4-64: Comparison of Alternative 8 to the Proposed Project

Environmental Resource Area*	Mole A - Option 1	Mole A - Option 2	Mole A - Option 3	Mole C	Mole D – Option 1	Mole D – Option 2
Aesthetics						
Impact AES-1	0	0	0	0	+2	+2
Impact AES-2	0	0	0	0	+1	+1
Impact AES-3	0	0	0	0	0	0
Air Quality						
Impact AQ-1	-1	-1	-1	-1	-1	-1
Impact AQ-2	0	0	0	0	0	0
Impact AQ-3	0	0	0	0	0	0
Biological Resources						
Impact BIO-1	-1	-1	-1	-1	-2	-2
Impact BIO-2	-1	-1	-1	-1	-1	-1
Impact BIO-3	-3	-2	-2	-2	-2	-2
Impact BIO-4	-1	-1	-1	-1	-1	-1
Impact BIO-5	0	0	0	0	0	0
Cultural Resources						
Impact CUL-1	0	0	0	0	0	0
Impact CUL-2	0	0	0	0	0	0
Impact CUL-3	0	0	0	0	0	0
Geology and Soils						
Impact GEO-1	0	0	0	0	0	0
Impact GEO-2	0	0	0	0	0	0
Impact GEO-3	0	0	0	0	0	0
Impact GEO-4	0	0	0	0	0	0
Greenhouse Gases						
Impact GHG-1	-1	-1	-1	-1	-1	-1
Impact GHG-2	0	0	0	0	0	0

Table 4-64: Comparison of Alternative 8 to the Proposed Project

Environmental Resource Area*	Mole A - Option 1	Mole A - Option 2	Mole A - Option 3	Mole C	Mole D – Option 1	Mole D – Option 2
Hazards and Hazardous Materials						
Impact HAZ-1	0	0	0	0	-1	0
Impact HAZ-2	0	0	0	0	-1	0
Impact HAZ-3	0	0	0	0	0	0
Hydrology and Water Quality						
Impact HWQ-1	-1	-1	-1	-1	-1/+1	-1/+1
Impact HWQ-2	0	0	0	0	+1	+1
Impact HWQ-3	0	0	0	0	0	0
Impact HWQ-4	-1/+1	-1/+1	-1/+1	-1/+1	-2	-2/+1
Impact HWQ-5	0	0	0	0	0	0
Land Use and Planning						
Impact LUP-1	0	0	0	0	+1	+1
Noise						
Impact NOI-1	0	0	0	0	0	0
Impact NOI-2	0	0	0	0	0	0
Impact NOI-3	0	0	0	0	0	0
Impact NOI-4	+1	+1	+1	0	-2	-2
Public Services						
Impact PBS-1	0	0	0	0	0	0
Impact PBS-2	0	0	0	0	+1	+1
Recreation						
Impact REC-1	0	0	0	0	+2	+2
Impact REC-2	0	0	0	0	0	0
Traffic						
Impact TRA-1	0	0	0	0	0	0
Impact TRA-2	0	0	0	0	0	0
Impact TRA-3	-3	-3	-3	-1	-1/+3	-1/+2
Utilities						
Impact UTL-1	0	0	0	0	0	0
Impact UTL-2	0	0	0	0	0	0
Impact UTL-3	0	0	0	0	0	0
Impact UTL-4	0	0	0	0	0	0
Total	**-11**	**-10**	**-10**	**-9**	**-4**	**-2**

Table 4-64: Comparison of Alternative 8 to the Proposed Project

Environmental Resource Area*	Mole A - Option 1	Mole A - Option 2	Mole A - Option 3	Mole C	Mole D – Option 1	Mole D – Option 2

Notes:
* The cumulative analysis results are similar to the proposed project-level impacts.
(-3) = Impact considered to be considerably less when compared with the proposed project.
(-2) = Impact considered to be moderately less when compared with the proposed project.
(-1) = Impact considered to be somewhat less when compared with the proposed project.
(0) = Impact considered to be equal to the proposed project.
(1) = Impact considered to be somewhat greater when compared with the proposed project.
(2) = Impact considered to be moderately greater when compared with the proposed project.
(3) = Impact considered to be considerably greater when compared with the proposed project.
(-#/+#) = Certain aspects of alternative's impacts are less adverse when compared with the proposed project, while other aspects are more adverse when compared to proposed project.

4.6 Environmentally Superior Alternatives

CEQA requires identification of an environmentally superior alternative. The environmentally superior alternative was determined based on a ranking system that assigned numerical scores comparing the impacts under each resource area for each alternative with the baseline. The scoring system ranged from -3 if impacts are considered to be considerably reduced when compared to the proposed project, to +3 if impact is considered to be considerably greater when compared with the proposed project. Tables 4-63 and 64 above show the scoring system and rankings for each alternative and Table 4-65 below shows Alternative 1 through 7 by relative rank and score, and Table 4-66 shows each of the Alternative 8 options individually by rank and score. As noted above there are different tradeoffs for each alternative and resource area (e.g., while some alternative would reduce impacts compared to the proposed project, some of the project benefits would not be implemented).

Table 4-65: Rank and Score of Alternatives 1 Through 7

Rank	Alternative	Score
1	Alternative 1 – No Project – No Build	-68
2	Alternative 2 – No Project – Necessary Infrastructure Improvements	-56
3	Alternative 3 – Landside Development Only ('No Federal Action Alternative')	-21
4	Alternative 7 – Reduced-Density	-15
9	Alternative 4 – No Property Exchange with State	2
10	Alternative 6 – Alternative Construction Phasing	6
11	Alternative 5 – No Pacific Avenue Reconnection	11

Table 4-66: Rank and Score of Alternative 8 Options

Rank	Alternative	Score
6	Alternative 8 - Mole A Option 1 (one-lane)	-11
6	Alternative 8 - Mole A Option 2 (one-lane with hand launch)	-10
6	Alternative 8 - Mole A Option 3 (two-lane)	-10
5	Alternative 8 - Mole C (one-lane)	-9
7	Alternative 8 - Mole D Option 1 (one-lane)	-4
8	Alternative 8 - Mole D Option 2 (two-lane)	-2

The impacts would be least severe under Alternatives 1 and 2; however, Alternatives 1 and 2 would not meet the project objectives. Alternatives 3 and 7 would have lower impacts than the proposed project; however, they would not fully meet the Project objectives. Alternative 8 options would have reduced impacts compared to the proposed project.

Based on the relative comparison ranking of the alternatives, Alternative 1: No Project Alternative would result in the fewest environmental impacts, and as such, is considered to be the environmentally superior. However, under CEQA, if the No Project Alternative is environmentally superior, an EIR is required to determine if an environmentally superior alternative exists among the other alternatives. The alternative with the next fewest impacts is Alternative 2: No Project – Necessary Infrastructure Improvements, which, while it would include some upgrades and replacement development, is also a no project alternative. Of the build alternatives that would partially or largely meet the objectives of the proposed project (Alternatives 3 though 8), Alternative 3: Landside Development Only (No Federal Action Alternative) would have the fewest impacts and therefore is considered the environmentally superior alternative. Under Alternative 3, impacts to air quality would be less than the proposed project but remain significant for construction after mitigation. Impacts to cultural resources would be less than significant after mitigation. Noise impacts would be less than the proposed project but would remain significant during operation (similar to the proposed project). However, as noted in greater detail in Section 4.6, there are different tradeoffs for each alternative, which are dependent upon the specific resource area. It should be noted that although Alternative 3 appears to be ranked much better than the proposed project and is deemed to be the environmentally superior alternative in terms of environmental impacts under CEQA, it does not include the project benefits associated with improvements to the waterside, including providing a boat launch ramp, improving site connectivity with the bicycle pedestrian bridge, and improving the habitat and recreational function of Seaside Lagoon and eliminating the need for chlorination. It also includes the removal of the boat hoists and would thereby reduce boater access within King Harbor.

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